

**THE ECONOMIC HISTORY SOCIETY**  
**Annual Conference**  
**University of Nottingham**  
**28 - 30 March 2008**

*Programme including*  
*New Researchers' Papers*  
*&*  
*Abstracts of the other Academic Papers*



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## Welcome to the University of Nottingham

The University of Nottingham was granted its Royal Charter in 1948. However, its history is far longer, having developed from Nottingham's first civic college, opened in the city centre in 1881 by W.E. Gladstone. After the First World War the College expanded rapidly and moved to larger premises at Highfields, funded by donations from Sir Jesse Boot. In 1928 the College moved to its present site at University Park, just outside the city centre. There are also campuses at Jubilee Park, King's Meadow, Sutton Bonnington, Kuala Lumpur in Malaysia and Ningbo in China. In 2006-7 the University of Nottingham had over 30,000 students, 6,500 of which were postgraduates. Our most famous graduate is D.H. Lawrence, but other alumni include John Monks, former General Secretary of the Trades Union Congress; Matthew Bannister, former Head of Production for the BBC; Tim Martin, founder of J.D. Weatherspoon and Lord Hollick, who has been special adviser to the Department of Trade and Industry and established the cross-party and business group 'Britain in Europe'.

We are all very proud of the University Park Campus which is just a short bus ride from the city centre. It is the largest campus, covering over 330 acres. Central to the campus is the Trent Building, the original University home, with its distinctive clock tower. University Park is also home to the modern East Midlands Conference Centre at which the conference is mainly housed. There is also the Lakeside Arts Centre and the Djanogly Recital Hall and Art Gallery. The campus has extensive parkland greenery, and you will no doubt be asked many times, 'have you seen our lake and swans yet?' There are also beautifully landscaped gardens and the hidden Millennium Garden designed around the theme of time. University Park is certainly a beautiful campus, and we do hope that you find time to wander around the woodland, lake and gardens to relax. For the more energetic of you there are various sports facilities on campus, including the sports hall, swimming pool and gym.

Usually best known for its connection with Robin Hood, Nottingham has much more to offer. The centre of town is dominated by the market square (allegedly the largest in Europe), with its Baroque Council House. The square is a central meeting place as well as the hub of Nottingham's tram network. There are plenty of medieval lanes and Georgian street to wander around as well as the trendy and imposing 'Lace Market' area, built on the oldest part of town, but now a monument to Nottingham's nineteenth century lace industry. Nottingham Castle unfortunately no longer exists. The thirteenth-century original was replaced by a Ducal Palace 400 years later, but today most visitors are less interested in the castle than in the network of caves beneath it. The Galleries of Justice also manage to make 'being in prison' rather an interesting experience. Nottingham has a lively cultural scene, with the Nottingham Playhouse and the Royal Court Theatre offering theatre and music, and the rather noisier Rock City catering for those with more modern tastes. There will be more information about Nottingham in your conference packs.

We do hope that you have a pleasant time here at the University of Nottingham, and that you have time to explore both the campus and the city itself.

*Sheryllynne Haggerty* (Local Organizer)

*Maureen Galbraith* (Administrative Secretary, Economic History Society)

## Summary Conference Programme

(See Contents for details of each session)

### Friday 28<sup>th</sup> March

0915-1045	EHS Publications Committee Meeting	Gallery 2
1100-1400	EHS Council Meeting	Conference Suite (CS)4
1200-1800	Registration	Atrium Foyer
1400-1530	<b>New Researchers' Session I</b>	
I/A	<i>International Business</i>	CS3
I/B	<i>Demographic History</i>	CS1a
I/C	<i>Medieval and Early Modern Europe</i>	CS2c
I/D	<i>Post-1945</i>	CS2a/b
I/E	<i>Power</i>	CS1b/c
1530-1600	Tea	Banqueting Suite (BS)
1600-1730	<b>New Researchers' Session II</b>	
II/A	<i>Business and Finance</i>	CS3
II/B	<i>Medieval and Early Modern Britain</i>	CS1a
II/C	<i>Medieval and Early Modern, International</i>	CS2c
II/D	<i>Human Capital</i>	CS2a/b
II/E	<i>Economics of the Family</i>	CS1b/c
1730-1830	Open meeting for women in economic history	CS1b/c
1815-1900	Council reception for new researchers and 1st time delegates	Gallery
1900-2015	Dinner	BS
2030-2130	Plenary Lecture: Professor John V Beckett <i>Nottingham: from Robin Hood to 21<sup>st</sup> Century City</i>	Conference Theatre
Bar available until late		EMCC

### Saturday 29<sup>th</sup> March

0800-0900	Breakfast	Rutland Hall
0900-1045	<b>Academic Session I</b>	
I/A	<i>Occupations in the Industrial Revolution</i>	Gallery 2/3
I/B	<i>Trade Flows</i>	CS1a
I/C	<i>Migration and Shipping Companies</i>	CS3
I/D	<i>Colonial Management</i>	CS1b/c
I/E	<i>Gender and Consumption</i>	CS2
I/F	<i>Politics and Business</i>	CS4
1045-1115	Coffee	BS
1115-1300	<b>Academic Session II</b>	
II/A	<i>Child Labour in Industrial England</i>	CS4
II/B	<i>Transport/Agglomeration</i>	CS2
II/C	<i>Liverpool and Empire</i>	Gallery 2/3
II/D	<i>Markets and Marketing</i>	CS1a
II/E	<i>Rural Housing, c.1600-1800</i>	CS1b/c
II/F	<i>Demography</i>	CS3
1300-1400	Lunch	BS
1415-1545	Meeting of Schools and Colleges Committee	Gallery 1

1415-1600	<b>Academic Session III</b>	
III/A	<i>Pre-Industrial City</i>	Gallery 2/3
III/B	<i>Industrial Revolution</i>	CS2
III/C	<i>International Investment</i>	CS4
III/D	<i>Medieval and Early Modern Business</i>	CS1b/c
III/E	<i>State Policy</i>	CS1a
III/F	<i>Mining and Management in British Coal Mining</i>	CS3
1600-1630	Tea	BS
1730-1830	Economic History Society AGM	CS3
1930-2000	Conference Reception <i>(Hosted by School of History, University of Nottingham)</i>	Atrium
2000	Conference Dinner	BS
	Bar available until late	EMCC

**Sunday 30<sup>th</sup> March**

0800-0900	Breakfast	Rutland Hall
0915-1015	<b>Academic Session IV</b>	
IV/A	<i>Central Europe</i>	CS4
IV/B	<i>Living Standards</i>	Gallery 2/3
IV/C	<i>Italian Finance</i>	CS1a
IV/D	<i>Rich and Poor in the Middle Ages</i>	CS1b/c
IV/E	<i>Work and Consumption</i>	CS2
IV/F	<i>Capital and Labour</i>	CS3
1015-1045	Coffee	BS
1045-1145	<b>Academic Session V</b>	
V/A	<i>India: Paths of Development</i>	Gallery 2/3
V/B	<i>Early Modern Credit and Wealth</i>	CS2
V/C	<i>Protest</i>	CS3
V/D	<i>English Cities</i>	CS4
V/E	<i>Exchange Rates</i>	CS1a
V/F	<i>Investors</i>	CS1b/c
1145-1300	Tawney Lecture: Professor Bruce Campbell <i>Nature as Historical Protagonist</i>	Conference Theatre
1300-1400	Lunch	BS
1400	Conference ends	

## Brief guide to conference arrangements

The conference will take place in the East Midlands Conference Centre (EMCC) on the University Park Campus of the University of Nottingham. The Campus is located a short distance from Nottingham town centre and is well served by local transport.

### Conference accommodation on campus

Ensuite and standard accommodation will be in Rutland Hall, which is adjacent to EMCC. A campus map can be found on page xiii. *On arrival, residential delegates should check in at Rutland Hall, where keys will be available from 3.00 p.m. onwards. Delegates arriving before 3.00 p.m. on Friday or Saturday should first register at the EMCC, where luggage can be stored prior to check-in. The Hall is portered until midnight – delegates arriving after that time should call the number provided at the Hall and the university's security personnel will open the Hall. Please advise Maureen Galbraith (ehsocsec@arts.gla.ac.uk) if you will be a late arrival.*

### Registration

Registration will take place between 12.00 and 18.00 in the Atrium of the EMCC. The registration desk will be staffed for the duration of the conference.

### Alternative Accommodation

Hotel accommodation (off site) can be reserved, at preferential rates, using the EMCC Hotel Reservations Service.

Contact: Nikki Cotton: +44 (0)155 951 5011 or Beverly Cunningham: +44 (0)155 951 3640.

### Car parking

Delegates may park in the car park adjacent to Rutland Hall and the EMCC. No permit is required. Please advise Security which conference you are attending.

### Book displays

Publishers' and booksellers' displays will be in the Atrium of the EMCC.

### Meals and Morning Tea/Afternoon Coffee

Breakfast will be served in Rutland Hall, where all residential delegates will be housed. All other meals, tea/coffee will be served in the EMCC.

### Receptions and Bar

The Council Reception for new researchers and first-time conference delegates (Friday, 1815-1900 hours) and the Saturday evening Conference Reception will take place in the EMCC. A late bar will be provided on both evenings in the EMCC.

### Meeting rooms for New Researchers, Academic Sessions etc

All meeting rooms will be located in the EMCC.

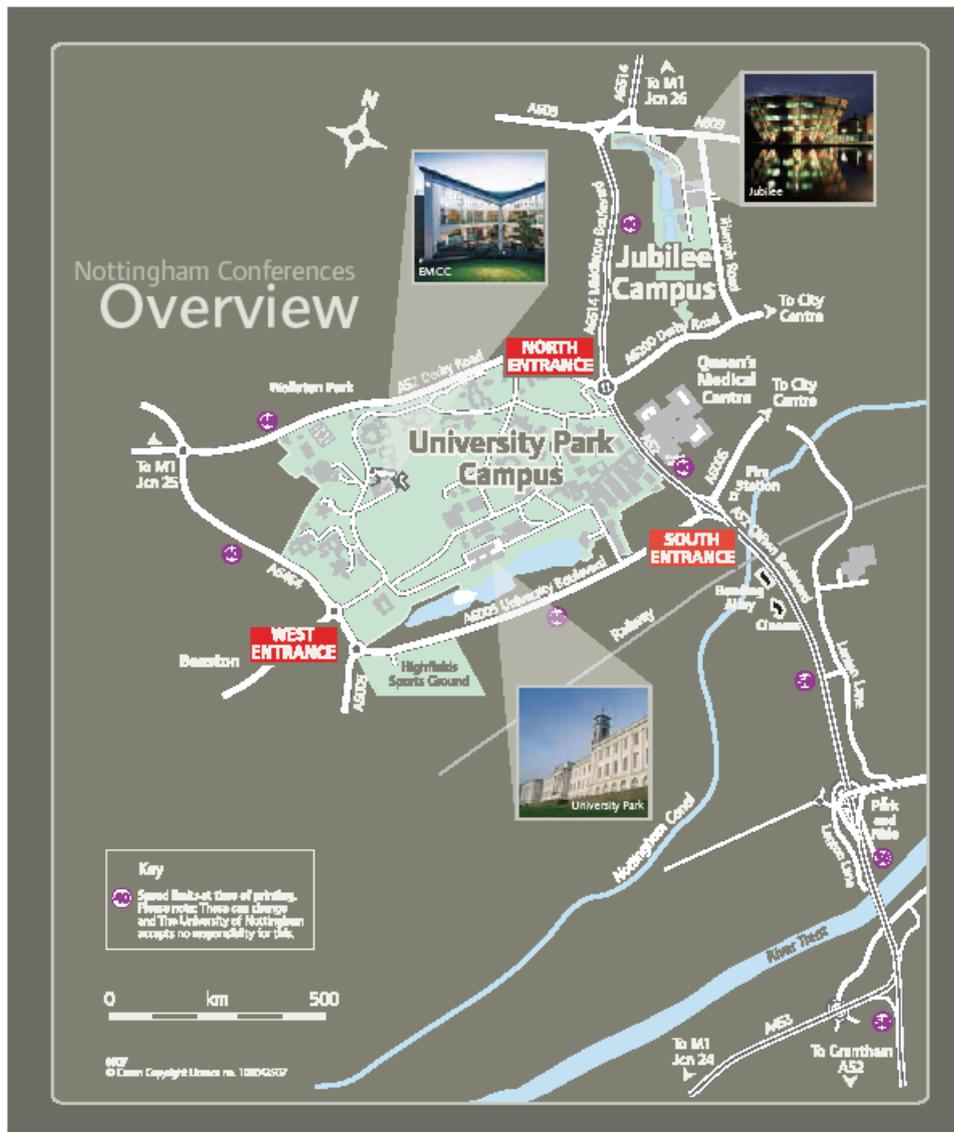
### Internet Access

There are three computers available in the EMCC as well as wi-fi. Alternatively, residential delegates, with laptops and modems, may access the internet from their bedroom; you must provide your own data cable. A user name and password will be issued at registration.

### Useful Contacts

EMCC: Tel: +44 (0)115 951 3640 Email: emcc@nottingham.ac.uk  
Maureen Galbraith Tel: +44 (0)141 330 4662 Email: ehsosec@arts.gla.ac.uk

## How to reach East Midlands Conference Centre



(A copy of this map can be found at: [http://www.emcc.co.uk/pdf/directions\\_overview.pdf](http://www.emcc.co.uk/pdf/directions_overview.pdf))

Nottingham is located at the heart of the UK, with excellent air, rail and road links. The proximity of the M1, A1, A52 and A46 means it is easily accessible by car, while speedy rail links run from Nottingham to much of the UK. The city is served by East Midlands International Airport ([www.eastmidlandsairport.com](http://www.eastmidlandsairport.com)).

### By Road

([www.emcc.co.uk/pdf/directions\\_overview.pdf](http://www.emcc.co.uk/pdf/directions_overview.pdf))

#### From the M1 North to University Park

Leave the M1 motorway at junction 26 and follow the A610 signposted to Nottingham. After approximately 2.5 miles turn right at lights onto the A6514 Nottingham ring road (Western Boulevard). Follow the A6514 to Middleton Boulevard and then take the slip road towards the Queen's Medical Centre roundabout. Take the third exit at the roundabout onto the A52, Derby Road. Turn left at the next roundabout (Toby Carvery) onto the A6464 Woodside Road. Turn left at the next roundabout to enter the University Park's West Entrance.

## How to reach East Midlands Conference Centre

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### From the M1 South to University Park

Leave the M1 motorway at junction 25 and follow the A52 signposted to Nottingham. After approximately 4.4 miles turn right at the roundabout (Toby Carvery) onto the A6464 Woodside Road. Turn left at the next roundabout to enter the University Park's West Entrance. For satellite navigation the postcode for University Park is NG7 2RJ.

Destination:	Distance
Birmingham	49 miles
Bristol	137 miles
Cardiff	151 miles
Edinburgh	259 miles
Glasgow	279 miles
London	123 miles
Manchester	71 miles
York	80 miles

### By Rail

Nottingham railway station is approximately two miles from the University Park Campus. Direct services operate to many UK cities. For further information, contact:

- National Rail website: [www.nationalrail.co.uk](http://www.nationalrail.co.uk)
- Midland Mainline website: [www.midlandmainline.com](http://www.midlandmainline.com)

### By Bus

University Park is on major bus routes, including a regular service to the city centre. For further information, contact:

- [www.trentbuses.co.uk](http://www.trentbuses.co.uk)
- [www.nctx.co.uk](http://www.nctx.co.uk)

### By Taxi

Taxis are available from the railway station and East Midlands Airport. Costs are approximately:

East Midlands Airport-EMCC: £26  
Nottingham railway station-EMCC: £7

### By Air

Nottingham is 17 miles from East Midlands Airport and approximately 50 miles from Birmingham Airport ([www.bhx.co.uk/](http://www.bhx.co.uk/)). A regular bus service operates from East Midlands Airport to Nottingham city centre.





# NEW RESEARCHER PAPERS



# Britain's exports of textiles to Argentina and Chile during the first half of the nineteenth century: return remittances

Manuel Llorca-Jaña, University of Leicester  
 (ml125@le.ac.uk)  
 Supervisor: Professor Philip L Cottrell

## Introduction

The historiography of economic relationships between Britain and the ‘Southern Cone’ (SC) during the first half of the nineteenth century largely ignores trade. Yet, neither British direct investment nor portfolio investment was important during this period, when the main gains arose from trade (textiles in particular), and directly associated invisible earnings.

The Spanish American colonies have been regarded in the literature as passive receptors of British manufactures, while struggling to produce raw materials for exchange. The few studies of post-liberation Anglo-South American trade are concerned mainly with British imports of raw materials. British exports have long been taken for granted to the extent that there are no specific considerations of textile exports to Latin America. All in all, the historiography, which lacks robust trade data, is encapsulated in Platt’s questionable assertion that ‘Latin America could sell nothing to Europe, so that it could buy nothing in return’.<sup>1</sup> This has led to mistaken conceptions of both the growth of British exports and of how return remittances were made. These are the two issues considered in this paper.

## The growth of British exports

Little attention has been given to the expansion of Britain’s exports to the ‘Southern Cone’. While lacking robust data, the received view is that an export boom following liberation glutted the market, to be followed by stagnation that persisted until the mid-century or, in the majority of the literature, to the century’s last quarter. It has also been accepted that the ‘Southern Cone’s’ small, low-income and scattered rural populations had little to offer in exchange for textiles, while high internal transport costs and lack of investment made this former backwater of the Spanish Empire nothing else but a marginal market.

Chart 1.1

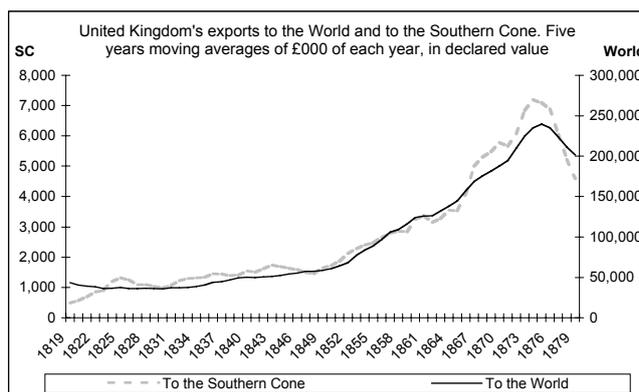
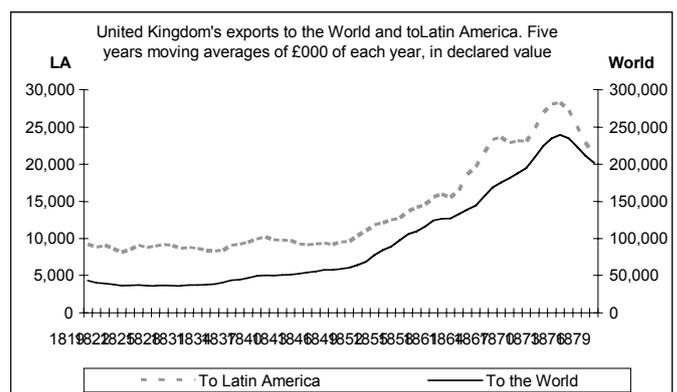


Chart 1.2



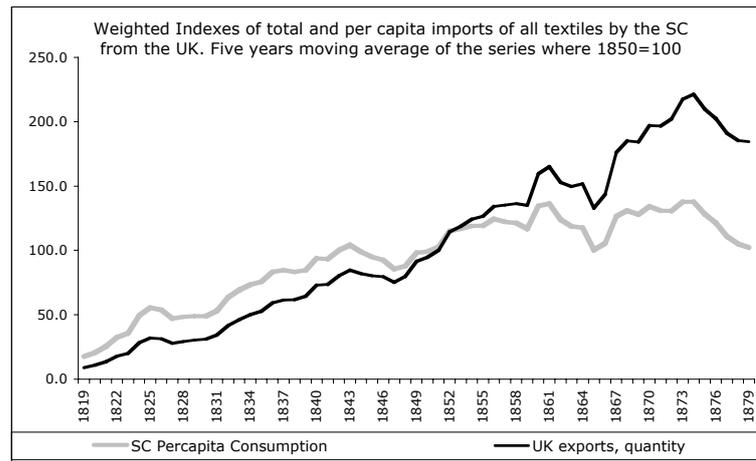
Source: Own elaboration from NA: CUST 8

An examination of the data for British exports to the ‘Southern Cone’ reveals a very different situation. First, in value terms (‘declared values’), they expanded in common with British exports to elsewhere in the world (charts 1.1 and 1.2). And, second, their quantities rose continuously over the period 1820-50, and at very high growth rates (see tables below). All in

<sup>1</sup> Platt, D.C.M. ‘Dependency in nineteenth-century Latin-America: an historian objects’. *Latin American Research Review*, 15-1. (1980), p. 115.

all, the ‘Southern Cone’ was by no means a marginal market; in particular, it took up to 6 per cent of the total value of cottons and woollen manufactures exported by Britain. Per capita import trade data in volumes terms are more robust, and during the 1840s the ‘Southern Cone’ was importing seven times more yards of cottons and linens than during the late 1810s, and nearly four times more wool manufactures. When compared with the 1840s, there was not a significant change in the average quantity of British textiles consumed in the ‘Southern Cone’ during the ensuing three decades. Chart 2 below speaks for itself. Indeed, there was not the sudden and substantial transformation in trade relationships c.1860 put forward in the historiography, but rather a continuous and expanding engagement from the 1820s.

Chart 2<sup>2</sup>



Source: Own elaboration from NA: CUST 8

Table 1.1: *Million of textiles yards exported from the UK*

PERIOD (Annual averages)	Wool Manufactures	Cottons	Linens
1815-9	0.74	3.86	0.27
1820-9	1.94	14.79	1.10
1830-9	2.20	34.18	1.82
1840-9	4.52	48.78	3.32
1850-9	7.38	73.98	3.92
1860-9	7.11	94.26	7.74
1870-9	9.03	121.59	4.61

Table 1.2: *SC per capita imports from the UK (yards)*

PERIOD (Annual averages)	Wool Manufactures	Cottons	Linens
1815-9	0.5	2.9	0.2
1820-9	1.2	9.2	0.7
1830-9	1.1	17.6	0.9
1840-9	1.9	20.7	1.4
1850-9	2.5	25.1	1.3
1860-9	1.9	25.8	2.1
1870-9	2.0	26.8	1.0

Source: Own elaboration from NA: CUST 8

This, in turn, raises question about how the ‘Southern Cone’ paid for growing imports from Britain, particularly as this issue had been largely oversimplified in the historiography.

### Return remittances

The possible means for local British merchants to remit export proceeds were: *bullion and specie*; *bills of exchange*; and *local produce*. What was the relative importance of each of these? This question is difficult if not impossible to answer. A considered response should be based on evidence for the totality of British import/export houses’ operations in both Argentina and Chile, but few of their archives have survived. In this section, some new light is thrown on the question, enabled by fresh evidence drawn from diverse sources.

<sup>2</sup> The indices were built by integrating three individual indices of quantum previously built for cottons, wool manufactures and linens. The weights given each year to each category were the shares they had in the value of UK’s exports to the SC for these three categories added together.

*Remittances from Argentina*

Vera Reber has argued (as have most historians) that ‘bills of exchange were the most common means of making payments’ from Argentina,<sup>3</sup> while Jonathan Brown has maintained that foreign traders had to take payment mainly in local products because of the depreciating paper peso<sup>4</sup>. Neither conclusion gives importance to bullion and specie, while both are based on limited quantitative evidence. Indeed, they may reflect the established view that British merchants were not in a position to remit bullion or specie from the 1820s as a consequence of Argentina being severed from her former supply of silver in Upper Peru.<sup>5</sup>

Fortunately, it is possible to obtain robust data for remittances within the papers of Hodgson & Robinson, a British house that successfully operated in Buenos Aires for most of our period of study. A summary is presented in table 2. The findings are striking. Before the Brazilian blockade (1826-8), this firm’s main means of conveying remittances was local produce, while bullion and specie also played an important role. Although local produce is acknowledged in the literature as a way of remitting to Britain, its importance has been underrated.

Table 2: *Remittances effected by Hodgson & Robinson from Buenos Aires*

Period	Produce	Bullion and Specie	Bills of Exchange	Observations
1817-25	57%	20%	23%	
1826-28	59%	12%	29%	Buenos Aires Blockaded
1829-37	29%	8%	62%	
1838-40	33%	0%	67%	Buenos Aires Blockaded
1841-44	27%	0%	73%	
1817-44	36%	9%	54%	

Source: Own elaboration from GHR/1-4

Soon after independence, hides from the River Plate found a ready market in Britain in sufficient volumes to pay for most British textile imports. In the words of a British consul, ‘Buenos Ayres possesses in her hides, a vast and increasing means of returns for all the commodities the population of these provinces are likely to want from Europe’.<sup>6</sup> Indeed, as displayed in chart 3, the area was the main supplier of untanned hides to Britain before 1850. Furthermore, Argentine produce was sent to other markets in exchange for British textiles, transactions that the bilateral trade data cannot reveal. For instance, Hodgson & Robinson sent a great deal of hides to Antwerp, Genoa, Spain and the USA, and the returns obtained were remitted to Manchester.<sup>7</sup> Likewise, Argentine jerked beef was extensively shipped to Havana, another triangular trade involving British textiles.<sup>8</sup>

<sup>3</sup> Reber, Vera, *British Merchants houses in Buenos Aires* (Cambridge-Massachusetts, 1979), p. 100; Clapp, Brian, *John Owen* (Manchester, 1945), pp. 84-6.

<sup>4</sup> Brown, Jonathan, *A socioeconomic history of Argentina* (Cambridge, 1979), p. 89.

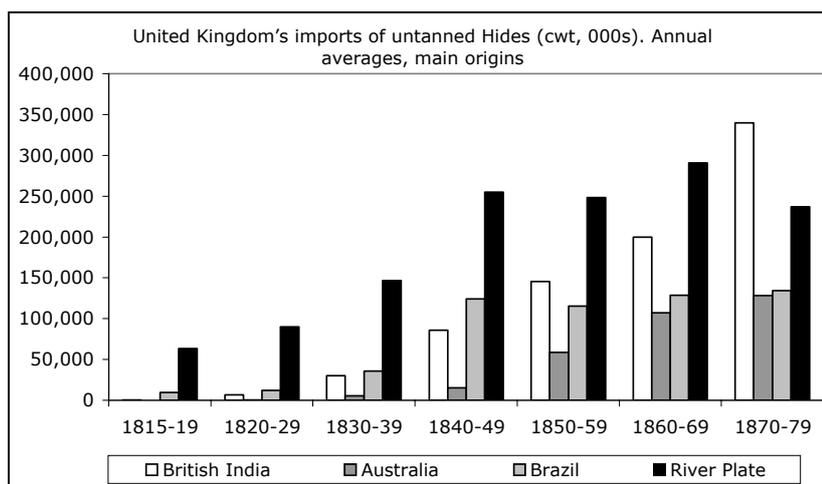
<sup>5</sup> For a recent and excellent challenge to this idea see Irigoien, María Alejandra and Roberto Schmit (editors). *La desintegración de la economía colonial*. (Buenos Aires, 2003), p. 23.

<sup>6</sup> National Archives [NA]: FO/6/11. Parish to Canning. 25 Aug. 1826.

<sup>7</sup> During 1833-38 the River Plate exported on average 570k. hides per year to North-Europe, a quantity not far away from comparable exports to Britain. John Rylands Library: Green Hodgson & Robinson [GHR]. GHR/5/2/10.

<sup>8</sup> The Baring Archive: HC/ 4.1.12. Duguid to Fesser. 26 June 1830; UCL, Library: Huth papers [HP]. Huth to Zimmerman & Co. (Buenos Aires), 5 Nov. 1835; and John Rylands Library: GHR/5/2/1. Kalkman to Hodgson, 1 Jan. 1829.

Chart 3



Source: Own elaboration from BPP

The data for bullion and specie in table 2 are supported by other robust evidence. During the period 1822-6, on average £300k in gold and silver was exported annually from Buenos Aires.<sup>9</sup> Furthermore, Fielding & Co. and Joseph Lyne (both British merchants in Rio) regularly requested Hugh Dallas & Co., a British merchant house in Buenos Aires, to obtain specie locally for effecting remittances to Britain.<sup>10</sup> For its part, Hugh Dallas & Co. undertook substantial own remittances in dollars either directly to Britain,<sup>11</sup> or, through its partner house, via Rio to Britain.<sup>12</sup>

Upper Peru was not the only source of bullion and specie for Argentina. A significant trade surplus with Chile provided a great deal of silver, as was reported by an American special commissioner in 1818.<sup>13</sup> d'Orbigny has subsequently estimated that 28 per cent of Buenos Aires's total exports in 1824 consisted of specie and bullion obtained from the interior,<sup>14</sup> and most had Britain as their final destination.<sup>15</sup> This is supported by the observations of an Englishman in the mid-1820s.<sup>16</sup> Furthermore, bullion and specie became particularly important during the four international blockades of Buenos Aires (1826-8; 1838-40; 1845-8; and 1851), as they were the only possible means of making remittances.<sup>17</sup>

It was also repeatedly observed by contemporaries during the 1840s that 'considerable exports of gold and silver' were made from Buenos Aires.<sup>18</sup> During the decade's early years, for instance, the American House of Zimmerman & Co. (which also dealt in British textiles) sent to Huth & Co., London, in a single operation £1k in 'Patriot Doubloons'.<sup>19</sup> Contrary to the historiography, Dickson & Co.'s agent at Buenos Aires reported in the mid-1840s that many British houses were receiving payments from local wholesalers in doubloons, which were then used for remittances to Britain.<sup>20</sup> Likewise, *The British Packet* reported in 1844 that there was 'large supply of specie constantly received from abroad' in Buenos Aires.<sup>21</sup>

<sup>9</sup> NA: FO/119/1. Parish to Palmerston, 30 Jun. 1831.

<sup>10</sup> Banco de la Provincia. Buenos Aires: Hugh Dallas Papers [HDP]: Fielding to Dallas, 5 Feb. 1820; Lyne to Dallas. 26 Aug. 1818.

<sup>11</sup> HDP: MacIntosh, Miller & Co. to Dallas, 8 Jan. 1819.

<sup>12</sup> HDP: Miller & Co. to Dallas. 4 Aug. 1818.

<sup>13</sup> Bland, Theoderick, *Descripción económica i política de Chile* (Santiago, 1926), pp. 18-19.

<sup>14</sup> d'Orbigny, Alcides, *Viaje a la America meridional*, II (Buenos Aires, 1945), p. 488.

<sup>15</sup> NA: FO/354/4. Parish to Duguid, 10 Dec. 1830.

<sup>16</sup> Englishman, *Cinco años en Buenos Aires* (Buenos Aires, 1986), p. 101.

<sup>17</sup> NA: FO/354/4. Parish to Bidwell, 21 Jul. 1827. See also Committee to Parish. 31 Dec. 1827.

<sup>18</sup> *The British Packet* (12 Sep. 1829).

<sup>19</sup> These were gold coins. HP: Huth to Zimmerman & Co., 8 Jan. 1840.

<sup>20</sup> Guildhall Library, London, Dickson papers [GFDP] Hughes to Dickson. 15 Apr., 11 Jun., 23 Jul. and 3 Aug.

Chile was not the sole further source of bullion and specie re-exported from Buenos Aires. In 1833, Consul Griffiths noted a ‘considerable quantity of bullion [had] been introduced from North America to purchase produce here’.<sup>22</sup> All in all, this evidence strongly suggests that bullion and specie cannot be disregarded when analysing the alternatives that British merchants had for sending remittances home.

Finally, all the evidence suggests that although bills of exchange became more important from the 1830s,<sup>23</sup> they were frequently unavailable during the 1840s and subsequent decades. For instance, Dickson & Co.’s Buenos Aires’s agent very often commented that ‘exchange is very scarce & I cannot get any to remit’.<sup>24</sup>

*Remittances from Chile*

While the role of bills of exchanges in remittances from Argentina has been overrated in the historiography, too much attention in the Chilean case has been paid to bullion and specie to the detriment of local produce. For instance, John Mayo has considered that the first stages of Anglo-Chilean commercial intercourse were ‘a relatively simple exchange of Chilean silver for British manufactures’.<sup>25</sup> Likewise, the role of bills of exchange has been overemphasized, though they had little importance in Anglo-Chilean trade. In the words of Huth & Co. to a new British exporter of wool manufactures: ‘We observe ... that you wish to receive the returns in bills of exchange, probably thinking the practice to be the same as in the Brazil trade; but in Peru & Chile safe bills are seldom or never to be met with, and all returns by our houses are exclusively made in hard dollars’.<sup>26</sup> Huth’s Valparaiso branch was still explaining 15 years later that good bills were seldom offered in the Chilean market, on this occasion to Rothschild & Sons.<sup>27</sup>

The reason why bullion and specie had primacy is clear – Chile was an important producer of silver so that Rothschild’s local agent remarked ‘with so much bullion in the market Bills on London found but few purchasers’.<sup>28</sup> If this was the situation in the main Chilean commercial centres, the difficulties of obtaining bills in the provinces can be appreciated. Not surprisingly, the British consul at Concepcion, reported in the early 1830s that ‘bills on London are scarcely negotiable, but as a matter of favour’.<sup>29</sup>

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1844. See also Hughes to Dickson. 21 and 25 Oct., and 11 Nov. 1844.

<sup>21</sup> *The British Packet* (9 Mar. 1844).

<sup>22</sup> NA: FO/6/38. Griffiths to Bidwell, 15 Apr. 1833.

<sup>23</sup> Before the 1830s, ‘bills of Exchange are not unfrequently not to be procured in Buenos Ayres’. GHR/5/1/1. Hodgson to Huish, 3 Oct. 1817.

<sup>24</sup> GFDP: Hughes to Garrett. 13 Aug. 1841. 15 months later, Hughes was again reporting to London that ‘there are not good bills to be had neither on England or Monte Video Patriot’. Hughes to Garrett. 3 Nov. 1842. See also 16 Feb. and 4 Oct. 1843.

<sup>25</sup> Mayo, John, *British merchants and Chilean development* (Boulder, 1987), p. 11.

<sup>26</sup> HP: Huth to Webster, 20 Apr. 1829.

<sup>27</sup> RHL. XI/38/149/A. Huth to Rothschild & Sons. 4 May 1844.

<sup>28</sup> Rothschild Archive, London: XI/38/81B-1848. Davidson to Rothschild & Sons, 1 Mar. 1849.

<sup>29</sup> NA: FO/16/27. Rouse to Bidwell, 31 Dec. 1833.

Chart 4.1

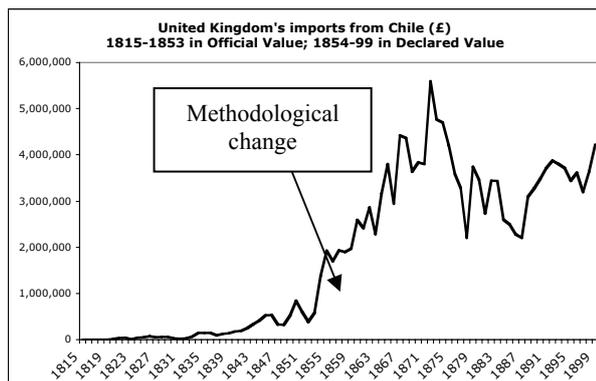
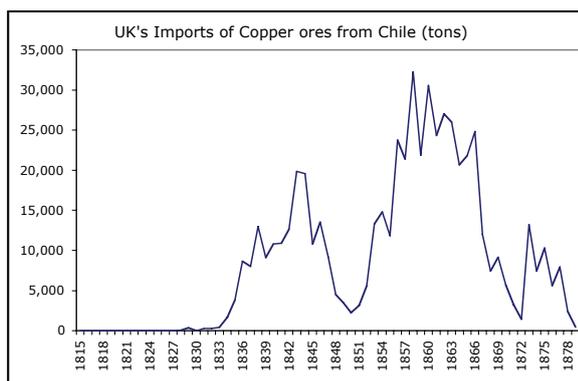


Chart 4.2



Source: Own elaboration from NA: CUST 9

Although gold and silver were preferred to bills, this does not mean that local produce was unimportant for making remittances during the first half of the century. They are substantially ignored in the historiography, possibly due to contributions lacking a clear understanding of British import statistics. The problem arises from the employment of the ‘official value’ series. This was calculated until 1853 with 1690s prices and, consequently, is very misleading (see chart 4.1). Indeed, during the early 1850s the most important Chilean exports – copper ores and copper regulus – were being registered at one-tenth and one-twentieth their market prices, respectively. Either a series with current market prices or a volume series should be used instead (see chart 4.2).

There is another serious anomaly. By 1852, one of the main products imported by Britain from Chile – silver ore – was not being registered by the Customs. One indication of what is omitted in British trade statistics is that over £0.5m of silver ore was imported from Chile during just 1855.

Table 3

Period	UK's import duties on Southern Cone produce						Hides, £ per cwt		
	Copper, £ per cwt						Part Wrought, £ per cwt	Dry	Wet
	Ore, under 15% pure	Ore, under 20% pure	Ore, over 20% pure	In plates, £ per cwt	Unwrought, £ per cwt				
1823-24	1.05	1.05	1.05	3.00	2.71	3.78	0.23	0.12	
1824-25	1.05	1.05	1.05	3.00	2.71	3.78	0.23	0.12	
1825-26 to 1832-33	0.60	0.60	0.60	1.50	1.35	1.75	0.23	0.12	
1833-34 to 1841-42	0.60	0.60	0.60	1.50	1.35	1.75	0.23	0.12	
1842-43 to 1844-45	0.15	0.23	0.30	0.50	0.44	0.50	0.03	0.01	
1845-46	0.15	0.23	0.30	0.50	0.44	0.50	0	0	
1846-47 to 1847-48	0.15	0.23	0.30	0.50	0.44	0.50	0	0	
1848-49 to 1852-53	0.003	0.003	0	0.125	0.125	0.125	0	0	
1853-54 to 1897	0	0	0	0	0	0	0	0	

Source: Own elaboration from BPP

Last but not least, to Platt’s verdict that ‘Latin America could sell nothing to Europe’ should be added ‘not at the import duties charged in Britain’ before the early 1840s. Table 3 well illustrates this point. Furthermore, both high import duties and the need to see the movement of goods as more than bilateral trade flows require a re-assessment of the importance of triangular trades. In the words of John Miers, a British mining engineer visiting the area during the early 1820s, ‘nearly all the copper raised in the country [Chile] was exported in its crude state to the East Indies, its islands, and China<sup>30</sup> (as well as to the USA),<sup>31</sup> in exchange for British manufactures. Even British textiles received at Buenos Aires were exchanged for Chilean copper sent to India,<sup>32</sup> or for Chilean wheat that, in turn, was exchanged for Argentine

<sup>30</sup> Miers, John, *Travels in Chile and La Plata*, I (London, 1826), pp. 1-2.

<sup>31</sup> Gatty, Richard, *Portrait of a merchant prince* (Northallerton, 1977), p. 158.

<sup>32</sup> GHR/5/1/1. Hodgson to Richards. 4 Mar. 1819. See also HC/4.1.3.1. Robertson to Baring Brothers, 21 Jul. 1817.

hides to be shipped back to Britain.<sup>33</sup> These multilateral operations explain the low volumes of Chilean exports of copper to Britain by the mid-1830s (chart 4.2).

### **Concluding remarks**

This paper shows for the very first time that British textile exports to the Southern Cone continued to expand during the first half of the nineteenth century, and that the ‘Southern Cone’ was an important market for British textiles. Their significance requires, in turn, a reassessment of the magnitude of return remittances and how they were made. British merchants in the ‘Southern Cone’ had more alternatives than has been usually thought. In the Argentine case, bullion and specie were important, while local produce was always significant. For Chile, local produce gained an importance at an earlier date than has previously been thought. Finally, by only analysing bilateral trade figures, the importance of triangular trades is missed, and they cannot be disregarded.

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<sup>33</sup> GHR/5/1/1. Hodgson to Ashcroft, 4 Mar. 1819.

## Scottish-American business networks: the development of the Dundee investment trust industry, c.1873-1914

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Scotland's contribution towards Britain's international capital exports has always been overshadowed by the amount pledged and controlled by its English neighbour. In actual fact, Scotland disproportionately invested a far larger sum per head of its population than was ever considered to be possible. A rough calculation estimates that the mean sum invested in foreign capital by the Scots had risen from £18 per person in 1871 to £105 in 1914 as shown in figure 1. This resembles a dramatic increase when compared to the rest of Great Britain and a higher average per head of population than the average £85 invested elsewhere. It has been said that this rise in Scottish capital export, in part, was due to the creation and significance of the investment trust industry during this period.<sup>34</sup> The development of which has often been associated with Dundee. In 1968, in what is one of the only texts concerned with Dundee's role in international investment, it was asserted that Dundee was home to the investment trust industry in Scotland.<sup>35</sup> This paper, as a summary of my main thesis, will consider to what extent Dundee was a centre of investment as has so often been claimed.

Figure 1: *Mean average of exported capital per head of population, 1871 and 1914*

Year	Scotland	Rest of Great Britain
1871	£18	£31
1914	£105	£85

Sources: Census 1971 Scotland: Preliminary Report, op. cit. S.G.E. Lythe, *An Economic History of Scotland 1100-1939* (Glasgow, 1975), p. 244; A. Imlah, *Economic Elements in the Pax Britannica: Studies in British Foreign Trade in the Nineteenth Century* (Cambridge, 1958), pp. 73-5.

The export of capital and its relationship with the jute industry in Dundee are among the central themes of my thesis. It has been estimated that Dundee, with an average annual income of £1.5 million in the 1880s, had invested £5 million in the United States by 1890. This was said to be about 10 times the value of the town's real estate and equalled the savings of the town for 20 years.<sup>36</sup> Yet, despite its alleged importance, the financial enterprises of the Dundonians in the United States have gone largely unrecorded and little is known about the link between capital export from Dundee and the role of the investment trust industry. Instead, attentions have focused on the role of other Scottish financial institutions such as banks, insurance companies and the Stock Exchange.<sup>37</sup> To date, there is no publication dedicated to the assessment of the role of Scottish investment trusts in the British financial market, nor is there a study that presents them as an important vehicle for the export of capital, or one that

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<sup>34</sup> Y. Cassis, 'The emergence of a new financial institution: investment trusts in Britain, 1870-1939', in J.J. van Helten and Y. Cassis (eds.), *Capitalism in a Mature Economy: Financial Institutions, Capital Exports and British Industry, 1870-1939* (Aldershot, 1990), p. 141.

<sup>35</sup> W.T. Jackson, *The Enterprising Scot*, (Edinburgh, 1968), p. 315.

<sup>36</sup> *Ibid.*

<sup>37</sup> J.H. Treble, 'The pattern of Investment of the Standard Life Assurance Company 1875-1914', in *Business History*, Vol. XXII, No. 2 (July, 1980), pp. 170-87; W.G. Kerr, 'Scotland and the Texas Mortgage Business', in *Economic History Review*, New Series, Vol. 16, No. 1 (1963), pp. 91-103; W.G. Kerr, 'Scottish Investment and Enterprise in Texas', in P.L Payne (ed.), *Studies in Scottish Business History* (London, 1967); R.E. Tyson, 'Scottish Investment in American Railways: The Case of the City of Glasgow Bank, 1856-81', in Payne, *Scottish Business History*; R.C. Michie, *Money, Mania and Markets: Investment, Company Formation and the Stock Exchange in Nineteenth Century Scotland* (Edinburgh, 1981).

considers the amount of capital raised or the direction in which their capital was disposed. Instead, the existing literature has generally been written by historians and economists primarily concerned with the interwar period and focuses on the comparison of British and American trusts.<sup>38</sup> Few deal with the significance of the Scottish investment trust movement and most of these exist as case studies of individual investment trusts; charting the growth and fall by decade.<sup>39</sup> Cassis and Schmitz have, more recently, gone some way to address this imbalance with articles on the development of the institution and a case study of Edinburgh's role, respectively.<sup>40</sup>

British investment trusts have been a global engine for the export of capital and one authority maintained that 'the English and Scottish investment trusts have been the most important factor in the export of capital from the United Kingdom'.<sup>41</sup> An investment trust holds shares or other capital in what is considered to be a reliable investment portfolio. The primary advantage of using an investment trust is that it is an attractive method of diversification of funds, minimizing risk by spreading investments across different areas of security. While, as an institution, trusts did invest in the domestic security market, the trusts tended to concentrate their finance and expertise abroad. Capital was directed through the medium of the British trusts to every continent, but at the end of the nineteenth century, the favoured destination was unequivocally America.<sup>42</sup> If chosen wisely, overseas securities generally provided a higher rate of return with an applicable degree of risk compared to most domestic stocks. Well-organized trusts also offered low administration costs and, most importantly, skilled management.<sup>43</sup> One last characteristic of the trust was the reduced capital amounts allowing those with small savings to subscribe. Some trust certificates were as low as £10 each, revolutionizing ownership and affording the middle class to enter into investment.

Rather than provide an overview to the origins of the investment trust industry in Scotland, which is dealt with more thoroughly in my thesis, this paper will document certain key outcomes of my research on the industry and its development. After explaining briefly my methodological approach, this paper will quantify Scotland's contribution to the British investment trust industry. The main focus, however, will address to what extent Dundee was a centre for Scottish foreign investment. Four reasons for this claim will be identified and explained in relation to the statistical database created as a result of this research.

To begin to analyse the contribution made by Scotland to the British investment trust industry the amount of capital raised by Scottish investment trusts has been accurately reconstructed in a database for my thesis. The *Stock Exchange Year Book* publishes annual figures for nominal, called and paid-up capital plus any debentures, deposits and loans. These have been collected to enable a time-series analysis of the industry from its origin in 1873 to 1914, widely regarded as a significant period for great capital accumulation and international lending. Unfortunately, while the *Stock Exchange Year Book* incorporates a section for investment, land and finance companies, it does not classify investment trusts separately. An investment trust is a type of financial company distinguished from its counterparts by law.

<sup>38</sup> L.M. Speaker, *The Investment Trust* (Chicago, 1924); T.J. Grayson, *Investment Trusts: Their Origin, Development and Operation* (New York, 1928); L.R. Robinson, 'Investment Trusts', in *The Journal of Business of the University of Chicago*, Vol. 3, No. 3 (July, 1930), pp. 279-316.

<sup>39</sup> These include The British Investment Trust Company, Limited, of Edinburgh in Speaker, *Investment Trusts*; The British Assets Trust of Edinburgh in Michie, *Money, Mania and Markets*; The Scottish American Investment Company of Edinburgh in R.B. Weir, *A History of the Scottish American Investment Company Limited 1873-1973* (Edinburgh, 1973); The Alliance Trust of Dundee in W.G. Kerr, *Scottish Capital on the American Credit Frontier* (Austin, 1976).

<sup>40</sup> Cassis, 'Investment Trusts'; C. Schmitz, 'The Nature and Dimensions of Scottish Foreign Investment, 1860-1914', in *Business History*, Vol. 39, No. 2 (1997), pp. 42-68.

<sup>41</sup> See L.R. Robinson, *Credit facilities in the United Kingdom* (New York, 1923), p. 109; *op cit.* Y. Cassis, 'Investment Trusts', p. 139.

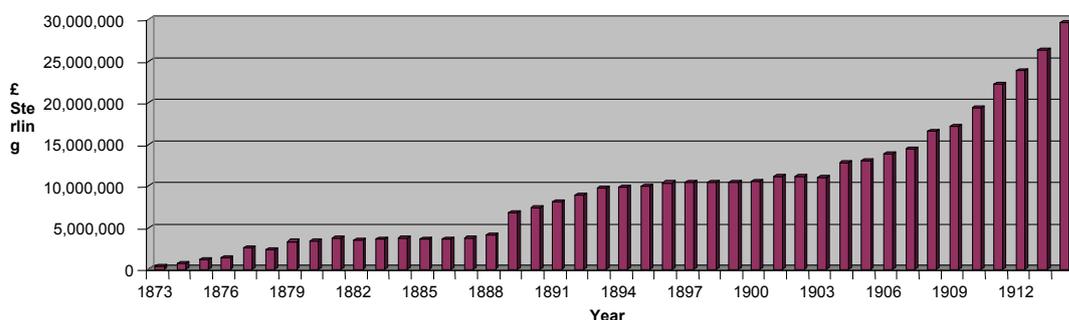
<sup>42</sup> Speaker, *Investment Trusts*, p. 6.

<sup>43</sup> W. Smith, *Robert Fleming*, (Haddington, 2000), p. 22.

There is some confusion, however, over the distinction between an investment trust and an investment company which has led scholars in the past to misinterpret their significance. It is therefore difficult, without Articles of Association, to distinguish all investment trusts in this sector and this sample has been based on those trusts named and collated by economist George Glasgow in 1932.<sup>44</sup>

The first Scottish trust was created by Robert Fleming in Dundee in 1873 and by 1914 there were 29 trusts registered in Scotland with a total of nearly £30 million in capital raised. My aggregate figures have made it possible to estimate that Scotland's capital contribution to Britain's investment trust industry on the eve of the Great War was 31 per cent.<sup>45</sup> Given that the concentration of investments made by the trusts were overseas,<sup>46</sup> it is clear that Scotland's contribution to international investment was significant. Looking more closely at the figures, it has also been reported that a rapid increase occurred between 1887 and 1890, when the amount of capital invested in Britain's investment trust industry had risen ten-fold from £5m to £50 million.<sup>47</sup> In Scotland, the rise was not as sharp but it is clear from figure 2 that there was a significant change in the momentum with regard to the amount of capital invested in Scottish trusts over these three years. In fact, the capital invested almost doubles from £3.7 million in 1887 to £7.4 million in 1890, as does the number of trusts registered from 6 in 1887 to 11 in 1890. What is perhaps clearer is the unprecedented rise in investments made between 1903 and 1914. £10 million alone had been invested from 1910 to 1914 reflected by the sharp upward trend in this period.

Figure 2: *Aggregate capital amount raised by Scottish investment trusts, 1873-1914*



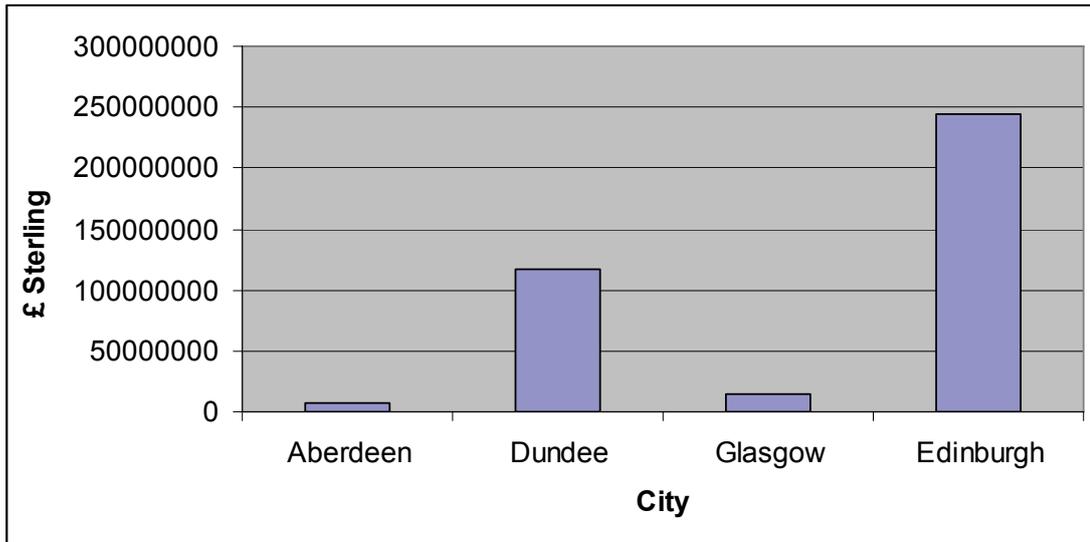
<sup>44</sup> G. Glasgow, *The Scottish Investment Trust Companies* (London, 1932).

<sup>45</sup> H. Burton and D.C. Corner, *Investment and Unit Trusts in Britain and America* (London, 1968), p. 50.

<sup>46</sup> Burton and Corner, *Investment and Unit Trusts*, p. 46.

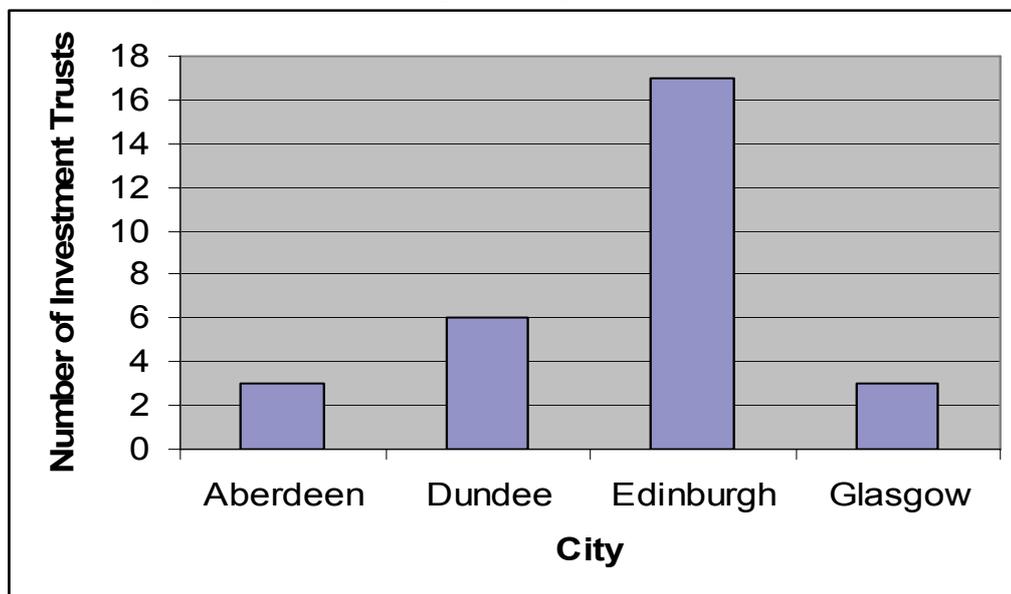
<sup>47</sup> Cassis, 'Investment Trusts', p. 141.

Figure 3: Total capital invested in companies registered by city, 1873-1914



This paper is not concerned with why the Scots became prominent in the investment trust industry, but rather to challenge the extent of the claim made by Jackson in his important work on *The Enterprising Scot*, that Dundee was a ‘centre for Scottish foreign investment’.<sup>48</sup> Indeed, Dundee was home to the first Scottish investment trust and did invest a significant proportion of capital in the industry, especially when compared to other cities such as Aberdeen or Glasgow which is shown in figure 3. By no means however, did Dundee invest the majority of the Scottish capital for the period, nor did it house the largest number of trusts, rather it was Edinburgh that made that largest contribution as shown in figures 3 and 4. So why then did Dundee’s acclaim to the home of investment trusts prevail?

Figure 4: Number of companies registered by city, 1873-1914



There are four reasons that can be identified to explain why Dundee has been considered ‘centre’ of the Scottish trust industry. First, as has been mentioned above, Robert Fleming has often been thought of as ‘father’ of the movement.<sup>49</sup> This, however, is somewhat misleading because he did not invent the concept, nor was his Trust the first investment trust to be

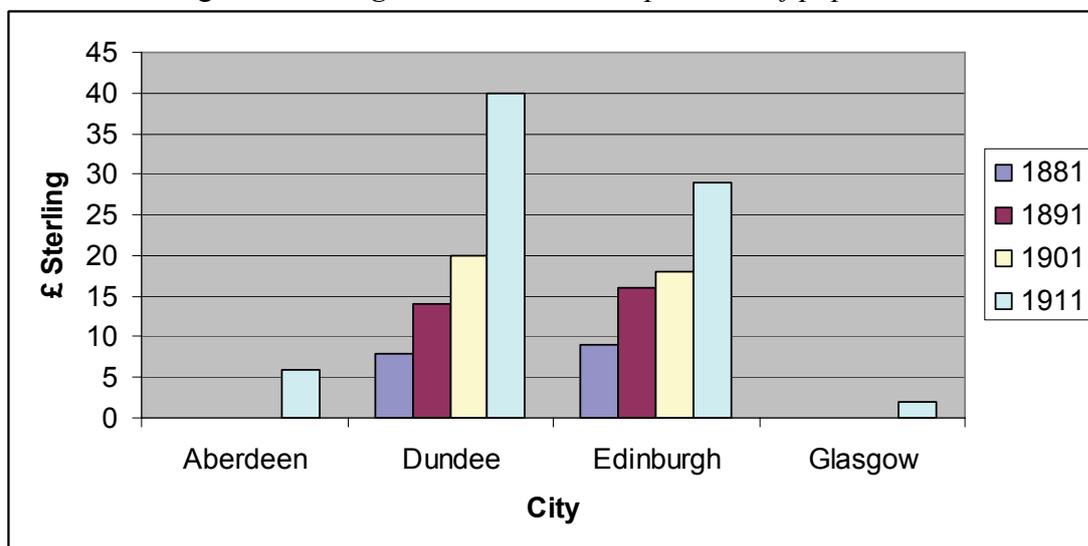
<sup>48</sup> Jackson, *Enterprising Scot*, p. 60.

<sup>49</sup> Smith, *Robert Fleming*, p. 22.

created. Instead, the first notion of a trust appeared in Brussels in 1822 where King William of the Netherlands formed the Société Générale de Pays-Bas and the first British investment trust, the Foreign and Colonial Government Trust, was registered in London in 1868.

The second reason that Dundee was associated as the centre of foreign investment can be explained by the amount that the town invested compared to others in terms of population. From the time-series gathered from the *Stock Exchange Year Book* it has been possible to detail the amount invested in each census year by head of population in each city in Scotland. Figure 5 makes clear that Dundee and Edinburgh contributed the most to the industry in the 1880s when it was averaging roughly the same investments made by population. This changed in the twentieth century when Aberdeen and Glasgow first make a notable interest in investment trusts but Dundee by far excelled with the majority. This again, is misleading. Dundee had a lower waged population and thus a small, but wealthy, middle class. In addition to this, it cannot be assumed that only Dundee residents invested in Dundee-registered trusts. Although, research is being conducted into this issue that would suggest that in general terms this, for the most part, is true.

Figure 5: Average investments made per head of population



This point is not unrelated to the third reason why Dundee is known as an influential centre for investment. That is because the Directors were known for their interests and experience in many different trusts. Fleming, for instance, in the early trusts served as a director to three Dundee trusts as well as the Edinburgh-based British Investment Trust and many London-registered houses. Similarly, John Guild, a director of four Dundee trusts was also on the board of two Edinburgh trusts. Director's were required, by law, to subscribe certain amounts and therefore would have a heavy presence in the direction and marketing of the companies. For example, in the Edinburgh-based Scottish American Mortgage Company, the largest shareholders were four Dundonains, two of whom were also directors.<sup>50</sup>

The final, and most considerable, point comes down to the legal definition of an investment trust. An investment trust fundamentally differed from any other type of finance company because of the legality surrounding capital gains. An investment trust could avoid taxation on any financial accumulation if it created a capital reserve that was not available for distribution as dividends.<sup>51</sup> Whereas investment trust 'companies' treat both their dividend receipts and capital gains as distributable income, and are taxed accordingly.<sup>52</sup> However, under the Joint Stock Company Act of 1879, any association operating with more than twenty

<sup>50</sup> Kerr, *Scottish Capital*, pp. 57-8.

<sup>51</sup> Burton and Corner, *Investment and Unit Trusts*, p. 3.

<sup>52</sup> Burton and Corner, *Investment and Unit Trusts*, p. 4.

members for the purpose of financial gain was made illegal.<sup>53</sup> This meant that the investment trusts were required to become Joint-Stock companies where the shareholders had limited liability for the debts of the company. While this was good for business, it technically put an end to what was legally known as an investment trust and all investment trusts became investment companies. Confusion arises when they are still fondly known as ‘investment trusts’ and it becomes ambiguous as to exactly how many trust companies were registered at any one time. As far as this paper is concerned, until the Companies Act in 1879, Dundee was in fact home of the investment trust since it not only housed the majority of the registered trusts in Scotland, but it raised the most capital through this vehicle. Dundee was home to three trusts compared to two in Edinburgh. Dundee had raised an accumulative amount of over £8 million since its origins compared to the £2.2 million raised in Edinburgh at the time.

This analysis has been based upon a new database of statistics collected on the Scottish investment trust industry. What this paper has shown are four reasons why Dundee was claimed to be the ‘centre for Scottish foreign investment’. Where these reasons support that Dundee was a centre for investment trusts in Scotland throughout the 1870s, it was not a leader in foreign investment over the period 1870-1914. On the other hand, it did place a significant amount of capital into companies primarily financing international ventures, and more research needs to be conducted into this. While Glasgow’s published figures have formed the basis of this investigation, they also alert the researcher to issues with his methods of identification. Ambiguity surrounds the number of trust companies that existed in Scotland and new methods will be needed to identify these before any other work can be done. The result can potentially change dramatically, it could increase the capital amount raised in Scotland by a considerable number and it will aim to provide clear definitions of the industry and its parameters. Altogether, it is hoped the completion of my thesis will signify the beginning of a new literature on the investment trust industry and the contribution of Scotland to foreign investment.

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<sup>53</sup> N. McKendrick and J. Newlands, *A History of Foreign and Colonial*, (London 1999), p. 50; J. Rutterford, ‘Learning from one’s mistakes? Managing risk in the mutual fund industry, 1868-1940’ *European Business History Conference*, Barcelona 2004, p. 7.

# **Management and networks – to what extent were free standing companies controlled from the Home Country? With reference to four Scottish examples**

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## **1. Introduction**

In the mid to late nineteenth century one of the main vehicles of foreign investment was the Free Standing Company. The Free Standing Company (FSC) is a fascinating concept in business history; FSCs are companies in the legal sense that have their headquarters situated in one country while having almost all their operations situated in another country.<sup>54</sup> Scotland was home to about 400 such companies between 1862 and 1900;<sup>55</sup> of these numerous firms this paper will focus on the structure of four FSCs for which a reasonable body of archival data remains. This paper will focus on the level of managerial control actually held in Scotland by the home office of four different FSCs. Wilkins (1988) proposes that many FSCs failed as a result of their failure to develop a suitable system of management. This paper will investigate the level of managerial control that the home office in Scotland had over operations in the host country and what role this had in the fortunes of these firms. Managerial control in this case is considered in the context of executive and organizational decisions being taken across distance and by those on the principal side rather than the agents. FSCs by nature have internal markets in information as well as finance and this paper will examine the frameworks used to control these internal markets. The four firms of interest are those highlighted in table 1.

Figures 1-4 are complete as possible organization charts for the four companies I have examined in detail. It is intended that these show the complexity of these organizations; vertical relationships represent principals and agents while horizontal ones represent officials or organizational units with an advisory/consultative role or a representative role, for instance the Canterbury & Otago's London Office in figure 1.

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<sup>54</sup> The label 'Free Standing Company' was first applied by the influential US historian of international business history Mira Wilkins in Wilkins (1986) and Wilkins (1988).

<sup>55</sup> See the National Archives of Scotland's (NAS) BT2 series, which is the repository for company registrations made before 1985 at Companies House in Edinburgh. For the purposes of this paper 'Scottish' is taken to mean companies that are registered there as it is assumed those simply seeking a UK registration would most likely have done this in London.

Table 1: *The ten largest Scottish FSCs 1862-1886 by nominal capital*<sup>56</sup>

Rank	Name	Nominal Capital (£,000s) <sup>57</sup>	Paid Capital (£,000s) <sup>58</sup>	Year Registered	Lifetime	Industrial Classification	Host Countr(ies)
1	<b>The New Zealand &amp; Australian Land Company Ltd.</b>	2000	1500	1866	11	<b>Agricultural Production - Livestock</b>	<b>NZ, Australia</b>
1	<b>The New Zealand &amp; Australian Land Company Ltd. [2]</b>	2000	2000	1877	91	<b>Agricultural Production - Livestock</b>	<b>NZ, Australia</b>
3	La Platense Flotilla Company Ltd.	1000	519	1886	15	Water Transportation	Argentina, Uruguay
4	<b>The California Redwood Company Ltd.</b>	900	468	1883	7	<b>Forestry</b>	<b>USA</b>
5	<b>Arizona Copper Company Ltd.</b>	875	700	1882	10	<b>Metal Mining</b>	<b>USA</b>
5	<b>Arizona Copper Company Ltd. [2]</b>	875	791	1884	35	<b>Metal Mining</b>	<b>USA</b>
7	Carpio Copper & Sulphur Company. (Ltd)	600	97	1872	9	Metal Mining	Spain
7	Canadian Copper Pyrites & Chemical Company Ltd.	600	295	1872	8	Metal Mining	Canada
7	The Swan Land & Cattle Company Ltd.	600	600	1883	42	Agricultural Production - Livestock	USA
10	<b>Canterbury &amp; Otago Association Ltd.</b>	500	500	1865	12	<b>Agricultural Production - Livestock</b>	<b>NZ</b>
10	Irrawaddy Flotilla Co. Ltd.	500	400	1875	73	Water Transportation	Burmah
10	American Land & Colonisation Company of Scotland Ltd.	500	59	1881	25	Real Estate	USA
10	Scottish American Accident Insurance Company Ltd.	500	0	1881	0	Accident & Health Insurance	USA

### 2.1: The Canterbury & Otago Association & the New Zealand & Australian Land Company

In both figures 1 and 2, the core business was sheep farming in New Zealand but a Glasgow-based General Manager took most key decisions with reference to the Board. At the NZ&A important investment decisions were theoretically supposed to be relayed by the Dunedin, Melbourne, or Brisbane agents back to the board for evaluation. The agents wrote to the board every month sending an accounting summary and with information about important developments. Using the information given the board made decisions to be sent back to Australasia. This system was established very early on the company's development although cash control was not developed as strongly as it might have been with many decisions taken by local managers before a reply giving permission (taking a minimum of four months) was

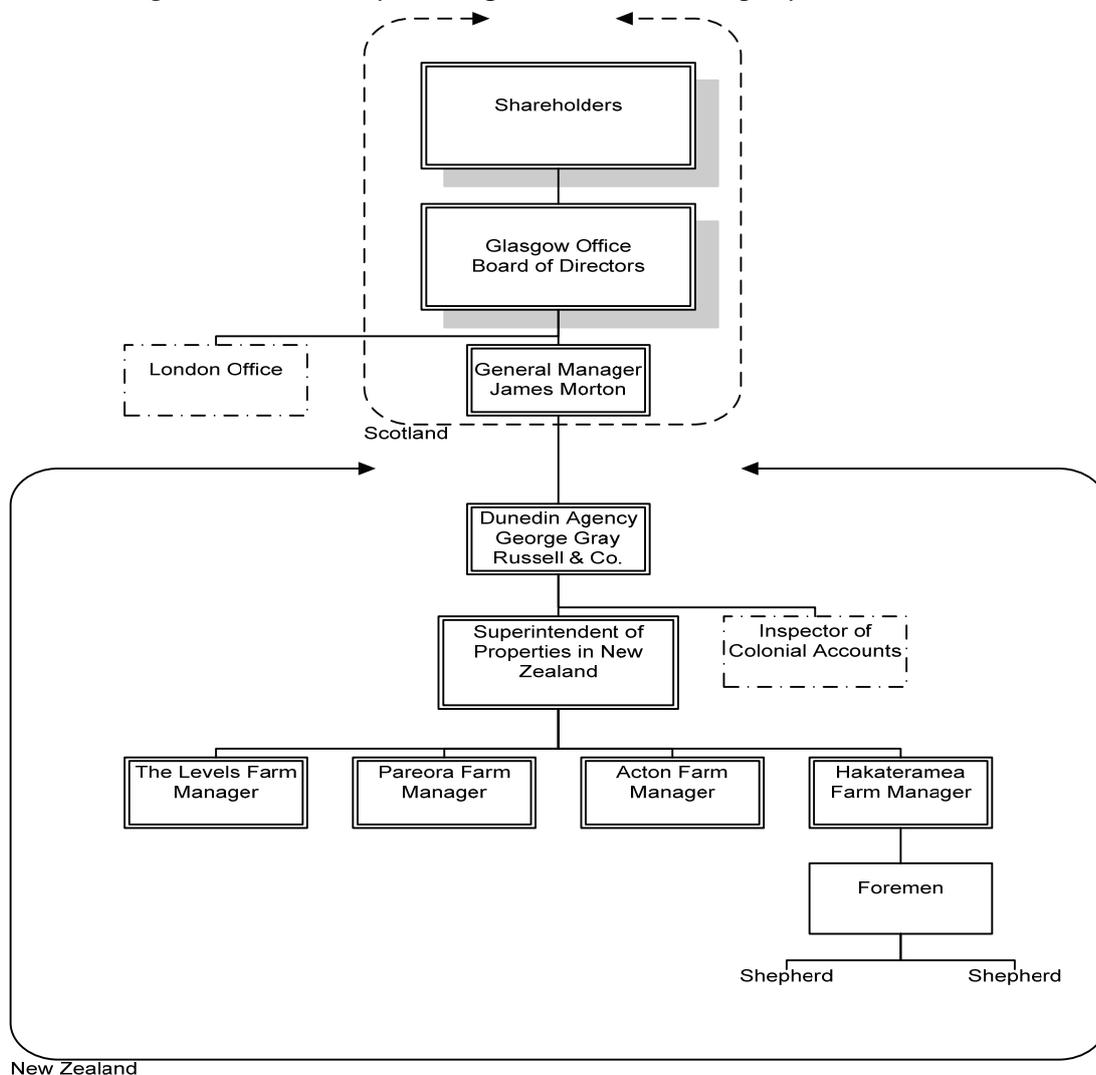
<sup>56</sup> These figures are taken from the NAS series BT2 files for these companies. See BT2/197, 229, 415, 441, 637, 1022, 1025, 1144, 1225, 1261, 1375 and 1502. Some of these companies are in fact failed promotions, but are included to give the reader an indication of the sort of companies that were promoted.

<sup>57</sup> Nominal Capital as registered when the company was initially registered. This may have been increased or decreased later.

<sup>58</sup> Paid Capital is taken from the highest level of paid capital reported while the company remained with its initial level of nominal capital.

obtained.<sup>59</sup> Huge sums were invested firstly in purchasing properties and then improving them. In late 1867 the NZ&A strategically decided to spend just £3,750 per month although this proved difficult to enforce with numerous stories of managerial extravagance surfacing. Partly due to their runs being in more northerly temperate locations over a 10-year period the C&O were able to gain more effective results while investing four times less per acre than the NZ&A had.<sup>60</sup>

Figure 1: *Canterbury & Otago Association Company Structure 1866-77*<sup>61</sup>



In addition to overseeing spending on this improvement process the Head Office had an important procurement role in obtaining the resources used for improvement; the Head Office purchased machinery, grass seed, rams for breeding purposes, thoroughbred horses, and even oversaw the purchase of stoats and weasels to attempt to control the rabbit population in the

<sup>59</sup> We know it took this long because letters were frequently reproduced in the minute books of the C&O and NZ&A along with the date that they were sent from New Zealand/Australia, and sometimes even the route that the post took (via Brindisi or San Francisco). See National Archives of Scotland GD435/1-7. The copyright status of these books is uncertain but it is hoped that no infringement is caused by citing them.

<sup>60</sup> The C&O had managed to support 113,000 sheep on its 28,000 acre Levels estate in Canterbury province by 1878 while spending only £2 1s per acre; the NZ&A supported a similar number of sheep at Edendale in Southland province only after spending £8 2s per acre – (Davidson, 1930) p. 93.

<sup>61</sup> This chart is mostly based on the minutes of meetings of the Board of the C&O (which the General Manager also attended). These can be consulted in NAS GD435/1. Some gaps were filled with the autobiography of William Soltau Davidson (1930) who rose to the rank of General Manager in of the merged company 1879 having started as a shepherd in the early 1870s.

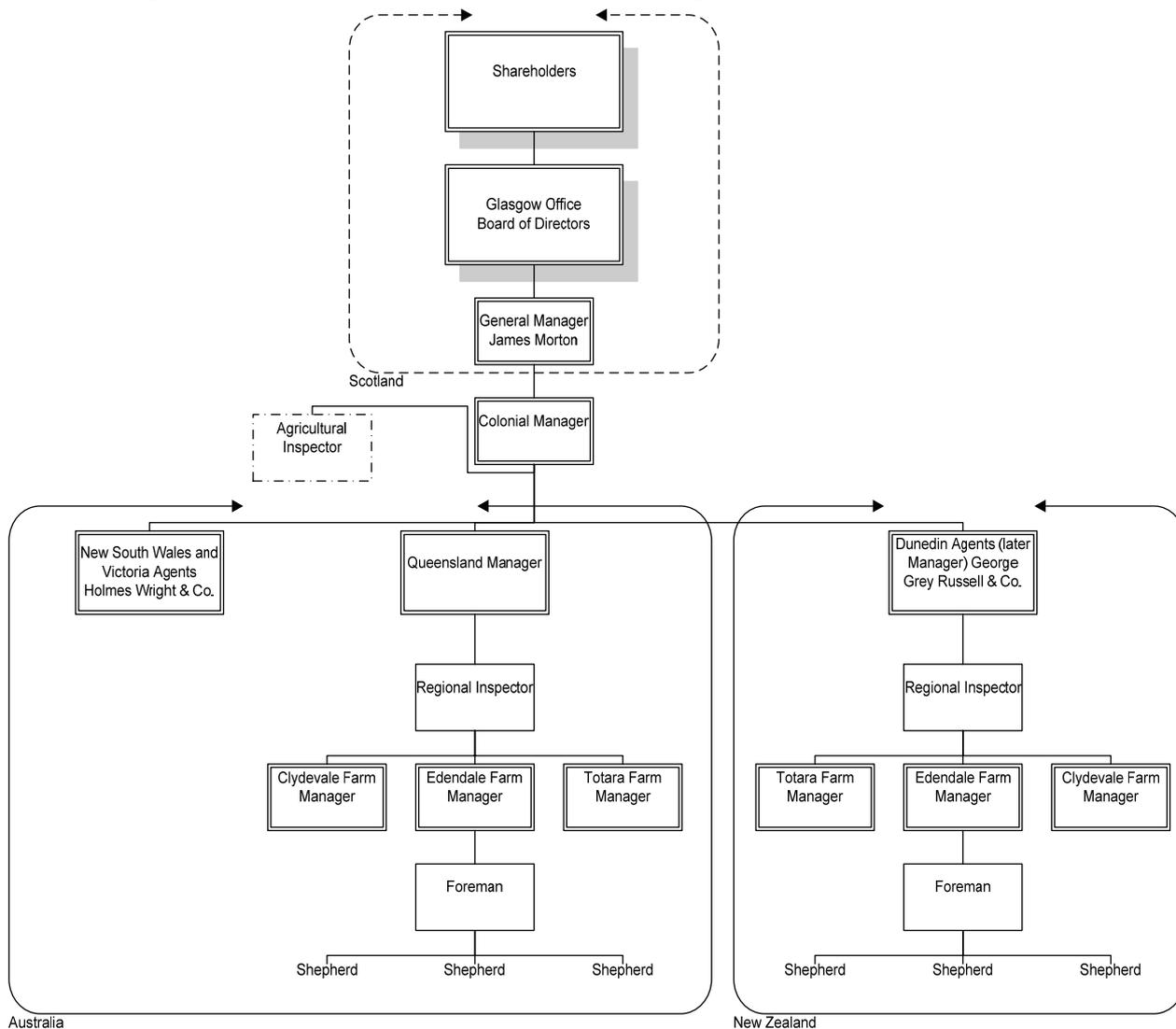
colonies.<sup>62</sup> The Head Office also recruited career staff for all levels of the company in Scotland not only the regional inspectors and supervisors mentioned in figures 1 and 2 but also personnel such as shepherds. There was also a role for the Head Office in marketing in forging links with London wool merchants. Both firms shared a common General Manager in James Morton, whose office with a small staff was also used as the Head Office and boardroom of both companies.<sup>63</sup> Although it is not surprising that the two companies were merged in 1878 to form a larger NZ&A the two companies had a partly separate shareholder base, and totally distinct structures and personnel in New Zealand from each other prior to merger, particularly after the NZ&A replaced George Grey Russell & Co. with a more permanent Dunedin management staff. For these companies then Morton's joint Head Office played a vital role as it procured scarce resources not accessible in the colonies for their activities there and could not be considered an unnecessary burden as its role was essential to generating revenue, even if indirectly.

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<sup>62</sup> Ibid., p. 48.

<sup>63</sup> See the minutes of both companies. NAS GD435/2 minute 30/04/1872 tells us Morton's remuneration was set at £1,250 per annum but he was expected to pay his own office expenses such as staffing, rent and utility costs.

Figure 2: *New Zealand & Australian Land Company Structure 1866-77*<sup>64</sup>



## 2.2 The California Redwood Company & the Arizona Copper Company

Figures 3 and 4 show the structures of the two US FSCs studied here, the California Redwood Company (CRC) and the Arizona Copper Company (ACC). The California Redwood Company was formed in 1883 by an Edinburgh syndicate in response to a pitch by James D. Walker who was seeking capital to exploit two large lumber estates in California.<sup>65</sup> The syndicate agreed to raise as much as £732,000 in cash and shares to purchase this property; at least another £200,000 in all was outlaid on apparent improvements to the sawmills and railways.<sup>66</sup> The CRC was subsequently wound up in 1885 amid allegations of illegal land grabbing.<sup>67</sup> In reality however the failure of the Edinburgh syndicate to establish an effective framework for management was more costly. In figure 3 everyone below the Edinburgh office was based in California. Further the office of the agents in San Francisco was some 200 miles distant from the company's main centre of operations at Eureka where David Evans, the General Manager in the US was based. Evans was responsible for both sites and associated activities such as shipping and the two railways attached to the company. Evans later became the target for allegations of extravagance and mismanagement from shareholders back in

<sup>64</sup> This chart is based on the minutes of the Board meetings of the NZ&A; see NAS GD435/7 and 8.

<sup>65</sup> See minute of shareholder EGM 28 April 1885, NAS GD282/13/142.

<sup>66</sup> Jackson (1968) p, 222.

<sup>67</sup> NAS GD282/13/125. Jackson (1968) blames this scandal for the CRC's failure.

Scotland while the San Francisco agents, Russ & Co. were accused of not overseeing Evan's activities closely enough. While it appears that the company did have significant lumber resources at its disposal the company never produced the volumes of timber required to break even, making the Scots reluctant to release more funds to California as they were not seeing any returns.<sup>68</sup>

The Arizona Copper Company (figure 4) formed in 1882 had similar origins as a pitched promotion, in this case by Frank Underwood of Kansas City who also pitched several ranching schemes to Scottish investors.<sup>69</sup> This company had the highest nominal capital of any Scottish mining FSC at £875,000 and was eventually sold to the US-based Phelps Dodge Corporation in 1921 for \$50 million.<sup>70</sup> It almost did not survive beyond 1884 and it did only thanks to a re-registration which allowed a financial reconstruction. A trust company was formed in Edinburgh alongside the ACC to act as an in-house financier.<sup>71</sup> The reason for the ACC's early difficulty was that the cost of smelting the ore to extract the copper onsite was initially neglected along with the need to invest further in rail transport to link the mine site with the rail network. The manager inherited from the previous owners quickly had to be removed after an emissary sent from Edinburgh reported that he was overspending on improving the smelters and had lost the confidence of his mining captains.<sup>72</sup> After 1884 the firm was run more directly by a new managing board made up of the mining captains and railway manager reporting back to the board in Edinburgh.<sup>73</sup> In the ACC's case once the mines were well established management over time was simplified by their close geographical proximity to the company's administration centre at Clifton Arizona.

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<sup>68</sup> See NAS GD282/13/143 – small booklet entitled 'The California Redwood Company Limited: Report submitted to the shareholders by Messrs Blyth and Menzies on their return from California', p.10. 50m board feet per annum of timber was the aim but only 10m was produced in the first year of operation.

<sup>69</sup> See Jackson (1968) chapters III and V.

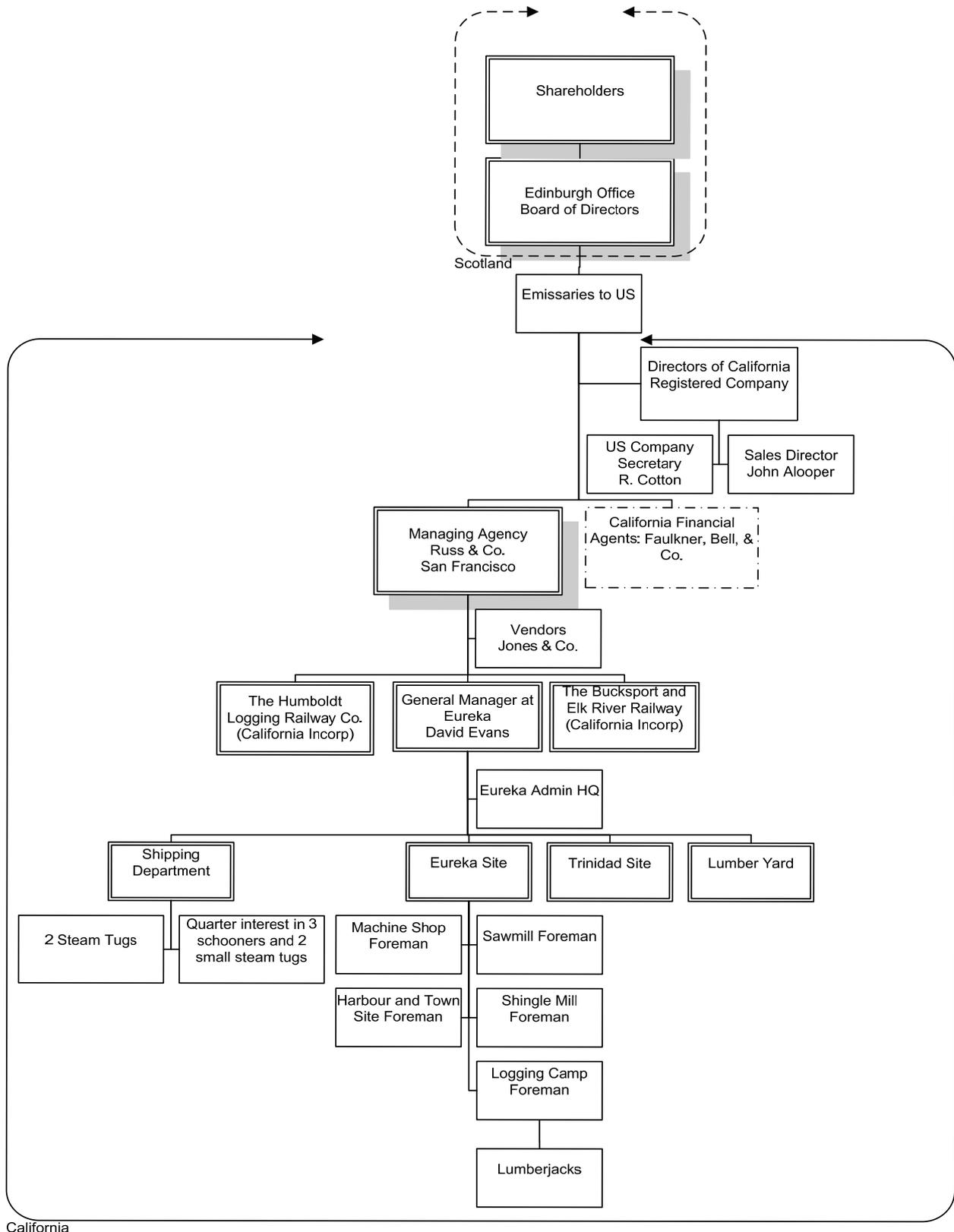
<sup>70</sup> Hyde (1998).

<sup>71</sup> See the NAS file GD282/13/154 for various documents relating to the relationship between ACC and the Arizona Trust and Mortgage Company Ltd.

<sup>72</sup> See NAS GD282/13 – report from J. A. Robertson's trip to Arizona, June 1884.

<sup>73</sup> Ibid.

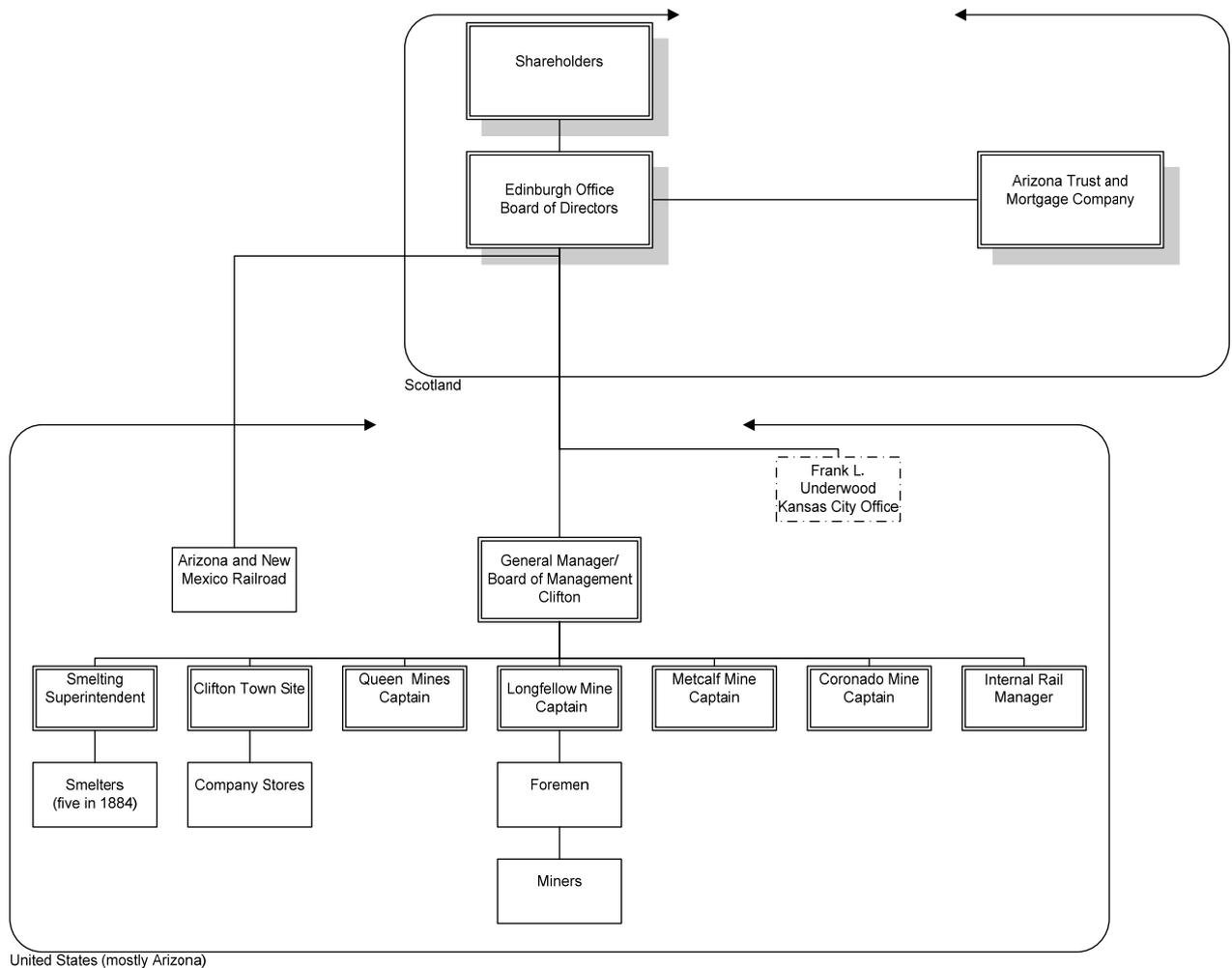
Figure 3: *California Redwood Company Structure 1883-5*<sup>74</sup>



California

<sup>74</sup> This has been extrapolated from an examination of a collection of documents on this company held at NAS in GD282/13; particularly of use was the reports and correspondence file GD282/13/123 and the scrapbook GD282/13/143. NAS GD282/13 is part of a much wider collection of documents under NAS GD282 from the Edinburgh law firm Messrs Davidson & Syme W.S., 1468-1977.

Figure 4: *Arizona Copper Company Structure c.1884*<sup>75</sup>



### 3. Conclusion

The experience of these four companies tells us that FSCs were difficult organizations to manage. Managing assets based on a different continent (and in the cases of the C&O, NZ&A and CRC multiple sites) presented a considerable challenge to capitalists mostly experienced with managing single site businesses. However in the case of the two Australasian firms these disadvantages were overcome by firstly setting up clear monitoring procedures to ensure resources were not being misallocated (monthly reporting was a key element of this) and to ensure that Scottish based board members and management had information to base their decisions on. The C&O and NZ&A relied to a large degree upon Scottish recruited personnel, raw material inputs, farming knowledge and distribution networks back at home. Although agency problems persisted an effective solution was found to run the necessary internal market in information flows from principal to agent and back again. Further the head office had a vital role in capturing technological knowledge and exporting it to Australia and New Zealand without any external cost. Meanwhile the ACC marketed its copper outputs mostly in the US and while the CRC did attempt to penetrate the home market by sending samples of redwood to trade shows it never successfully produced enough redwood to sell in volumes back in the UK market. The ACC relied upon US technology in smelting (it purchased its hardware from one firm based in San Francisco and

<sup>75</sup> This has been extrapolated from an examination of a collection of documents on this company held at NAS in GD282/13; particularly of use in doing this has been the report of Mr Robertson’s visit to the mines – see NAS GD282/13/154.

another in Chicago)<sup>76</sup> but it did inherit some Scottish personnel in Arizona.<sup>77</sup> In the cases of both the ACC and CRC the home office fulfilled a purely representative function acting only as a meeting place for the board and giving the company an official address. These head offices were not used as managerial centres nor as centres for procurement or recruitment – instead these functions were carried out in the host country, thus exposing the Edinburgh based principals to a higher level of risk. The experience of these four companies would suggest therefore that the level of control from the home office in Free Standing Companies matters in terms of their success at developing as businesses; control did not successfully extend in all cases and when it did not FSCs were essentially vulnerable to schism into two separate firms with conflicting aims. Scottish control did successfully extend across borders but appears to have been more effective at doing so when presented with a blank institutional canvas as in Australia and New Zealand.

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<sup>76</sup> Hyde (1998) p. 118.

<sup>77</sup> The Superintendent of smelting after 1884, James Colquhoun (1857-1954), and later General Manager after 1892, was Scottish. He was joined by Mr Gibb, a Scotsman who had 'large experience' of smelting in England and America – J. A. Robertson's report NAS GD282/13/154.

# Loans in France and abroad for French wine merchants following the example of champagne merchant Jean Remi Moët, under the Directory

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If the trade of goods, in general, has called forth and continues to call forth numerous academic works, the credit transaction represents a less studied terrain. As a form of interaction between people and/or institutions, dedicated to strengthening themselves in a more or less durable way, the relationship of credit cannot be reduced to a specific and isolated bond established between two individuals. Inscribed in relational chains and complex social formations, it cannot exist without utilizing guarantees of confidence and dependence. This credit relationship no longer builds itself under social and legal standards that are elaborate and/or tacitly accepted by the actors in question; they influence strategies. We investigate the forms which this particular relationship took toward the end of the eighteenth century for the businessman Jean Rémi Moët, thanks to an examination of his correspondence and accounting books.

One of our prime objectives is to take into account the broad range of actors involved. We also wish to approach the credit relationship through the perspective of the transaction, which places two types of actors at odds, the creditor and the debtor, moreover their susceptibility for role exchange or simultaneous role holding.

Our attention will focus here, in this exploratory phase of research, on the methods of the loans selected or accepted by Moët, which would be in accordance or not, from the point of view of his contributions to the history for European finance and trade, during the Directory. These contributions are particularly characterized by the instability of several money markets (bankruptcy of several commercial firms of Hamburg after the winters 1798-9 for example), a collapse of currency-paper in France, etc.

Thus, we will pull from some of the first teachings of the practice of borrowing between champagne negotiants.

## 1. Jean Remi Moët, actor within credit relationships

In the eighteenth century, the majority of exchanges reposed on credit. In the business of Champagne wines, Jean Remi Moët needed to mobilize money for his enterprise. He also needed those who must have had the money that he needed, which, according to Braudel, ‘a precarious balance, on the border, without end, of tumbling and falling’.<sup>78</sup>

### 1.1 To borrow from a stranger is to encounter difficult returns

Or, delays to recover commissions that are under irregular and long Directories.<sup>79</sup> This is similar according to Jean Remi Moët ‘the greatest misfortune which could arrive at this moment in France to a house of commerce, the slowness of payments’.<sup>80</sup> This same moment, in France, also saw a monetary instability read as the devaluation of paper money. For this, Moët put his stock in borrowing from privileged foreigners, like he wrote to Mérian Father and Sons, of Bâle, on 31 December 1795: ‘The sequestering of England on the burdens and the rarity of species in France forces us to seek out burdens for the stranger’.<sup>81</sup> These

<sup>78</sup> See Braudel (F), *Civilisation matérielle, économie et capitalisme*, Paris, A.Collin, t.2, p. 57.

<sup>79</sup> See Perron, (F.), *Clients of Marnais Traders and the Financing of their Commissions During the Directory*, EHBA - Geneva, September 13-15, 2007.

<sup>80</sup> Arch. deprived Moët and Chandon, 18 J507, f 166, 7 August 1797.

<sup>81</sup> Arch. deprived Moët and Chandon, 18 J 505, f°78, 31 December 1795.

different borrowing demands under the Directory have several objectives: they served, for example, to reimburse anterior loans or to pay for imports. They were equally perceived like responses to objectives inscribed in concurrent approaches: they permitted the continuation of prospects in foreign markets but also provided them with grape harvests. This is within the last goal, for example, that Moët asked Feuillant on 7 November 1797 for him ‘to promise assistance for a reasonable rate’, adding this remark: ‘it is that we have decided to strike down the rest of the requests of Mr. Ruinart, already strong with anger from buying that which we had suffered him’.<sup>82</sup>

### **1.2 An examination of exchange between hands and multiple actors**

To satisfy loan demands, Moët solicited several actors to spread out in a vast area (Switzerland, Germany, France). He said, however, to not have to require help from his family, evoked on 31 December 1795, ‘it has been 4 years, it has found within the family a million to borrow, (and which will no longer be true) because each has a place in acquisitions of good burdens in order to separate from those assigned’.<sup>83</sup>

According to persons approached on this subject, we distinguish financial professionals who directly demanded a loan, like Merian, Vidal, Heyder and the famous Perregaux, future founder of the Bank of France, and others, familiar to or employed by Moët, who asked for him to intercede.

It is necessary to note within this approach, the essential role that accorded Moët to his travellers, Henry Jacob Geiger, as a prospector of markets, promoter of products, agent of recovery but also an authority favoured in the research on negotiating and lending.

## **2. Types of lending: an obscure reality?**

### **2.1 The demands of loans**

The measure of solicited loans and their types is assuredly delicate. A systematic study of correspondence sent by Jean Remi Moët allows us to distinguish 22 letters evoking a demand for the period 1796-9, which represent an extreme part of the letters. These demands, often motivated, were not, however, always precise: the rise, the tax, the duration, the type of payment (coins or tickets) were not always mentioned. This is the case of a letter written by Moët to Geiger on 3 March 1798 where he asked him ‘to send money and procure several thousand ledgers of modest interest, 6, 7, or 8 per cent per year’.<sup>84</sup> Similarly, on 2 July 1798, he solicited Kolb, of Strasbourg, to procure for him ‘12, 15, or 20 thousand ledgers for 6 months or a year, which would determine larger speculations’.<sup>85</sup> The request was still unfocused for 2 years following, until he requested of Mrs Chauffour, from Aÿ, ‘a good sum of banknotes’.<sup>86</sup> A certain estimation of the quantity solicited is thus impossible, as much as we guarantee that these demands by correspondence would have been the only demands effected by Jean Remi Moët in this sense. To observe the calendar of his mailings is, however, significant.

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<sup>82</sup> Arch. deprived Moët and Chandon, 18 J 507, f°252, 7 November 1797.

<sup>83</sup> Arch. deprived Moët and Chandon, 18 J 505, f°78, 31 December 1795.

<sup>84</sup> Arch. deprived Moët and Chandon, 18 J 507, f°371, 3 March 1798.

<sup>85</sup> Arch. deprived Moët and Chandon, 18 J 507, f°485, 2 July 1798.

<sup>86</sup> Arch. deprived Moët and Chandon, 18 J 505, f°160, 21 March 1796.

Table 1: *Requests for loans by correspondence of Jean Remi Moët, 1796-9*

Year	Number of letters
1796	10
1797	2
1798	7
1799	3
total	22

(Sources: private archives of Moët and Chandon, 18 J 505-508)

We observe that the two years strongest in correspondence are 1796 and 1798 with a maximum in 1796 (11 letters). Certainly, it is necessarily nuanced: in one way, the figure is quite frail, and in another way, in 1796, the date of letters addressed to the same person drives us to move the actual number from 11 to 8. This is, in effect, the same question which moved about the letters to Mrs Chauffour, from Aÿ, the 21 and 25 of March. The note was the same for those sent from 27 April to 14 May, always to the same person, the same speaking of, but not a repetition, a modification of the question, read in the context of French money. Of 27 April 1796, Moët asked for ‘a line from Paris in assigning 29,000 ledger books’.<sup>87</sup> On 14 May, he returned it to him because it ‘hadn’t been paid (and asked him so that) the acquisition of 20,000 ledger books’.<sup>88</sup> We do not set out the information of the origin of banknotes that make it difficult to identify with certainty the reasons of refusal of the first type, without doubt however to the extreme deflation of the banknotes (that had already happened at that era).

Despite these nuances, it is necessary to highlight that the observed rhythm for these loan demands resembles that which has already been observed for the commissions and for the recovery. This is the same in 1796 and in 1798 that the sales are less numerous and that show some commissions are less returned.<sup>89</sup> To the inverse of effectuated commissions at the more favourable times were better returned, like in 1797 with 45.7 per cent of commissions, this is also the year where Jean Remi Moët made the least amount of loan demands, this is explained in large part here.

Qualitative examination of borrowing conditions reveals an augmentation of interest taxes between 1796 and 1798, to the point that they are mentioned. This is not on the part of poor information from Moët, who seems to appreciate the advantage of tariffs, at a higher rate, than the ‘moderated tax’ that he reclaimed in 1796,<sup>90</sup> proof of the intensity of his difficulties in that year. Thus, asking a new article from Geiger, he affirmed that ‘interest in borrowing which seems strong, there are two years that it seems actually smooth’ asked him to procure from him ‘a nondescript sum from 10 to 12 thousand francs at 10-12 per cent per year’.<sup>91</sup>

The raises requested also knew the same inflection between 1796 and 1798. Like in 1796, we did not find demands greater than 10,000 specific books, in isolating the sums of banknotes, they are different in 1798 with some requests, approaching 25,000 books. On 8 August 1798, he again charged Geiger for him ‘to discover a capitalist (sic) who would like to place in his hands 20-25,000 books at a reasonable tax, for example from 10-12 per cent per year and who would leave us these funds for 12-18 months, which would give us time to wait for returns to hope for the next expeditions’.<sup>92</sup> These loan demands show higher rates of taxes in 1798 than in 1796, able to have several reasons: is it the sign of greater confidence in Jean

<sup>87</sup> Arch.deprived Moët and Chandon, 18 J 505, f°196, 27 April 1796.

<sup>88</sup> Arch. deprived Moët and Chandon, 18 J 505, f°214, 14 May 1796.

<sup>89</sup> See Perron (F.), « Clients of Marnais Traders... », op. cit.

<sup>90</sup> Arch. deprived Moët and Chandon, 18 J 505, f°130, 19 February 1796.

<sup>91</sup> Arch. deprived Moët and Chandon, 18 J 507, f°515.

<sup>92</sup> Arch. deprived Moët and Chandon, 18 J 507, f°504-6.

Remi Moët, of a greater investment? Realized, this loan had almost all, in this case, a superior cost to the higher loan for the period beginning in October 1795 to 1800 ('25-30,000 specialty books at 4 or 5 per cent interest where the obligation to reimburse was 1 or 2 years').<sup>93</sup>) From this, if we take a loan of 25,000 books in these two cases, for the same duration of one year, taken in 1795, he would have cost according to the hypothesis higher negotiation of 26,250 books (tax at 5 per cent) and taken in 1798, 28,000 books (tax at 12 per cent). The existence of terms of the duration of Moët seems identical: he was bothered to ask for an annual loan. This was the temporary card appreciated by Moët, corresponding to the duration of neutralization of the debt.<sup>94</sup>

Force is thus observed in the plural reality that could take the research of capital mobilization, for the life of the loan, irregular long under the Directory, and somewhat important as to the belief to travel and obtain commissions. Of this access to credit, depending in fact on the accomplishment or failure of business. Who says credit, says facility of payment, rapidity of exchange and gains.

## 2.2 Lending accordances

If it is also difficult to appreciate the group of conditions of obtaining loans that were requested, in spite of the examination of accounting books, it is possible to carry out certain official reports.

Altogether, requests that Moët carried out are far from being very fruitful. Accord is similarly rare, since we do not find that Chauffour, Perregaux, and Heyder had loaned Moët during this period. The first is the only offer of official records, the second which is found to address foreigners to obtain credit, permitted Moët to dispose of 3,000 specialty books that he wanted at the beginning of 1796, the third distinguishes several reprisals of a loan. This is certain, then, that he was satisfied, Moët put in some time, that he highlighted in a letter to Maréchal from Avise: 'You believe that we found the money to lend when we need it at this moment. It was good another time. There are many years that I did some looking in Frankfurt, Bale, and Hamburg, and I wasn't able to find any recently'.<sup>95</sup> These difficulties in obtaining loans served, then, as supplementary arguments for Moët to revive his debtors. So, always to the same Maréchal, he begins to revive on 13 July 1797 with these words: 'If I had been able to find a loan, I would have also supplemented this sacrifice to the desire of your obligation a long time, but in vain, I knocked on all the doors, and the resources which I waited for missed ... I need the totality of that you need give me'.<sup>96</sup>

## 3. First teachings of «the practice of lending» of Jean Remi Moët

Observation of relations of credit woven or not by Jean Remi Moët could equally clear up for us several titles of the practices of borrowing from champagne businessmen at the end of the eighteenth century. They could not alone permit us to make generalizations on the usage of champagne businessmen, nor of the existing norms in this period.

The examination of correspondence reveals however all of the beliefs of real experience of this practice for Moët and good information as to the financial situation of European places. This seems to be well known, the risks of failing that could present interdependences. This is also like he explains to Grenet on 15 April 1796, that he calls equally 'the affair of Berlin': 'the fault of the richest house of the bank of Berlin understood much of the houses of Hamburg'.<sup>97</sup> He speaks similarly of 'the terrible bank-route of the

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<sup>93</sup> Arch. deprived Moët and Chandon, 18 J 505, f°16.

<sup>94</sup> See Weber (F.), « Transactions marchandes, échanges rituels, relations personnelles. Une ethnographie économique après le Grand Partage », *Genèses*, n°41, déc. 2000, p.85-107.

<sup>95</sup> Arch. deprived Moët and Chandon, 18J 507, f°39, 16 April 1797.

<sup>96</sup> Arch. deprived Moët and Chandon, 18 J 07, f°146, 13 July 1797.

<sup>97</sup> Arch. deprived Moët and Chandon, 18 J 505, f°178.

place of Hamburg'.<sup>98</sup> These incidents explain the issue of some effective requests in 1796, resting in letters. On 23 February 1796, Moët had in fact solicited Vidal of Hamburg to advance to him '6,000 books of France or the reimbursable value in 1 year, showing the sums which he had due in England'.<sup>99</sup> Without response to the last, Moët supposed that 'Vidal was also embarrassed about the affair of Berlin',<sup>100</sup> but did not cease to seek out loans, choosing instead to look in other places.

He kept, in fact, all alongside the Directory a permanent wish to not recover the course of money, so as to avert a 'badly controlled chronology'.<sup>101</sup> Moët knew well the essential character of mastering the flux of money (and the time) for permitting him to make positive choices for his business. Constantly partaking in the desires of market conquest and in placing his products and the produce to have during this troubled period, he did not hesitate to request loans for 'measuring foresight'.<sup>102</sup> We have already demonstrated the wish of this last of occasions, driving him to slow certain expeditions in order to know, for example, to profit from an overture of a fluid track.<sup>103</sup> It was necessary for him to set out the faculties of financing if it would equally suppose arbitration, between indebtedness and auto-financing.

Thus, these relations of credit illustrate complex links, social and professional, of dependence and of interdependence between Jean Remi Moët and actors he solicited. He moved about interpersonal relations in his confidence and defiance, subordination and domination. This maintenance with Heyder seems to gradually convert in an assured confidence, endowed with the average of measure and of mastering interactions: the fact that he had accordances of credit for 6,000 books in 1796 incited Moët to solicit him for other trades, to such that Heyder was forced to respond, reinforcing the naturalness of these bonds unifying champagne businessmen. However, Moët did not leave certain prudence, perhaps for avoiding too much interdependence. He informed Geiger on 29 August 1798 that 'he is going to write in order to feel more generosity but that he was going to wait until the month of December, when he would come to be reimbursed for his loan'.<sup>104</sup>

<sup>98</sup> Arch. deprived Moët and Chandon, 18 J 505, f°206, 5 May 1796.

<sup>99</sup> Arch. deprived Moët and Chandon, 18 J 505, f°137.

<sup>100</sup> Arch. deprived Moët and Chandon, 18 J 505, f°178.

<sup>101</sup> Coquery (N.), « Les boutiquiers parisiens au XVIIIe siècle et le crédit : une réinterprétation pragmatique des conventions », séance séminaire IHMC, ENS, Paris, november, 19, 2007, p.3.

<sup>102</sup> Arch. deprived Moët and Chandon, 18 J 507, f°88, 25 May 1797.

<sup>103</sup> See Perron (F.), « Pluri-modalité des moyens de transports et commerce des vins de champagne de la fin du XVIIIe au début du XIXe siècle », *Le Champagne : regards croisés sur une identité en mutation*, Reims, 2007, Epure, p. 99-119.

<sup>104</sup> Arch. deprived Moët and Chandon, 18 J 507, f°515.

# A demographic study of Winchester College and New College, Oxford, 1392-1540

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## 1. Introduction

The late medieval period is well known for the extreme changes in population structure that were experienced as a result of the Black Death, and in turn for the major repercussions these changes had on economic and social history. Yet the dramatic fall in population and its continued inability to recover are subjects of much debate.<sup>1</sup>

Census data and parish records, such as those used by Wrigley and Schofield in *The population history of England 1541 – 1871*, were not compiled in the late medieval period.<sup>2</sup> Instead, medieval historians must make best use of those documents that have survived, for example, court records or poll tax data. Z. Razi used the manorial court records of Halesowen (Worcs.) to investigate the demographic history of this community between 1270 and 1400, and L. R. Poos used the poll tax records alongside church and government documents to produce a picture of social and economic change in Essex from 1350 to 1525.<sup>3</sup>

Another particularly fruitful area of investigation has been the records of former monastic communities. The monks of Christ Church, Canterbury, Westminster Abbey and Durham Priory have been used as case studies to explore mortality experiences in the late medieval period.<sup>4</sup> The detailed and well-kept records of these institutions have allowed the lives of the monks to be followed and their deaths to be observed within these closed communities. However, few records survive that contain data of the quality required to chart the mortality experiences of monks at other foundations and it is likely that no further monastic samples will be found.<sup>5</sup> However, this only underlines the need to investigate alternative avenues of study.

This paper presents the findings of another case study, the largest of this kind, which focuses on the experiences of 2,692 scholars at Winchester College and New College, Oxford. These two sister colleges were founded by William of Wykeham, Bishop of Winchester, in 1382 and 1379 respectively. Seventy scholars were maintained at each college at all times. They studied grammar at Winchester and progressed to New College for their university education, before joining the ranks of the clergy. This study has followed them through their educational career and beyond, analysing mortality rates at the two institutions and contrasting them to the monastic communities. Life expectancy rates for the whole sample have also been calculated and compared to those of the monks.

## 2. Sources and methodology

This study has employed the methods used for the monastic samples of Christ Church, Canterbury, Westminster Abbey and Durham Priory. Annual crude death rates have been calculated for Winchester College and New College, Oxford in order to compare the mortality experiences at these two institutions to those of the monasteries and of any future sample groups. Life expectancy rates for the group as a whole have also been calculated. This has incorporated data on the post-university careers of scholars.

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<sup>1</sup> Hatcher, *Plague, population and the English economy*.

<sup>2</sup> Wrigley and Schofield, *The population history of England*.

<sup>3</sup> Poos, *A rural society after the Black Death*; Razi, *Life, marriage and death in a medieval parish*.

<sup>4</sup> Hatcher, 'Mortality in the fifteenth century'; Harvey, *Living and Dying*; Hatcher, Piper and Stone, 'Monastic mortality'.

<sup>5</sup> Hatcher, Piper and Stone, 'Monastic mortality', p. 668.

The array of source materials that have survived for the two colleges is impressive. This is largely due to the continuous functioning of the colleges since their foundation over six hundred years ago. Wykeham required that records be made and securely kept in a purpose built Muniment tower, which has proved ideal conditions for their preservation. By consulting a range of different documents it has been possible to obtain all the information required to calculate mortality and life expectancy rates for this sample.

Admission records for Winchester College and New College, Oxford survive for the period of this study and provide details of the names, place of origin and date of admission of scholars. This provides the initial entry date to the sample group for all 2,692 scholars. Age of scholars at admission to Winchester College was recorded from the 1460s, but for the earlier period this has been ascertained using the Winchester College Register of Oaths. Scholars were required to take an oath at the age of fifteen, and comparison of the date of this oath taking to the ages provided in the latter half of the admission register indicates that the Register of Oaths is a reliable means of deducing age when not given elsewhere.

Records of death or exit from the sample group have been ascertained using the admission records of both colleges and through the use of hall book accounts for Winchester College. Marginal notes in the Winchester College admission records often provide detail as to when and why a scholar left the college, and details of death. The hall book accounts survive in great number for much of the period and provide weekly lists of those scholars eating in hall at Winchester. This has provided dates of death or exit from the sample for the majority of those instances in which the date of these events was not provided elsewhere. The New College, Oxford admission records add to the dates of departure for Winchester scholars, who were required to be at Oxford within two weeks of obtaining a place. The form of admission records is also slightly different, giving details of the previous New College scholar who had created the vacancy, and specifying if this was created by their death or departure from the college. These sources combined have given the information necessary to calculate who was at each college at any one time, the dates of their admission and departure, their age, and the date of their death if it occurred while at either college.

Calculation of life tables and life expectancy rates has also utilized information taken from the volumes of Emden's *Biographical Register*.<sup>6</sup> These volumes provide short biographies of medieval Oxford alumni. They have been used in this study to trace the post-university careers of New College scholars, and to obtain a date of death or of last observation for the majority of those who survived their university education.

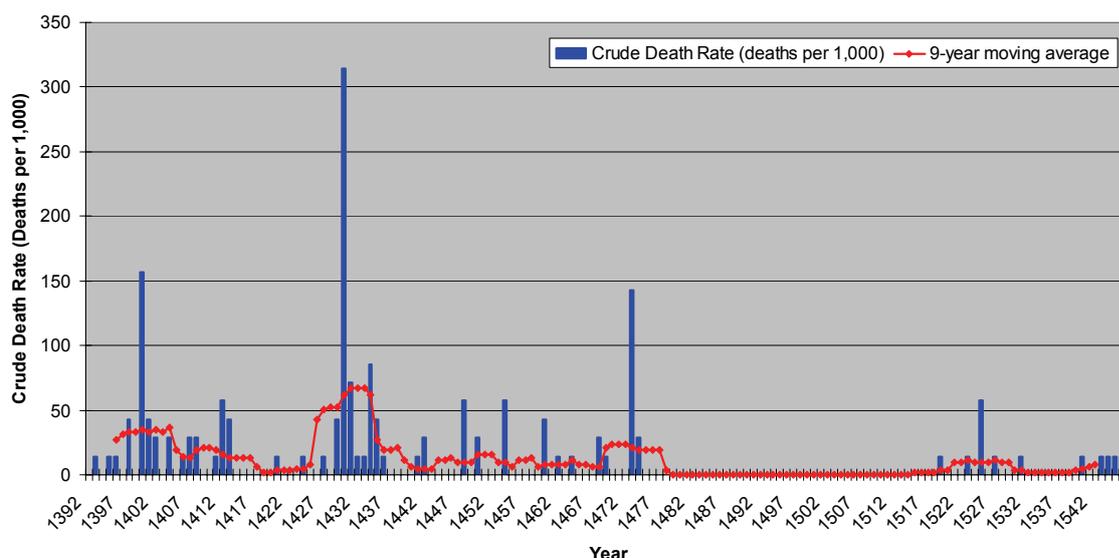
### 3. Mortality at Winchester College

Of the 2,692 scholars enrolled at Winchester College between 1392 and 1540, a total of 128 scholars died while at Winchester. Figure 1 shows the annual mortality rates experienced at Winchester College between 1392 and 1546. A 9-year moving average crude death rate has also been calculated. Those years in which mortality rates exceeded the level of 50 deaths per 1,000 have been deemed as years of crisis mortality. This level has been calculated in accordance with the methods used in previous studies.

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<sup>6</sup> Emden, *A Biographical Register of the University of Oxford to A.D. 1500*, (3 vols.); Emden, *A Biographical Register of the University of Oxford A.D. 1501 – 1540*.

Figure 1: *Mortality at Winchester College 1392-1546: annual crude death rate and 9-year moving average*



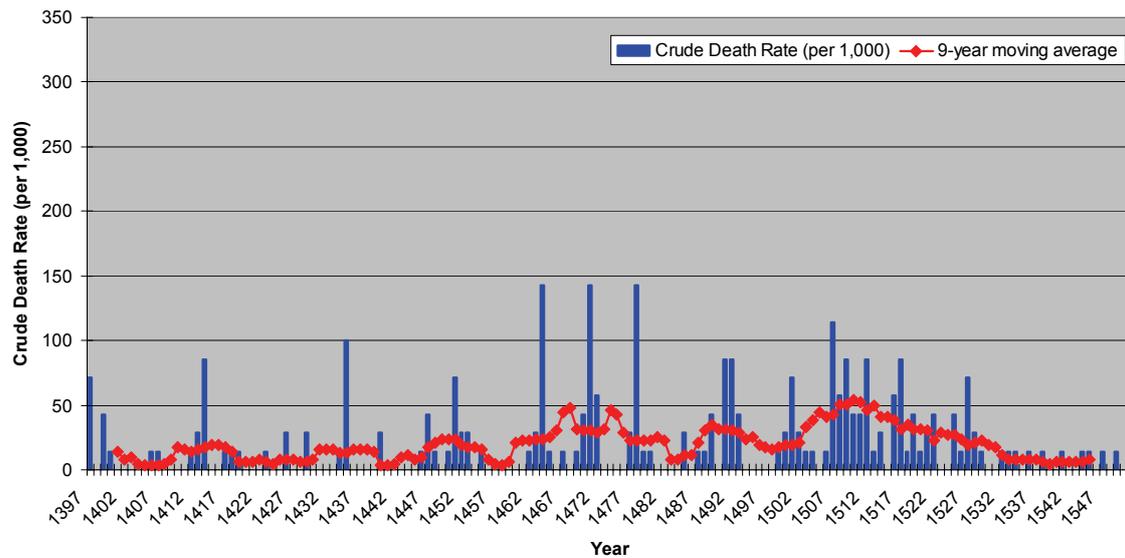
As can be seen from figure 1, Winchester College experienced levels of crisis mortality in nine out of the 154 years of the study period, with all but one of these years occurring before 1474. Of these years, three show exceptionally severe levels of mortality, with the crude death rate reaching 157 deaths per 1,000 in 1400, a staggering 314 deaths per 1,000 in 1430, and 143 per 1,000 in 1473. These three years clearly reflect extreme rates of death within the community and can be identified as years in which epidemic illness swept through the college with devastating effect. Examination of the hall book accounts for 1430 further supports this hypothesis, showing that the deaths occurred in quick succession over the course of a few weeks, rather than being evenly dispersed throughout the year.

Figure 1 shows that the death rate fluctuated through the earlier half of the study period, and that the majority of mortality crises occurred prior to 1474. Death rates then dropped and became nearly non-existent in the period between 1474 and 1519, before a slight rise in mortality was again seen, with 1525 just exceeding the crisis level with 57 deaths per 1,000. The absence of deaths between 1474 and 1519 in figure 1 is likely, however, to reflect the consequences of less detailed information in the marginal notes of the Winchester admission records for this period, resulting in a greater number of scholars for whom their cause of exit from the Winchester College sample group is unknown. Despite the differences in levels of recording for this period, however, it is probable that the death rates at the college were indeed much lower during this period, as a greater proportion of scholars were being admitted to New College, Oxford. In several years of the early sixteenth century close to 100 per cent of scholars admitted to Winchester College progressed to New College Oxford, compared to values of around 40 per cent in the first half of the study period.

#### 4. Mortality at New College, Oxford

Of the entire sample of 2,692 scholars, 1,378 (51 per cent) continued their education at New College, Oxford. Of the 1,378 scholars at New College, 216 died while in residence at Oxford. The annual crude death rates experienced at New College, Oxford are shown in figure 2 below.

Figure 2: *Mortality at New College, Oxford 1397-1549: annual crude death rates and 9-year moving average*



The mortality rates at New College, Oxford over the period 1397 – 1549 show a rather different picture to that seen for the Winchester College scholars. Levels of crisis mortality are gauged in the same way, with the level of 50 deaths per 1,000 being the level at and above which a crisis was deemed to have been experienced. At New College, Oxford, 18 of the 152 years under observation have been identified as being years of crisis level mortality. This was twice as many years of crisis as were identified at Winchester College. However, the level of crisis was generally much lower, with none of the extreme peaks that were witnessed at Winchester College over the study period. The mortality rate only exceeded the level of 100 deaths per 1,000 on four occasions, reaching the level of 143 deaths per 1,000 in 1464, 1471 and 1478, and 114 per 1,000 in 1507.

The timing of these crises differed to those experienced at Winchester College, with the majority of years of high or crisis level mortality having occurred in the latter half of the study period at New College, Oxford, after c. 1460. At New College it appears that high levels of mortality were more frequent in the latter half of the study period and that periods of crisis level mortality were more common at New College, Oxford than at Winchester College. However, it can also be seen that when levels of crisis mortality were experienced at New College, the effects were often much less severe than had been the case at Winchester College. This may reflect a number of factors, such as a greater resilience to disease on the part of the Oxford scholars, who had already survived their grammar education at Winchester, or the less crowded environment and living conditions experienced at Oxford.

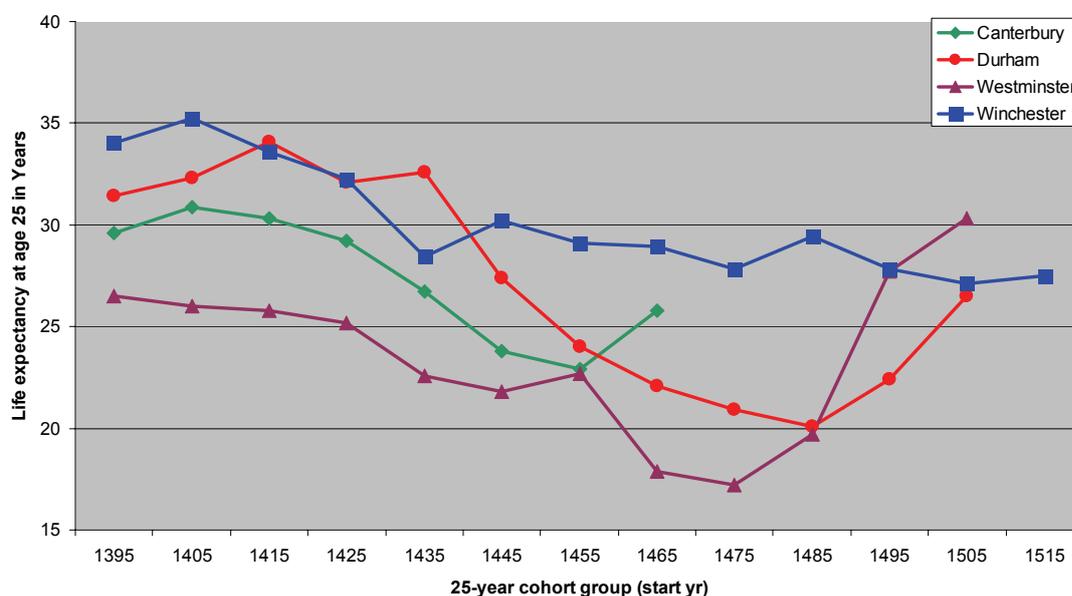
## 5. Life Expectancy

Life tables have been constructed for the sample group as a whole using the data collected from the records of both colleges and from the details relating to post-university careers as collated from the volumes of Emden. These life tables have been calculated in 25-year overlapping cohorts, commencing in 1395 in order to make them directly comparable with the life table data calculated for the monastic communities. These cohorts overlap at 10-yearly intervals. Figure 3 shows the life expectancy of the Winchester College scholars at the age of 25 compared to that of the monks of Christ Church, Canterbury, Westminster Abbey and Durham Priory. This graph shows the average number of years an individual could expect to live once they had reached the age of 25 in each of the sample populations.

It can be seen from figure 3 that the life expectancy rate of the Winchester College sample group was generally higher than that of the three monastic communities. Life

expectancy rates for the Winchester College sample followed the direction and timing of the other communities until 1435. After this point, the life expectancy rates within the monastic communities fell quite steeply, with life expectancy at age 25 falling to a low of 22.9 years at Canterbury in the 1455 cohort, 17.2 years at Westminster in the 1475 cohort and 20.1 years at Durham in the 1485 cohort. Each of these three institutions then began to experience a rise in life expectancy, however, the effects of this are not fully observed as the dissolution of the monasteries at the Reformation prevented the remaining members of these communities from being traced until their deaths. The Winchester College sample group displays a markedly different life expectancy experience for the latter half of the study period, with life expectancy rates remaining fairly constant at between 27 and 30 years for the cohort groups of 1435 to 1515.

Figure 3: Comparison of life expectancy at age 25 of the communities at Christ Church, Canterbury, Westminster Abbey, Durham Priory and Winchester College in 25-year overlapping cohort groups, 1395-1515<sup>7</sup>



## 6. Conclusion

This study contributes important new data to the debates on the demographic history of the late medieval period, and is unique in its consideration of adolescents. The comparison of the mortality rates experienced at Winchester College, New College, Oxford, and at the monastic communities, demonstrates that outbreaks of disease were more localized in the fifteenth century. No two institutions demonstrate severe crisis level mortality in the same years.<sup>8</sup> This seems to indicate that national epidemics were not experienced in the way they had been at the first outbreaks of plague. However, towards the end of the fifteenth century lower levels of crisis mortality occurred more frequently at Christ Church, Canterbury, Westminster Abbey, Durham Priory and New College, Oxford. These rates were more often at or below c.150 deaths per thousand, in contrast to the severe crises seen at Westminster Abbey and Winchester College in the earlier part of the fifteenth century, when rates exceeded c.250 deaths per thousand. Although far less severe in the latter part of the study period, the increased frequency of years of crisis mortality suggests that death and disease continued to play a major role in preventing recovery of pre-plague population levels.

<sup>7</sup> Data compiled using the records of Winchester College and New College, Oxford and comparative data for the monastic samples taken from Hatcher, Piper and Stone, 'Monastic mortality', p. 674, table 3.

<sup>8</sup> Harvey, *Living and Dying*, p. 126; Hatcher, 'Mortality in the fifteenth century', p. 26; Hatcher, Piper and Stone, 'Monastic mortality', p. 677.

The data presented in this paper demonstrates that the life expectancy rates experienced by those who undertook their education at Winchester College and New College, Oxford were generally higher than those experienced by the monastic communities over the course of the same period. Crucially, unlike the monastic samples, the life expectancy rates for the Winchester College sample remained fairly consistent throughout the latter half of the study period. This indicates that the dramatic fall seen in the monastic samples may not be applicable to the population as a whole and that only by examination of further case studies will it be possible to build an accurate picture of demographic changes in the late medieval period.

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# Amartya Sen re-visited: population, grain production and income inequality in eighteenth-century Guadalajara (Spain)

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## 1. Introduction

This paper presents original series from the historical diocesan archives of Sigüenza and Getafe, and includes baptismal records and cereal production for the province of Guadalajara and grain prices for the province of Madrid for the eighteenth century. The main purpose of the paper consists in giving an answer to the demographic paradox that took place in Guadalajara during the second half of the eighteenth century when fertility maintained a sustained and intense growth while the total production of cereals in the same province was constant and even declined in per capita terms.

The first section will present the baptismal record and cereal production series to show the existence of a demographic paradox. After describing the dataset, the paper will introduce a possible solution to this puzzle based on Amartya Sen's entitlement theory and present the Gini coefficient of the cereal production series, and its relationship with the demographic and productive trends. Finally the last section will look at the reasons behind the changes in inequality, concluding that the improvements made by small producers were the driving force of the process.

## 2. The Data

The dataset includes estimations from primary sources of grain production, fertility rates and grain prices for eighteenth-century Guadalajara and Madrid. To proxy grain production we have used tithe records kept by the local priest in 25 towns and villages of Guadalajara.<sup>9</sup> For the period under analysis the use of tithes offers a good estimation of real production, as the level of taxation remained constant at 10 per cent and cheating was not significant until the end of the Napoleonic wars in the early nineteenth century. Fertility has been estimated by using baptismal records, also kept by the local parishes and widely used in the demographic literature including 25 locations in the province of Guadalajara.<sup>10</sup> Finally new series of wheat and barley prices were produced for Madrid from accounting books of the parish of Santa Maria Magdalena in Getafe. The final dataset includes more than 200,000 observations from individual producers, households and ecclesiastical authorities directly extracted from the manuscripts kept in the Historical Diocesan Archive of Sigüenza-Guadalajara and in the Historical Diocesan Archive of Getafe.

## 3. Population and production in eighteenth-century Guadalajara

In agrarian terms, the eighteenth century is a period of very modest growth. The crisis of the late seventeenth century extended its effects until the first year of the eighteenth century. After the economic slump, a quick and consistent recovery started in 1710 and until 1720 the

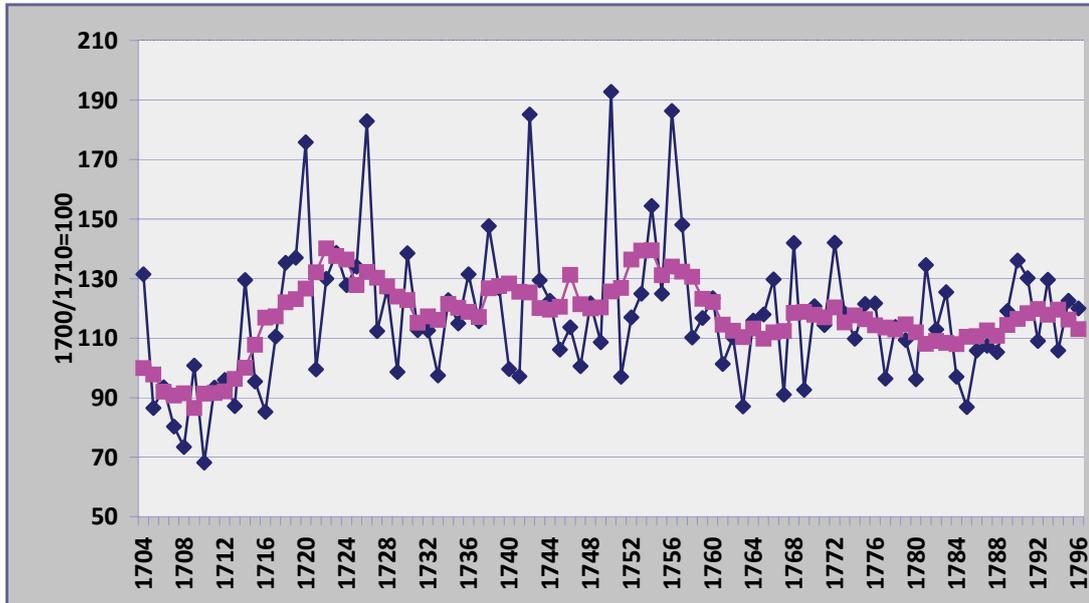
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<sup>9</sup> The villages are Alcuneza, Mojares, Madrigal, Trillo, Miedes de Atienza, Santiuste, Concha, Hijes, Navalpotro, Imon, Herreria, Canales de Molina, Cerrados, Ciruelos del Pinar, Anquela del Pedregal, Olmeda del Extremo, Castilmimbres, Cantalojas, Castejon, Bañuelos, Aragosa, Villaseca de Henares, Sienes, Villares de Jadraque.

<sup>10</sup> The sample includes the villages of Albores, Anchuela del Pedregal, Anquela del Ducado, Arroyo, Bañuelos, La Bodera, Cantalojas, Cañizares, Castilmimbres, Ciruelos del Pinar, La Cobeta, Concha, Congostrina, Galve de Sorbe, Garbajosa, Hijes, Milmarcos, Olmeda de Jadraque, Peralejos de las Truchas, Renales, Riba de Saelices, Setiles, Sienes, Somalino y Torrubia.

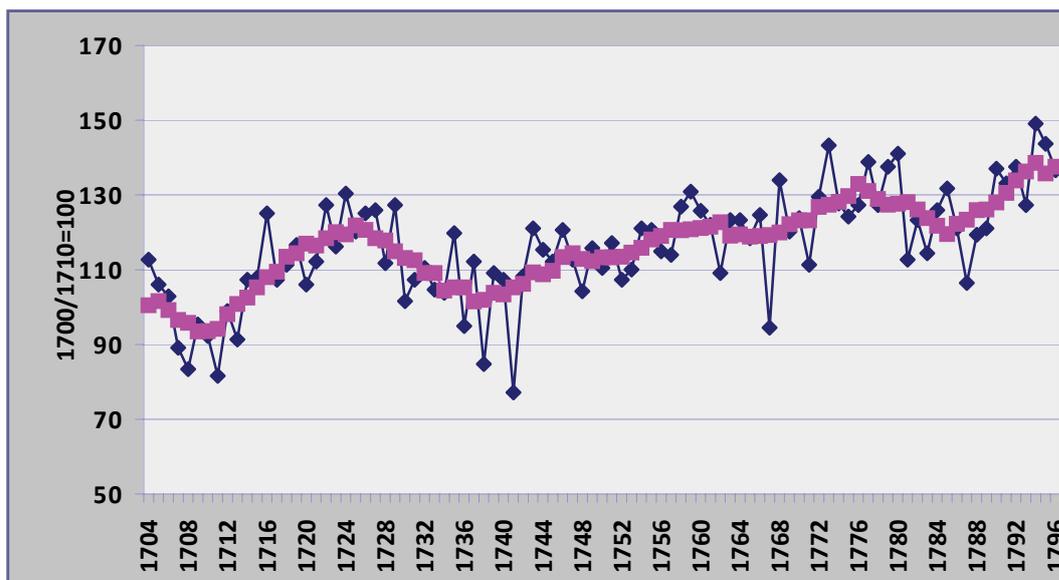
positions that had been lost during the crisis were clearly recovered and even surpassed with an increase in grain production of nearly 50 per cent in only 10 years. The following forty years were a period of stagnation with brief crises and recoveries that finished with the crisis of the late eighteenth century, that started in the second half of the century and that was marked by an early decline of grain production during the 1750s and a later stagnation in the production of grain that would last until the end of the century.

Figure 1: *Grain Production in 18<sup>th</sup> century Guadalajara*



Source: same as footnote 1

In demographic terms, baptismal series show that the eighteenth century was a period of intense fertility growth, a fact supported by a growth of 40 per cent in the number of baptisms. There were three very clear trends. The first one, and after the last effects of the crisis of the late seventeenth century, was a period of growth that started in 1710 and that was sustained until the mid-1720s when it reached its peak to be followed by a crisis until the late 1740s with a decrease of almost 20 per cent in the number of baptisms. The last period was a constant and long process of demographic growth that started in the 1740s and continued during the rest of the century with an increase in the number of baptisms of nearly 40 per cent.

Figure 2: *Baptisms in 18<sup>th</sup> century Guadalajara*

Source: same as footnote 2

Combining the information from both graphs the most striking feature is how the demographic growth continued in Guadalajara during the second half of the century when the production remained stagnant or even declined. We have seen that during the second half of the eighteenth-century grain production was constant while after the analysis of baptismal series it is quite probable that the total population grew in Guadalajara. Therefore in per capita terms the availability of grain diminished. So the question is how can population grow when the supply of food is constant or in per capita terms even declines? A possible explanation is that the distribution of that production became more equal, and therefore that distribution is as important as production levels.

#### 4. The entitlements approach

According to Amartya Sen in his studies of demographic shocks, the distribution of food is as important as the level of food production itself. In his entitlements theory Sen states that 'The entitlement approach to starvation and famines concentrates on the ability of people to command food through the legal means available in the society, including the use of production possibilities, trade opportunities, entitlements vis-à-vis the state, and other methods of acquiring food'.<sup>11</sup> For Sen there are four ways of commanding food, through trade, own production, own labour and inheritance. To study the relationship between food production and demographic movements, we should therefore look not just at the total levels of food production, but also at the ability of every individual to command his own supply.

Sen's theories appeared to explain the emergence of famines in cases where the production of food did not suffer a reduction. In this paper we will use the same theory not to explain a famine, but to explicate the opposite, how the demographic growth of the late eighteenth-century Guadalajara took place when total production of food remained constant and per capita levels probably diminished.

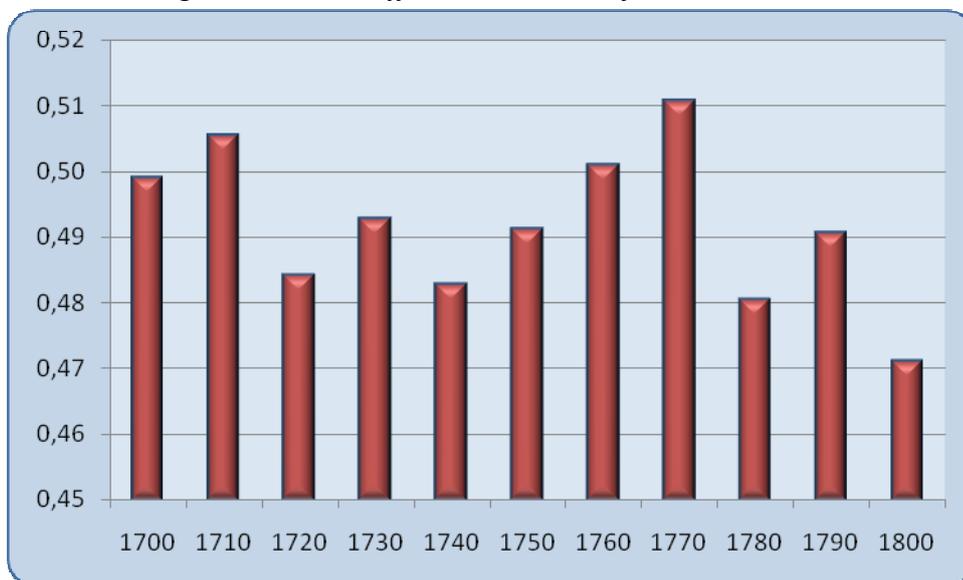
The Gini coefficient measures the dispersion of the observations in a sample, and has been widely used to measure inequality. The coefficient takes values between 0 and 1 being 0 perfect equality and 1 perfect inequality, or in other words and in the case that we are studying the Gini coefficient would be 0 if all the producers produce exactly the same amount of grain and 1 if one single peasant owns all the production. In mathematical terms the Gini coefficient can be defined as:

<sup>11</sup> A. Sen, *Poverty and famines: An essay on entitlement and deprivation* (Clarendon Press, Oxford, 1981), p. 45.

$$G_1 = 1 - \sum_{k=1}^n (X_k - X_{k-1})(Y_k + Y_{k-1}) \quad (1)$$

Using the dataset extracted from the *tazmias* books we created decadal calculations of the Gini coefficient for cereal production in Guadalajara. In order to get a better approximation to real incomes, the production of different grains was transformed from capacity measurements to a monetary one, using the series of prices created for Madrid, the closest available one and the market for the grain from Guadalajara. The new series were therefore not in volume of different grains but in grams of silver. Around 85 per cent of the inhabitants in the villages included in this work were peasants that cultivated their own land and that obtained the bulk of their income from the cultivation of grain (figure 1). Therefore the study of inequality in the production of grains is a raw although good proxy on income inequality. The results of the Gini coefficients of the transformed series for every decade of the eighteenth century are presented in the following figure:

Figure 3: *Gini Coefficient in Guadalajara 1700-1800*



Source: same as figure 1

The results show three clear trends during the eighteenth century. The first one is a period of convergence and inequality reduction from 1710 until 1740. The second one shows an increase of the inequality starting around 1750 and ending around 1770. The last period is again a convergence one that took place from 1770 until the end of the century. In general terms we can confirm that the trend during the eighteenth century is a period of falling inequality.

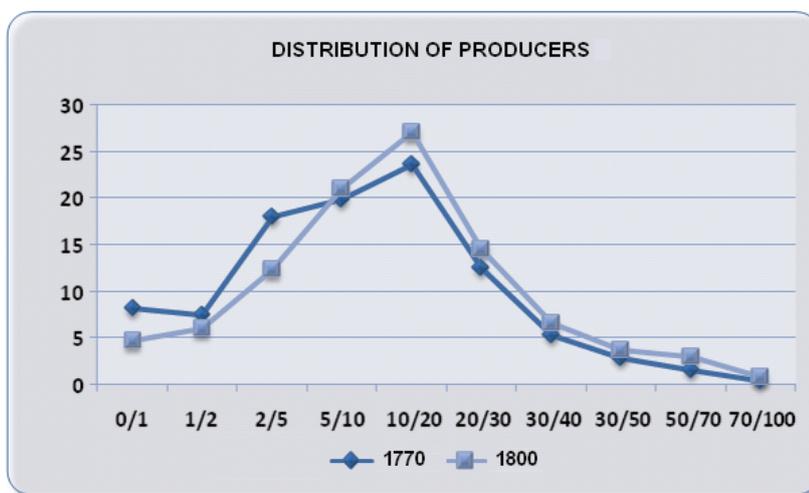
But what is the significance of these numbers? What was the effect of the reduction in the Gini coefficient from 0.51 to 0.47 that took place during the last third of the century? Is it a consequence of small producers catching up? We can provide some answer to these questions. In our sample, doubling the production of the bottom 12 per cent would reduce the Gini coefficient in 0.1 points. In the same way in order to achieve the reduction of 0.4 points we would have to double the production of the bottom 33 per cent. Therefore if the changes are based on improvements of the smaller producers then the effects of the change in inequality would be considerable.

To check if that was the case, all the producers were divided into ten groups depending on their production levels. Taking index numbers and 100 as the output of the maximum producer, the observations were divided depending on their percentile in relation to this maximum. Therefore the first group includes the number of peasants whose production levels

are between 1-2 per cent of the output of the biggest producer, etc. Three graphs will be shown for each period, the first one with the distribution of the producers in each inflexion point, the second one with the variations in percentage in the number of individuals in each group and a third one with a summary of the second graph containing not 10 groups but three, small, medium and big producers.

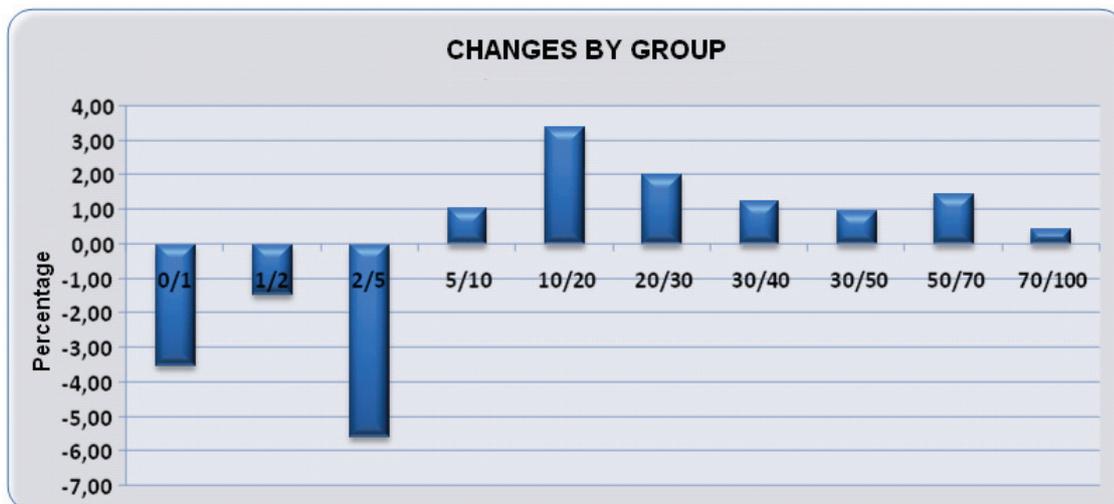
The results show that the period 1770-1800 shows a very clear convergence; the number of small producers was reduced by more than 10 per cent while the number of medium producers grew by 7 per cent (figures 4-6). The fall in inequality was mainly a consequence of very small producers improving their positions and many of them probably joining the group of medium producers. The biggest fall was in the 2/5 and 0/1 percentiles while the biggest rise took place in the 5/20 and 20/30 percentiles. Therefore the reduction of inequality during the eighteenth century in Guadalajara was mainly conditioned by a catching up of small producers that improved their situation in relation to the biggest ones.

Figure 4: *Distribution of producers 1770 and 1800*



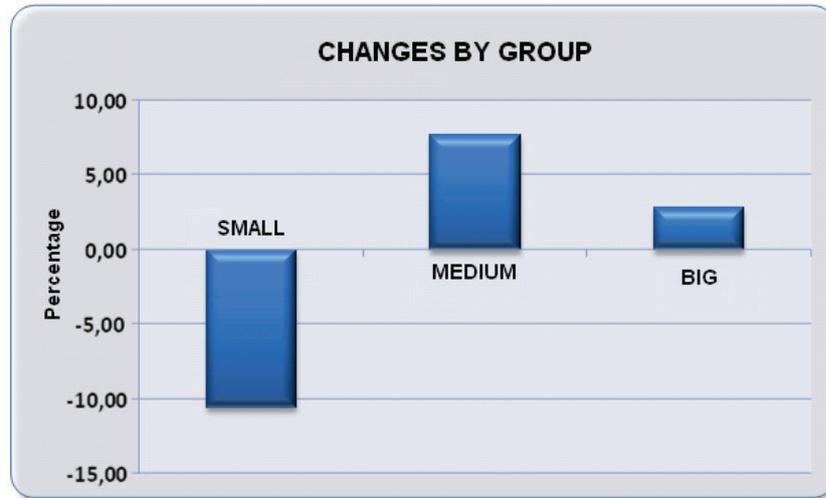
Source: same as figure 1

Figure 5: *Changes in the number of producers by group 1770-1800 (I)*



Source: same as figure 1

Figure 6: Changes in the number of producers by group 1770-1800 (II)



Source: same as figure 1

Although the Gini coefficient is a good way of measuring the changes in total inequality, it also presents some limitations. The Theil Index is an alternative to the Gini coefficient that also measures the distribution of a sample and that has been widely used in the literature of income inequality.<sup>12</sup> However the Theil index offers some interesting properties, for example it can be easily decomposed. Its calculation is defined by the formula:

$$T = \frac{1}{n} \sum_{i=1}^n \frac{w_i}{\mu} \ln \left( \frac{w_i}{\mu} \right) \quad (2)$$

Where in our case n would be the number of producers,  $w_i$  the production of the individual i and  $\mu$  the arithmetical average of the sample. As it was explained before, the Theil index can be decomposed. If we divide the observations of a sample in different groups, the Theil index can tell us what are the changes in inequality within each group and between them. In our case we decided to divide the producers in the sample by villages grouping them by size. Therefore three groups were created with small, medium and big villages. There are good reasons to support this division, the size of the village also defined its economic and social structure. Small villages were mainly occupied by a homogenous group of small peasants that were owners, while big villages also included manufactures producers and workers that did not own land. We can therefore expect differences in inequality between the three groups that can be explored by the Theil index. Following the methodology presented above, for every group g,  $\mu_g$  is the average production,  $n_g$  the number of producers and  $T_g$  is the Theil index for that specific group. Then the new formula for the Theil index would be:

$$T = \sum_{g=1}^G \frac{n_g \mu_g}{n \mu} T_g + \sum_{g=1}^G \frac{n_g \mu_g}{n \mu} \ln \left( \frac{\mu_g}{\mu} \right) \quad (3)$$

Being

$$T_g = \frac{1}{n_g} \sum_{i=1}^{n_g} \frac{w_i}{\mu_g} \ln \left( \frac{w_i}{\mu_g} \right) \quad (4)$$

<sup>12</sup> R.H. Steckel and C.M. Moehling, "Rising Inequality: Trends in the Distribution of Wealth in Industrializing New England", *Journal of Economic History*, (2001) and N. Mora Sitja, "Exploring Changes in Earnings Inequality During Industrialization: Barcelona, 1856-1905", *Discussion Papers in Economic and Social History*, University of Oxford, N.61, April 2006.

The first term in (3) corresponds to the weighted addition of the Theil indexes of every group and therefore presents the inequality within each group, in other words it measures the inequality within small, medium and big villages. The second term shows the inequality between the three groups. Therefore for the period 1770-1800 we can measure if the reduction of inequality was a consequence of reduction of inequality within or between groups. The results are presented in the following table.

Table 1: *Inequality changes decomposed by size of village 1770-1800*

<b>Inequality within groups</b>	<b>107.19%</b>
Small villages	-5.48%
Medium villages	74.26%
Big villages	38.41%
<b>Inequality between groups</b>	<b>-7.19%</b>
<b><u>Total change in inequality</u></b>	<b><u>100.00%</u></b>

Source: same as figure 1

The results show that during the period 1770-1800, the reduction of inequality was mainly driven by within groups convergence, and very especially in medium and big villages. On the other hand there was a small increase in the inequality within small villages. The reason is that in small villages inequality levels were already low in 1770, and that the following three decades would experience a catch up from high inequality levels by medium and big villages (table 2).

Table 2: *Theil index by size of village 1770 and 1800*

	<b>Theil 1770</b>	<b>Theil 1800</b>
<b>Big Villages</b>	0.43	0.33
<b>Medium Villages</b>	0.42	0.18
<b>Small Villages</b>	0.34	0.36

Source: same as figure 1

### **Conclusion**

We can therefore conclude that the eighteenth century is a period of strong demographic growth in the Spanish province of Guadalajara. This growth was possible even during the last third of the century when the production per capita of cereals decreased under the effects of one of the last production crises in modern Spain. One of the possible explanations of this demographic paradox relies on a reduction of income inequality, based on an increase in the production of grain by small producers that generated an increase of their food entitlements and therefore the possibility of increasing fertility rates.

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- Sen, A., *Poverty and famines: An essay on entitlement and deprivation* (Clarendon Press, Oxford, 1981).
- Steckel, R.H. and Moehling, C.M., "Rising Inequality: Trends in the Distribution of Wealth in Industrializing New England", *Journal of Economic History*, (2001).
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## A case study in the economics of vernacular printing: Paris, 1550-1600

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### Introduction

As industries go, the printing trade is an unusual one, particularly in Paris. There it grew out of the manuscript trade already in existence in the Latin Quarter on the left bank and, as such, was closely connected with the University. For the entirety of the sixteenth century, the printing trade was under the authority of that body and the members of the trade were official officers of the University and as such no ordinary tradesmen. They were forbidden to form a guild and the closest structure they had to that was a confraternity, the Brotherhood of St John, membership of which was open to a number of auxiliary trades, including binders, paper merchants, etc. The key figures in the manuscript and printing trades were the *libraires*. The greatest of these, the four great *libraire-jurés*, were responsible, initially, for the administration of the trade on behalf of the University. As the century wore on this administrative structure was unsatisfactory and various royal edicts (particularly those of 1571-3)<sup>1</sup> decreed that an additional *communauté* was required. This was composed of two representatives of the *libraires*, two representatives of the printers and one Syndic – usually a *libraire*. This quasi-guild structure, supported by royal authority, policed the requirements of the edicts: that master printers shall have served an apprenticeship and shall have received certification by two master printers and two master libraires; that master printers shall be responsible for the correctness of their texts; and that no apprentice shall qualify without the certification of their master and two other master printers. The act had 24 articles in total and was the first proper attempt to give the printing trade a coherent and robust structure.

The Paris printing trade was clearly important enough to the crown that it would pass a number of acts for its reform but how important was the Parisian trade to the overall book world? If we look at just those books printed in the French vernacular in this period we see that 76.6 per cent of the 34,971 editions printed were done so within the borders of France. Paris alone accounts for 58.2 per cent of those printed in France or 44.6 per cent of total French vernacular print, 1550-1600. The closest rivals: Lyon, Antwerp and Geneva, together only account for 23.7 per cent of total French vernacular print (table 1).

Table 1: *Percentage share of French vernacular print by locus*

	<i>In France</i>			<i>Outside France</i>		
	Paris	Other	Lyon	Antwerp	Geneva	Other
<i>In France</i>	58.2%	20.6%	21.2%	N/A		
<i>In French</i>	44.6%	15.8%	16.3%	3.6%	3.8%	15.9%
		23.7%				
	32.0%		23.4%			
	55.4%					
	76.6%			23.4%		

Clearly Paris was the most important French vernacular printing centre in the years 1550-1600, not an unsurprising or particularly groundbreaking discovery. What has been

<sup>1</sup> *Edict du Roy sur la Reformation de l'Imprimerie* 8° (Paris, Frédéric Morel, 1571); *Declaration du Roy sur l'edict concernant la reformation de l'imprimerie* 8° (Paris?, s.n., 1572?); *Plaidoyez pour la reformation de l'imprimerie* 8° (Paris, s.n., 1572?)

overlooked, however, is the cost of producing those 15,597 editions, and until recently such work has been impossible.

**Case-study: Paris, 1550-1600**

The limitation of this analysis to just books printed in French is due to the current lack of availability of data for non-vernacular printing, data that is now available for French vernacular printing. The French Vernacular Book project,<sup>2</sup> a project that aimed to catalogue all books printed in the French language before 1601, can provide this data for vernacular printing, but not for non-vernacular printing. The project database supplies the data for volume sizes in terms of pagination and foliation as well as in terms of format size. With these two pieces of information a simple calculation can be done to reveal the number of sheets of paper needed to produce one copy of each edition:

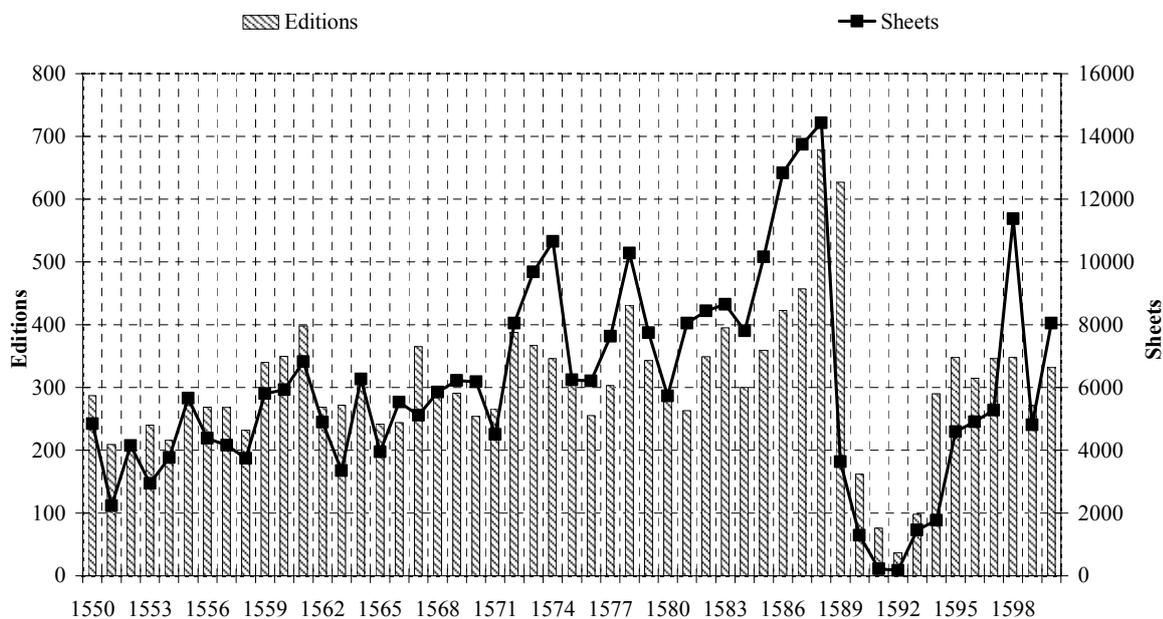
$$sheets (ss) = \frac{pagination}{format \times 2} + \frac{foliation}{format} \tag{1}$$

Once we have the sheet requirement for each book, we can be plot this against edition numbers, also provided by the project, to chart the industry confidence or strength of the trade in this period (chart 1). This confidence can also be seen in a index chart. Taking 1564 as the index year plotted as '0' we can mark the rise and fall in industry confidence or strength on an index linked scale of ±150.

Table 2: Industry Strength/Confidence scale

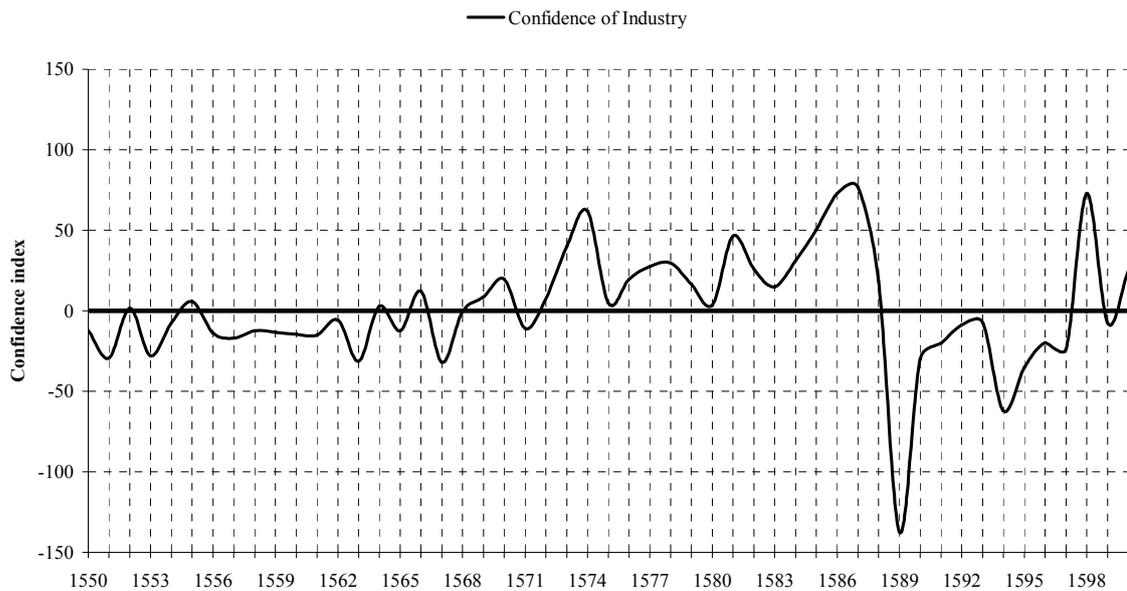
-150	-100	-50	0	50	100	150
Extremely Weak	Very Weak	Weak	Normal	Strong	Very Strong	Extremely Strong

Chart 1: Number of sheets per copy / number of editions



<sup>2</sup> Pettegree, A., M. Walsby and A. Wilkinson (eds.) *French vernacular books: books published in the French language before 1601* (Leiden, 2007).

Chart 2: Confidence of Industry (index=1564)



The gap between the sheets sizes and the edition numbers indicates confidence: if sheet usage is high and edition numbers are low, this indicates confidence as the books being printed have a large number of pages. They are more substantial books that would cost more to purchase, take up more time on the presses, and would indicate considerable investment. When sheet usage is low and edition numbers are high this indicates low confidence: the books produced are smaller in size and are considerably less substantial. According to these graphs, 1589 would be the prime example of a period of low confidence, a suggestion that is confirmed by the fact that 78 per cent of Paris vernacular output in 1589 was in the form of political pamphlets: low bulk but high edition (and probably copy) numbers. The massive drop in both edition numbers and sheet usage in the years 1590-93 are because of the city's siege by Henri IV. With this information an analysis can be done on the confidence and strength of the printing industry in Paris in this period, but not much more on the actual economics of print. Here, however, one has to deal much more with conjecture and estimates rather than concrete figures. However, it is worth the attempt.

### Cost of production

The first area of conjecture we enter is the cost of paper. Paper was usually gathered into reams of 20 'mains' or 'quires' of 25 sheets so that a ream consisted of 500 sheets. The cost of a ream varied from year to year and with geographical location. Unfortunately, there are no definitive costs for paper in Paris in this period and we must rely upon figures from elsewhere. The best place to find these figures are in the accounts of the Antwerp printer, Christopher Plantin.<sup>3</sup> Plantin bought about 97 per cent of his imported paper (over 194,000 *fl.* worth) from paper agents in France between 1563 and 1589. In 1563 he paid 312 *fl.* 15 *st.* for 150 reams of paper from Lucas Brayer, a Parisian printer and paper-merchant. 70 *fl.* of this was for the transport of paper from Paris to Antwerp.<sup>4</sup> If we subtract the transport costs, Plantin paid about 1 *fl.* 12 *st.* per ream for this paper; with transport costs he paid about 2 *fl.* 2 *st.*; clearly therefore transport costs amount to about 22 per cent of overall costs for paper delivered to Plantin. We should, therefore, take this into account when considering how much he paid for paper. For good quality paper, Plantin paid, on average, 1 *fl.* 5 *st.*; for cheap paper

<sup>3</sup> Full details of Plantin's records can be found in Voet, L., *The golden compasses: A history and evaluation of the printing and publishing activities of the Officina Plantiniana at Antwerp* vol. 2 (Amsterdam, 1972).

<sup>4</sup> Voet, p.28, p. 43f.

he paid about 13 *st.* If we remove transport costs; this means about 1 *fl.* for good paper and 11 *st.* for cheap paper. At the exchange rate current to 1577<sup>5</sup> paper of medium quality would cost about 18 *s.* This fits in with figures given for provincial French costs.<sup>6</sup>

If we take 18 *s.* per ream as an average cost of paper in this period, we can use this data to create an estimated picture of the cost of producing one copy of each edition in terms of paper. According to Plantin's balance sheets,<sup>7</sup> paper amounted for the majority of the costs involved in creating a book: approximately 51 per cent. Wages amount to 47 per cent of the cost and ink to a mere 2 per cent. If we take it that the average journeyman printer was paid about the same in Antwerp as they were in Paris, we can use these ratios to determine the total average cost of a book in this period. The calculations to work out these costs are as follows:

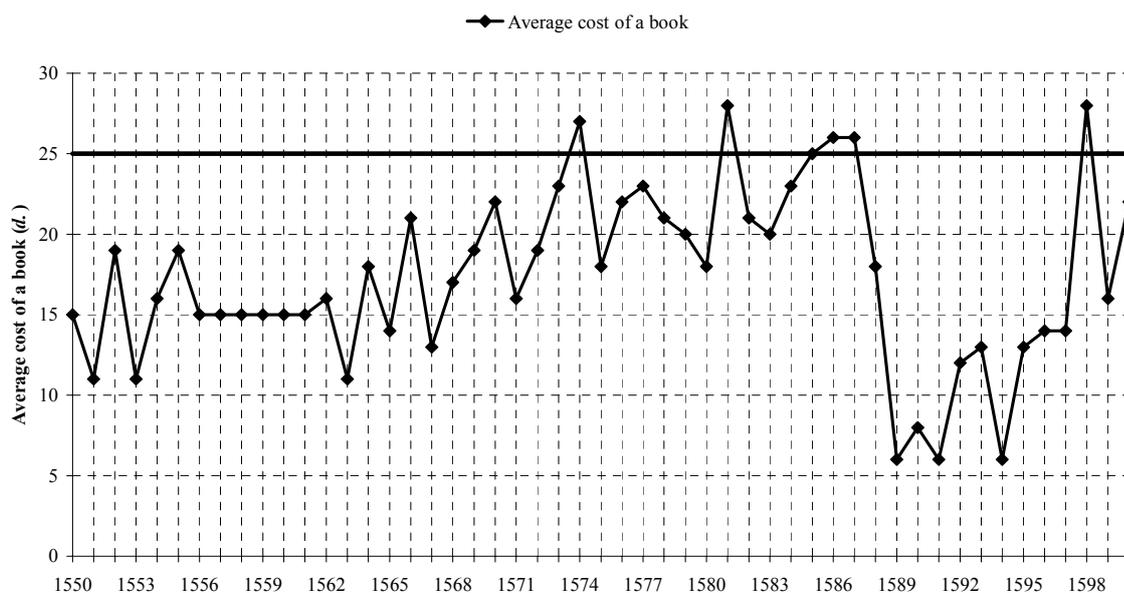
$$\text{total costs} = \left(\frac{100}{52}\right) \times \text{paper costs} \quad (2)$$

$$\text{wages} = \left(\frac{47}{100}\right) \times \text{total costs} \quad (3)$$

$$\text{ink costs} = \left(\frac{2}{100}\right) \times \text{total costs} \quad (4)$$

The changes in average cost of a book printed in the French language in Paris between 1550 and 1600 are illustrated in chart 3.

Chart 3: Average cost of a book



As can be seen, when confidence is high and the industry is responding to this confidence by producing bulky, expensive volumes (e.g. 1574, 1581, and 1585-7) the average cost of a book is quite high: above 2 *s.*; in 1574 it was 2 *s.* 3 *d.*, in 1581 it was 2 *s.* 4 *d.* and it rose from 2 *s.* 2 *d.* in 1581 to 2 *s.* 2 *d.* in 1586-7.

<sup>5</sup> Plantin kept his books in the unit of *monnoye de Brabant* which was equal to the (Carolus) guilder or florin. This consisted of 20 *stuivers*. French currency was more complicated: the normal currency was *livre tournais*. 1 *livre tournais* (*lt.*) consisted of 20 *sous* (*s.*), each *sous* consisted of 12 *deniers* (*d.*). This is the unit of currency for France used throughout this paper. The rate of exchange was 20 *st.* [1 *fl.*] Carolus guilder = 24 *s.* (1 *lt.* 4 *s.*). See Voet, p. 445f.

<sup>6</sup> For more information on paper prices and quality see Voet and Febvre, L. and H.-J. Martin, *The coming of the book : the impact of printing 1450-1800* (London, 2000).

<sup>7</sup> Voet, pp. 382-4.

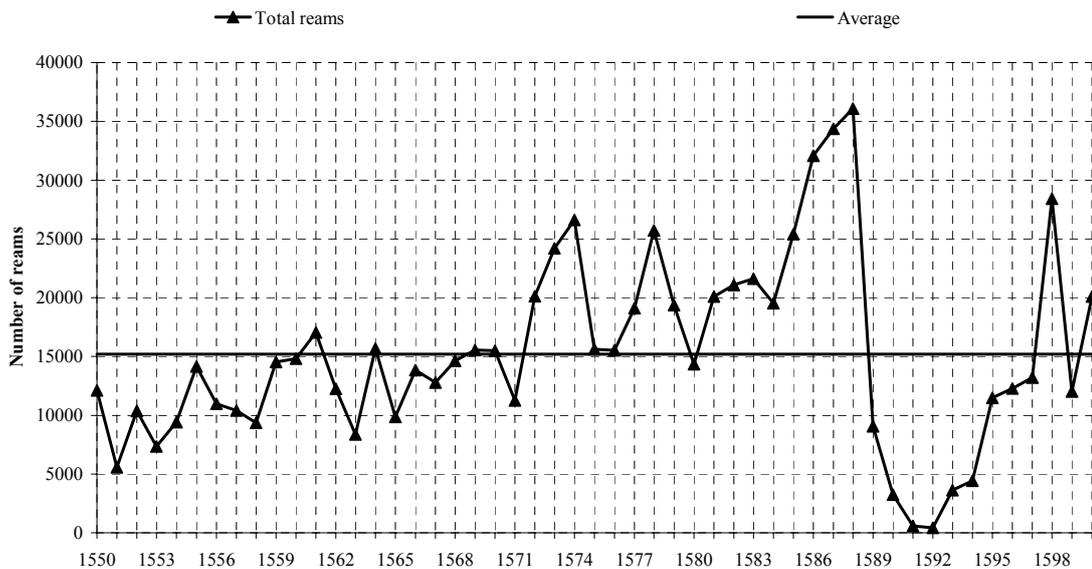
It must be emphasized that these are average costs: they do not take into account the format of the book, folios (2<sup>o</sup>) will cost more to produce than sextodecimos (16<sup>o</sup>) because the paper would generally be of higher quality as would the workmanship. Nor do these average costs take into account the fluctuations in paper prices: the cost of paper in 1590-3 would be above the average price of paper as the siege would result in considerable price increases as the supply of paper is cut off; chart 3 is useful only as a generalization. Additionally, these figures represent only the cost of producing the book, not the actual price that it would be sold for; there is no attempt to calculate any profit margins.

**Size of production**

Another area of interest is in the general amount of paper coming into the city to produce these books. This is an area that is often overlooked, but is useful in suggesting the scale of trade and commerce between Paris and other areas. The production of paper requires large amounts of reasonably fast running and clean water which means that little paper production would be undertaken within the city. This means that all of the paper used in the production of books in this period had to enter the city from elsewhere. As with figures for costs, we must use some conjecture in estimating these figures as we have only the figures for the amount of sheets used to produce one copy of each edition. There is little in the way of surviving contracts or other commercial documents that indicate the size of print runs in Paris at this time. We certainly do not have print run information for all of the 15,597 editions produced during these years. Again, we must turn to more complete records: those of Plantin in Antwerp. The number of copies in an average Plantin print run was between 1,250 (mode) and 1,442 (mean). In this case the mean average is less useful than that of the mode as we require the most common length of a print run. Using the figure of 1,250 copies per run, we can estimate the amount of paper needed to produce all the books printed in a year. This data can only be an estimate as print runs will, by necessity, be shorter for bulkier books and possibly longer for the shorter pamphlets. As an overall picture of the industry and of the trade in paper, however, it suffices as long as we are clear that peak years will have a far larger margin of error than non-peak years. The calculation for this data is:

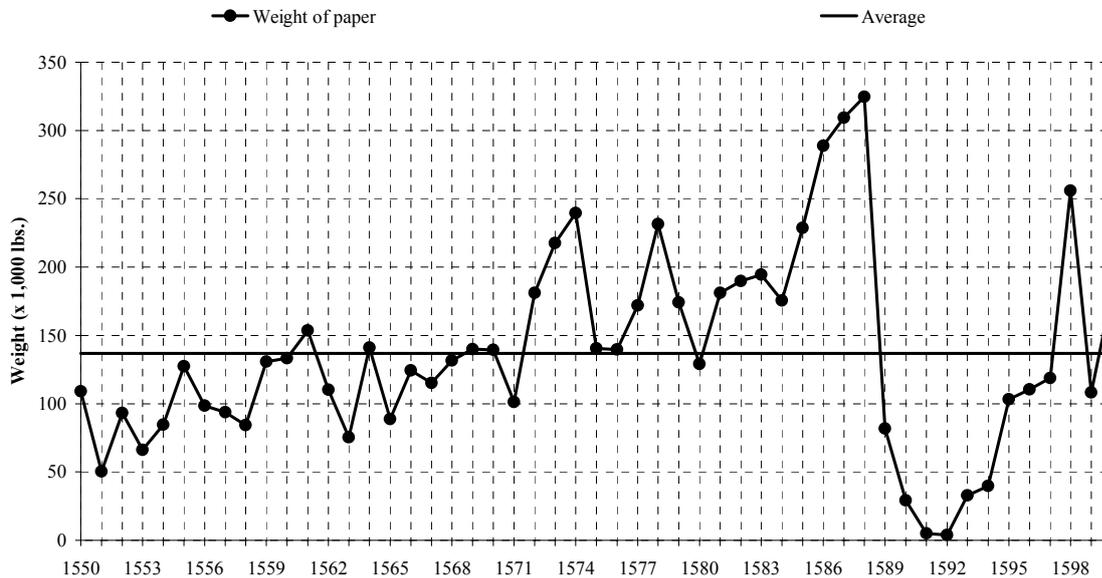
$$total\ reams = \left( \frac{ss}{500} \right) \times 1,250 \tag{5}$$

Chart 4: Total number of reams



Finally, we can work out the actual weight of all this paper. From the same source as before,<sup>8</sup> we have the information that 352 reams weighed 3,165 lbs., so one ream weighed approximately 9 lbs.; this means that on average 136,848 lbs. of paper was being brought into the city each year between 1550 and 1600 just for the production of books (chart 5).

Chart 5: Weight of paper



**Concluding statements**

This paper has attempted to give an overview of the economic profile of printing in the sixteenth century, something that until very recently has been overlooked. Perhaps there is a very good reason for this. Too often in this paper the terms ‘average’ and ‘estimate’ have been used; too often for comfort. Criticisms of this paper can be based on the fact that far too much is based upon conjecture and conjecture that takes into little account the varying social and political changes in this period; of which there were many. In France, 1550-1600 was a time of civil war and social upheaval. Hundreds of people were killed in the numerous battles between Protestant and Catholic and Royalist, hundreds more were murdered in the brutal massacres of 1572/3 that began in Paris on St Bartholomew’s Day 1572.

Despite this, what this paper does do is take a step in the direction of viewing the printing trade as an industry. It is important not to treat the book, and the trade that produced it, with too much reverence if we are to comprehend the trade properly. If we treat the idea of the book with too much reverence, we can become blinded to the fundamental fact that the printing trade is, was, and always has been a trade; an industry with profit and loss margins, and an industry where those margins could be narrow. That it is not to say that those involved in the industry were motivated by the idea of profit alone, most involved were highly learned men; they were often involved in all stages of the production of a book including in the creation of its text. However, the printing industry could not exist and it could not have survived if it was an industry based in an ivory tower, the industrial element of the book trade is integral to the understanding of the sixteenth-century book, without knowing how books are created, by whom they are created, and the economics in their creation, our understanding of the book and its contents is incomplete.

<sup>8</sup> Voet, p. 43f.

Table 3. *Estimated costs of printing, 1550-1600*

	Average costs			Total costs		
	<i>lt.</i>	<i>s.</i>	<i>d.</i>	<i>lt.</i>	<i>s.</i>	<i>d.</i>
Cost of paper	13,684	15	4	697,923	0	0
Cost of wages	12,368	18	5	630,815	0	5
Cost of ink	526	6	9	26,843	3	10
Total costs:	26,316	17	1	1,342,159	12	4

As can be seen by this, albeit, inelegant and conjectural paper a lot of money was involved in the creation of books. Most of that money was spent on paper, then on wages. Ink represented the final variable in the actual printing of a book, though the cost of ink was negligible compared with other costs (table 3). Again, these figures are based upon estimates but even still they help show that the printing industry in the sixteenth century was a well established industry which involved the control of large amounts of money. It was not a trade of hobbyists or of amateurs dallying in vanity printing; not if those involved wanted to keep the wolf from the door.

## Economic fluctuations and the poor: some Lancashire evidence, 1630-80

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Whatever long-term rules apply, the level of deprivation in any community, region, or nation will fluctuate from year to year. In the context of pre-modern England, Paul Slack has highlighted the difference between ‘background’ and ‘crisis’ poverty, while Steve King has claimed the existence of hardship associated with trade cycles.<sup>9</sup> Moreover, the notion of the short-term economic crisis has not only informed recent work by Steve Hindle on the 1590s and the late 1640s, but has also been explored in detail by those, such as John Walter and Andrew Appleby, who have studied dearth and its more deadly offspring: famine.<sup>10</sup> Yet, Poor Law scholarship as a whole has not come to grips with the timing, form, and impact of such ‘poverty crises’. In particular, focus on so-called life-cycle hardship has served to emphasize *structural* poverty ahead of ‘conjunctures’, while our knowledge of when, where, and why *crisis* poverty appeared is underdeveloped.<sup>11</sup> But poverty and poor relief as it was experienced must have seemed as dictated by year-on-year fluctuations as it was dominated by its weekly relief of the old, the sick, and the victims of family breakdown, and difficult periods could leave a lasting impact on the memories of those who lived through them.<sup>12</sup>

Yet it is not just because they were remembered that poverty crises are important. They also represented moments when the fabric of society was tested, and the limits of charity, neighbourly relations, and social regulation were searchingly probed.<sup>13</sup> They could see the social order threatened by disorder and discontent, and large swathes of people faced with the possibility of having to sell up their land, to migrate in search of food, or in the worse cases maybe simply starve. And they also were occasions for vast transfers of wealth through the Poor Laws.

It is the relationship between crisis poverty and poor relief which will concern us here, and the aim of this paper is twofold. Firstly, it will attempt to describe and explain the chronology of major poverty crises for a specific period in one county, namely from the 1630s to the 1670s. The period straddles the upheaval of the mid century; but it also covers decades in which the English population was first tailing off, and then beginning to decline.<sup>14</sup> Most interestingly, existing research suggests that it was in these decades that England first ‘slipped the shadow’ of famine, never – as it would turn out – to go back under it, and our second purpose will be to explore the reasons why.<sup>15</sup> In fact, it is this latter factor which dictates our county of study, for Lancashire is not only blessed with an excellent documentary record, but it also formed part of the north-western region so devastatingly hit by the catastrophe of 1622-3.<sup>16</sup>

### 1. Poverty Crises, 1630-80

It is not always a particularly well-documented place, but in the seventeenth-century Lancashire has left us with at least one spectacularly good archive. Containing thousands of individual petitions for relief, the county’s Quarter Sessions papers are a goldmine of

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<sup>9</sup> Slack (1988), p. 39; King (2000), p. 120.

<sup>10</sup> Hindle (2001); Hindle (Forthcoming); Walter (1989); Appleby (1978).

<sup>11</sup> For a classic treatment of ‘life-cycle poverty’: Wales (1984).

<sup>12</sup> For example: Thirsk and Cooper (1972), pp. 258-9; L(ancashire) R(ecord) O(ffice), QSP/459/6; QSP/471/13.

<sup>13</sup> For example: Walter (1989).

<sup>14</sup> Wrigley and Schofield (1981).

<sup>15</sup> Walter and Schofield (1989).

<sup>16</sup> Appleby (1978), pp. 109-54; Rogers (1975).

information about poverty, the Poor Laws, and paupers themselves.<sup>17</sup> By the later century, these petitions almost always represented appeals above the heads of local officers, with paupers hoping to overturn rejection by overseers in their own townships. Earlier on the picture is less certain, and it seems that in many cases a judicial order was considered an ordinary prerequisite for the payment of relief.<sup>18</sup> In all cases a petition involved a simple appeal for aid from the Poor Law, detailing the perceived reason for poverty, and often containing protestations of due deference and hard labour as well as a smattering of (selective) biographical details.

Clearly there were long-term developments that affected the level of petitioning in the county. There would have been little point in launching such an appeal had there not been parishes and townships with overseers, collecting taxes, giving relief. To a certain extent, then, the growth in the number of petitions surviving up to the 1650s reflects the increasing sophistication of Lancashire's relief provision.<sup>19</sup> On the other hand, the increasing importance of Petty Sessions as a court for the managing of the Poor Laws would work the other way, and the almost total disappearance of pauper petitions in the county archive after about 1720 must reflect this development.

These secular changes aside, the annual variations in the numbers of surviving petitions can tell us much about the perceived level of need amongst the poor, and so the first step for this paper is to detail the fluctuations in the volume of documents. First petitions are the focus: meaning that all documents were scrutinized and cross-referenced to make sure that the pauper in question had not already made his or her case at the court. This helped to sift out some of the most controversial and therefore intensely political and difficult cases, some of which saw claims and counter-claims to-ing and fro-ing in the archives to the detriment of both clarity in the present and community goodwill at the time. Thus, figure 1 charts the annual number of petitions in the Lancashire records, and as you can see, there are four clear peaks: in 1638; around 1649; a sustained elevation from 1657 to 1662; then finally an extremely sharp peak in 1674-5. These are our four main 'poverty crises' for the period.

So how do we explain this pattern? If we convert the petitions figures into an index number (excluding the earlier, low survival, years; 100 representing the mean value for 1640-79), and then add the composite mean of grain prices found in the *Agrarian History Volume Five*, it becomes quite clear that there is a strong relationship between periods of high food prices and poverty crises.<sup>20</sup> Furthermore, the peak in 1638 also coincided with what Bob Outhwaite has called 'probably the worst barley harvest of the whole period 1590-1700'.<sup>21</sup> And barley was critical to the ordinary diets of the Lancashire poor.<sup>22</sup>

<sup>17</sup> LRO, QSB/1-301; QSP/1-1517.

<sup>18</sup> Oxley (1966), pp. 11-12.

<sup>19</sup> Healey (Forthcoming), Chapter Four.

<sup>20</sup> Bowden (1985), pp. 828-31.

<sup>21</sup> Outhwaite (1981), p. 398.

<sup>22</sup> For example: Wrightson (1974), p. 173.

Figure 1: *Volume of first petitions for poor relief in records of Lancashire Quarter Sessions, 1627-79*

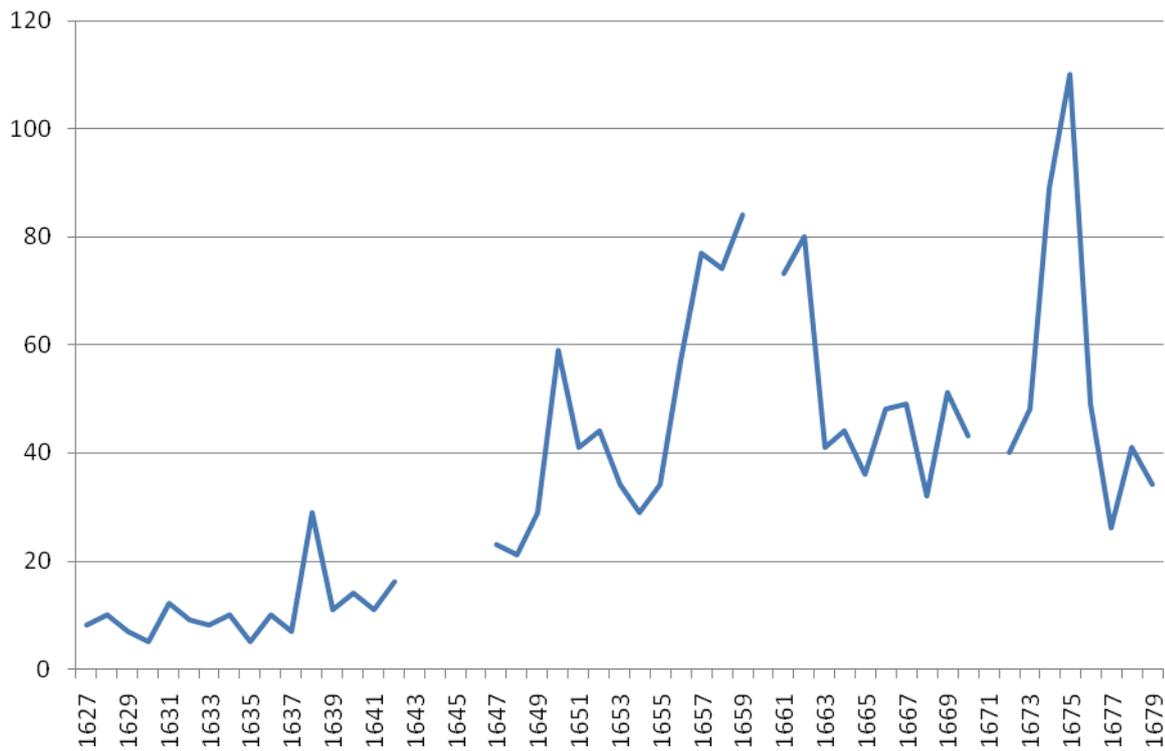
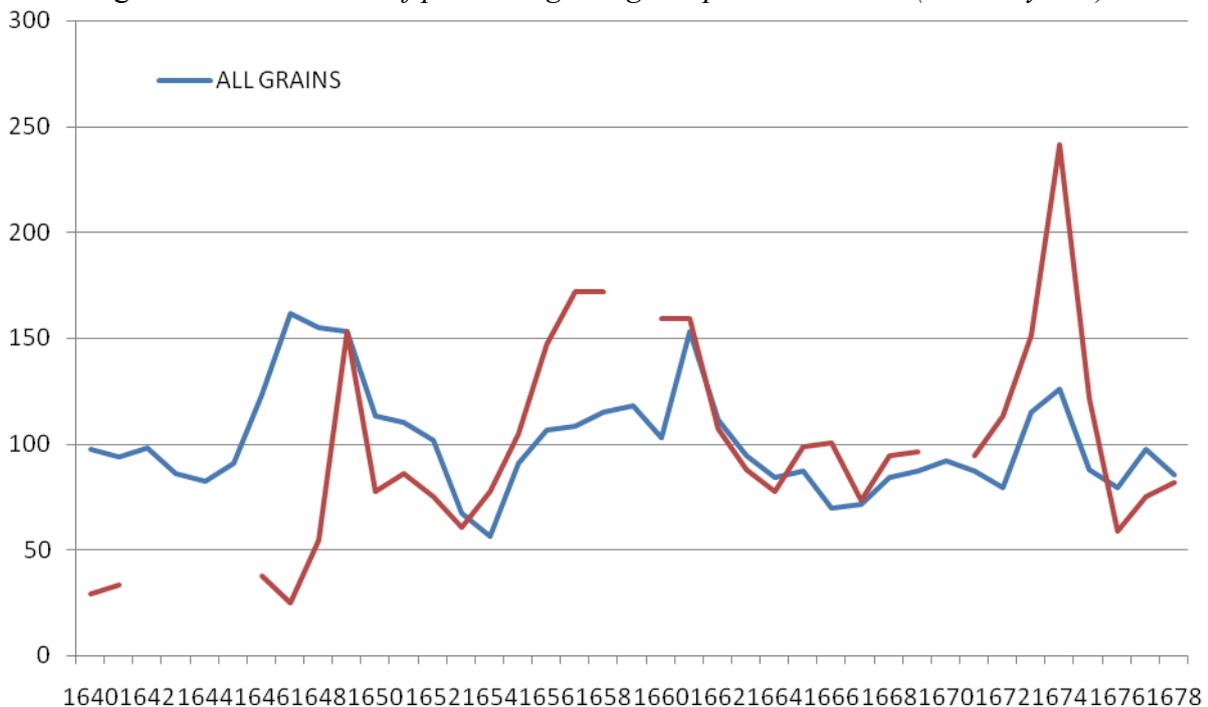


Figure 2: *Indexed level of petitioning and grain prices, 1640-79 (harvest years)*



The price of food, it seems, was a key determinant of the level of hardship, and we should not be surprised at this. W.G. Hoskins described harvests as the ‘heartbeats’ of the early-modern economy, and research by Carole Shammas suggests that the northern poor spent an exceptionally large proportion of their meagre incomes on food.<sup>23</sup> There are periods of departure, perhaps related to regional differences in food prices, but what is arguably most

<sup>23</sup> Hoskins (1964), p. 40; Shammas (1983).

impressive is the opposite of this: the Lancashire poor seem, by and large, to have had their livelihoods dictated by *national* series of prices from the Restoration if not earlier.<sup>24</sup>

As always, however, the picture is muddled. In particular, while the relationship between poverty crises and high food prices is fairly clear, this was just part of the story. There was an independent role for two other factors, namely epidemic sickness and unemployment. The former makes surprisingly little impression on statistics of petition survival, although there was a small peak in petitioning from the north (and perhaps the west) of the county in 1669, coinciding with a period of epidemics and high mortality.<sup>25</sup>

The latter, meanwhile, was partly related to the quality of the harvest in itself: high prices meant low sales of those goods with more elastic demand than food; and in the context of the period that meant virtually everything. Industrial production was hard hit in periods of dearth, and many of the poor were caught in a pincer movement of expensive essentials and disastrously curtailed earning power.<sup>26</sup> Such problems ring in the ears of anyone who reads individual petitions, within which complaints of low wages clustered in years of high prices. George Townsend of Over Darwen, for example, was ‘very sore impoverished soe that his familie is like to come to great want’ thanks to the ‘deadness of trayding & the darth of corne’ in 1674.<sup>27</sup> In addition, there are peaks in petitioning, detectable only once separate series are produced for three sub-regions, which are only understandable in terms of trade depressions clearly *not* related to high prices. Take the disaggregated figures for the post-Civil War period, for example (figure 3). The expected peak during the great dearth of 1647-50 was far more pronounced in the north of the county than the south, and we might recall that some of the most desperate statements of distress from the period came from Cumberland and Westmorland, so this is perhaps not surprising.<sup>28</sup> What is arguably more interesting is the line for Manchester Sessions, representing the southeast of the county. Here, the most noticeable peak was in 1652-3, during the First Dutch War, and at a time when complaints of a stoppage in the region’s cotton-using manufactures were frequently heard. James Roylands of Westhoughton near Bolton was one. He complained in 1653 that he had ‘beene forced to sell both bed cloathes and back cloathes with other household goods towards the maintaineing of his children and soe it is that your petitioner being a fustian webster and now litle to be begotten with it, and hee hath noe more goods to sell’.<sup>29</sup> One petition, this time to the Council of State ‘on behalf of the poor’ of the county, even suggested that the shortage of cotton wool was ‘worsor undergone by the poor in Lancashire than the famine of bread was (though that was great) three years past’.<sup>30</sup> Given what we know of the sheer seriousness of the great dearth of 1647-50 such claims seem fantastical, but in the Manchester region it was the later crisis which produced more petitions.

<sup>24</sup> C.f.: Overton (1996), pp. 137-47.

<sup>25</sup> Gritt (Forthcoming); Healey (Forthcoming), Chapter Eight.

<sup>26</sup> For example: Hindle (Forthcoming).

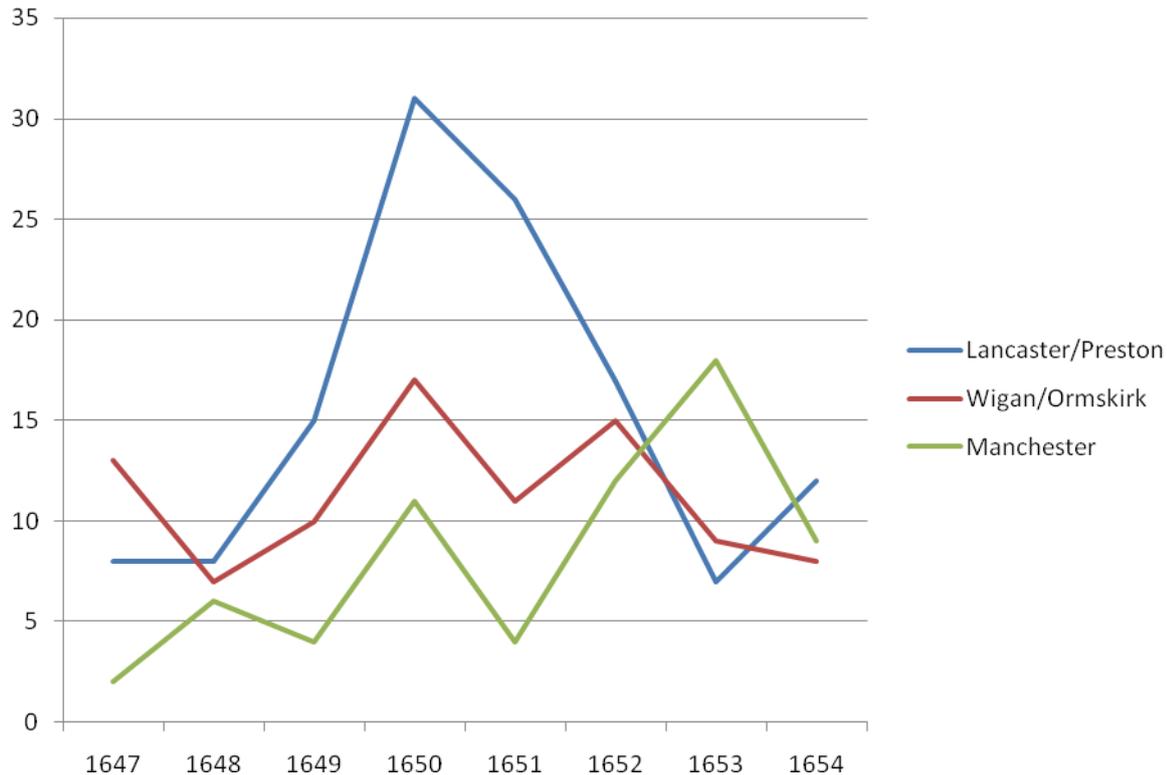
<sup>27</sup> LRO, QSP/423/16.

<sup>28</sup> Hindle (Forthcoming).

<sup>29</sup> LRO, QSP/80/14.

<sup>30</sup> Thirsk and Cooper (1972), pp. 258-9.

Figure 3: *Petitions by location, 1647-54*



## 2. Slipping the Shadow

If, then, the leading role was played by the harvest, it had to share the stage with sickness and trade depressions in the drama of seventeenth-century poverty crises. The most tragic moments in that drama came when two or more of the main actors played off against one another. This was when poverty could descend into destitution and eventually even into numerous deaths. On one occasion recently, at least two had come together and the result, it seems, was famine. In 1619, with central Europe reeling from the defenestration of Prague, the continent entered into a sustained period of industrial depression.<sup>31</sup> Markets for the cheap, poor-quality woollen cloths produced in northern England plummeted, and when harvests failed in 1622 and 1623 the combination of no food and no work was catastrophic for the region's poor. Starvation was widespread, with the squatters and smallholders eking out a precarious existence on the slopes of the Pennines or the Cumbrian mountains the worst hit.<sup>32</sup>

And then: nothing. Dearth returned in 1631, 1638, in the late 1640s and around 1660, but none of these occasions appear to have resulted in famine.<sup>33</sup> Something had changed. Theories vary as to just what, but the most important have been those offered by Andrew Appleby. Essentially, Appleby offered two explanations for the disappearance of famine in the North West and by extension England. On the one hand, developing capitalism, market integration, and the laws of comparative advantage saved the day. Specialization was no longer a danger as industrial growth raised incomes and the inland and coastal trade of agricultural goods meant that food was always readily available.<sup>34</sup> On the other, diversification of production between winter and spring-sown crops meant that, in contrast to France, bad English harvests were no longer followed by symmetrical peaks in the cost of all types of grain.<sup>35</sup>

<sup>31</sup> Supple (1959), pp. 52-72.

<sup>32</sup> Rogers (1975); Appleby (1978).

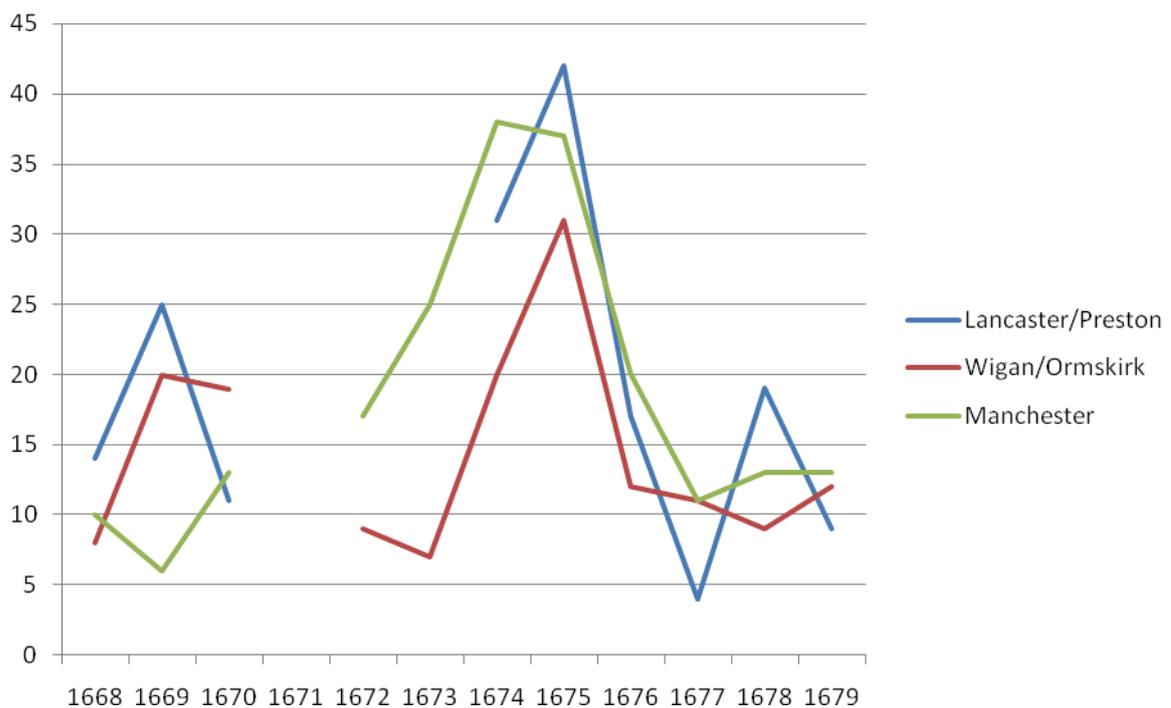
<sup>33</sup> Walter and Schofield (1989), pp. 34-6.

<sup>34</sup> Appleby (1978), pp. 155-81.

<sup>35</sup> Appleby (1979).

We can test some of these suppositions by looking at the sharpest peak in petitions: that in 1674-5. Fortunately, a local price series survives, and from this, the content of petitions, and the letters and memorials of the time, it is clear that the mid 1670s saw a confluence of two economic crises, most critical in the southeast of Lancashire.<sup>36</sup> Firstly, from 1673 at the latest, the cotton-using industries were hit by serious depression, once again occasioned by a war with the Dutch Republic, though this time it was compounded by the notorious Stop on the Exchequer in early 1672.<sup>37</sup> According to a petition from Bolton, the fustian trade was ‘now fayled’ and some £500 was needed to maintain the town’s industrial poor, who had ‘growne very unruly’ and were beginning to ‘runn through the parish ... and other neighbouring parishes daily in great numbers a begging’.<sup>38</sup> We can see the impact of this depression in the high number of petitions reaching Manchester Sessions in 1673. However, it is also clear that the principal rise in hardship was the following year, and that this coincided with a massive rise in the local cost of grains.<sup>39</sup>

Figure 4: *Petitions by location, 1668-79*



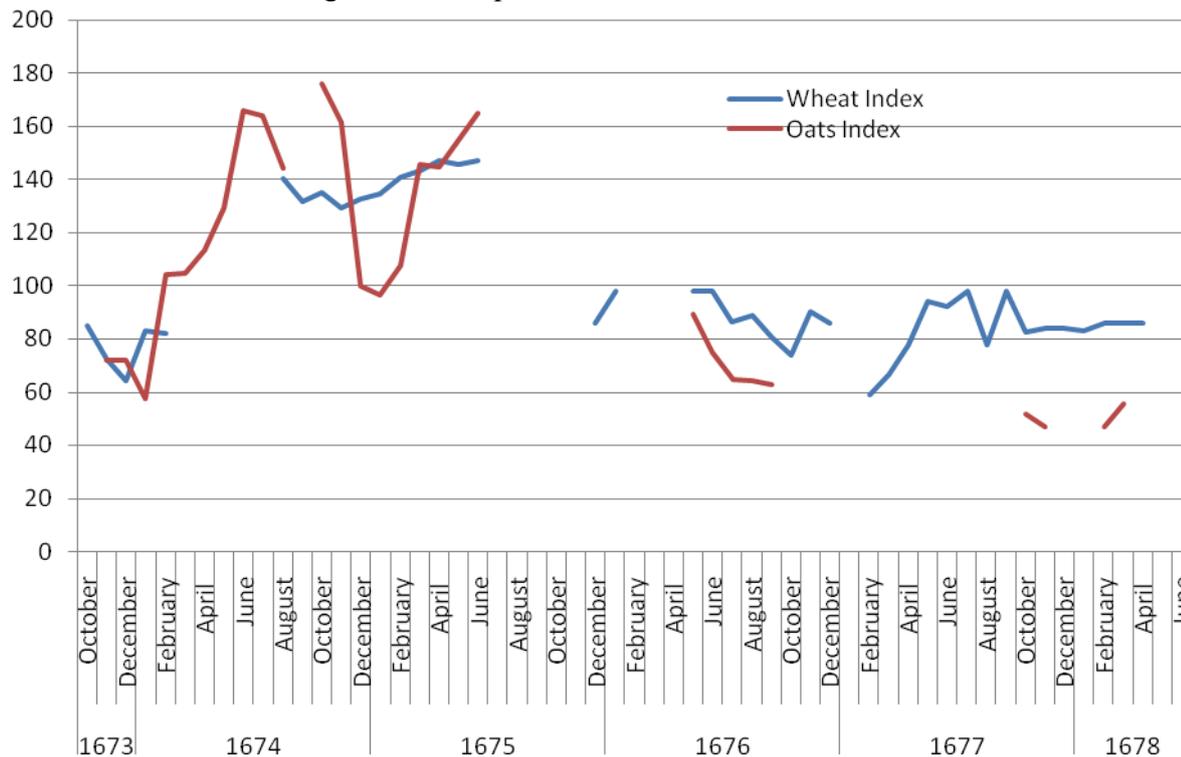
<sup>36</sup> Healey (Forthcoming), Chapter Eight.

<sup>37</sup> Wood (1935).

<sup>38</sup> LRO, QSP/413/14.

<sup>39</sup> Fell (1920).

Figure 5: Food prices at Swarthmoor, 1673-78



The important points to take from figure 5 are firstly that we see a definite symmetry of prices between wheat and oats, and secondly that the increase in the North West is far in excess of the rise of around a third found in the *Agrarian History* series. High prices across grains once again combined with industrial depression. And there is no reason to suppose the poor of southeast Lancashire were any less vulnerable than their starving smallholder ancestors of the 1620s. Industrial growth brought with it the familiar cycle of wage-dependency, population growth, and the development of a sizeable population of labouring poor. Hearth Tax returns from 1664 tell us that in the worst areas nearly 80 per cent of households were exempted on grounds of poverty.<sup>40</sup> The social structure, the cost of food, and the lack of employment could, surely, have provided the disastrous ingredients for mass starvation.

### 3: Relieving the Poor

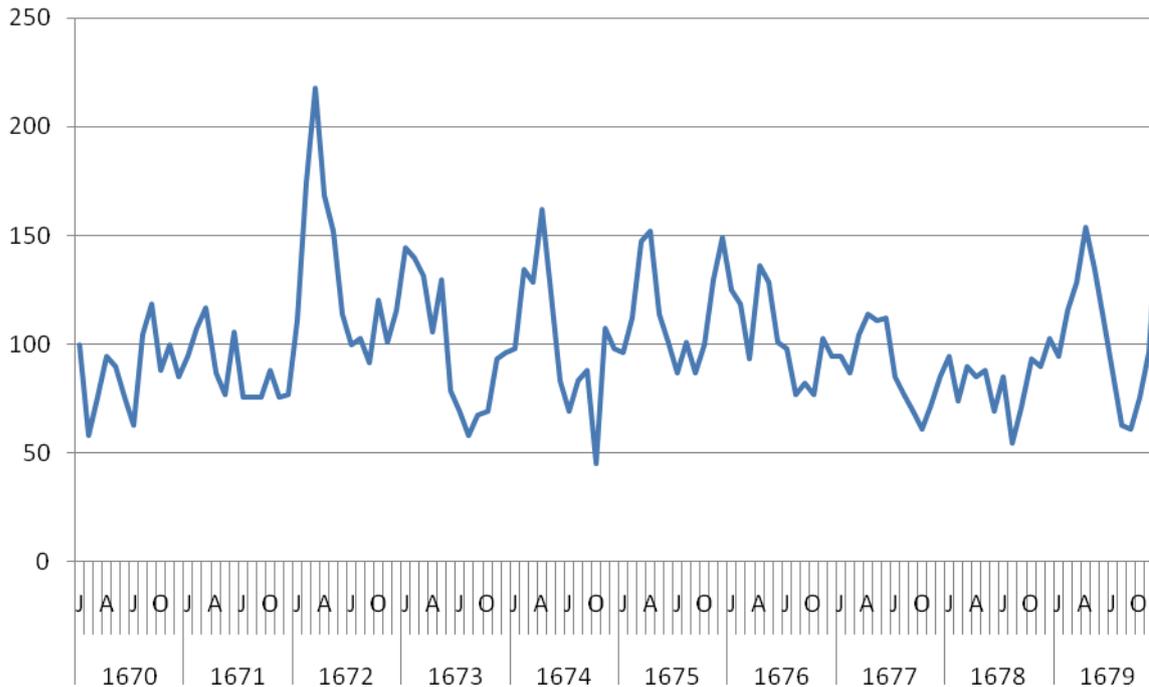
But they didn't, and the reason for this seems to have been pretty simple, for there is one glaring factor distinguishing the situation in 1674-5 from that of 1622-3, and for that matter from Scotland in the 1690s. And so we return to the key source material for this paper: petitions for *poor relief*. Standard overseers' accounts are hard to come by for the period, but those we have are suggestive of a massive redistribution of wealth from ratepayers to the most vulnerable members of Lancastrian society. In Prestwich, just to the north of Manchester, relief costs doubled during the crisis.<sup>41</sup> In Bolton, where a census of the poor survives for 1674, over £37 was spent a week on the poor: an annual relief bill of nearly £2000 in other words, in a town with perhaps 600 householders.<sup>42</sup> By comparison, the town rarely seems to have spent more than about £250 a year on its poor in the late seventeenth century; even in the high price year of 1699 costs were only around £285.<sup>43</sup>

<sup>40</sup> National Archives (Public Record Office), E 179/250/1 Part 6.

<sup>41</sup> Manchester Archives and Local Studies, L160/2/1.

<sup>42</sup> Stobart (2004), p. 37; LRO, DDKe/2/6/2.

<sup>43</sup> Bolton Record Office, PBO/1/1-2.

Figure 6: *Burials in southeast Lancashire, 1670-79 (100 = 1670-79)*

And lest we forget the scores of petitions, most of them successful, presented at the county's Quarter Sessions. These individual appeals helped oil the wheels of both compassion and social policy, ensuring that the Poor Law did its job: preventing the deserving poor from perishing through want. Of course, the existence of enough wealth as a result of regional specialization, and the availability of food from parts of the country less hard hit may have made this all possible, but it remains the case that wealth had to be properly channelled, and so it had to be redistributed: through the Poor Law.

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## The economic functions of the trade card in eighteenth-century Britain

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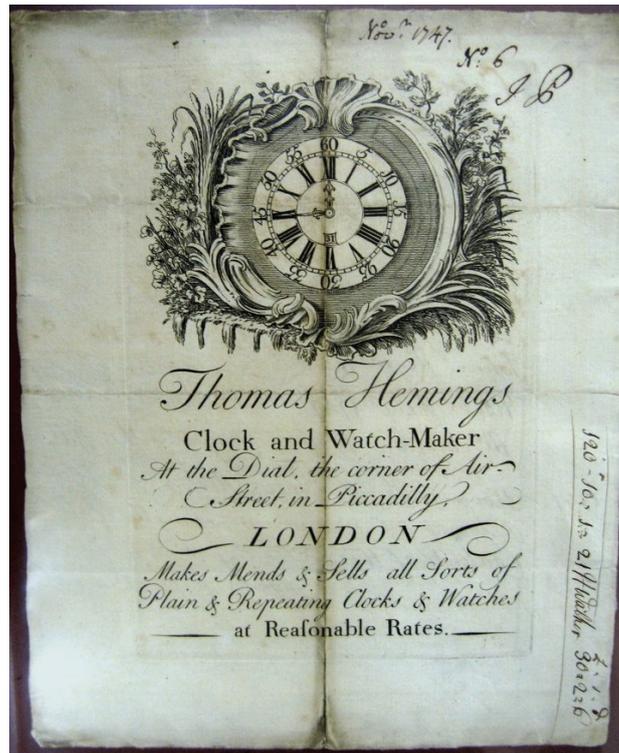
My paper investigates the role and functioning of trade cards in eighteenth-century Britain. Portable advertisements, produced from paper or card, and distributed at point of sale or sent to the homes of customers, trade cards were an important medium through which shopkeepers and tradesmen promoted their goods and services. Through a close reading of a number of trade cards, drawn from several important collections, the paper offers an overview of their economic attributes.<sup>44</sup> Despite their popularity as an illustrative source for histories of consumption, trade cards have rarely been considered in their own right as objects that performed a wide variety of economic and social functions.<sup>45</sup> In a more durable manner than the fleeting cries of a street seller or the advertisements embedded in newspapers, trade cards relayed basic commercial information about the nature and location of businesses, as well as occasionally offering more specific details about price and product differentiation. Through a combination of engraved text and image, trade cards promoted individual commercial identities in a congested marketplace. The card reproduced here advertises the business of clock and watch maker Thomas Hemings.<sup>46</sup> Typical of the style and content of trade cards from the mid-century, the card uses calligraphic text to give the details of Hemings' business, whilst the decorative element at the top of the notice draws attention to his location at the 'Dial' in Piccadilly.

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<sup>44</sup> Trade card collections consulted include those at the Guildhall Library (Prints and Maps), consisting of approximately 4000 trade cards and bill heads. The Banks and Heal collections at The British Museum (Prints and Drawings), consisting of c.15,000 cards, the John Johnson collection of c.5,000 cards at the Bodleian Library (Oxford), and the smaller collection of c.1,000 cards at the V&A. Though a few provincial examples survive in the collections (a comparatively rich selection of cards from other cities and provinces survives for the John Johnson set), all those consulted predominantly consist of cards for London based businesses.

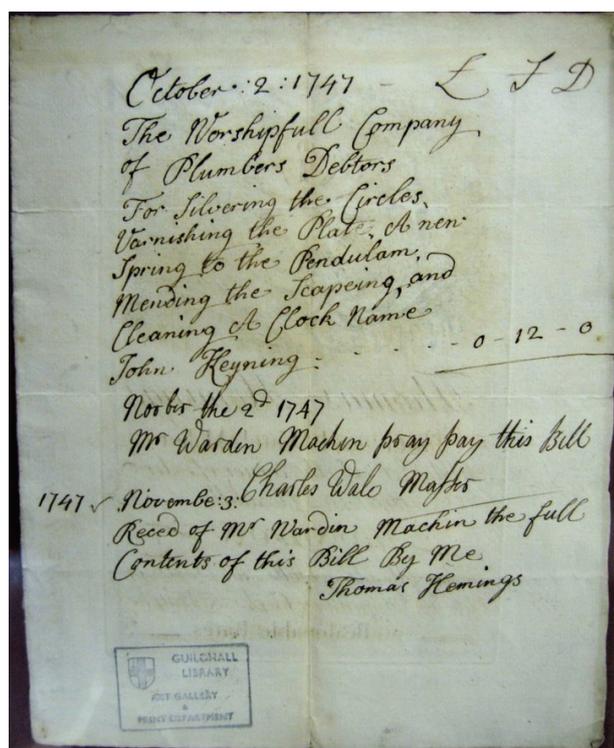
<sup>45</sup> Katie Scott's analysis of the set of c.500 continental trade cards at Waddesdon Manor (Buckinghamshire) is suggestive of the ways in which eighteenth-century trade cards might have been used and exchanged. See Scott, 'The Waddesdon Trade Cards: More than One history', *Journal of Design History*, 17 (2004): pp. 91-100. See also Maxine Berg and Helen Clifford, 'Selling Consumption in the Eighteenth Century: Advertising and the Trade Card in Britain and France', *Cultural & Social History*, 4 (2007): pp. 145-70.

<sup>46</sup> Trade card of Thomas Hemings, 1747. Guildhall Library (GL), Prints and Maps, trade card collection, box 13.



Highly practical objects, the frequency of marginalia on surviving cards attests to their regular use as bills and receipts. Analysis of the set of eighteenth-century English trade cards at the Guildhall Library (London) reveals that almost 40 per cent record some sort of handwritten detail pertaining to a single or multiple transactions.<sup>47</sup> The paper focuses on this particular economic function of trade cards, and suggests some reasons for their frequent use in this way, despite the existence of other commercial ephemera more suitable for the purpose. Though a defined area for recording transactional information was rarely reserved on trade cards, in the way it was with bill heads, trade cards were regularly used to record invoices, with information relating to purchases inscribed around the perimeter of the image, or most regularly, on the reverse of the card. Neatly arranged, bills on trade cards set out the details of a debt, including the date a transaction was made and the cost incurred. This in itself signalled a request for payment. The bill on the back of Hemings' card, reproduced below, drawn up a month after the initial transaction made by a Mr Machin, was settled the next day. Signed by Hemings, the invoice then functioned as a receipt, providing evidence of a closed account for the customer and shopkeeper.

<sup>47</sup> Data for this paper has been taken from a detailed analysis of the 1086 eighteenth-century trade cards and bills at the Guildhall Library. Once the cards and bills were selected from the larger collection of nineteenth and twentieth-century cards, the set was divided into bill heads and trade cards. The trade cards were then scrutinized for details relating to a transaction, and a database constructed to record the frequency of these sorts of cards.



The paper explores trade cards used as bills within the context of eighteenth-century credit systems. Their increasing prevalence in British trade card collections and household accounts from the middle of the eighteenth century suggests that they assumed a prominent role in the management of customer accounts and the recovery of debt. This coincides more generally with a move towards greater professionalism in shop keeping, and more careful book keeping, reflecting what John Smail describes as ‘the organizational requirements of the more complex system of credit’.<sup>48</sup> Similarly, Nancy Cox observes that by the second half of the eighteenth century, book keeping, ‘the essential skill in the management of credit, was becoming an accepted norm for shopkeepers, at least in London and other big cities’.<sup>49</sup> The increasingly prominent role of trade cards as devices used to communicate billing information within more sophisticated systems of credit, is absent from these accounts. Trade cards recorded debts incurred by single or multiple purchases, obtained through a credit agreement arranged between tradesman and consumer. Their economic functions were thus multiple; they set out an invoice, reminding a customer of their debt, and emphasized the customer’s connection to the tradesmen, whose name and business were clearly advertised on the bill.

As well as performing this basic economic role, trade cards were objects of social and cultural significance, mediating the relationship between buyer and seller in complex and delicate systems of credit. Drawing on recent historical work on the social and cultural underpinnings of early modern economic exchanges, the paper argues for a wider role for trade cards in mediating relationships within eighteenth-century retailing. Highlighting the role played by trade cards in cultures of credit can help to elucidate the complexities and nuances of an economic system in which ‘individual emotional agents’ engaged.<sup>50</sup> Credit was

<sup>48</sup> John Smail, ‘The Culture of Credit in Eighteenth-Century Commerce: The English Textile Industry’, *Enterprise and Society* 4.3 (2003): 299-325, p. 306.

<sup>49</sup> Nancy Cox, *The Complete Tradesman: A Study of Retailing, 1550-1820* (Hants, 2000), p. 149.

<sup>50</sup> Craig Muldrew, *The Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England* (London, 1998), p. 3. Muldrew’s work emphasizes the social function and significance of credit networks in the sixteenth and seventeenth centuries. See also ‘Interpreting the Market: The Ethics of Credit and Community Relations in Early Modern England’, *Social History* 18 (May, 1993) pp. 168-83; ‘Credit and the Courts: Debt Litigation in a Seventeenth-Century Urban Community’, *Economic History Review*, 2<sup>nd</sup> ser., 46 (Feb. 1993): pp. 23-38. For a brief critique of recent historical work on credit and an examination of the development of commercial credit from a cultural perspective within the English textile

the main way of procuring goods in the eighteenth century, allowing customers to obtain products and services on the promise of future payment on agreed terms. Despite being an expected and necessary economic procedure, the recovery of debts for goods and services not yet paid for generated enormous tension for some shopkeepers. Indeed, they were regularly confronted by stubborn customers with specific expectations about when and how bills should be solicited. Debt could be a difficult subject to broach, and some tradesmen, wary of offending their clientele, allowed accounts to run over several years, rather than bring up the sensitive issue of debt. Invoices inscribed on trade cards however, enabled tradesmen to politely refer to an outstanding payment away from the shop space after a transaction had taken place. Selectively distributed, trade cards underscored the bond between shopkeepers and their most valued customers within a wider context of politeness, and can be seen as a culturally acceptable way to press for payment. Often elaborately engraved, combining calligraphic text and ornate imagery, trade cards circulated as polite forms of commercial ephemera that courteously raised the delicate topic of repayment. To some extent in both appearance and use trade cards mirrored contemporary visiting cards, participating in similar games of polite social intercourse. The cards, sent to customers' homes or given at the point of transaction, physically reminded customers of a tradesman and debts owed. They veiled a base economic agenda in prevailing modes of politeness.

The courteous retrieval of outstanding debts was especially important in a commercial world where politeness was highly prized. Issues of payment necessitated elevated modes of polite behaviour, and invoices endorsed on trade cards civilly and elegantly signalled a gracious 'request', rather than a 'demand' for payment. They can be seen as part of what Helen Berry has described as 'the application of politeness to social behaviour in shops', which she suggests was necessary within the 'context of a society where personal acquaintance and credit still had some purchase'.<sup>51</sup> Trade cards used as invoices were an extension of modes of social behaviour and polite retailing. Tailor-made services for individual shoppers were a way to foster loyalty and hopefully remind customers of their debt to a shopkeeper, but it was the personalized trade card that raised the matter of payment, the single issue that most explicitly connected a shopkeeper to his customer. Furthermore, the relationship between shopkeeper and customer was emphasized by the physical exchange of trade cards, creating opportunities for direct contact between retailer and customer within retail premises, and enabling vendors to maintain contact with their clients away from the shop space.

Civilizing the request for payment is most pertinently suggested by the arrangement of invoices on trade cards. Frequently, cards reveal the confinement of all billing information to the back of notices, thereby leaving the stylish visuals of the cards unblemished. Almost 85 per cent of the trade cards in the Guildhall collection display the details of an invoice in this way.<sup>52</sup> This physical division of the transactional detail from the graphic element had the effect of transforming these commercial notices into miniature graphic works, which then functioned as commercial souvenirs or gifts, rather than simple bills. Often produced by popular engravers, trade cards could be reminiscent of many other kinds of small contemporary graphic prints. As miniature engravings these commercial notices assumed a gift value and set in motion the obligation that came with that. The extension of credit in general brought with it some of the ties of responsibility that earlier systems of gift giving had

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industry see Smal, 'The Culture of Credit' as above. For a discussion of the culture of credit and personal debt relations during a period of seismic shifts in industrial production, retailing and consumption in England see Margot Finn, *The Character of Credit: Personal Debt in English Culture, 1740-1914* (Cambridge, 2003).

<sup>51</sup> Helen Berry, 'Polite Consumption: Shopping in Eighteenth-Century England', *Transactions of the RHS* 12 (2002): 375-94, p. 394.

<sup>52</sup> The database constructed for the Guildhall set of trade cards recorded separate categories for bills inscribed on the verso of cards and those recorded on the front.

implied. Indeed James Carrier observes that in the eighteenth and early nineteenth centuries purchasing goods on credit ‘carried an air of gift, rather than just commodity, transaction’.<sup>53</sup> In the context of credit systems where trust, reputation, and reciprocity all played an active role, the trade card as a commercial gift performed an important, mediatory function. As well as bills and receipts, selectively distributed trade cards operated as gifts given to customers tied to a particular tradesman through a unique credit agreement.

Furthermore, this commercial gift was personalized, made unique to an individual customer through the inscription of their name and purchases. Rather than anonymous commercial objects, trade cards endorsed with the handwritten name and title of the debtor, alongside their corresponding transaction details, alluded to their private credit arrangement. A point emphasized by the visual strategy of recording the names of the shopkeeper and customer in close proximity to one another on the bill, thereby reminding the shopper of their economic agreement and responsibility, and what Carrier describes as a ‘decision to enter into a personal relationship of trust’.<sup>54</sup> The invoice inscribed on a personalized graphic trade card physically reinforced the very notion of credit to the privileged customer, perhaps reminding them of the nuances and inconsistencies of credit selection and of their elevated status.

The division of transactional detail from the graphic element on trade cards also performed another important function. Not only did it provide the space to neatly present the details of a bill, but it allowed the text and images of a tradesman’s card to be clearly read, thereby reiterating the name of the tradesman to whom the customer was indebted. During a period when most shoppers received goods on credit, accumulating a variety of bills, the visual and textual constructs on trade cards reminded consumers of a credit agreement with a particular tradesman. The importance of this increased where households juggled multiple credit arrangements. Existing accounts from larger eighteenth-century households demonstrate the common practice of tying bundles of bills together, with each one consisting of handwritten accounts on plain paper and engraved trade cards and bill heads.<sup>55</sup> Within this context, the visuality and materiality of trade cards is striking, enabling their distinction amongst numerous, generic others. Visually, engraved invoices stand out from the rest, whilst the tactility of the impressed engraved lines has a sort of braille effect, easily directing the handler of the accounts to those inscribed on decorative notices. Highly graphic tactile bills pertinently reminded a consumer of a shopkeeper and their debt away from the shop space and commercial marketplace. A distinguishable trade card was especially important where shopkeepers communicated with customers at distances precluding direct communication. A point supported by the elaborate London bills that appear in household and tradesmen’s accounts some distance from the capital, such as East Anglia, Edinburgh, and even North America. In these circumstances a polite bill on a clear, professional trade card was especially important. Furthermore, their use across vast geographic space to communicate commercial information and mediate economic relationships, elevates the role of trade cards in systems of credit further, and offers insights into economic relations and operations of credit in the Atlantic commercial world.

In conclusion, the mnemonic function performed by engraved trade cards was crucial when shopkeepers effectively competed for payment. They advertised individual commercial identities. On a practical level they offered a visual reminder of an unsettled bill and the length of time a debt had run for, and once settled, verified a closed account. They reminded customers of a contractual agreement often intimately and sometimes casually arranged. However, circulating within an arena of polite consumption, and operating within credit

<sup>53</sup> James G. Carrier, *Gifts and Commodities: Exchange and Western Capitalism* (London, 1995), p. 92.

<sup>54</sup> *Ibid.*, p. 93.

<sup>55</sup> Household accounts at Norwich Record Office (NRO) and The National Archives of Scotland (NAS) reflect the practice of organizing household accounts into tied bundles. See especially (NRO) BUL4/40/12, Earle and Bulwer papers, 1563-1759 and (NAS) GD44/51/466, household accounts for Alexander, 4th duke of Gordon.

agreements bound by reputation, trust, and respect, bills endorsed on engraved trade cards civilized the process of procuring payment. They were a culturally acceptable way to press for payment, marking the unavoidable, and sometimes distasteful retrieval of debt with civility and respectability; central tenets around which eighteenth-century 'polite consumption' operated, and to which many self-conscious and ambitious shopkeepers hoped to comply. Trade cards performed in the ritual of consumption, mediating familial and economic relationships within retailing. As well as communicating economic information, trade cards encoded ideas about taste and status, underscoring the bond between a shopkeeper and his most valued customers. Examining them as both communicative and mediatory objects leads the discussion of eighteenth-century credit away from a purely economic focus to reveal the cultural and social aspects that underpinned a seemingly basic economic procedure. As portable advertisements transformed into invoices that became personal possessions, trade cards crossed household boundaries, possessing the ability to sustain consumer responses beyond the moment of transaction and outside of the formal marketplace.

## The quest for the African dummy

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In 1991 R.J. Barro published ‘Economic Growth in a Cross Section of Countries’, a paper exploring causes of economic growth in a global sample of countries. The article spurred a great amount of research. These papers remained with the same methodology – cross country growth regressions in which the dependent variable was the average growth rate of per capita GDP (Durlauf et al., 2005). The innovation in this literature, henceforth called the regression literature, was found in adding different independent variables, or interactions of them, to the initial baseline estimation.

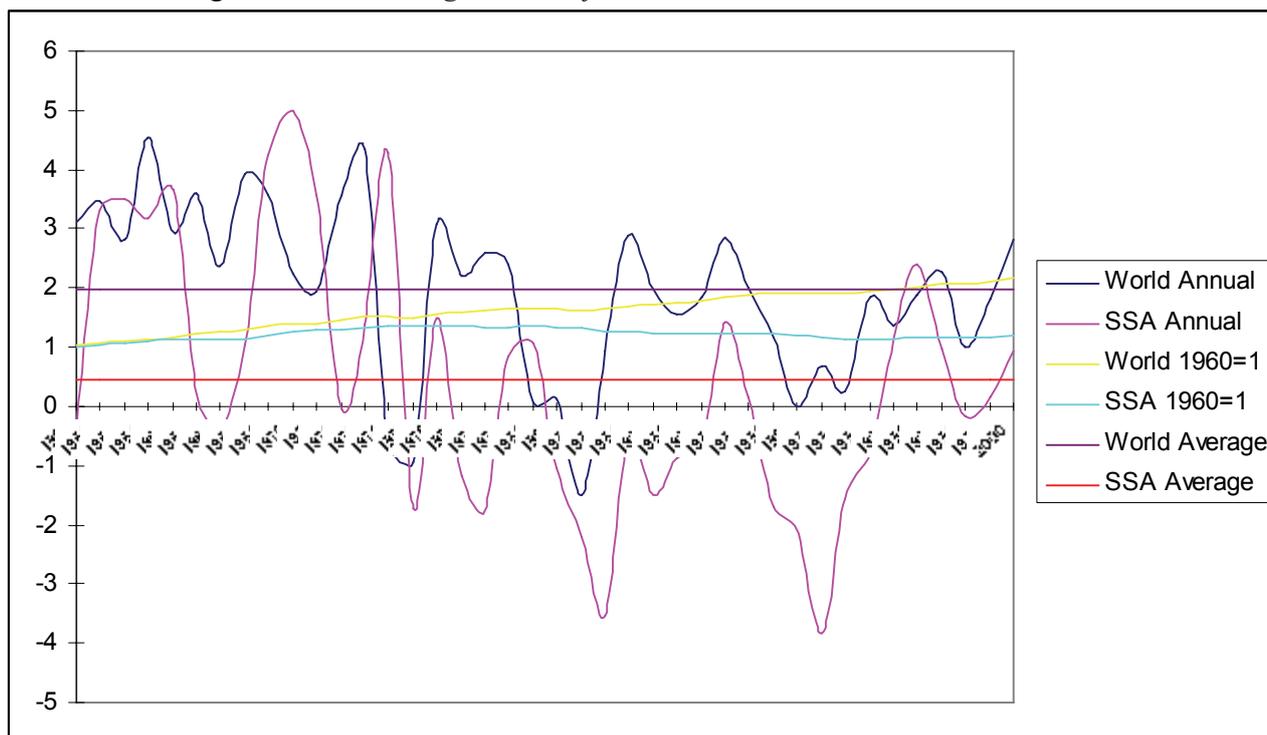
One of the central findings in that seminal paper was a large and significant African dummy variable. The interpretation of this variable was that African economies had grown inexplicably slowly, or that the analysis had as yet not fully captured the characteristics of a ‘typical country’ on the African continent (Barro, 1991). This finding prompted a research agenda aiming to eliminate the African dummy, and thus explain the African growth shortfall.

The findings of the quest for the African dummy has had a large resonance, and some of the conclusions have been furthered to a non-academic audience through recent publications by P. Collier (2007), W. Easterly (2001, 2006) and J. Sachs (2005), the major contributors to this literature. The findings of the regression literature are thus increasingly treated as established evidence. The quest for the African dummy has had a decisive effect on the writing of the economic history of independent Africa, and this article serves a corrective review before the conclusions are embodied in textbook publications.

An authoritative survey of the regressions on African growth summed up the research question on the agenda as follows: “It is clear that Africa has suffered a chronic failure of economic growth. The problem for analysis is to determine its causes” (Collier and Gunning, 1999b: 4). The questions on this research agenda were an outcome of the specific methodology utilized, which again determined the use of the growth evidence. Its origin is found in the empirical growth literature. That model was developed to empirically test growth theory and was aiming at explaining differences in the steady state growth rate. What the model initially was intended to explain is a separate issue to what the scholars using it, claim it to explain.

A model has a narrative associated with it and both parts should be evaluated. It is explicitly stated that the papers intend to explain African economic performance in the post-colonial period. For that purpose the average rate of growth in GDP per capita was used as the dependent variable. In a global sample this leaves a negative growth residual for African economies unexplained or a significant negative African dummy. It requires a leap of faith to go from a cross sectional observation to reach the verdict that this observation is valid through time. What the model actually examines is at times different from its literal interpretation in the literature. This paper will examine how the regression model, and the use of the growth evidence, has influenced the conclusions reached on African growth. The paper first considers the aggregate growth evidence, then it reviews the explanatory variables, before the paper concludes by summarizing the characteristics of the explanatory framework, and it is shown how the ‘quest for the African dummy’ has had a decisive effect on the writing of the economic history of independent Africa.

Figure 1: *Economic growth – Africa versus the World 1960-2000\**



\*Source: World Development Indicators (2007). Data: GDP per capita (constant 2000 US\$) Annual Growth %. Author’s calculations.

Figure 1 above shows three different ways of comparing growth in Africa with the rest of the world between 1960 and 2000. The first two curves plot annual GDP per capita growth in the World and Africa. It is evident that there is a large year to year variation in growth, and that the variation is around a higher trend in the first half of the period compared to the second half of the period. It is also apparent that the African GDP per capita growth is often negative from the late 1970s onwards. The two next curves are GDP per capita indices (1960=1). The main lesson to take from the indices is that the gap between the two is very small in the first part of the period, and it is only after 1975 that the difference between them is larger than 10 per cent. After that point, however the indices diverge dramatically.

The third way of comparison is the average growth in GDP per capita over the period. The average growth shortfall over the period is about 1.5 per cent, with an average African growth rate of 0.5 per cent compared to 2 per cent world average. It is this growth evidence that has informed the regression literature. The quest for the African dummy has not explained how African economies grew, but taken it as given that this average growth shortfall is the defining characteristic of African growth performance. Collier and Gunning observe this weakness “One limitation of the growth regression literature is that to date it has focused upon explaining long-term average African slow growth” (1999a).

Not limited by that perspective, the aggregate growth evidence does indeed open up for other interpretations regarding the timing of the dummy. The African growth experience is not one of persistent stagnation. In 1960 the African GDP per capita was about one sixth of the World GDP per capita. This fraction remained the same until 1977, after which the GDP per capita gap widened. In 2000 the African GDP per capita was less than one tenth of the World GDP per capita. The African growth shortfall is therefore a more recent phenomenon. Before 1977, African economies were not significantly lagging behind. Indeed, viewed in total GDP terms, the African economies grew quicker than the rest of the world in this period, since the population growth in Africa 1961-2000 was 1 per cent higher than in the rest of the world.

In this perspective the growth pattern of Africa looks considerably different. The notion of the African growth failure came about in the wake of the 1973/4 and 1981 oil price shocks, and has increased in currency as African economies have become heavily indebted under structural adjustment, and due to the required food aid related to the Sahelian drought and other droughts that have plagued the continent particularly from the early 1980s onwards. The regression literature is, by trying to solve the puzzle of slow growth, a child of its own time.

This alternative presentation of the growth evidence demonstrates that there is no such thing as a ‘chronic failure’ of growth in Africa and it would seem that the phrasing of the question as to why Africa has grown slowly is misleading. This paper now moves to consider the independent variables used in the regressions, review their conceptual soundness and test how well they stand as causal factors of growth in Africa. Has the quest for the African Dummy yielded any results that can coherently explain the rapid growth in the 1960s and early 1970s, and the subsequent retrogression in the late 1970s and the 1980s?

Table 1: *The quest for the African dummy – a summary table*

<b>Regression</b>	<b>Value of the African Dummy</b>	<b>Central Variable</b>
(Barro, 1991)	- 0.0129 (0.0030)*	
(Barro and Lee, 1993)	-0.0116 (0.051)*	Black Market Premium
(Mauro, 1995)	-0.017 [-4.26] to 0.021 [-5.21]**	Corruption
(Sachs and Warner, 1995)	0.02 [0.05]**	Openness
(Easterly and Levine, 1997)	-0.013 [-2.46] **	Ethnicity
(Burnside and Dollar, 1997)	-0.0135 & -0.0161 (0.76)*	Aid
(Temple, 1998)	-0.0102 [1.74] to -0.0238 [4.38]	Social Capital
(Collier and Gunning, 1999a)	-0.0052 [0.98]	

\*Standard Error in parentheses

\*\*T-scores in brackets

The table above shows the quest for the African dummy, as it progressed over a decade, searching for the right explanatory variable that that would remove the “stubborn African dummy” (Temple, 1998). The dummy remained significant with the exception of the Sachs and Warner regression, where the African dummy was defined elsewhere by the inclusion of a tropical dummy. The table is by no means exhaustive. Durlauf et. al (2005: appendix 2) report that 145 explanatory variables have been found statistically significant, with 43 conceptually different ‘theories’ of growth as being ‘proven’ in the literature, a result of what they call a ‘growth regression industry’ as researchers have added plausibly relevant variables to the baseline Solow specification (2005: 599, 639).

A natural starting point is the authoritative survey of the regression literature on African growth ‘Explaining African Economic Performance’ by P. Collier and J.W. Gunning (1999a). It is concluded that the cumulative evidence of the regression literature identifies lack of openness to trade and low level of ‘social capital’ as having “large, damaging effects on the growth rate” (Collier and Gunning, 1999a: 74). That paper summarized the most important factors in regressions on African growth under six headings: lack of social capital, lack of openness to trade, deficient public services, geography and risk, lack of financial depth, and high aid dependence.

At face value, this list of the significant factors illustrates that by finding explanations for a lack of growth, the regression literature has found variables that give a distinct flavour of a subtraction approach. The subtraction approach can be described as taking the characteristics of a developed country on one side, and comparing it with an underdeveloped country on the other side. The differences between them are taken to explain underdevelopment. This is well illustrated by the list of factors in the paper, and the frequent use of ‘lack of ... ’ makes it explicit.

Linked with the subtraction approach is the revival of the notion of the vicious circle of underdevelopment, where underdevelopment is taken to explain itself. This does not cohere with the actual growth record. The African economies have displayed both growth and retrogression and have not been captured in a low-level equilibrium where poverty has reproduced itself. It is already known before reading the regression literature that Africa has performed relatively worse in GDP per capita terms over the post-colonial period as a whole. The African economies are poorer. Knowing that we would also assume that they rank lower on education, health and infrastructural indicators, it is also reasonable to assume that these poor countries receive more aid, and have less developed financial markets. This is confirmed by the regression literature. What it does not tell us, and what would be the key to understanding economic performance, is why the African economies grew and why they retrogressed.

It could be seen as a paradox that policy is taking such a prominent role in the explanation. If one takes the growth pattern presented earlier in the thesis into consideration, the African economies grew rapidly when 'bad' policies were implemented. The first structural adjustment package in 1979 was agreed upon with Senegal in 1979 (Van de Walle, 2001). Since then most African economies have moved towards implementing 'good' policies as prescribed by the orthodox scholars, while economic performance has been poor. There is considerable debate on whether these policies were fully implemented. Nevertheless, the reforms that were manifestly implemented targeted specifically the prominent variables in the regression literature. That is, the black market premium through devaluation, openness (also part of the former) by abandoning price controls and reducing tariffs, and lastly financial reforms.

The regression literature has overwhelmingly put the blame for poor economic performance with African policy makers and attempts to explain these 'bad' policies with social arrangements that are specific to Africa. This is where social capital comes in. In Collier and Gunning the lack of social capital is the original sin (1999b, 1999a), as put by Azam et al 'the choice of bad policies ... is traced to the lack of social capital and deficient political institutions (2002). The regression literature initially found that certain policy variables such as observed overvalued currencies, corruption and general institutional quality were correlated with low averaged growth rates. In trying to assign a causal link, and avoiding endogeneity, the literature has increasingly sought to explain these policy outcomes with respect to initial conditions.

The initial conditions that have been used are 'social capital' and 'ethnic diversity' and this evidence has been coupled with observations from the late 1980s on policy or institutional quality. The weakness of the social capital measures is explored in Jerven (2006) where the main conclusions are that beyond suffering from crude formulations and measurement, initial conditions can at best be contingent factors as many African economies experienced rapid growth in the early years. The values for the policy and institutional variables are grossly inflated by observations taken in the 1980s so that post shock phenomena are taken to explain growth in the whole period.

Pritchett (1998) observed that most developing countries' growth experience was characterized by instability rather than a stable trend growth and warned that the 'exploding economic growth literature' was 'unlikely to be useful' Pritchett wrote that the 'use of "panel" data, particularly with "fixed effects" to investigate long-run growth effects is almost certainly pointless' (Ibid: 3-4). This article has stressed that the 'quest for the African dummy' has solely focused on explaining African economic performance as a slow average growth. By doing so, the investigation has been misguided, and the value of the findings is accordingly limited. It is not only that the growth rates were 'volatile', but the aggregate growth evidence brings out a pattern of growth, a pattern that is missed, and not explained by the regression literature.

Important quantitative and qualitative changes took place in Africa over the period. A pattern of growth and followed by retrogression, not a permanent stagnation. This observation raises issue of timing, and missed events in the performance narrative. Important qualitative changes happened during the period. The quest for the African dummy has let two decades of structural adjustment pass unnoticed, and falsely attributed situational observations from the 1980s apply to the whole period, while ignoring the simultaneous policy changes.

To observe a difference between two countries based on a subtraction approach is a potentially useful start, but not a satisfactory conclusion. One has to ask why this difference exists and how it came about. That correlation does not imply causation is a truism, yet one feels that this basic acknowledgement sometimes needs to be restated when confronted with the regression work on African growth. What is needed is a stricter explanatory framework of cause and effect. This would necessitate an abandonment of the central premise of the cross section regression literature. While these regressions are fitted by averaging dependent and independent variables one is constructing African economic history as a static story of stagnation and slow growth – a story that ignores important quantitative and qualitative changes

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## Work culture and skill in the Linwood car factory, 1963-81

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Upon opening in 1963 Linwood was the only car-manufacturing site in Scotland. It was conceived as a major regional policy tool to tackle unemployment associated with the decline of heavy industries in the west of Scotland, as well as a new phase in industrial restructuring.<sup>1</sup> Despite subsequent changes in ownership and government investment the factory closed in 1981. The prevailing dominant narrative tends to attribute this ‘failure’ to difficult industrial relations at the plant arising from a clash between work cultures: craft-based bespoke production, an embedded feature of Scottish industrial work experience, and automated assembly. This explanation of poor industrial relations is put forward by Lee: ‘Established forms of work ... had been hard but varied. Their replacement with easier but boring and repetitious work did not provide an easy or attractive exchange for the workers. The level of the performance of the workforce turned out to be poorer than expected by the employers’.<sup>2</sup> Similarly, Knox suggests that it was the failure of car workers to adapt to assembly-line production that formed the basis of many of the industrial relations problems in the late twentieth century.<sup>3</sup> Likewise, this is a view shared by Hood and Young who argue that one of the key reasons for industrial conflict in the car plant was the dissimilar production techniques in the car industry in comparison to traditional industry.<sup>4</sup> However, the use of oral testimony provides a source rich in detail about perceptions of the nature of work at Linwood. Utilizing material from in-depth, multiple interviews with 23 former employees of the Linwood car factory, this paper explores one of the key assumptions made about the workforce at Linwood; that its occupational background contributed to poor industrial relations.<sup>5</sup>

The ‘clash of cultures’ narrative assumes that a large portion of the Linwood workforce, which peaked at around 7,500 in the mid-1970s, came to the plant after working in the traditional industries. Linwood was the destination for those leaving the declining sectors of shipbuilding and engineering where craft skill and bespoke production predominated. This assumption is explored in the oral testimonies, which indicate a range of occupational backgrounds and mixed skill profiles at the car plant. Only two individuals from the sample group had shipyard experience prior to working in the car plant, although one of these, Peter Gordon, who became an inspector at Linwood, claimed that many had left shipbuilding to work at the plant. His foreman’s response had been: ‘not another one ... off to join the bonanza’.<sup>6</sup> The other ex-shipyard worker Archie Watson, a semi-skilled operator in the Unit Machine Block, partly concurs: ‘... there was one fella that actually came from Singers in Clydebank and there was a lot of people ... that came from Clydebank and some o’ them came from shipyards, some came fae Singers or whatever’.<sup>7</sup>

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<sup>1</sup> Documented in D. Sims, and M. Wood, *Car Manufacturing at Linwood: The Regional Policy Issues*, (Paisley College, Department of Politics and Sociology, 1984) and J. Phillips, *The Industrial Politics of Devolution* (Manchester: Manchester University Press, 2008).

<sup>2</sup> C.H. Lee, *Scotland and the United Kingdom: The economy and the union in the twentieth century* (Manchester: Manchester University Press, 1995), p. 183.

<sup>3</sup> W. Knox, ‘Class, Work and Trade Unionism in Scotland’, in *People and Society in Scotland, Vol. III, 1914-1990*, ed. by A. Dickson, and J.H. Treble, (Edinburgh: John Donald, 1994), p. 128.

<sup>4</sup> S. Hood and N. Young, ‘The Linwood Experience: Chrysler and Peugeot Citroen in Scotland’, in S. Maxwell (ed.), *Scotland, the Multinationals and the Third World* (Edinburgh: Scottish Education and Action for Development), p. 125.

<sup>5</sup> Names of interviewees have been changed. Interview material is transcribed in local dialect.

<sup>6</sup> Testimony - Peter Gordon, Interview One.

<sup>7</sup> Testimony - Archie Watson, Interview Two.

Others from the sample group talk about the many time-served tradesmen who joined the Linwood workforce. These testimonies reveal a motivation to seek work at the plant: ‘... the money. Everybody at that time, the money was the attraction to Linwood. Mair money. There was people workin’ in Linwood wae trades like mechanics, painters, joiners, ye had every, every trade worked in Linwood on the assembly line because of the money’.<sup>8</sup> Similarly when asked whether people had come to Linwood from skilled backgrounds Douglas McKendrick stated: ‘It was the money that drew everybody’.<sup>9</sup> This apparently applies to time-served workers also, with money recurrently emphasized as the key extrinsic reward attracting workers to Linwood: ‘Ye know, it was, was a great job that way ... the pay at that time, coming off the roofs an’ that an’ goin on [t]ae the lines was phenomenal’.<sup>10</sup>

These testimonies partly support dominant assumptions about the composition of the workforce. They also partly reinforce standard perspectives for industrial sociology about the labour process and its tensions. In the *Affluent Worker* study Goldthorpe et al noted that: ‘... it was the immediate relationship between men and their jobs which was the aspect of their work most capable of producing either some feeling of personal fulfilment or, on the other hand, some clear sense of deprivation’.<sup>11</sup> Thus linking the ‘nature’ of work to intrinsic rewards. For many workers the technologically driven, routinized nature of assembly-line production work was dissimilar to their craft-based production background where there had been a degree of independent working and bespoke craftsmanship. Assembly-line workers were generally categorized as semi-skilled and worked in repetitive jobs that provided few intrinsic rewards.

For Braverman, such Taylorist division of labour led to the deskilling of work as it separated knowledge from practical application.<sup>12</sup> With the stages of the production process broken down to limited tasks the work was highly repetitive. The introduction of scientific management principles in the system of Measured Day Work in the South Plant from 1963 and the North Plant in 1968 meant that work was timed and rated.<sup>13</sup> Furthermore, management set the pace of the machines. Consequently, during peak periods, workers on the car assembly line were capable of producing 60 vehicles per hour. When asked about work on a day-to-day basis Barry Stubbs, who worked in the Car Assembly Building, stated: ‘It was repetition all the time. Complete repetition. Once you got to do your, to know your job, you just went through it. Just like being a robot! ... You were a robot ... You were in to do your job’.<sup>14</sup> This narrative on the repetitive nature of assembly-line work is reinforced in a second interview: ‘... it was a horrible job. Imagine being on a track for eh, every day in life doing sixty cars an hour. That was your job. As soon as you went in there you didnae need a foreman, the line was your foreman’.<sup>15</sup> This participant became one of the inspection staff, but even then his job was repetitive. As a ‘Viewer’ on final inspection he worked underneath the high track with a checklist of twenty-one items, inspecting a car a minute.<sup>16</sup> This testimony is consistent with empirical evidence on the composition of the workforce at the time of Linwood’s closure in 1981. This indicated that 14.3 per cent of the 4,893 employees were classed as ‘manual skilled workers’, whereas 49.3 per cent were ‘manual semi-skilled’ and a

<sup>8</sup> Testimony - David Crawford, Interview One.

<sup>9</sup> Testimony - Douglas McKendrick, Interview One.

<sup>10</sup> Testimony - George Wilson, Interview One.

<sup>11</sup> J. Goldthorpe et al., *The Affluent Worker: Industrial Attitudes and Behaviour*, (Cambridge: Cambridge University Press, 1968), p. 16.

<sup>12</sup> H. Braverman, *Labor and Monopoly Capitalism: The Degradation of Work in the Twentieth Century*, (New York: Monthly Review Press, 1974), p. 443.

<sup>13</sup> *Report of the Court of Inquiry under Professor D. J. Robertson into a dispute at Rootes Motors Limited, Linwood, Scotland*, Cmnd. 3692, (HMSO 1968), pp. 6-7.

<sup>14</sup> Testimony - Barry Stubbs, Interview One.

<sup>15</sup> Testimony - Barry Stubbs, Interview Two.

<sup>16</sup> Testimony - Barry Stubbs, Interview Two.

further 15.7 per cent were 'manual unskilled'. Evidence suggests that many of the semi-skilled workers were likely to have worked on the main assembly lines and sub-assembly lines.<sup>17</sup> This evidence and the oral narratives strongly suggest a continual deskilling process and subsequent absence of intrinsic rewards. They support Braverman's model of work intensification and greater managerial control associated with both increased mechanization and scientific management principles. In this respect the established explanation of conflict at Linwood holds true.

Dominant narratives are not entirely supported, however, by the Linwood sample, with, for example, a wide variety of attitudes to work exhibited: 'I hated it ... the noise was terrible ... people brushing past you, they're workin' on the line you know'.<sup>18</sup> Alternately, George Wilson stated: 'I enjoyed it, I enjoyed everyday, I enjoyed goin tae ma work doon there, ye wouldnae believe it an awe I wis doin' was workin' on a line drillin' holes'.<sup>19</sup> Similarly, David Crawford claimed: 'it was an experience. I enjoyed it and if I, if the place opened up the morrow, I would go back to the job I left'.<sup>20</sup> However, he then seemed to contradict himself when asked whether his job was interesting: 'Naw it was, it was boring actually. Boring, doing the same thing day in, day out ... you're doing the same job fur eight hours or whatever it was. And it, just a wee machine went round aw day, aw day long'.<sup>21</sup> This apparent contradiction can be explained in the following narratives, which reveal control over the pace of work on the assembly line as an important element of engagement with work. It appears that the desire for a better wage and some control over work converge as perceived advantages to the job of line worker at Linwood.

Although tedious, the assembly-line work was considered easy and provided the opportunity to exercise control over the workplace. All of the semi-skilled assembly operators in the sample, with the exception of Barry Stubbs, constructed a narrative of work that was so easy they worked faster than the dictated speed. Subsequently they could work on vehicles further back on the line and 'create' time away from it. For instance, David Crawford, 'I worked with another chap right, so we worked ... a half hour on, a half hour off'.<sup>22</sup> Likewise, Douglas McKendrick's narrative supports the notion that eventually assembly workers were able to obtain job control – to some degree – in that they were able to share their work and work back on the line to gain time: 'after yer at it a while ye just looked at the screws an' they jumped in'. He later stated: 'ye got so good at the job ye could do the two sides ... So ye used to work half hour breaks'.<sup>23</sup> This experience was shared by George Wilson who described the job as being fairly straightforward. Eventually he could work back up the line completing his work before the machine brought it to his station on the line: 'it was night shift an' ye were only workin' five hours oot the ten hours. An oot that five hours ye, ye were only workin' two, that sort o thing'.<sup>24</sup> He worked with a 'mate' drilling holes on either side of each vehicle. However, he claimed that he was able to complete both their jobs. This allowed one to rest while the other worked, and both to work further back on the line, enabling two hours breaks: 'I had my bed under a table; it was great'.<sup>25</sup>

Oral testimony evidence suggests such practice was commonplace and accepted by foremen. Rodger McGuinness told of working in pairs to fit headlining on the front and the back of the car. Eventually he was able to do both ends and the men worked in turns enabling one of them to take a break and play dominoes or chess: 'the foreman says to us, "I don't

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<sup>17</sup> Modern Records Centre, Warwick, MSS.315/p/3/14 'Linwood Plant Closure'.

<sup>18</sup> Testimony - Douglas McKendrick, Interview One.

<sup>19</sup> Testimony - George Wilson, Interview One.

<sup>20</sup> Testimony - David Crawford, Interview One.

<sup>21</sup> Testimony - David Crawford, Interview One.

<sup>22</sup> Testimony - David Crawford, Interview One.

<sup>23</sup> Testimony - Douglas McKendrick, Interview One.

<sup>24</sup> Testimony - George Wilson, Interview One.

<sup>25</sup> Testimony - George Wilson, Interview One.

care: you can work five hours about if you like”<sup>26</sup> However, McGuinness also acknowledged that not all workers could structure their workload in such a way. Workers on the high track seemed to be less able to achieve this level of job control. The testimony of Barry Stubbs above constructed a narrative of negative engagement with his work: he ‘hated’ his work and only stayed as he had a mortgage to pay.<sup>27</sup> However, his testimony notes his inability to leave the line or even negotiate the pace of work thus denying the opportunity of some control. The evidence suggests that the level of engagement was not necessarily rooted in the work process itself but linked to the degree of control workers had over their time on the assembly line.

Oral testimony is not, of course, unproblematic or straightforward. The source material in this paper has been analysed from reconstructive, interpretive and reflexive perspectives. Consideration has certainly been given to potential exaggeration of the amount of control workers had over their work. There is, for example, evidence in the entire sample that there was constant pressure on foremen and inspectors to increase the rate of production, which could undermine assertions of working back along the line. Yet given the similarities between the narratives from dissimilar interviewees, there is a commonality in the testimonies with foremen allowing workers back on the line as long as production was maintained.<sup>28</sup>

Furthermore, I have argued elsewhere, using documentary sources, that to a large extent workers at Linwood displayed elements of craft attitudes in terms of ‘intrinsic rewards’ concurrent with those of Goldthorpe et al.<sup>29</sup> Hence, as Knox noted, ‘craft attitudes were, at least for a time, kept alive in a totally different working environment’.<sup>30</sup> Demands for greater control, autonomy and initiative by the shop stewards and convenors are evidence of a desire for intrinsic rewards. Consequently, job control and the speed of the assembly line were two of the key areas of conflict at Linwood. What becomes apparent is that while those working on the assembly line appeared to relinquish control, obtaining and maintaining control over their pace of work was a central tenet underpinning the nature of work in the car plant and the ‘rewards’ associated with it. Within this varied pattern there appears to be a correlation between background and narratives produced. The oral testimonies reveal a more complex pattern of working cultures than those which have appeared in the literature, with a substantial heterogeneity of experience at Linwood.

<sup>26</sup> Testimony - Rodger McGuinness, Interview One.

<sup>27</sup> Testimony - Barry Stubbs, Interviews One and Two.

<sup>28</sup> For example, the testimonies of Adam Fleming (Production Manager); Peter Gordon (Inspection); Andrew McIntyre (Electrician) and Barry King (Quality Control Foreman).

<sup>29</sup> A. Gilmour, ‘The Trouble with Linwood: Compliance and Coercion in the Car Plant, 1963-1981’, *Scottish Journal of Historical Studies*, 27.1, 2007, pp. 75-93.

<sup>30</sup> Knox, ‘Trade Unionism’, p. 128.

## British cinema advertising 1945-65: an example of managerial conservatism?

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Supervisors: Professors Pat Thane & Youssef Cassis

The selling power of British screen advertising during 1945-65 has been misunderstood. A report discovered during archival research details the first large scale attempt to accurately assess the selling power of a film campaign in terms of over the counter sales. The report lends support to the argument that British cinema advertising was under utilized as an advertising medium during the 1950s. Nevett and Kelly have identified the cost of production, audience resentment, poor quality and the attitudes of cinema exhibitors as key factors which worked against cinema advertising. However a variety of studies undertaken by the J. Walter Thompson advertising agency, and its subsidiary, the British Market Research Bureau, undermine the validity of all but one of these assertions. The failure of industry and advertising agencies to invest in a new, and highly effective form of advertising, may offer fresh insights into managerial conservatism in Britain during the 1950s.

British cinema advertising has been a neglected area of study. This is perhaps because cinema advertising failed to gather any real momentum. Cinema as an advertising medium experienced a continual decline in the percentage of total advertising expenditure which it secured, falling from a peak of 4 per cent in 1948 to 1 per cent in 1960.<sup>31</sup>

This pattern of declining cinema expenditure appears to be at odds with the appeal of cinema as a form of entertainment. Board of Trade statistics demonstrate the huge popularity which British cinema enjoyed during the two decades following the Second World War. In 1948, 4,708 cinemas were open at the end of the year, and a total of 1,585 million admissions were recorded.<sup>32</sup> Although cinema admissions dwindled after 1948, a figure of 343 million admissions was reported in 1964.<sup>33</sup>

The existing literature relating to British cinema advertising in the postwar period is both limited, and unable to explain why the popularity of cinema failed to translate into a source of advertising revenue. Kelly<sup>34</sup> is one of the few authors to have examined this topic. He depicts an attitude of antipathy towards advertising on the screen:

... another audience grievance concerns advertisement films. A great many of these are inept and cheap-jack snippets of poor quality which a national television contractor would be ashamed to transmit but which exhibitors force on their scoffing patrons.

Unfortunately, exhibitors declare that without advertisement film revenue would be significantly lower and seat prices would have to go up. If they are a necessary evil in most cinemas, then exhibitors should nag those who make them into a higher degree of professional accomplishment. This would remove a lot of audience resentment, not to mention improve the selling message of the advertisements.<sup>35</sup>

Nevett has suggested that the attitude of cinema exhibitors worked against cinema advertising:

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<sup>31</sup> Colin Seymour-Ure, *The British Press and Broadcasting Since 1945* (Basil Blackwell, 1991), p.123.

<sup>32</sup> Terence Kelly, *A Competitive Cinema* (The Institute of Economic Affairs, London, 1966), p.11.

<sup>33</sup> Ibid.

<sup>34</sup> Ibid.

<sup>35</sup> Terence Kelly, *A Competitive Cinema* (The Institute of Economic Affairs, London, 1966), p.150.

In December 1938 the Associated Picture Corporation announced that in future no advertising films were to be shown in any of its 500 or so cinemas. John Maxwell, Chairman and Managing Director of the Corporation declared, "I think it is unethical to take money from customers at the box office then, when they are inside, sell them products from the screen. People come to be entertained not to be advertised at. The general public I am sure do not approve".<sup>36</sup>

The issue of quality, technical expertise and cost of production are also highlighted by Nevett as having been obstacles to the growth of cinema advertising:

... cinema proprietors originally objected to the showing of obvious advertisements, which were therefore generally incorporated into short films what was known as the "powder in jam" method of advertising. Apart from being expensive in terms of production this approach often provoked an adverse reaction because of poor technical quality and the general lack of expertise.<sup>37</sup>

During the week ending 7 August 1943, a survey was carried out on the reaction of cinema audiences to the Lux Toilet Soap film. This was designed to convey the Lux Toilet Soap copy story in a two-minute film. On leaving the cinema 122 women were questioned about the film. The interviews were obtained from 15 different cinemas.<sup>38</sup> Their responses formed the basis of a report<sup>39</sup> prepared for Lever Brothers, by the British Market Research Bureau. 92 per cent of those who remembered seeing an advertising film recorded a favourable response, and 86 per cent indicated that they would like to see more films of this type.<sup>40</sup> The reasons given for wanting to see more advertising films like Lux Toilet Soap fall into three main categories. 47 per cent thought it "amusing-interesting-unusual", 35 per cent thought it "instructive-helpful", and 21 per cent cited "other reasons".<sup>41</sup> Although the sample size and geographical diversity of the survey are incommensurate, the findings of the report draw into question the reliability of Kelly and Nevett's analysis regarding responses to cinema advertising.

It is apparent from client correspondence and internal memoranda that during the 1950s J. Walter Thompson was increasingly cognizant of the limitations associated with advertising in feature films. A letter written by an employee of the J. Walter Thompson film department outlines these reservations:

It stands to reason that no exhibitor will pay 30 per cent or 40 per cent of his box-office receipts to the renter for a sponsored film. I have seen one such film made of the "Good Quads" – it was a three real British quota picture in which this agency was asked to find 2 or 3 sponsors at £3,000 each. There were no takers at this price. When the film was completed, we were asked to the pre-view to see what we had missed. Miss Jones and myself knew this was sponsored, but we had great difficulty in spotting the products. We spotted British Railways – Butlins Camps, but had to ask the producer who the remainder were. When the film was exhibited, the final list of cinemas bore no relation to the original.<sup>42</sup>

<sup>36</sup> Terence Nevett, *Advertising in Britain: A History* (London Heinemann, 1982), p.159

<sup>37</sup> Terence Nevett, *Advertising in Britain: A History* (London Heinemann, 1982), p.159

<sup>38</sup> The town, cinema and number of performances attended are listed in Appendix 1.

<sup>39</sup> *Report on Audience Reactions to the Lux Toilet Soap Film*, J. Walter Thompson Client Files: History of Advertising Trust: Norwich.

<sup>40</sup> For a full tabulation of the survey results see Appendix 2.

<sup>41</sup> Good forms of publicity 16%, and Draws attention to product 6% were the more specific reasons covered under the heading of "Other reasons". See Appendix 2.

<sup>42</sup> Letter to Mr F. Brickman, From L. Brown-Dated March 11, 1952, p.1. See J. Walter Thompson Client Files: History of Advertising Trust: Norwich.

These concerns contributed to the transition away from advertising in feature films, to the production in Technicolor of higher quality short advertising films. A memorandum on testing a two-minute Lux Toilet Soap film<sup>43</sup> outlined the rationale for the shift:

During the past two or three years, the restrictions which existed on the amount of hard selling one could do in a two minute film have for various reasons, largely disappeared. The two-minute film has always been regarded by us to possess a considerable number of attributes. It can be in Technicolor, it gives one sufficient time to tell the full story in a visual cinematic way, it is a solus position not flanked by other advertisers very often in the same product field as is possible in other types of advertising films, and it has entree to the large G.B./Odeon circuits which also other advertising films do not possess.<sup>44</sup>

It is simplistic to suggest that the cost of cinema advertising acted as an impediment to its adoption on a broader scale. Both forms of film advertising were able to accommodate a diversity of advertising budgets. The options offered to clients who preferred advertising in a feature film, ranged from “the smallest contribution is just a shot of one of your products not in use – in other words on a shelf, in a shop window”<sup>45</sup> costing £250 to “the maximum contribution, ... is the building up of a scene showing the need for your product, a shot of it in use, together with a verbal reference to the name in the dialogue” billed at £5,000.<sup>46</sup> The cost of a two-minute colour film was significantly higher than the cost of insertions in a feature film, however this reflected its superior quality and efficacy. The cost per 1,000 viewers of 6 insertions per year in the film *Signs of the Times* was 12/6d.<sup>47</sup> The production of a two-minute Film (Colour) cost £1.1s.3d. per thousand viewers.<sup>48</sup> In addition to two minute Films, filmlets (22 feet-Colour) were available at a cost of 3/8d. per 1,000 viewers<sup>49</sup> and Youngers Shoppers Gazette<sup>50</sup> at a cost ranging from 2/- to 5/- per thousand viewers, depending on length.<sup>51</sup>

In 1953 a report titled “The Selling Power of Screen Advertising”<sup>52</sup> was published by the London Press Exchange for Theatre Publicity. The publication was itself based on a report by the British Market Research Bureau. The report gives a detailed account of a test carried out during the winter of 1951 and the spring of 1952 to assess the effects of using advertisement films as a medium for one product. Unfortunately the product is not identified in the report and is only referred to as “Product X”.<sup>53</sup>

During 1951 the British Market Research Bureau, developed and put into practice a sales-trading mechanism in the Greater London area. The test mechanism was implemented in two areas, one in North London and one in South London; each area containing approximately 2,000,000 people (500,000 families). The two regions together incorporated nearly half the total population of Greater London.

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<sup>43</sup> Memorandum on Testing 2 Minute Films for Lux Toilet Soap: 1951: See J. Walter Thomson Client Files: History of Advertising Trust: Norwich.

<sup>44</sup> Ibid. p.1.

<sup>45</sup> Letter to A.Taylor Esq., Messrs. Lever Sales, Ltd: Dated 3<sup>rd</sup> March 1952: See J. Walter Thompson Client Files: History of Advertising Trust: Norwich.

<sup>46</sup> Ibid.

<sup>47</sup> Letter to Mr F. Brickman, From L. Brown-Dated March 11, 1952, p.1. See J. Walter Thompson Client Files: History of Advertising Trust: Norwich.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

<sup>50</sup> Youngers budget comprises 20 feet-50 feet of silent sequences-all national advertisements are in colour. Costs vary according to length of film.

<sup>51</sup> Letter to Mr F. Brickman, From L. Brown-Dated March 11, 1952, p.1. See J. Walter Thompson Client Files: History of Advertising Trust: Norwich.

<sup>52</sup> *The Selling Power of Screen Advertising*, (The Fanfare Press Ltd, London 1955).

<sup>53</sup> Ibid.

How the cinema advertising changed the position.

The 20-week base period came to an end on 1 December 1951. Immediately after this the test period began with the showing of the first film in South London, and continued until the second half of April 1952. By this time all six films had been shown at cinemas throughout the South London test area. The test period ended on 19 April 1952.

Table 1: *Index of Brand X's sales per week during the test period*<sup>54</sup>

	North London (No Advertising Film)	South London Advertising Film
Base Period (20 weeks to Dec 1. 1951)	100	100
Test Period:		
4 Weeks to 29 Dec. 1951	119	140
4 Weeks to 26 Jan. 1952	132	160
4 Weeks to 23 Feb. 1952	125	163
4 Weeks to 22 Mar. 1952	132	179
4 Weeks to 19 Apr. 1952	83	136
Average for 20 Weeks to 19 Apr. 1952	118	156

Two key points emerge from the figures in table 1. Whereas in the North London control area (no films) Product X's seasonal rise during the last period was slightly less than for the total market in this area, in the South London test area its rise was more than double that for the total market. Not merely did the product gain in the film test area relative to the control area, but the gain was cumulative throughout the period of the test.

The second of these points can be seen in the following table, which gives the tonnage gains in sales of the product in the test area compared with the control area.

Table 2: *Cumulative Percentage Gain in Sales of Brand X in South London compared with North London*<sup>55</sup>

Test Period:	Cumulative Percentage Gain in Sales of Brand X South London (Film Area) Compared with North London (Control) Area
First 4 weeks to 29 Dec. 1951	+17%
First 8 weeks to 26 Jan. 1952	+19%
First 12 weeks to 23 Feb. 1952	+23%
First 16 weeks to 22 Mar. 1952	+26%
First 20 weeks to 19 Apr. 1952	+32%

By the end of the 20-week test period, tonnage sales of the product in South London films area showed a gain of almost one-third in comparison with the North London control area.<sup>56</sup>

<sup>54</sup> Ibid, p.20.

<sup>55</sup> Ibid, p.21.

<sup>56</sup> Ibid.

Table 3 *Brand X's share of the Market in both the North and South London areas*<sup>57</sup>

	North London (No Advertising Film)	South London Advertising Film
Base Period (20 weeks to Dec 1. 1951)	27%	26%
Test Period:		
4 Weeks to 29 Dec. 1951	26%	29%
4 Weeks to 26 Jan. 1952	28%	35%
4 Weeks to 2 Feb. 1952	26%	33%
4 Weeks to 22 Mar. 1952	26%	35%
4 Weeks to 19 Apr. 1952	21%	33%
Average for 20 Weeks to 19 Apr. 1952	26%	33%

Table 3 demonstrates that in the South London area the beginning of the film showings quickly led to a sharp rise in Brand X's share of the total market. This increased market share was equivalent, over the 20 weeks of the test period, to approximately 7 per cent of the total market and was maintained throughout the test.

The existing historiography relating to cinema advertising during the 1950s should be viewed as embryonic and flawed. Kelly and Nevett have failed to acknowledge the transition away from advertising in feature films, to the creation of short direct advertising films. As a result the factors which they highlight as having worked against cinema advertising, are for the most part erroneous. The production of two-minute advertising films offered companies an effective high quality method of increasing their market share. This is reflected both in the positive audience responses recorded in the BMRB survey, and the results from the BMRB cinema advertising test. The paucity of available data precludes any definitive conclusions from being made. Nonetheless managerial conservatism may provide, at least a partial explanation, for the opportunity which industry and advertising agencies failed to embrace during the 1950s.

## Appendices

Appendix 1: *The interviews were obtained at the following cinemas*

Town	Cinema	Number of performances attended
Birmingham	Perry Bar Odeon	2
Birmingham	Warley Odeon	2
Birmingham	Handsworth Villa Cross	1
Birmingham	Shirley Odeon	1
Sutton Coldfield	Odeon	2
Colchester	Headgate	2
Colchester	Hippodrome	2
Bromley	Gaumont	2
Bromley	Odeon	1
Dagenham	Heathway	2
Dagenham	Grange	1
Romford	Plazza	2
Romford	Havanna	1
Southend	Gaumont	2
Southend	Odeon	1

<sup>57</sup> Ibid, p.21.

Appendix 2: *Reasons given for wanting to see more advertising films like Lux Toilet Soap*

Thought it amusing-interesting-unusual	47
Amusing-funny	17
Interesting	12
Entertaining	8
Very ingenious-original-clever	3
Pleasing to see	2
It's short and interesting	2
Makes a change-like to see all sorts	2
Amusing for children	1
Sort of film to tell children about at bath time	1
Bright and cheery	1
Helps to make up a programme	1

Appendix 3: *"Base Period" Shares of the Market (before film showings began)*

Control Area (North London)		Test Area (South London)
14%	Brand A	14%
24%	Brand B	24%
35%	Brand C	36%
27%	Brand X	26%

Appendix 4: *Brand X's share of the market during the summer and early autumn, and during the four weeks immediately prior to the film launch*

Period	North London	South London
8 weeks to 8 September 1951	26%	28%
8 weeks to 3 November 1951	27%	26%
4 weeks to 1 December 1951	27%	25%
Average for 20 Weeks	27%	26%

Appendix 5: *The percentage of shops handling each of the four brands in the two areas during the four weeks immediately before film showings began in South London*

	North London	South London
Brand X	79%	82%
Brand A	95%	95%
Brand B	87%	89%
Brand C	68%	73%

Appendix 6: *The stock position of Brand X in the two test areas*

Period ending	North London	South London
14 July 1951	29%	29%
3 November 1951	29%	30%
1 December 1951	29%	33%

*Appendix 7: Tonnage Index of Total Market Sales per week*

	North London (No Advertising Film)	South London Advertising Film
Base Period (20 weeks to Dec 1. 1951)	100	100
Test Period:		
4 Weeks to 29 Dec. 1951	123	127
4 Weeks to 26 Jan. 1952	125	121
4 Weeks to 23 Feb.1952	130	131
4 Weeks to 22 Mar. 1952	134	136
4 Weeks to 19 Apr.1952	105	109
Average for 20 Weeks to 19 Apr. 1952	123	125

*Appendix 8: Percentage of Shops Handling Brand X*

	North London (No Advertising Film)	South London Advertising Film
End of base period (4 weeks ending 1 Dec. 1951)	79%	82%
End of test period (4 weeks ending 19 Apr. 1952)	73%	81%

## Women in power: administrative structure and financial change at Syon Abbey 1440-1539

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The study of monastic households and financial administration, though not a large field, has not been entirely neglected. However, no scholar has completed a full-length case study or comparative analysis focusing on the structures of administration in monasteries and nunneries.<sup>1</sup> Nunneries have been particularly neglected, a fact explained by a previously common belief in the almost complete lack of sources available.<sup>2</sup>

My survey of the available primary material for English nunneries revealed, however, a variety of sources for administrative history. Most astonishing are the number of accounts from Syon Abbey's household and its estates. There are more than 1,200 account rolls for Syon Abbey in the National Archives, 220 of which are household accounts of five different administrative positions. These household accounts begin in the reign of Henry VI, in 1442, and after a pause from 1462 to 1488, continue largely uninterrupted until the dissolution of the Abbey in 1535.<sup>3</sup> Oddly, most historians of nunneries seem to have been unaware of this excellent and detailed set of sources. Aside from these accounts, the best primary sources available on the house are the Syon Additions, a set of locally-specific official addenda to the original and very general, Bridgettine Rule. Written in the mid-fifteenth century, these legislative documents outline the household and religious duties of the members of Syon in sometimes extraordinary detail.<sup>4</sup>

In addition to the availability and quality of sources, Syon Abbey is an excellent subject of study for a variety of reasons. It was the largest nunnery in England with 80 religious members, the richest nunnery in England with an income of £2,000 per year, and in fact the ninth-wealthiest of all monastic houses in England at the time of the dissolution. It was one of the few late foundations as well, endowed in 1415 by Henry V. As a member of the Bridgettine Order, it housed religious men as well as women, and most significantly, the women of the convent were given explicit control over the finance and administration of the entire convent, including the men's half. The religious men of Syon, though distinctly separated in a physical sense from the nuns, were nevertheless meant to be entirely dependent upon the women for their earthly necessities. The Syon accounts and Additions therefore provide an outstanding opportunity to examine a situation of female financial and administrative supremacy in late medieval and early Tudor England. My dissertation focuses in part on these issues, and this paper is a brief synopsis and discussion of them.

The accounts show that five central figures in the Abbey were responsible for managing money and coordinating extensive operations. These were the abbess, treasurers, cellaress, sacristan, and chambress. The Additions, however, reveal a large number of further

<sup>1</sup> The major studies of monastic household administration are the following: Dom David Knowles, *The Religious Orders in England*, 3 vol. Cambridge 1961-74.; R.A.L. Smith, 'The financial system of Rochester Cathedral Priory', *The English Historical Review* vol 56, no 224, pp. 586-95; R.A.L. Smith, *Canterbury Cathedral Priory: a study in monastic administration*, Cambridge, 1943.; R.B. Dobson, *Durham Priory, 1400-1450* (Cambridge studies in medieval life and thought; 3d ser., vol. 6), Cambridge, 1973.

<sup>2</sup> Knowles *Religious Orders*, Power, E. *Medieval English nunneries*, c. 1275-1535, Cambridge, 1922.

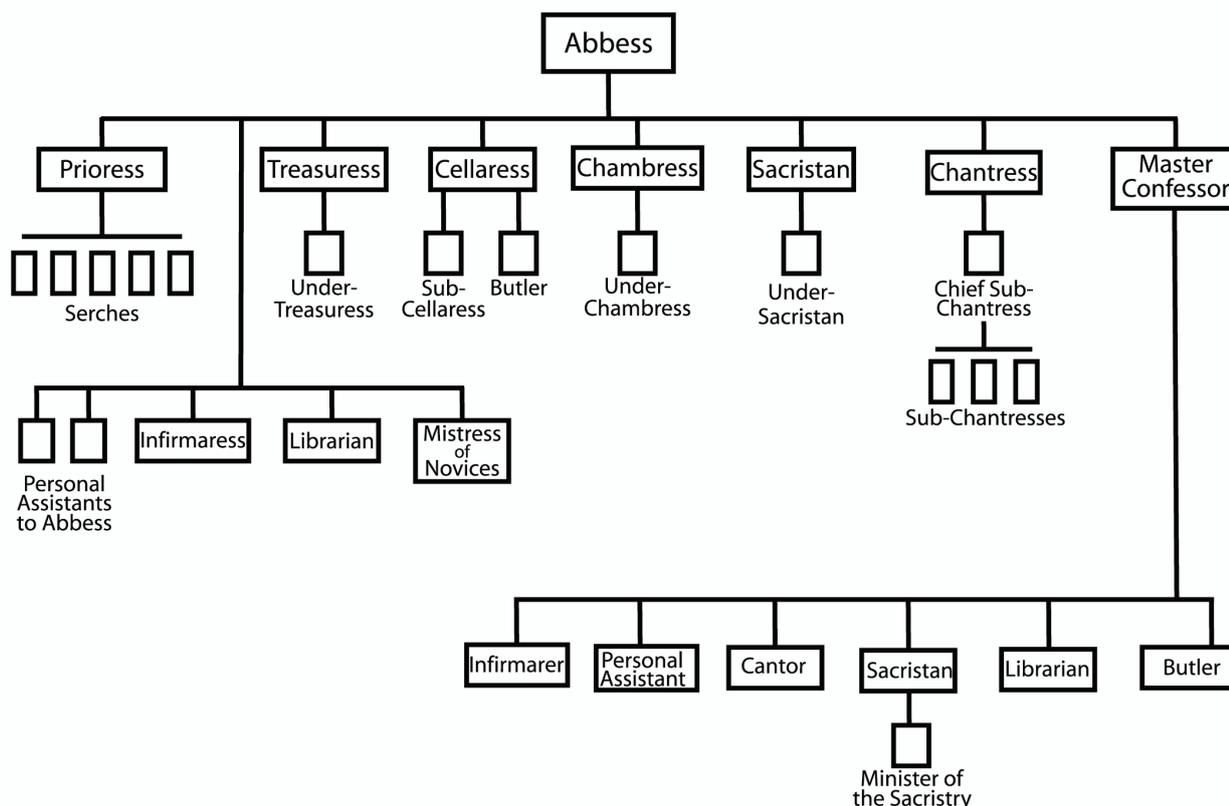
<sup>3</sup> PRO SC6/1106-12-1106-26; SC6/1261-1-1261-5; SC6/HenVIII/2207-HenVIII/2338; and others not in sequence.

<sup>4</sup> James Hogg, *The Rewyll of Seynt Sauoure* : [and other Middle English Brigittine legislative texts / edited by] James Hogg. Vol.2, The MSS. Cambridge University Library Ff.6.33 and St. John's College Cambridge 11 [A.11]. Vol.3, 'The Syon additions for the Brethren and the Boke of sygnes from the St. Paul's Cathedral Library MS', Salzburg, 1980. and *ibid*, vol.4, 'The Syon additions for the Sisters from the British Library MS. Arundel 146'.

positions regularly occupied by sisters, and to a certain extent by religious men. Through these two sources, a great deal of the duties and activities of the officers can be discerned.

As figure 1 shows, the organizational structure of Syon Abbey was extensive and hierarchical. This figure shows only the main accounting officers and their primary subordinates. However, the additions refer also to many more minor positions of responsibility in the enclosure of Syon, including keepers of doors, grates, and infirmaries. These positions tended to be mirrored by similar positions on the men's side of the monastery. It is estimated that around 35 out of the 60 sisters – or 58 per cent – held an office at a time.<sup>5</sup> A similar percentage is likely on the brothers' side.

Figure 1: Syon Abbey Organizational Chart



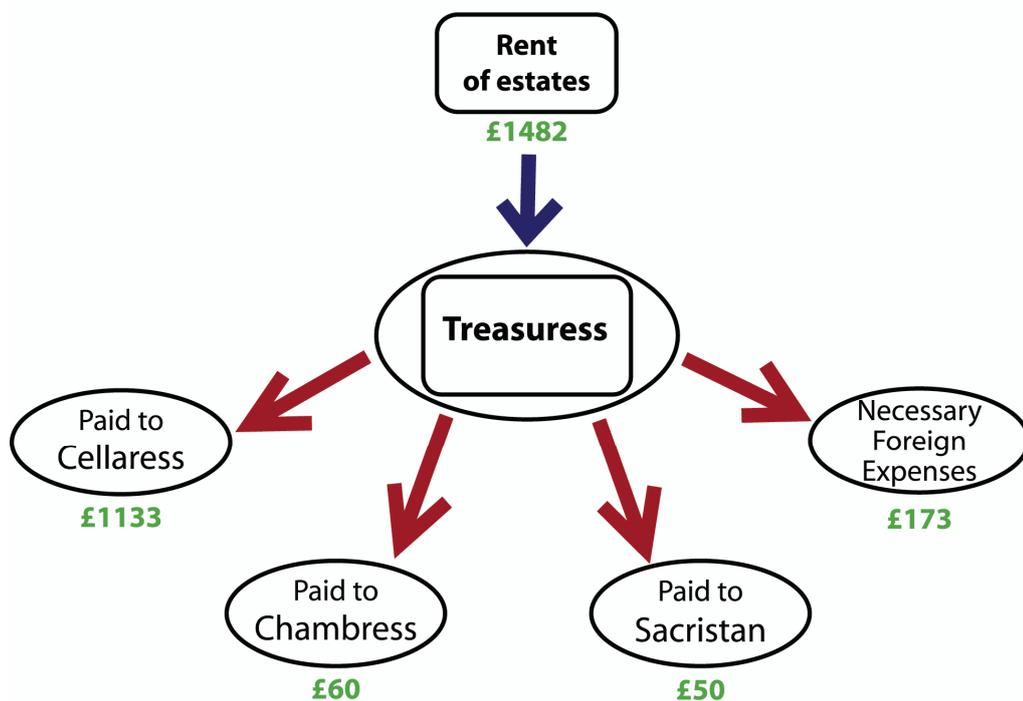
The abbess of Syon was ultimately responsible for the entire administration of the abbey. She was elected solely by the sisters, appointed all officers other than the master confessor on the men's side, and could fire them at will. The abbess had a separate income from Syon's treasuresse, though not as large, and had distinct financial responsibilities. Her 1512 income of £311, including both rents and offerings at shrines, was used mainly for building and repair work, which constituted her major financial responsibilities.

The master confessor was elected by both the sisters and brothers. He reported to the abbess and was responsible for the oversight of conduct and duties on the male side of the monastery. For this, he had the help of several officials, taken from the ranks of the priests, deacons and lay brothers who composed the male side of Syon Abbey. These officials included an infirmarer, cantor, sacristan, and butler, among many minor officers. Oddly, there are no remaining accounts of the master confessor or any of his subordinates. At first this seems in keeping with the Bridgettine Rule, which states that the men's side of the abbey should be fully dependent on the women for their practical needs and provisioning. But very rarely do any provisions for the men appear in the accounts of the female obedientiaries,

<sup>5</sup> Ulla Sander Olsen, 'Work and Work Ethics in the Nunnery of Syon Abbey in the Fifteenth Century', *The Medieval Mystical Tradition in England: Exeter Symposium V* Exeter, 1992. p. 134.

which suggests that the men obtained goods through other means – perhaps through their own separate income and provisioning system. It is also possible that their needs were indeed provided by the cellaress, but it was not deemed necessary to highlight the amounts allocated to them. If their provisions were lumped together in the final cellaress’s accounts with the general provisions of the abbey, then the lack of mention is understandable. One of the few pieces of evidence in the accounts about Syon’s men does indicate, however, that the master confessor, at least, had income which he was free to allocate to others, though the passage suggests that his money may have come from the treasurers initially.<sup>6</sup> Another indicates that the sacristan on the men’s side of the Abbey was given money ‘for a year’ by the female sacristan.<sup>7</sup> These items indicate that the finance of the male side of Syon Abbey was similar to that of the lesser accounting officials of the female side – who had no income separate from the treasurers, but had freedom of purchasing.

Figure 2: Treasurers Income and Expenses, 1512



The treasurers was charged with keeping track of all coin and property of the monastery. She had a treasury house, in which was kept a great chest filled with gold and silver coins. An intricate system of key-holding and transfer of authority was put in place to reduce the possibility of corruption and collusion regarding abbey finances. Also in the treasury house, and therefore in the care of the treasurers, were all of the accounts, receipts and other financial documents of the Abbey and its holdings. In keeping with her main duties, the treasurers was the main recipient and distributor of funding in the abbey. Her income source was simple but large – money receipts from rent collectors and bailiffs sent to each of her 35 properties in counties as far as Cornwall, and as near as Isleworth manor. In 1512, a typical year in Tudor Syon, rents received by the treasurers from her estates amounted to £1,482. (figure 2) The bulk of this money was transferred to the cellaress – a total of £1,133. In addition, the treasurers gave money to the chambress and sacristan and paid for various necessities such as doctors, lawyers and spices for festivals.

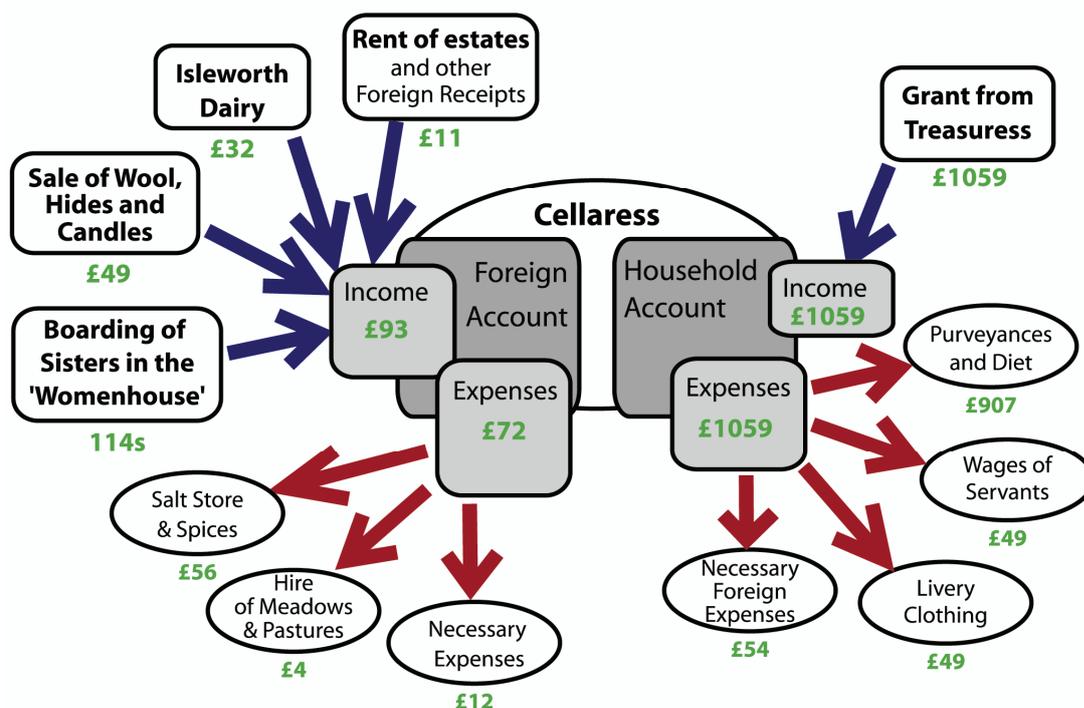
The cellaress had perhaps the most complicated set of tasks in the monastery. In addition to purchasing food and drink for religious of both sides of the monastery, she was also charged

<sup>6</sup> PRO SC6/HenVII/1728.

<sup>7</sup> PRO SC6/HenVII/1718.

with supervising the vast external enterprise of food and drink manufacturing which sustained the abbey. The list of her areas of influence is long. With the help of her sub-cellaress and butler, she managed a bakehouse, brewhouse, kitchen, buttery, pantry, cellar, frater, parlor, and the food for the infirmary, as well as any other place of eating, both within and outside the household, for both residents and strangers. She was also charged with supervising, feeding, clothing, and paying all outward servants of the household, and was responsible for the management of the home farm and the nearby dairy farm.

Figure 3: Syon Cellaress Income and Expenses, 1512



Though the treasures had the largest cash flow at Syon Abbey, the cellaress certainly had the most complicated. Figure 3 is an attempt to represent this graphically. The central feature of the cellaress's finances is that they were divided into the household account and the foreign account, each obtaining revenue from different sources and each focusing on different expenses. The household account was the simplest and recorded more money than the other. All income in the household account of the cellaress was received from the treasures – a total of £1,059 in 1512. The greatest sum was spent on food – a category divided into Purveyances (grains, live animals and other food) and Diet (dairy products and fresh fish), which together come to £907. The next greatest expenses were livery and wages, which each cost a substantial £49 in 1512.

Unlike the household account just discussed, the cellaress's foreign account is complicated more by its income than its expenses. There were four types of income. The sale of wool, hides and candles was the most substantial at £49, which demonstrates the continued importance of the home farm to the monastery's economy. The income from Isleworth Dairy added £32 to the agricultural income of the cellaress. Aside from the minor income of £11 from small tracts of land let out for pasture, and occasional grants from the abbess, the final foreign source of income for the cellaress was derived from the boarding of visitors – especially of devout laypeople wishing to live near the monastery. Compared with the income in the foreign accounts, the expenses are fairly straightforward. Sixteen pounds was spent on various necessary expenses. The greatest cost, however, was the salt store of dried and pickled fish and various spices, at a total of £56 together.

Such is the picture of Syon's administrative and financial structure in the Tudor era – three prominent economic units with separate income elements and separate expenditure

specialties. But Syon's original financial structure seems to have been somewhat different. Though the majority of the existing Syon accounts are from a variety of officers during the reigns of Henry VII and Henry VIII, the early accounts beginning in the 21<sup>st</sup> year of the reign of Henry VI, in 1442, and extending until the first year of Edward IV in 1461, are excellent sources as well.

The most obvious difference between these early accounts and the later ones is that those of the fifteenth century include only cellaress's accounts. At first, this was disappointing and suggested that only a part of Syon's economy of the time would be visible as a result. Examination of the accounts fortunately proved otherwise. Unlike in Tudor Syon's financial structure, in which each officer dealing with money accounted separately and in which all transfers of money from one officer to another were itemized, in the early accounts, the income and expenses of each officer are entered into the cellaress's accounts. Alongside receipts by the cellaress from the sale of wool and skins, appear receipts in various forms from the treasurers. One item makes it clear that money is being given by the treasurers directly to the cellaress, for the cellaress's expenses. But other lines claim an income, 'received from the same treasurers by the hand of the chambress', or by the hand of the sacristan. There is even one saying, 'Received from the same treasurers against payment of diverse regular expenses by the same treasurers'. Meanwhile, in the expenses section of the accounts, expenses of the chambress, sacristan, and treasurers are itemized, alongside the more extensive and detailed list of cellaress expenses. It is therefore clear that the accounts of the many officers were being subsumed into one overarching account created by the cellaress. This system makes it possible to gain an almost complete picture of the finances of the abbey in 20 years of the mid-fifteenth century.

There are a few things missing, however, which make full comparison with the Tudor accounts difficult. Most importantly, the early accounts include no information about the abbess's income and expenses. They also do not divulge details regarding the nature of the treasurer's income. It is impossible to determine how much was from rent, how much in kind, and how much from other sources, if any. The accounts do, however, have enough detail to determine expenses, and fortunately use the same categories of expenses as the later accounts, making comparison possible.

A major issue in the administration of Syon Abbey is the role of lay staff and councillors versus that of the monastic officials. Particularly interesting and important is the extent to which Syon's female officials could manage such vast enterprises from within the enclosure. A key mechanism was no doubt the use of Syon's household stewards and its extensive and varied hierarchy of sub-stewards, receivers and bailiffs. Though male monasteries of the late middle ages tended to use monk-wardens for supervision of estates, Syon Abbey seems to have used a system similar to that of medieval lay households.<sup>8</sup> The later accounts and the early both mention 'stewards of the household'. There were also a chief steward, general receiver and auditor at the time of the Dissolution.<sup>9</sup> Both account series mention a bailiff of the demesne of Isleworth, and the Tudor accounts have rent-collectors as well.

Though the issue of lay staff/nun relations touches on all the monastic officials, the position of cellaress is an ideal case study. How did she, who was expected to coordinate the efforts of a large lay staff engaged in a variety of disparate enterprises, manage to do this from within the enclosure, with a minimum of secular contact? The steward of the household would

<sup>8</sup> See for households: C.M. Woolgar *The great household in late medieval England*, London 1999. For male monasteries, see Smith, 'Rochester'. Power, *Nunneries*, p 99, claims Syon's system of lay officials was the usual system for nunneries. That this system was very similar to that of lay households is understandable – nuns couldn't manage and oversee their estates personally, but lay landowners most often would rather spend their time doing other things.

<sup>9</sup> *Valor ecclesiasticus temp. Henrici VIII: auctoritate regia institutus*; J. Caley, and J. Hunter (eds.) (6 vols) London, 1810-34. vol 6.

obviously have been of great help to the cellaress. Her accounts also show that the understeward and ‘clerk of the kitchens’ were sent on long provisioning journeys.<sup>10</sup> It is however unclear from the sources whether the cellaress made most of the decisions herself, or if she mainly acted as general overseer and nominal head of an organization managed in truth and fact by the steward who could maintain personal contact and supervision with a variety of lay employees.

However, the sometimes feisty and independent disposition of the Syon nuns in political and legal matters suggests that these women held enough personal power and pride to demand professional power and pride of place in important decisions.<sup>11</sup> It is likely that they delegated routine decisions only. This centralized power would of course have required more constant communication with outside lay staff to coordinate decisions and implementation. Ideally, the nuns were to have as little contact with seculars as possible, but provision was made for speaking with seculars for official reasons, but at the Abbey through windows or grates. There is also evidence, though, that the nuns did leave the enclosure on occasion. One occurrence was for the gathering of assigned wine from the King’s men at Bishop’s Lynn, probably in 1452.<sup>12</sup> Another was journeys of female Syon officials to London for purchasing in the year 1536 – once by the cellaress, and three times by the chambress to buy cloth.<sup>13</sup> Unfortunately, both of these sources are suspect, leaving the true mobility of the nuns unknown. It is clear in any case, though, that the Syon administrative nuns were highly capable. Most who attained high office could read Latin, and came from backgrounds in which they would have learned the arts of household management.<sup>14</sup> Many were also of high birth and accustomed to the associated power.<sup>15</sup> It would be surprising if this knowledge and background didn’t translate into proactive managerial actions by the female obedientiaries of Syon.

This paper has briefly demonstrated the unique opportunities and limitations faced by the managerial women of Syon Abbey. The evidence indicates that on the whole the priests and nuns did not adhere strictly to the Rule and Additions regarding finance, provisioning, and even enclosure, but preferred, rather, to make money directly available to those officers on the men’s side who needed it, and thereby free them from complete dependence on the ‘wheel’ in the wall through which the women could pass provisions. They preferred as well, it seems, to allow at least some of the high female officials to leave the enclosure to pursue official business – perhaps to make provisioning more efficient. But since Syon was always considered strictly observant, we can conclude that at this dual monastery, with all of its challenges, a happy balance was struck between ideal and practicality, between the life of the world, and the life of God.<sup>16</sup>

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<sup>10</sup> PRO SC6/HenVIII/2283.

<sup>11</sup> George James Aungier. *The History and Antiquities of Syon Monastery*. London, 1840, p. 88. and Johnson, F. R. ‘Syon Abbey’ in *Victoria History of the Counties, Middlesex*, vol 1. 1969, p. 182.

<sup>12</sup> Sir William Dugdale *Monasticon Anglicanum : a history of the abbies and other monasteries, hospitals, frieries, and cathedral and collegiate churches, with their dependencies in England and Wales* 6 vol. ed John Caley, Henry Ellis and Bulkeley Bandinel London, 1817-1830, vol vi pt 1 p. 31 NE. There is some uncertainty about the date.

<sup>13</sup> Power, *Nunneries* p. 368. But she gives no source. It is impossible to double-check this.

<sup>14</sup> Virginia R Bainbridge ‘The Bridgettines and Major Trends in Religious Devotion c.1400-1600: with Reference to Syon Abbey, Mariatroun and Marienbaum’, *Birgittiana*, 19. 2005, pp. 234-5.

<sup>15</sup> Aungier p. 80. Edward IV’s sister Anne was a Syon nun and later prioress, and their mother Cecily was a close supporter and friend of the abbey.

<sup>16</sup> G.W. Bernard, *The King’s Reformation: Henry VIII and the Remaking of the English Church*, by GW Bernard, London 2005, 167.

## Power struggle over power utilities: the Brazilian capitalism formation, 1900-20

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The Brazilian economy in the early twentieth century underwent deep changes. Enhanced agricultural exports and foreign investments in Latin America drove the country's urbanization and industrialization. One visible feature of Brazilian cities' modernization was energy power in public and domestic lighting, tramways and industries. Contradictions in the country's history of capitalism's formation were mirrored in the conflicts between Canada-based *Light and Power* and the *Brazilian Company of Energy Power* – CBEE over the supply of public urban services to Brazil's main economic cities at the time – Rio de Janeiro, São Paulo and Salvador.

Contemporaneous with the 1870's utility companies of Europe and the United States and sustaining archaic services, such as gas illumination and animal-drawn tramways, two types of companies initially coexisted in Brazil: few foreign companies, mainly from England, and a larger number of utilities formed by Brazilian entrepreneurs with capital from import and export trade or agrarian production of coffee and rubber, for instance.<sup>17</sup>

Two socio-political turning points – the 1888 Slavery Abolition and the 1889 Republican Regime establishment – had led the Brazilian urban elite to focus its efforts on the cities' modernization. After a decade of economic turbulence, this elite became obsessed with the idea of providing electric illumination and tramway services.

Although the orthodox economic policy sustained by then Presidents Campos Sales (1898-1902) and Rodrigues Alves (1902-6) had triggered the introduction of electric power utilities, very few rules at federal level fostered the development of this new sector. Law no. 1.145 of 31 December 1903 and Decree no. 5.407 of 27 December 1904 defined general lines for concessions: maximum 90 years of benefits, revision of tariffs and duties exemption for plant building. But the balance of power was about to shift. The new political system of 1889, the Federalism, had transformed municipal decisions in deterministic guidelines for utility bids, making municipal lobbying a key instrument in utility concessions.

Late nineteenth-century Brazilian utility companies were small and of a local character: plants used coal, had a limited supply capacity and were controlled by local entrepreneurs. Poor service delivery gave rise to a concentration process. Concomitantly, municipal powers started to implement local laws forcing companies to replace gas and animal power for electric systems.

The first of those laws was in Brazil's then federal capital, Rio: Organic Law of 1892 allowed politicians in power at municipal level to make decisions on the city's utilities concessions.<sup>18</sup> As a result, Rio's council reviewed its agreements and required the concessionaries to modernize their services. Nevertheless, only almost a decade later, with Rio's modernization project spearheaded by Mayor Pereira Passos (1903-6) would such changes have concrete consequences.

The second law was issued on 4 July 1898 in Salvador city, state of Bahia. Mayor Antônio Araújo passed Law no. 330 to stimulate the electrification of tramways. Salvador's

<sup>17</sup> This was an incipient process of capital diversification from commercialism to urban and industrial investments: Mello, Z. *Metamorfoses da Riqueza São Paulo, 1845-1895*. São Paulo: Hucitec, 1985, SAES, F. *A grande empresa de serviços públicos na economia cafeeira*. São Paulo: Hucitec, 1986 and Perissinotto, R. *Classes dominantes e hegemonia na República Velha*. Campinas: Unicamp, 1994.

<sup>18</sup> Federal District Organic Law no.85 of 20 Sep. 1892.

town council required the enterprises willing to retain the municipal concession to substitute traction type and standardize tramway gauges within three years.<sup>19</sup>

Finally, in São Paulo, its first mayor, Antonio da Silva Prado (1899-1911), took advantage of the market concentration and signed the so-called unification contracts, which demanded the electrification of tramways and illumination services which, ultimately, concentrated power in the hands of the town hall.<sup>20</sup> Nonetheless, local enterprises would have to mobilize large financial resources to induce all the required technological changes. But these resources were not promptly available.

The change in scenario began to unfold with the arrival of Toronto-based Light in Brazil in 1899, followed by the foundation of Brazilian CBEE in 1904.<sup>21</sup> Both companies not only counted on a great amount of financial resources,<sup>22</sup> but also enjoyed good commercial relations with manufacturers of electrical equipment abroad.

Light soon became the largest utility in the Brazilian economy. Incorporated in Canada, it started operations in the cities of São Paulo (1899), Rio (1904) and Salvador (1906). Led in São Paulo and Rio by Canadian lawyer and entrepreneur Alexander Mackenzie and US 'technoentrepreneur' Frederic Pearson, and in Salvador by US promoter Percival Farquhar, Light had amassed great lobbying power and forged alliances with local political groups,<sup>23</sup> aside from its huge financial resources.

Previous successful business ventures, such as the 90-year concession to build and operate the port of Santos and the commercial representation of US General Electric, led national entrepreneurs Cândido Gaffrée and Eduardo Guinle to found CBEE, which engaged in competition with Light. Favoured by an energy power surplus at the Port of Santos, CBEE began investing in the light and power sector in 1906, initially offering its services to São Paulo at lower rates than Light's. Service implementation, however, was pending on the approval of its town council.

Meanwhile, Gaffrée and Guinle's company bid to supply energy in two other Brazilian cities: the federal capital Rio and the northeastern commercial centre, Salvador. CBEE was questioning Light's utilities monopoly control of the electric system. In the state of Rio, CBEE had already acquired concessions for power utilities in the cities of Niterói and Petrópolis, while in Salvador it had taken over the main tramway company.<sup>24</sup>

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<sup>19</sup> Coelba Archive (state of Bahia), T.5.4.009, 13 Dec.1899 and Salvador Municipal Archive, *Municipal Council Record*, 27 Feb. 1907.

<sup>20</sup> Power Utility Law no. 407 of 21 July 1899, art. 1: 'The installation of power and light distribution services in the city is subjected to authorization by the municipal mayor' and Unification Contracts Law no. 400 of 11 May 1899.

<sup>21</sup> In fact, CBEE was effectively formed only in 1909, as a new enterprise of Brazilian capitalists Gaffrée and Guinle. Though their interest in power utilities had begun with a federal authorization to build a hydroelectric plant in Rio in 1889, they established the first company, Guinle & Co, in that sector only in 1904. This company sold General Electric equipment in Brazil and supplied technical instructions to build plants; it was also one of the first to obtain a concession for electric services in Brazil. Thus, CBEE originated in 1909 from Guinle & Co. concessions and capital. Data from Rio de Janeiro National Archive, Commercial Board L 431 R 54088 (1904) and CBEE constitution meeting, 8 July 1909, pp. 4248-9 in Brazil's government official newspaper.

<sup>22</sup> Light's capital in 1908 was \$10 mn in São Paulo, \$6 mn in Rio and \$3.5 mn in Bahia. CBEE's in 1909 was \$9 mn. Comparatively, in São Paulo state's countryside, important CPFL (São Paulo Company of Light and Power) had a capital of only \$645 thousand in 1912.

<sup>23</sup> For Light's history: Souza, E. *A história da Light. Os primeiros 50 anos*. São Paulo: Eletropaulo, 1982, Armstrong, C. and Nelles, H.V. *Southern Exposure: Canadian Promoters in Latin America and Caribbean 1890-1930*. Toronto: University of Toronto, 1988, Gauld, C. *Farquhar, o último titã*. São Paulo: Editora de Cultura, 2006, McDowall, D. *The Light: Brazilian Traction, Light and Power Company Limited 1899-1945*. Toronto: University of Toronto, 1988 and Light's *Annual Reports* (1902-20), São Paulo state's Eletropaulo Archive.

<sup>24</sup> For CBEE: Barros, G. *Guilherme Guinle: 1882-1960*. Rio de Janeiro: Agir, 1982, Hansen, C. *O poder da Companhia Brasileira de Energia Elétrica em Petrópolis (1909-1927)*. Niterói: UFF, 2006 and *Annual Reports (1909-27)*, Rio de Janeiro National Archive.

What had begun as mere local conflict grew into a fierce debate in newspapers, political institutions and society at large: while some questioned the foreign monopoly in a key sector to national development, others contended that only a powerful company like Light could modernize the Brazilian urban life.

On one side of the dispute, CBEE's entrepreneurs articulated their local influence to publish nationalist articles in the newspapers *O Estado de São Paulo* (São Paulo), *Jornal do Commercio* (Rio) and *Diário de Notícias* (Salvador). Also, Guinle invested heavily in a campaign against Light, portraying it as an octopus whose tentacles controlled Brazilian political institutions. On the other side, São Paulo's Light launched the newspaper *A Gazeta* and co-opted influential Brazilian lawyers Carlos de Campos, Rui Barbosa and Assis Chateaubriand.<sup>25</sup>

The conflict escalated to unprecedented levels in 1909. In São Paulo, CBEE had offered its town hall the services at a rate eight times lower than Light's.<sup>26</sup> In return for that attractive offer, Gaffrée and Guinle demanded from Mayor Prado 'non-occupied' places in the city, i.e., where Light had not already installed its equipment.<sup>27</sup> By way of the same offer, CBEE expected to obtain the services in Brazil's largest city, Rio. Furthermore, the entrepreneurs used their relationships with important local politicians, such as Serzedelo Correa, Lauro Müller and Gabriel Osório, all members of the Engineering Club – of which Gaffrée was an influential director – to defend their liberal right to compete.<sup>28</sup> Finally, in Salvador city, through the modernization of its tramway service, CBEE started to offer electric illumination in areas adjacent to its tramway rails. That was an irregular move because an illumination concession had already been awarded to *Compaigne d'Éclairage de Bahia*, a Light subsidiary that was unable to supply services to the entire city and to restructure its outdated gas illumination services.<sup>29</sup>

To achieve its aims, CBEE was building two hydroelectric plants, in São Paulo and in Salvador, and had inaugurated a plant on the Piabanha River, in the state of Rio, one of the largest at that time.<sup>30</sup> Despite its rapid profit growth, should the Brazilian company continue serving only secondary cities, such as Niterói, this vulnerability would never allow it to reach Light's profits. Whereas CBEE's total revenues from electric power services increased from 54,644 to 450,123 *contos de réis* between 1909 and 1913, São Paulo's Light revenues already totalled 1,173,906 in 1909 and 2,679,372 *contos de réis* in 1913.<sup>31</sup> Thus, CBEE envisioned the market of cities like Rio and São Paulo, which not only counted on public financial powers to rapidly modernize the cities, but also enormous private illumination and industrial power markets.

Favoured by Article 72 of the liberal Federal Constitution, CBEE used the tactic of claiming for freedom of initiative: entrepreneurs Gaffrée and Guinle argued the Brazilian economy was sustained on a free competition system, and therefore CBEE had the right to supply energy power at least to non-occupied areas in large cities.<sup>32</sup> Light had successfully used CBEE's argument to conquer São Paulo's and Rio's markets from former local

<sup>25</sup> *O Estado de São Paulo* and *A Gazeta* (1909-12) – São Paulo State Public Archive; *Jornal do Commercio* (1909-15) – Rio de Janeiro's National Library; *Diário de Notícias* (1909-15) – Bahia State Library. Carlos de Campos was Light's lawyer and an influential politician in São Paulo; his father had been São Paulo's governor between 1892-6 and 1902-4. The lawyer was also a state governor between 1924-7. Rui Barbosa was responsible for the first Republican Constitution (1891), a prominent minister of foreign relations and a much-respected Brazilian lawyer. Finally, Assis Chateaubriand was a famous lawyer and a magnate of Brazilian communications.

<sup>26</sup> Eduardo Guinle's letter to the city of São Paulo in *O Estado de São Paulo*, 6 March 1909.

<sup>27</sup> São Paulo Light's letter submitting application for services, *Town Council Report*, São Paulo, 26 June 1911.

<sup>28</sup> Engineer Club Magazine, 1922, pp. 49-57.

<sup>29</sup> *Éclairage* contract revision. *Town Council Report*, Salvador, 28 Sep. 1910.

<sup>30</sup> National Archive (RJ), Brazil's government official newspaper, 28 April 1910.

<sup>31</sup> São Paulo Light *Annual Report*, 1902-20 and CBEE *balance sheets*, 1909-27.

<sup>32</sup> *O Estado de São Paulo*, 6 March 1909.

enterprises.<sup>33</sup> Now that it had these markets, Light changed its viewpoint. Drawing on the ideas of Rui Barbosa, and on US doctrines presented in the books *American Constitutional Law* by Clarke Hare and *Commentaries on the law of municipal corporations* by John Dillon, Light positioned itself against the coexistence of different utilities companies within the same city.<sup>34</sup>

Though ensuing debates focused on the principles of Brazil's Federal Constitution, the permission for CBEE's insertion into new markets would ultimately rely on municipal decisions. And, in São Paulo, Mayor Prado approved the concession for the Brazilian company, since it would help expand the service in the city and reduce rates. Nevertheless, Light lobbied to hinder the mayor's decision: it had made available a great amount of money for the town council to make improvements in the city;<sup>35</sup> crossed its railroads onto town councillors' lands, like those of José Oswald de Andrade, to foster land speculation and, not less importantly, intervened in the municipal elections, encouraging its employees to vote for the town councillors who served Light's interests.<sup>36</sup>

And Light won this round of the dispute in São Paulo. Despite town council debates from 1909 to 1912 and a protest rally by law students against foreign capital – which destroyed Light's tramways – the Toronto-based company managed to renew its contracts thus obtaining 50 more years of monopoly for this service in São Paulo.

In Rio, CBEE's close nationalist allies brought it brief victories between 1905 and 1907: the national company won the right to supply electric power after Light's monopoly concession of 1915 ended. However, the political changes after the 1908 election had placed foreign capital adepts in the government, such as Mayor Souza Aguiar.<sup>37</sup> Besides that, Rio's Light counted on support from Alexander Mackenzie's friend, Brazil's foreign minister Baron of Rio Branco<sup>38</sup> and on the admiration of Brazil's president Nilo Peçanha (1909-10). Then, in 1912, closing the second round of the dispute in Rio, CBEE's authorization was cancelled and Light's right to monopoly was extended for the next 33 years.

In a big twist of events, resolutions in Salvador were different. In part, this new dispute had arisen from simultaneous conflicts between both enterprises in the city of São Paulo and Rio. Besides that, it was a response to CBEE's increasing market service that invaded Light's concessions in this city. And, whereas Light had accrued debts of over 15:000\$000 réis from municipal taxes and fines due to the bad conditions of their equipment and services, CBEE was investing in the hydroelectric plants to reduce utility services costs. The result was that on 5 July 1911 Mayor Carneiro Rocha sanctioned a law to take over Light. In 1913, the Justice Commission approved the indemnity value of 20.238:095\$238 réis.<sup>39</sup> Effectively, all the goods passed from Bahia Light to the municipality, and, some years later, to CBEE, which would monopolize the sector.

Hence, different relationships with local powers generated distinct results. Light preserved its monopoly in Rio and São Paulo, creating the powerful Brazilian Traction Light

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<sup>33</sup> *A Notícia*, 9 Oct. 1907.

<sup>34</sup> Another Light lawyer, Francisco Castro Jr. wrote in that period the book *Light and Power privilege*, where he systematized the ideas of Rui Barbosa, Clarke Hare and John Dillon: Castro JR., Francisco. *O privilégio da Light and Power*. Rio de Janeiro: Papelaria Americana, 1909, pp. 15-17.

<sup>35</sup> *A Platéia*, 11 March 1909.

<sup>36</sup> *O Commercio de São Paulo*, 14 July 1907. As the company reported to its shareholders in Canada, 'We anticipate a relationship with the new administration with the utmost cordiality'. São Paulo Light *Annual Report*, 1910, pp. 1-8.

<sup>37</sup> Rio de Janeiro was the Brazilian capital, thus federal and municipal institutions fought to control power decisions. While CBEE had more influence in the federal sphere, Light had hegemony in the municipal one; in 1911, Light's lawyer Rui Barbosa won the debates giving the municipal arena power to decide Rio city's electric power future. LAMARÃO, S. *A energia elétrica e o parque industrial carioca (1880-1920)*. Niterói: UFF, 1997, p. 232.

<sup>38</sup> McDowall, 1988, p. 148.

<sup>39</sup> *Town Council Report*, Salvador, 16 Jan. 1914.

and Power Company in 1913. CBEE was only granted the concession in Salvador. Although the absence of specific legislation and bureaucratic criteria led to unexpected municipal resolutions over power utilities in this case, companies never ceased to invest in Brazil, as the liberal institutionalist approach stresses.<sup>40</sup> Furthermore, these power utilities allowed Brazil to trigger its urbanization and the industrialization process, even though large companies and urban elites benefited more from the lack of legislation than society as a whole.

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<sup>40</sup> Haber, Stephen H. 'The efficiency consequences of institutional change: financial market regulation and industrial productivity growth in Brazil, 1866-1934', in: Coatsworth, John & Taylor, Alan. *Latin America and the world economy since 1800*. Cambridge: Harvard University Press, 1998.

## Women and the rural economy, Oxfordshire c.1945-70

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In this paper I will investigate how women in postwar Oxfordshire contributed to the family income through their labour both inside and outside the home, with traditional means such as growing vegetables, keeping livestock, wooding and gleaning, and domestic service both continuing and being augmented by the increasing opportunities for paid labour. The paper is based on oral history interviews with 92 women from different locations in Oxfordshire.<sup>41</sup> These were the villages of Benson and Ewelme in south Oxfordshire; the Wychwood villages in west Oxfordshire; the 24 square miles near Banbury in north Oxfordshire covered by the *Country Planning* (1944) survey; Oxford city centre; and the contrasting suburbs of Cowley and Florence Park, and North Oxford and Summertown. Women with a variety of educational backgrounds were selected, from minimum age school leavers to graduates. The aim of the research is to see how locality, education, and class influenced women's experiences. The women chosen were aged between their late 50s and their 90s, allowing change and continuity over time to be examined. Oral history, the methodology for this research, provides objective information about women's lives, but also reveals their thoughts and feelings through the subjectivity of their accounts. Oral history can therefore complement and sometimes even challenge the evidence of contemporary surveys and records. The case study approach was chosen in order to investigate how variations in women's experiences related to issues of locality; geographical, social and economic contexts; and housing and community structure. In the paper I will demonstrate that while it is clear that women were still contributing to the family income and rural economy in significant ways during the postwar period, women at this time showed a tendency not to think of themselves as workers, prioritising home and family in their accounts.

In his 1913 survey *How the Labourer Lives* Seebohm Rowntree found that average weekly earnings for agricultural labourers in Oxfordshire were the lowest in country at fourteen shillings and eleven pence.<sup>42</sup> However Rowntree also found that subsidiary earnings by other members of the family and produce from gardens and allotments helped to supplement the male worker's income.<sup>43</sup> With reference to the village of Headington Quarry, Raphael Samuel has described the extent to which all family members contributed to the family living before World War One.<sup>44</sup> Families continued to supplement the male wage after World War One. Recalling her childhood growing up in the village of Ducklington between the wars, Mollie Harris writes:

Everybody had big allotments as well as their gardens. Both men and women toiled on these; into late evenings they would work, growing enough potatoes and other vegetables to last all the year round. Children, too, helped their parents with picking up potatoes, hoeing, and weeding.<sup>45</sup>

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<sup>41</sup> The interviews and transcripts are held by the author. Pseudonyms have been used.

<sup>42</sup> B. Seebohm Rowntree, *How the Labourer Lives: A Study of the Rural Labour Problem* (London: Thomas Nelson and Sons, 1917) (1913), p. 24.

<sup>43</sup> *Ibid.*, p. 32.

<sup>44</sup> Raphael Samuel, "'Quarry Roughs': Life and Labour in Headington Quarry, 1860-1920. An Essay in Oral History", in Raphael Samuel (ed.), *Village Life and Labour* (London: Routledge and Kegan Paul, 1975), p. 174.

<sup>45</sup> Mollie Harris, *All Kinds of Magic* (Oxford: Oxford University Press, 1995), p. 8.

There were also other ways of adding to the family's income, such as poaching, wooding, and gleaning. Harris explains:

I really do not know how some of the families in the village would have managed to survive in those days without a bit of poaching. And although our Mother did not encourage Bern or Bunt to go, she was really quite glad when Denis, the youngest, took it up.<sup>46</sup>

While women's employment in field-work was in steady decline (in 1911 there were 94,700 females employed in agriculture, in 1921 there were 83,100, but by 1931 this fell to 55,700)<sup>47</sup> they still added to the family's earnings. Discussing women's contribution to the family economy in the village of Headington Quarry, Samuel argues:

... housekeeping itself depended on her own efforts rather than the amount of his allowance. The children's clothes, for instance, depended upon her skills with the needle and thread ... . Pig-keeping was the joint responsibility of the husband and wife ... . When the pig was killed, the woman of the house was involved in a whole series of manufacturing activities ... . Pickling vegetables was another species of manufacturing activity which, in the autumn, took up a lot of the woman's time.<sup>48</sup>

All members of the family contributed to their income and they did so in various ways. Although this way of life was changing, elements of the rural economy continued into the postwar period for working-class families, notably this supplementing of the male wage. Madge was born and brought up in Shipton-under-Wychwood moving to the neighbouring village of Milton-under-Wychwood upon marriage. She had five sons between 1940 and 1948. When describing how she and her husband coped with the financial strain of having this number of children born so close together she explained that villagers produced much of their own food: 'of course we had big gardens and we grew a lot, everybody. We had a big garden and we used to keep some hens as well'.<sup>49</sup> Gloria was born and brought up in Benson. She said as a child her parents instilled in her that it was important to be 'self-sufficient'. In adulthood Gloria put this education into practice and she and her husband 'got an allotment, we grew a lot of our veg, which was again that's following on, that's from his parents and from my parents which will still do, we still grew our own veg'. Gloria also proudly explained how she and her neighbour used to go wooding, stating, 'Buy logs, never, not in a hundred years, we'd never buy logs'.<sup>50</sup> Poaching was also referred to as a way of contributing to the family economy, particularly in times of financial hardship. Doris, another Benson resident, told an anecdote about her husband who had been caught poaching as a child and his parents' reaction. Her husband's father was ill with tuberculosis and as a result 'money was tight'. Her husband went out poaching rabbits, but he was caught and had to go to court. When he got home his father 'gave him a good hiding'. Her husband asked 'what was that for?' and his father replied 'for getting caught'.<sup>51</sup> Doris' sister-in-law Tina told a story about her husband who had gone out poaching when they were married. He had been redundant from the Cowley car factory and was unemployed so he used to go out poaching pheasants and rabbits to feed the family.<sup>52</sup>

<sup>46</sup> *Ibid.*, p. 181; See also Sheila Stewart, *Lifting the Latch: A Life on the Land* (Charlbury: Day Books, 2003).

<sup>47</sup> Edith H. Whetham, *The Agrarian History of England and Wales: Volume VIII, 1914-1939* (Cambridge: Cambridge University Press, 1978), p. 213.

<sup>48</sup> Samuel, 'Quarry', pp. 200-1.

<sup>49</sup> Madge, WY8, pp. 13-14.

<sup>50</sup> Gloria, BE14, p. 23.

<sup>51</sup> Doris, BE2, p. 58.

<sup>52</sup> Tina, BE3, p. 58.

It was often assumed in the postwar decades that growing affluence meant fewer women had to take jobs in order to support their families and that those who did were working in order to afford luxuries rather than necessities. However a substantial number of working-class mothers interviewed in Oxfordshire needed to engage in paid work outside the home for financial reasons. Peggy, a resident of Middleton Cheney, had four children between 1951 and 1965 and explained how she had to take a job throughout her children's upbringing. While her husband was employed he spent most of his wages in the pub and she had to make up the shortfall in order to support her family. She said, 'I've always had to work, I've never had a time that I could sit back and say, "Well I don't have to work" ... I've waited a long time, but I've got it at last'.<sup>53</sup> Peggy felt she was forced to work. She implied that it was not something she wanted to do and she would have preferred to remain at home. Not all the women who worked enjoyed doing so and several recalled feeling they had missed out through not being at home with their children when they were young. Lily, who lived in Ewelme, had five children between 1946 and 1961. Although she had left work when her first baby was born she had to return after first husband died. She stated: 'I had to go back to work. First of all there used to be a honey factory in the village ... I went there for two years. I can't say that I thoroughly enjoyed it but it helped'.<sup>54</sup> However while paid work could be a necessity for women rather than an active choice, many women did take pleasure in their jobs. Rita also had to find employment after she was widowed. She was happy to resume her work as a seamstress which she had left upon the birth of her first child. In part her satisfaction derived from the flexibility her trade brought her as she could work from home. In consequence she did not feel her ability to care for her children was compromised.<sup>55</sup> Paid work could remain supplementary to Rita's role as mother and she did not have to challenge contemporary perceptions of womanhood.

Another group of women who had to work were farmers' wives as their labour was crucial to the farm economy. While census statistics have shown the number of female agricultural workers had been in sharp decline over the first half of the century, it was clear from the interviews with Oxfordshire farmers' wives that they were still engaged in farm work. Women's work in rural areas was probably under-recorded in the postwar decades, perhaps due to the fact that farm work was not seen as a suitable job for a woman at this time. Furthermore, as highlighted by Hilary Callan in *The Incorporated Wife*, the work undertaken by wives assisting their husbands in professions such as farming was taken for granted. The 'hidden services' wives provided only became visible when they were withdrawn.<sup>56</sup> Maud reported that as a farmer's wife she was expected to care for the prisoners of war stationed on her husband's farm during World War Two.<sup>57</sup> While she told this as a humorous story, recalling having to quickly learn how to cook pasta, she also spoke of the arduous work it caused. Daisy and her husband bought a smallholding in Shipton-under-Wychwood in the early-1950s on which they were required to keep chickens and pigs. Her husband worked full time so she was responsible for the animals and recalled, 'I had two children to look after and chickens and pigs so I tell you it was quite tough really'. Running the smallholding was associated in Daisy's mind with hardship and she highlighted this by telling a traumatic account of an incident when her son was attacked by one of the pigs. In 1955 she and her husband took on a milk-round because they were struggling to pay their mortgage and needed a new source of income. Again Daisy was left in charge of this as her husband still worked outside the village. She explained: 'I had to take the little boy of three ... and he had to sit in

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<sup>53</sup> Peggy, BA9, p. 14.

<sup>54</sup> Lily, EW6, p. 7.

<sup>55</sup> Rita, BA6, p. 3.

<sup>56</sup> Hilary Callan, 'Introduction', in Hilary Callan and Shirley Ardener (eds.), *The Incorporated Wife* (London: Croom Helm, 1984), p. 4.

<sup>57</sup> Maud, WY4, p. 6.

the van whilst I delivered milk'.<sup>58</sup> Daisy clearly felt this responsibility was a burden to her rather than an exciting employment opportunity. Even in the 1960s farmers' wives were still playing an important role. Alice was twenty-two when she married a farmer in 1961. When asked what she did on the farm Alice replied, 'Oh driving tractors, I used to do most of the hay and straw-bailing in the summer ... I'd work at school in the morning then go home pick up some sandwiches, take them up the fields and probably stay up there the rest of the day'.<sup>59</sup> It was notable from the interviews that, for these farmers' wives, work was conceived of as part of life. They described it as their duty rather than something they did for their own satisfaction.

Women did not enter the labour market on equal terms to men, however, because their domestic role was considered to be of paramount importance. Dolly Smith Wilson suggests that 'men and women existed in two separate labour markets, one for men, considered the real workers, the other for women, considered low-paid auxiliaries working on the side, unrelated to their real role as wives and mothers'.<sup>60</sup> The women interviewed in Oxfordshire did give precedence to their domestic role in their narratives. Although all of the respondents had been engaged in some kind of paid or voluntary work after their children were born they constructed their identities as mothers rather than as workers. It was common for women to say they had not worked after having their children when initially asked, but then later in their narratives to reveal that they had. In part this may have been a legacy of the lack of emphasis on careers they received at school, which meant they had grown up expecting to become full-time mothers. It may also have been due to the lack of status ascribed to women workers. Women who had their children at the end of the period were more concerned with identifying themselves with work outside the home, but all the women interviewed regarded being a mother as their primary identity.

The interviewees were aware they were living through a reconceptualization of women's work, but they had ambivalent attitudes towards working mothers just as contemporary commentators had done, and this was clearly seen in their attitudes towards their daughters' generation. While paid work was viewed as offering a means of subsistence, a degree of financial independence, or a break from domesticity, few interviewees conceived of employment in terms of a career. They also displayed an interesting tendency to not think of themselves as members of the labour force, even if they had been employed outside the home, and they prioritized family in their accounts. However, perhaps influenced by the discourses of second-wave feminism, women spoke of their desire to gain independence through work, whether this was inside or outside the home. It is interesting that the women interviewed thought that both paid work and motherhood were ways in which autonomy could be gained for women in the postwar world.

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<sup>58</sup> Daisy, WY9, pp. 3, 4, 10.

<sup>59</sup> Alice, WY2, p. 14.

<sup>60</sup> Dolly Smith Wilson, 'A New Look at the Affluent Worker: The Good Working Mother in Post-war Britain' *Twentieth Century British History*, 17 (2006), pp. 206-29, p. 225.

## “Last orders please!”

# The rise and impact of commercial brewing in nineteenth-century Manchester and Salford

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This paper examines the nature of the brewing industry in Manchester and Salford during the nineteenth century, with particular reference to the complex relationships between drinking establishment, publican, and commercial brewer. It was a rapidly changing time for both publican and commercial brewer who were faced with difficult matters that included technological development, increasing economic competition within the brewing industry, together with changes in legislative control and strategy. The impact of these factors was particularly evident on the role of the publican and other drinking place keepers who entered a retail-only occupation as their former brewing function declined, and leading to the domination of commercial brewing. This was a national trend, though here it focuses on changes in brewing at local level. The paper surveys current literature, looking at licensing legislation, technology, and transport. It also utilizes sources such as newspaper advertisements which describe key aspects of drinking establishments; brewing statistics through the use of parliamentary sources and trade directory material; and local brewery ledgers, particularly those of Manchester's Boddingtons brewery.

When looking at the volume of legislation within which the brewing and drink trade operated, it is clear how complex the brewing industry was and how it was faced with some of its biggest challenges during the period in question. Much of this legislation was designed to control licensing and manipulate drinking habits. The most notable example of this was the 1830 Beer Act, which was pivotal in attempting to divert consumers away from spirit drinking and to direct them towards beer consumption. When considering interpretations on the social implications of such legislation, the Webbs were particularly critical of the system. They argued that the period up to the 1830 Beer Act was ‘the most remarkable episode in the whole history of public-house licensing in England’, whose regulation was seen to be ‘deliberate and systematic’ by magistrates.<sup>1</sup> Gourvish and Wilson explain, ‘The Beer Act of that year did effectively ‘free’ the trade in the sale of beer. Licences of all retail outlets had hitherto been entirely and jealously controlled by magistrates, and were increasingly becoming the valuable possession of brewers eager to exploit their custom’.<sup>2</sup>

Equally there was rapid technological change. This included innovations in beer production and improvements to transport. Briefly, these factors had the effect of producing greater quantities, a wider variety of products, better quality, and wider, faster distribution. Whilst we see improvements in transport from the 1830s, and technological progress with brewing techniques post mid-century, it was around the 1870s that these factors collectively impacted on the industry with maximum effect. In terms of improvements to transport, the beginnings of a railway network from the second quarter of the century had a major impact on the industry and undoubtedly shaped its direction, though brewing historians do not agree on the extent of influence railways had or the ways in which the brewing sector was affected. Hawkins and Pass see the onset and continued development of railways as the most significant factor in shaping the brewing industry throughout the nineteenth century, though Jacobson's local study of Boddingtons' Strangeways Brewery in Manchester illustrates the

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<sup>1</sup> Webb, S.B. (1903). *The History of Liquor Licensing in England, Principally from 1700-1830*, Longmans., p. 49.

<sup>2</sup> Gourvish, T.R. and R.G. Wilson (1994). *The British Brewing Industry 1830-1980*. Cambridge [England]; New York, Cambridge University Press, p. 3.

degree of strain on smaller breweries caused by changes such as transport since, when it came to opening markets, local modest sized companies were increasingly unable to compete with larger concerns from outside the area which could tap new markets much more easily.<sup>3</sup> The brewing industry could be described as having been ‘scaled-up’ through technological innovation in the sense that larger, faster, and cheaper systems of production were created which widened consumer choice.<sup>4</sup> Weir maintains that during the pre-railway age many brewers transporting their products by dray had at most six miles distribution territory, thereby highlighting just how influential the railways were in the distribution process.<sup>5</sup>

The results of changing legislation, technological development, and the consequent rise in commercial brewing during the nineteenth century included a displacement of the publican from publican-brewer-retailer to publican-retailer. It is undisputed that at the beginning of this period the majority of publicans produced and retailed their own product on their own premises. This was especially prevalent in areas such as Manchester, though it was less of a feature in London where large commercial brewers had dominated from a much earlier period.<sup>6</sup> Publicans initially benefited from exclusive deals in consequence of their new relationships with commercial brewers. However, this balance was finely tuned. Tighter licensing legislation from 1869 increased pressure to improve the quality of public houses and their products, which added further financial burdens on drink place keepers. Gutzke maintains that publican brewing declined as commercial brewing increased production, continuing, ‘as retailers ceased brewing, their exclusive role as sellers of beer, legally restricted numbers and certain factors inherent in brewing itself gave brewers powerful motives for purchasing licensed premises outright’.<sup>7</sup>

When focusing on the experiences of Manchester and Salford, the historian can begin by first examining local newspapers advertising the sale and letting of premises, predominantly between the 1830s and 1870s. From the 1850s advertisements began to differ in format, whereby property agents managed sales and lettings resulting in brief descriptions. Up to the 1850s many establishments had their own brewhouses, largely producing a single figure barrelage each week. For example, the Cross Keys in Ancoats was reported in 1843 as having a six-barrel brewhouse.<sup>8</sup> Equally in the 1850s we see the Crown and Thistle, also in Ancoats, operating an eight-barrel brewhouse.<sup>9</sup> There is an example in 1860 that gives an indication of what was to come, since the Old Blucher in nearby Ardwick was offering ‘all the building that used to be a brewhouse but is now a machine shop’, illustrating how attached brewhouses were declining in their brewing function and were being rented off for other uses.<sup>10</sup> In terms of commercial concerns, the Suspension Bridge Brewery in 1835 being advertised as capable of producing around 100 barrels per week.<sup>11</sup> At the same time there are examples of public houses having a brewing function being separated from its establishment, indicating how some commercial brewing companies emerged in Manchester. As early as 1825 the Von Blucher public house wanted to part with a brewery.<sup>12</sup> The Cotton Tree public house in Ancoats by the mid-1840s had separated the public house function from its brewing

<sup>3</sup> Jacobson, M. (1978). *200 Years of Beer: The Story of Boddingtons' Strangeways Brewery*. Manchester, Boddingtons Breweries Ltd.

<sup>4</sup> Sigsworth Eric, M. (1965). ‘Science and the Brewing Industry’, *The Economic History Review* 17(3): pp. 536-50, p. 536.

<sup>5</sup> Weir, R (1980) ‘The Drinks Trade’, in Church (ed) *Dynamics of Victorian Business*, pp. 212-35, London: George Allen and Unwin, p. 216.

<sup>6</sup> Gourvish & Wilson, *op.cit.*, ch. 1.

<sup>7</sup> Gutzke, D. (1989). *Protecting the Pub: brewers and publicans against temperance*. Woodbridge, The Boydell Press, p. 4.

<sup>8</sup> Richardson, N. (1986). *The Old Pubs of Ancoats. Manchester*, p. 9.

<sup>9</sup> *Ibid.* p. 23.

<sup>10</sup> *Ibid.* 10 March 1860.

<sup>11</sup> *Wheeler's Manchester Chronicle*, 3 October 1835.

<sup>12</sup> *Ibid.* 4th June 1825.

to develop two individual businesses.<sup>13</sup> The Bank of England, also in Ancoats, began its life as a beerhouse. By 1841 it was a fully licensed house and by 1847 had initiated a brewing function with at least one tied house. In the 1860s the brewing function had become a separate business to the public house.<sup>14</sup> The former Bridge Inn public house and brewery was originally a public house from the late 1830s with attached brewhouse. Thomas Chesters purchased this in 1859 and let the brewery out as a separate business in 1861. By the 1870s the shift in brewing function had noticeably changed since advertisements were by now emphasizing freedom from brewer tie-in a selling point as opposed to highlighting brewhouse facilities or barrels produced. To sum up this section, we see the emergence of a small number of commercial brewers which were joined by a rash of public houses with attached brewhouses, some of which grew into stronger brewing concerns and others that relinquished their brewing function.

In order to establish more precisely the timeframe in which this took place, there are two ways in which this can be achieved. First, an assessment of the numbers recorded in contemporary trade directories; and second by an examination of parliamentary data. These cover slightly different geographic areas but nonetheless provide useful comparisons. Table 1 depicts the number of commercial brewers in Manchester and Salford as recorded in trade directories during the nineteenth century.

Table 1: *Number of Breweries - Manchester and Salford (1818-83)*

Year	No. of Brewers	No. of Agents/Out of Area Representatives
1818	13	0
1821	15	0
1825	26	0
1834	34	1
1847	81	0
1852	83	8
1869	79	35
1873	69	20
1883	63	41

Source: Pigot and Dean's Directory of Manchester and Salford 1821/2; Baines' Directory of Lancashire 1824/5; Pigot and Dean's Trade Directory of Manchester and Salford for 1828/9; Slater's Classified Directory of Manchester 1847; Whellan and Co 1852 Manchester and District Directory; Slater's Directory of Lancashire 1869; Manchester 1873 Kelly's Directory

Table 1 indicates a marked increase in commercial brewers 1834-47 that depreciates after 1869. This could indicate either a decline in commercial brewing or the result of brewery takeovers. Table 2 represents those engaged in brewing in Manchester Excise District between 1832 and 1890, and highlights the three main brewing groups – commercial brewer, publican-brewer, and beerhouse keeper-brewer. Table 3 provides a more detailed analysis of data in table 2, calculating actual quantities from overall percentages in each respective category.

<sup>13</sup> Richardson, *op.cit.*, p. 30.

<sup>14</sup> *Ibid.* p. 26.

Table 2: *Beer producers in Manchester Excise District 1832-90*

Year	No. of Common Brewers	Licensed Victuallers	% Brewing	Persons licensed to sell beer	% brewing	% beer brewed by common brewer	% beer brewed by licensed victualler	% of beer brewed by person licensed to sell beer
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1832	29	619	86.1	820	86.6	24	50	25
1841	84	1499	66.8	2911	49.4	43	38	19
1850	99	1671	57.2	3369	34.9	55	28	18
1860	118	1839	46.7	4219	27.2	70	18	12
1870	102	1375	11.7	3704	6.2	89	7	4
1880	94	1489	5.6	4693	1.7	93	4	3
1890	64	1511	0.8	3171	0.5	98	1	1

Source: Gourvish, T. R. and R. G. Wilson (1994). *The British Brewing Industry 1830-1980*. Cambridge [England]; New York, Cambridge University Press. Ch. 3 table 3.2.

Table 3: *Actual numbers and proportions engaged in the Manchester brewing industry 1832-90*

	Commercial Brewer	% of total production	Licensed Victualler-Brewer	% of total production	Person licensed to sell beer	% of total production
	(u)	(v)	(w)	(x)	(y)	(z)
1832	29	24	533	50	710	25
1841	84	43	1001	38	1438	19
1850	99	55	956	28	1176	18
1860	118	70	859	18	1148	12
1870	102	89	161	7	230	4
1880	94	93	83	4	80	3
1890	64	98	12	1	16	1

Source: breakdown of table 2 above

Analysis of tables 2 and 3 indicates that in 1832, 533 licensed victuallers were producing half the total quantity of Manchester's beer. The largest single group, 'persons licensed to sell beer', were producing almost the same quantity as the small number of commercial brewers that existed at this time. By the 1840s the brewing function began to shift towards commercial brewing in Manchester's Excise District. It is 1860-70 where there is the most substantive evidence of a significant shift towards commercial brewing. By 1870 there are in the region of 102 commercial brewers producing 89 per cent of beer output, with only 161 licensed victuallers continuing with a brewing function and producing a mere 7 per cent, and 230 'licensed to sell beer' brewers producing just 4 per cent of Manchester's beer. So we can conclude that commercial brewing increased rather than declined in Manchester and Salford, indicating that the reduction in number of commercial companies was the result of brewery take-overs with fewer but larger concerns. Equally the dominance of commercial brewers is evident from the 1860s in Manchester.

We can now look in more detail at some of the main commercial brewers in the area to gain an insight into their business strategies. It was at the same time as Henry Boddington took charge of the Strangeways Brewery in 1852, that Joseph Holt began developing his

brewery nearby.<sup>15</sup> By 1860 Holt had acquired additional land and began construction of the Derby Brewery. Holt systematically began purchasing public house premises from 1861, starting with the Duke of Wellington in Eccles.<sup>16</sup> We can conclude from Boddingtons' records that despite Holt's brewery being located right next to their Strangeways brewery, it was never a serious rival, producing at best 15,090 barrels per annum in 1878, compared with Boddingtons 109,895.<sup>17</sup> Another example is that of Groves and Whitnall at the Regent Road Brewery in Salford, which originates from around 1837.<sup>18</sup> Barnard estimated that Regent Road Brewery was producing around 200 barrels per week in the late 1860s, but Whitnall soon developed the business to produce an average of 3,000 barrels per week.<sup>19</sup> This equates to 10,400 and 156,000 barrels per annum respectively. However, Boddingtons' records suggest that Regent Road Brewery produced 16,304 in 1867, dropping to 12,746 barrels by 1872 and increasing to 15,000 in 1873 and rising thereafter.<sup>20</sup> Clearly this is markedly different to the estimates Barnard presents, yet despite these discrepancies the Regent Road brewery was a significant player in Manchester and Salford's brewing industry.

Returning to one of Manchester's largest and most notable brewers, Boddingtons at the Strangeways Brewery in the Cheetham district of Manchester, a brewery inventory looks at a list of publican-brewers during the early 1880s visited by Boddingtons' representatives, and whose comments add a personalized insight to the range of data they present. They were establishments that Boddingtons were targeting for trade and most of these were located in suburbs on Manchester and Salford's periphery, such as Middleton, Whitefield, and Pendlebury. For example, John Trow, a beer retailer near Salford was recorded as an individual brewer. William Lord of the Dyers' Arms, near Bury, brewed his own mild but bought in Tetley's bitter. Thomas Arrowsmith of the Friendship Inn, Middleton brewed all his own beer, but which was recorded as 'not safe'. Sarah Hall of Rhodes traded with Wilsons and refused to change supplier. An establishment run by Sam Haywood in Little Heaton brewed his own 4°, but bought J W Lees 6°, and Wilsons bitter.<sup>21</sup> Boddingtons were deploying a sales pitch to not only convert publicans from brewing their own ale, but to switch commercial brewers for part, if not all, of their beer sales. It is also evident that individual publican brewing did still exist into the 1880s despite the increased domination of commercial brewing, and some publicans retailed a mixture of individual and commercial brews for sale. Boddingtons' inventory highlights that the production and retailing of beer was a more complex system than other primary sources indicate, particularly statistical data, which fails to acknowledge such business practices.

In conclusion, this paper provides a short overview and investigated a range of sources and data on Manchester and Salford's brewing industry. Brewing in early nineteenth-century Manchester was largely in the hands of the individual publican-brewer with some notable commercial brewers developing such as Boddingtons. Manchester and Salford's brewing industry started to ignite during the 1840s, where commercial brewer and individual brewer were pretty evenly matched in terms of output and importance. It was during the 1860s that saw the domination of this locality's commercial brewing. However, the records of Boddingtons illustrates that even this was not so clear cut with publicans opting for a range of supplies to their houses.

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<sup>15</sup> Jacobson, *op.cit.*, pp. 37-9.; Richardson, N. (1984). *A History of Joseph Holt*. Swinton, Neil Richardson Publications, p. 1.

<sup>16</sup> *Ibid.* p. 2.

<sup>17</sup> M693/405/13, Boddingtons Ledgers, *op.cit.*

<sup>18</sup> Barnard, A. (1889-1891). *The Noted Breweries of Great Britain and Ireland.*, vol III., p. 185.; (1862-1890).

<sup>19</sup> *Ibid.* p. 185.

<sup>20</sup> M693/405/13, Boddingtons Ledgers, *op.cit.*

<sup>21</sup> *Ibid.*

# Comparative advantage and productivity gap under scarcity of resources: British and American rubber manufacture industries compared, 1870-1910<sup>22</sup>

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The fast growth of the Chinese economy, which in 2006 reached 10.7 per cent, has revived doubts about growth sustainability and access to resources. China is certainly committed to getting the resources needed to sustain its sky-rocketing economy, and is taking its quest to lock down sources of oil and other necessary raw materials across the globe. In a context of long-term instability in the Middle-East, China's appetite for oil has channelled investment into Africa, turning Angola, for instance, into the single largest supplier of oil to China.

In a world of scarce resources, access is a valuable asset to sustain economic development and growth and, in that regard, the much earlier battle for resources brought about by the American rise as an industrial power might help us understand the Chinese current quest for resources. However, the United States is usually regarded as a rich resource country and several theories explained its economic development and growth as based on access to cheap domestic resources. For instance, Wright (1990) and Nelson and Wright (1992) claimed that American manufacturing exports were increasingly intensive in non-reproducible resources. Furthermore, Habakkuk (1962), Wright (1990) and Broadberry (1994) are often cited to claim that resource endowments explained the productivity gap favouring the United States.

Evidence from the rubber manufacture industry does qualify these long accepted ideas though. Until 1910, and consequently before rubber plantations, the United States did possess a productivity advantage in rubber manufacturing compared to Britain but it is shown here that this productivity gap was not laid upon an easier and cheaper access to crude rubber, the main input in the industry. Surprisingly, wages might partly explain the productivity gap but it seems that protection (in the form of tariffs and patent rights) might have played a decisive role.

Moreover, the paper qualifies Crafts and Thomas (1986) who claimed that Britain was a laggard just before the Great War. As far as rubber manufacturing is concerned, British rubber manufacture net export in the first decade of the twentieth century was higher in Britain than in the USA despite the fact that the US rubber manufacturing industry was three times larger than its British counterpart. Revealed comparative advantage further shows that Britain was ahead of the United States up to 1908.

Therefore, the paper addresses the paradox of why the American productivity gap in rubber manufacturing did not translate into comparative advantage. So: 1) Why was rubber manufacturing productivity higher in the United States? 2) What then explains British comparative advantage in rubber manufacturing in a context of higher US productivity in this very same industry?

## 1. Defining comparative advantage and productivity

Before addressing these two questions it is important first to define comparative advantage and productivity in rubber industry. Here, comparative advantage is measured by the index of Revealed Comparative Advantage as proposed by Lafay (1990). The index provides a measure of the contribution of rubber manufacture trade to the total trade balance. Since we are interested in the evolution of revealed comparative advantage over time, the comparative

<sup>22</sup> References and sources are presented in the extended version of the paper only, available at <http://personal.lse.ac.uk/fernandt>

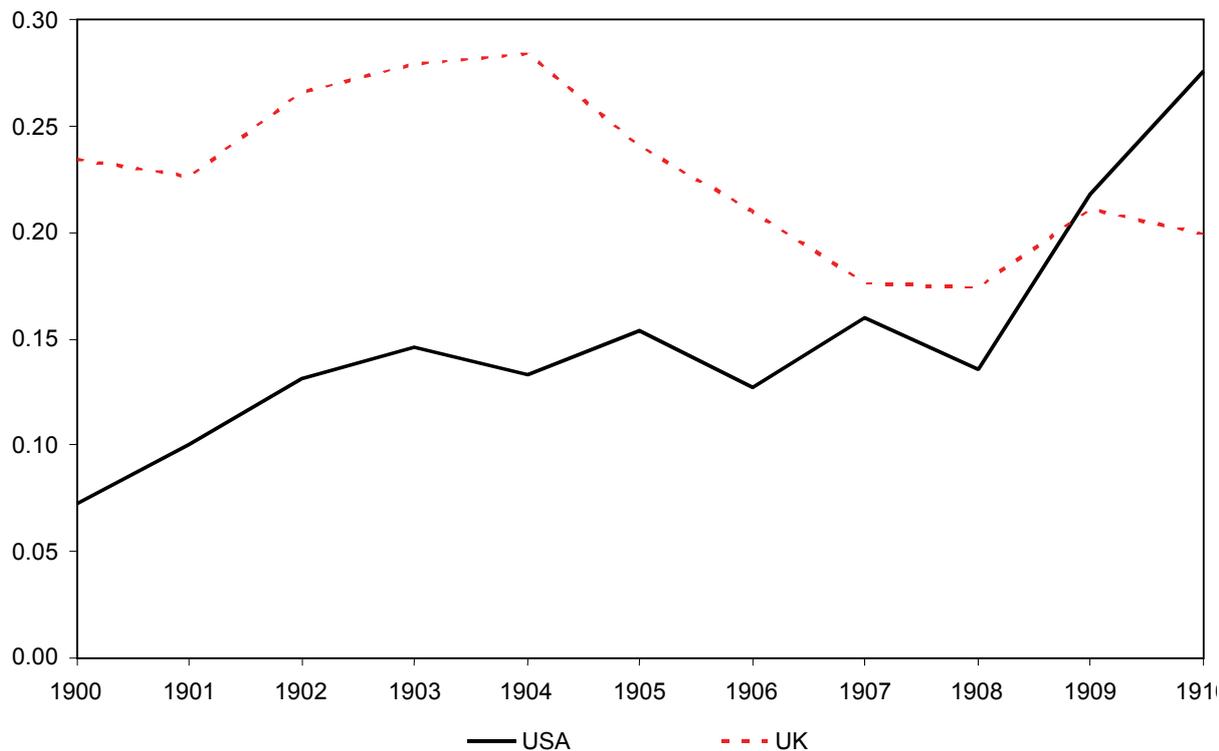
advantage of the rubber manufacturing industry will depend not only on its trade balance but also on the GDP which is used as a proxy for domestic demand. The revealed comparative advantage in rubber manufacturing would increase whenever the trade balance in that sector increases more than the overall growth of the economy. Since the index is weighted by the country's total trade, increases in the trade balance that affect all sectors relatively in the same way (like a devaluation of the currency) should not impact the index and thus a positive estimate must then be interpreted as the country revealing comparative advantage. The index is defined as below.

$$COMP\_ADV_i = \frac{1000}{GDP_i} \left[ \left( X_i^{ManufRubber} - M_i^{ManufRubber} \right) - \frac{\left( X_i^{ManufRubber} + M_i^{ManufRubber} \right) \left( X_i - M_i \right)}{\left( X_i + M_i \right)} \right] \quad (1)$$

where  $X_i^{ManufRubber}$  is the total exports of rubber manufactures by country  $i$ ,  $M_i^{ManufRubber}$  refers to total imports of rubber manufactures whereas  $X_i$  and  $M_i$  are country's  $i$  total exports and imports, respectively. Lastly,  $GDP_i$  refers to country  $i$ 's GDP.

The index suggests that both the USA and Britain possessed comparative advantage in rubber manufacturing but British comparative advantage was higher until 1908 (see figure below). This comparative advantage gap can also be assessed directly from foreign trade data. From 1900 to 1910, Britain exported US\$8.9 million in rubber manufactures compared to just US\$6.1 million for the USA in the same period. It is true that Britain imported more rubber manufactures than the USA but rubber manufacture net exports over this period were still favourable to Britain: US\$5.2 million against US\$4.7 million.

Figure 1: Revealed Comparative Advantage, UK versus USA (1900-10)



Data sources: 1) UK – a) Rubber Manufacture Imports and Exports (in £): up to 1900 from Woodruff (1958, pp.206-7) Parliamentary Papers thereof; b) Total Imports, Exports, Re-Exports and GDP (all in £): Mitchell (1988). 2) USA – a) Imports of Rubber Manufactures: computed as the sum of imports of Manufactured Gutta-Percha, Elasticon & similar substitutes for India Rubber (all in US\$): from US Trade and Navigation Reports; b) Exports of Manufactured Rubber (in US\$): from US Trade Navigation Reports. Total Imports, Exports, Re-Exports and GDP (all in US\$): Historical Statistics of the United States, Milner Edition.

Therefore, foreign trade data suggest that Britain had a comparative advantage over the USA, but was it rested upon a productivity gap favouring the British rubber manufacturing industry? Productivity here is measured in two different ways. First, in the absence of any measure of prices and physical production of rubber manufactures, productivity in the US rubber industry can only be computed from 1869 onwards as gross production of rubber goods per wage earner. Apart from 1869, when a wage earner produced US\$7,541 worth of rubber goods, the other years seem to indicate that between 1879 and 1909, a rubber worker would have produced on average US\$5,177 worth of rubber goods (all values were deflated by the price of crude rubber in the USA from trade data).

Unfortunately, there is no equivalent dataset for Britain that would allow us compare productivity in the nineteenth century as the first UK Census of Production was only taken in 1907. But we can use 1904 and 1909 for the United States and 1907 and 1912 for Britain as benchmark years for comparison. The difference here is that implicit rubber prices from imports registered different values in these two countries and we are faced with two possible deflators: the UK rubber price and the US rubber price.

Figure 2: *Rubber Manufacturing Productivity, 1904-12*

	USA 1904	UK 1907	USA 1909	UK 1912
<b>Production Levels</b>				
Current Price (US\$)	148,015,391	43,292,880	197,394,638	62,336,000
at 1910 US Rubber Price (US\$)	216,054,484	56,570,149	282,737,669	73,886,059
at 1910 UK Rubber Price (US\$)	283,210,432	79,344,672	290,260,706	94,399,922
Number of Wage Earners	43,873	24,039	49,264	31,900
<b>Unit Value (in US\$)</b>				
Current Rubber Prices in the USA	1.51	-	1.54	-
Rubber Price in 1910 in the USA	2.21	-	2.21	-
Current Rubber Prices in the UK	-	1.55	-	1.88
Rubber Price in 1910 in the UK	-	2.85	-	2.85
<b>Productivity</b>				
	<b>US Prices</b>		<b>UK Prices</b>	
USA1904/UK1907	2.1		2.0	
USA1909/UK1907	2.4		1.8	
USA1909/UK1912	2.5		2.0	

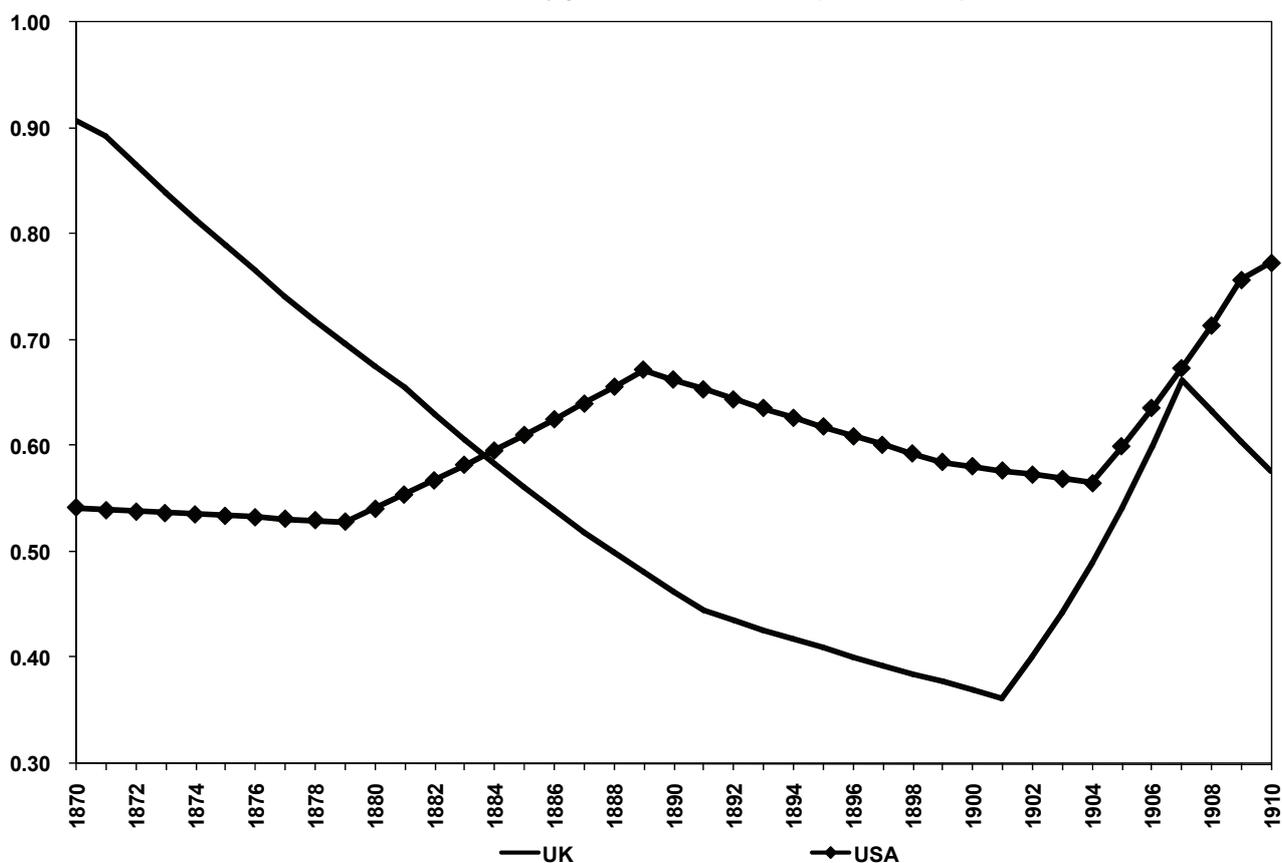
Sources: US Census of Manufactures (1904, 1909) and UK Census of Production (1907, 1912). Rubber prices were used to estimate Unit Value and were computed as the implicit price from crude rubber imports: total value of crude rubber imports over quantity of crude rubber imports imported. Crude rubber import data were obtained from US Trade and Navigation Reports and from Parliamentary Papers. UK values were converted into US dollars using [worthmeasuring.com](http://worthmeasuring.com) tool

Once converted into the same currency, it is possible to compute the productivity gap across the Atlantic. Using US crude rubber prices as a deflator, the productivity gap ranged from 2.1:1.0 to 2.5:1.0 favouring the US whereas under UK crude rubber prices, the productivity gap stood at around 2:1. These estimates are in line with Broadberry's (1997) figures for the whole manufacturing sector. However, they do not take into account quality differentials or specialization of production since the unit value used here did not take into account those effects. Indeed, the production mix of rubber goods was quite different: whereas rubber tyres accounted for only 32 per cent and 38 per cent of overall rubber manufacture gross production in the UK in 1907 and 1912, respectively, rubber tyres accounted for 74 per cent of overall US rubber production in 1914. Conversely, footwear and waterproofing clothes remained relatively more important in Britain compared to the USA. Quality differentials are more difficult to assess, but it might be the case that the USA was buying low quality rubber (at least at the margin) which could have limited and influenced the quality of their rubber

manufacture products. Rubber prices were indeed lower in the USA, suggesting that quality might have been lower as well (see figure 2).

Thus, an alternative and perhaps complementary way to assess productivity in rubber manufacturing would be by analysing crude rubber consumption per wage earner in the manufacturing industry, capturing how much crude rubber a wage earner was able to process (figure 3 below). By this index, in the mid-1880s American workers started to process more crude rubber in per capita terms than their British counterparts. This productivity gap was narrowed in 1907 just to widen again up to 1910. Therefore, contrary to the previous measure of productivity, there does not seem to be a productivity gap as high as in the manufacturing sector as a whole, even though there seems to be no doubt that the USA registered higher productivity in the later part of the period under analysis here.

Figure 3: *Consumption of Crude Rubber in Long Tons per Wage Earner in the American and British Rubber Industry for Selected Years (1870-1910)*



Sources: Crude Rubber Consumption was computed as Net Imports (Imports minus Re-Exports) computed from UK Parliamentary Papers Series for the years 1861, 1871, 1881, 1891, 1901 and 1911 and from US Trade and Navigation Reports for the years 1869, 1879, 1889 and 1899. For the period 1904, 1909 and 1914, data came from Barker (1938). The number of US rubber workers was obtained from US Census of Manufactures for 1869, 1879, 1889, 1899, 1904, 1909 and 1914. In turn, the number of British rubber workers was obtained as the number of rubber workers registered in the Census of Scotland plus the number of rubber workers registered in the Census of England and Wales for the years 1861, 1871, 1881, 1891, 1901 and 1911. For both, the USA and Britain, the crude rubber net imports were divided by the number of rubber workers and interpolated to compute the graph above.

## 2. Why was productivity higher in the USA?

The answer to this question partly lies on the standardization of demand and the move towards mass-production in the USA, especially because that productivity gap was mainly created by the close relationship between American tyre making companies and the US motorcar industry and the consequent adoption of Fordian organization of production after the turn of the century: the average size of rubber manufacturing establishments was increasing over time from 72 rubber workers per plant in 1849 to 185 in 1909. But these averages still hide the emergence of the four giant rubber concerns where most of these economies of scale

were being generated: by 1907 B.F. Goodrich employed 2,500 workers in a single plant. Moreover, the relationship with car makers granted the US tyre manufacturers advantage in the development of the new designs necessary for car tyres. Therefore, in addition to economies of scope, US rubber companies exploited substantial economies of agglomeration as rubber companies clustered around Akron, Ohio.

Economies of scope and agglomeration should have certainly generated a productivity advantage but what was their impact on costs in the industry? Rubber manufacture companies moved to Akron for two main reasons: labour supply and access to cheap resources. Let's see each of these two factors in detail. First, Akron possessed a readily available supply of labour that was being pulled out by the economic decadence of some other industries in the region. With agglomeration of rubber industries the cost of searching and training labourers should have declined over time as more and more people were acquiring the skills necessary for rubber production. Moreover, the interaction between rubber workers might have generated spillovers of new techniques and production process. In sum, in a context of population (and labour force) growth, we should expect wages to decrease, at least in relative terms: indeed, compared to the national average, Akron rubber companies paid 20 per cent less as wages. But what was the extent of the impact of economies of agglomeration on rubber industry costs (notably on wages)?

Unfortunately, the UK Census of Production in 1907 and 1912 did not record wage sums for the British rubber industry. However, it was possible to compute an average wage for the British firm Moulton & Co. from 1870 to 1900 that, once converted into US dollars, can be compared to the US average from the US Census of Manufactures. Given the fact that Moulton & Co. was a specialized firm in high quality rubber springs and buffers, it is likely that their wages were higher than the British rubber industry average.

Until the beginning of the 1890s, wages in the USA might have been considerably higher but the ratio took a downward trend from the 1880s onwards, possibly due to economies of agglomeration, giving room for the productivity gap to emerge favouring the USA: wages were indeed a significant part of total costs, ranking second only after crude rubber.

Access to other inputs could have determined the productivity gap as proposed by Habakkuk (1962), Wright (1990) and Broadberry (1994) among others. However, this does not seem to be the case here as coal, fabrics and chemicals comprised a very small proportion of total costs and price differentials across the Atlantic were certainly insufficient to account for the productivity gap. Therefore, the remaining cost explanation for the productivity gap would then be crude rubber whose cost amounted to around 30 per cent of the final price of rubber products from 1870 to 1910.

In order to analyse if crude rubber endowment resources explained the higher productivity in the USA, it is necessary to assess how scarce crude rubber was in the USA and Britain, and the extended version of the paper shows that this commodity was generally very scarce in both markets throughout the period from 1870 to 1910. Under scarcity, access to raw rubber sources became even more strategic, and the main finding is: the British and American struggle for crude rubber generated different geography of supply, impacting over the quality of rubber these two countries were importing.

As far as the rubber manufacture industry is considered, resource endowments do not explain the productivity gap as proposed by Habakkuk, Wright and Broadberry among others. At this stage, my hunch is that tariffs (and declining relative wages) would then explain the higher productivity in the USA compared to Britain. I have not yet computed the effect of tariff protection but the evidence suggests that it might have been high: for instance, the McKinley act of 1890 increased the *ad valorem* duties on imported cycles and parts from 35 per cent to 45 per cent. Protection, here, should also embody patent rights: the extended paper indeed shows that rubber goods were sometimes excluded from markets due to patented monopolies in certain market niches.

Once having understood the causes of higher productivity in the USA as being the protection umbrella and possibly declining relative wages, we still need to understand why this productivity gap did not translate into comparative advantage on trade favouring the USA. To assess this issue, we turn, once more to the crude rubber market.

### **3. What explains British comparative advantage? The role of the crude rubber market**

Given the nature of production until 1910, which was almost exclusively from wild sources, the paper investigates, from British and American trade balance data, how hungry for rubber these industrial centres were and what their strategies were to save on rubber. The methodology is based on the estimation of elasticities of demand from the two main sources of rubber: Brazil and British Colonies (for the USA, the last category includes Britain). Together, they accounted for 76.2 per cent of total crude rubber imports into the UK and 74.4 per cent of total crude rubber imports into the USA from 1870 to 1910. The estimation procedure proposed is based on an Almost Ideal Demand System (AIDS) which provides a framework that is general enough to be used as a first-order approximation to any demand system. The important feature of the estimation is that it captures the fact that the USA was very reliant on crude rubber re-exports from Britain.

Elasticities of demand for Brazilian and British Colonial rubber (not shown here, see the extended paper for details) suggest that in a context of rising prices of crude rubber, both the USA and Britain would have saved on rubber to some extent, but Britain was in a better position: since that country was importing more rubber than its domestic market needed, if crude rubber prices increased, they could simply save on all rubber sources and re-export even more (at higher price) to the USA. For the USA, there were clearly limits to save on rubber and the alternative was just to mix more low quality rubber from British Colonies with better quality rubber from Brazil, impacting on the overall level of quality of the raw product. In this context of high crude rubber scarcity, it is easy to understand why the USA was more reliant on reclaimed rubber than Britain.

The US rubber manufacture industry really reached physical limits to its expansion due to the lack of a steady and reliable supply of the main input of the industry: crude rubber. With the increasing domestic demand for rubber manufactures, American producers could not expand their production even further to supply the domestic market and at the same time to capture a higher market share abroad, especially because to increase production at the margin American producers would have paid higher prices for more low quality of crude rubber. Low quality of that raw material was not suitable for every use and the American producers would have had to either decrease the overall quality of their production (because they would be mixing more low quality rubber with their good quality rubber) or just produce lower quality rubber manufactures at the margin. Neither solution would be satisfactory and that is why the British, who possessed better access to crude rubber, were able to reveal a higher comparative advantage even in a context of higher productivity levels in the US rubber manufacture industry.

Therefore, as far as rubber manufacturing is concerned it seems that imperialism might have paid off for Britain to some extent. The lesson from the American rise to power is then that securing a source of key commodities does pay off and might even provide a cutting edge in manufacturing and then the Chinese political and economic expansion in Africa should then be analysed from this viewpoint.

# The relationship between private incentives and subsidies in large infrastructure projects: insights from the case of the Pacific Railroad

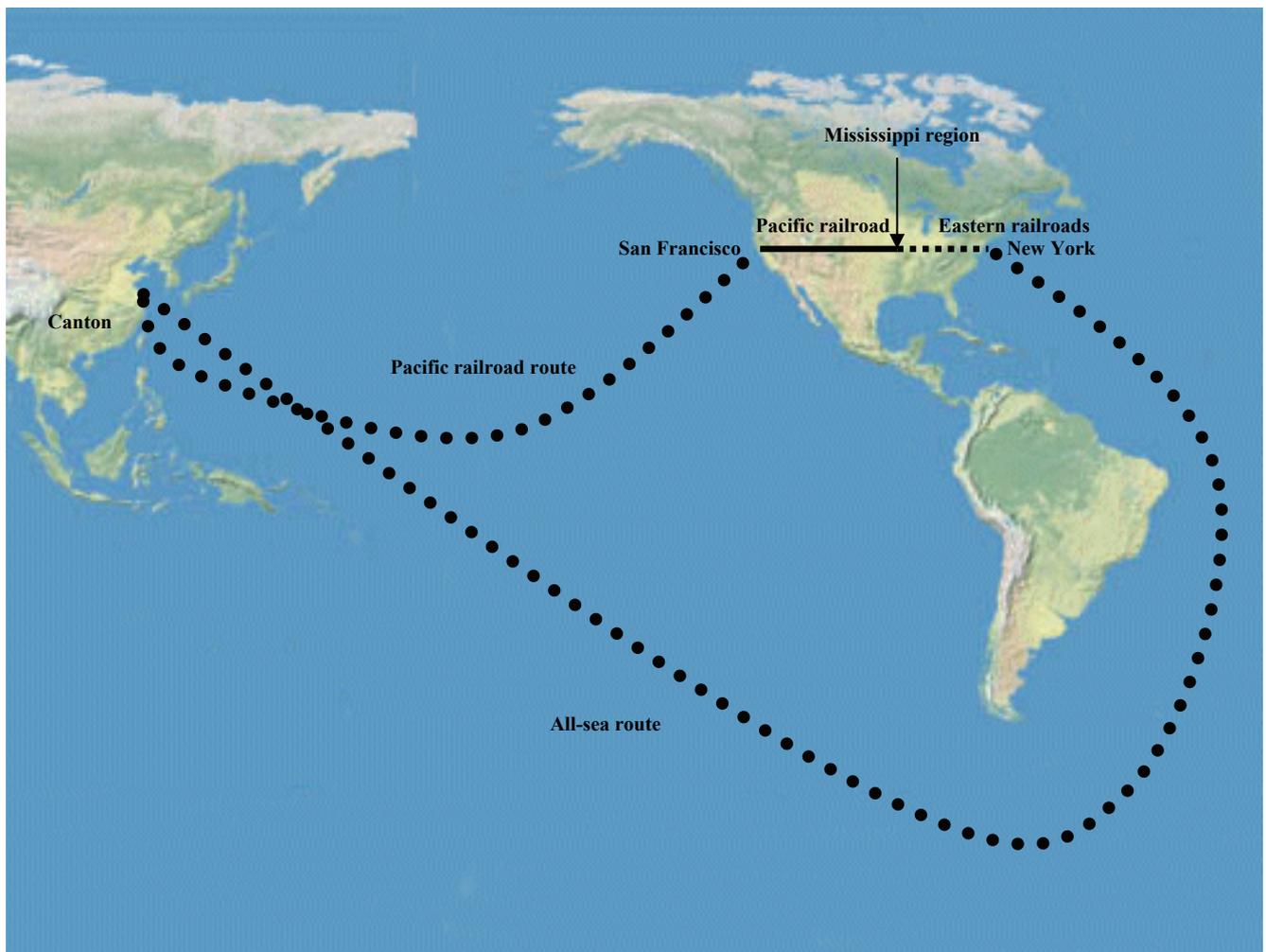
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Supervisors: Professor Nicholas Crafts, Dr Tim Leunig & Dr Henry Overman

## 1. Introduction

The Pacific Railroad (PR) was built between 1863 and 1869 to connect eastern the USA to the Pacific Ocean, and substitute for the Cape Horn sail route (see figure 1). It was funded with substantial subsidies and by 1873 it was clear the promoters had pocketed an important part of them as construction profits. The natural question is: were subsidies necessary to promote private construction of the PR?

Figure 1: *Illustration of all sea route and Pacific railroad route*



The question has been subject to heated debates continually. The entrepreneurs pursuing the project had to go to Congress for approval since the railroad was to cross federal territories. Congressional debates started in 1845 when the first project was submitted and because of the subsidies and the corruption scandals have continued since then.<sup>23</sup>

<sup>23</sup> See headlines of *New York Sun*, Sep. 4, 1872 and *Newsweek*, Sep. 16 1972, p. 35.

Existing academic literature has adopted an ex-post qualitative or cost-benefit (social savings) approach to answer this question. Business historians suggest the difficulty and heroic nature of the entrepreneur's work surely deserved subsidies.<sup>24</sup> Economic historians suggest the PR was not expected to be profitable, but surprisingly turned out to be highly profitable, privately and socially.<sup>25</sup>

Not only do national and academic debates still exist, but the question is certainly not a trivial one. The issue is about how to distinguish between asymmetric information and uncertainty, given our limited ability to predict the future, and the role for private and public interests in the development of large infrastructure projects. The standard approach to evaluate these projects is to apply cost-benefit analysis to measure private and social benefits of the project once it has been built (ex-post).

The thesis presented here argues that analysing this question with only ex-post information is not satisfactory. A key issue is whether the project was expected to be privately profitable or not. In order to develop the ex-ante approach, two sets of information are compared: 1) expectations as declared by entrepreneurs before subsidies were provided, and 2) 'expectations' as derived from a counterfactual model of the entrepreneurial decision controlling for any incentives to lie the entrepreneurs might have faced. The purpose of the comparison is to distinguish between asymmetric information and uncertainty.

The view resulting from pursuing this approach is radically different to existing literature. First, entrepreneurs' reports indicate that technological uncertainty had been greatly overcome before the subsidies had been granted. Second, the expectations declared by the entrepreneurs and the simulated outcomes suggest the PR was, and should have been expected to be, profitable. Thus, subsidies were not needed to promote private construction of the PR. Moreover, the essence of profit expectations was the possibility of the PR capturing rents associated to the provision of new goods (reduced travel time and safety), an angle entirely overlooked by the existing literature.

The next section of the paper presents and discusses the expectations as declared by the entrepreneurs, followed by a section discussing the main findings derived from the counterfactual model. Finally, conclusions are put forward.

## **2. Expectations as declared by entrepreneurs in their project reports**

The information on entrepreneurial expectations comes from private and public reports developed by entrepreneurs promoting and building the PR, 1845-69. The reports had been previously overlooked and allow identifying clearly profit expectations, as declared by entrepreneurs.<sup>26</sup>

The first entrepreneur to draw a project to build the PR was Asa Whitney, a merchant who had been active in New York, London and China and was connected to the Jay family. In 1845, after returning from China, he submitted to Congress the first of several memorials proposing a plan to build the PR. The most detailed of his documents indicated that the main objective for construction of the Pacific railroad was to divert the Europe/US-Asia trade that went through Cape Horn and Cape of Good Hope (Whitney, 1849). Using trade statistics he identified the magnitude of market size for the PR. Additionally, he also worked out that travel distance and time would be reduced by 50 per cent compared to the all-sea route. Whitney also requested Congress to provide the railroad company with land grants. In turn, land granted would be sold to fund the PR's construction. The railroad should price close to operational costs to allow for maximum trade diversion and maximizing the benefits for the US.<sup>27</sup>

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<sup>24</sup> See Duran (2007) for a review.

<sup>25</sup> See Duran (2007) for a review. Particularly important is Fogel (1960).

<sup>26</sup> Business historians acknowledge the existence of the reports but did not analyse the information contained in them. Economic historians do not acknowledge the existence of these reports.

<sup>27</sup> Note that Asa Whitney implied the PR was expected to be profitable, but it was not desirable for the US that

Asa Whitney promoted the project in Congress for 7 years, but was not successful. Although he managed to convince the nation of the benefits of the PR, he was probably too successful. Entrepreneurs and politicians realized the potential of the project's idea and developed competing projects. When retiring, Whitney indicated that inter-regional conflicts of interests over the benefits of the PR blocked his project.<sup>28</sup> Searching for a technical choice, in 1853 Congress decided to request the army to evaluate different alternative routes for the railroad and estimate their costs.

The second influential entrepreneur was Theodore Judah, a New York railroad engineer who had worked on the construction of Niagara Falls Gorge railroad, an engineering feat of the time, and the construction and operation of other large transport projects. In 1854 he moved to California to build the Sacramento Valley railroad, originally envisioned as a local railroad that would grow into the PR. Judah surveyed the area, developed PR project proposals, and also went to Congress to promote them, although unsuccessfully.

The pass over the Sierra Nevada was the major technical difficulty on the PR route. In 1859 Judah found a pass that implied technical difficulties comparable to those found in the eastern railroads. The existence of the pass reduced technical uncertainty substantially. Additionally, he managed to convince a group of Sacramento merchants to fund the exploratory activities that led to the development of a series of reports between 1860 and 1862. In these reports Judah showed that it was possible to build the railroad without using grades steeper than those of eastern railroads, and provided all the project details (route, grades, curves, bridges, tunnels, costs and expected earnings). In summary, Judah's reports indicate the railroad route had been identified to a high level of detail, it would not imply operating conditions more complicated than those experienced by eastern railroads, high profits were expected and requested subsidies (with no explicit justification).

After the reports were written, Judah went to Washington to pursue the project late in 1861. In Washington Judah managed to pass the project all the way through Congress. In 1862 President Lincoln signed the Pacific Railroad Act dividing the route between the Central Pacific and the Union Pacific railroads and granting subsidies in the form of land grants and a loan of treasury bonds.

Finally, the third entrepreneur was General Grenville Dodge. Before the Civil War, Dodge was already a well connected railroad engineer, and held a meeting with Abraham Lincoln to discuss the route of the PR over the plains of what is today Nebraska and Wyoming. When the war was finishing, Dodge joined the Union Pacific as chief engineer. An investment prospectus published in 1868 indicates the Union Pacific was expected to be profitable, international and inter-regional US trade and passenger traffic was expected to generate most profits, and proposed prices would be higher than prices observed on competing all-sea routes as safety and time savings brought by the rail route would be valued by part of the traffic. Subsidies had already been granted and used.

Summarizing, the proposals by the three most persistent entrepreneurs indicate: i) detailed information for most of the route that was actually built existed by 1861 and ii) the PR was expected to be profitable. Moreover, the fact that a diverse group of entrepreneurs were pushing for: i) five other different transcontinental railroad routes within the US; ii) another transcontinental railroad route through Canada; iii) Canals through Central America and the Suez; and iv) invested in the development of the Clipper ships to bring luxury perishable goods from Asia, are all an indication of profit expectations derived from the Asia trade. Expectations declaring profitability would normally indicate no need for subsidies.

Although the existence of technical uncertainty cannot be fully discarded as the PR clearly implied work on a scale never performed before, efforts to overcome uncertainty had

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the PR charged commercial rates.

<sup>28</sup> Also note the geography of the conflict over the gains and costs of the Pacific railroad neatly coincides with that of slavery, complicating further the political economy of the project.

been performed successfully. The most difficult tasks had been identified, studied and their costs evaluated. Additionally, the construction period evidence indicates most of the road was actually built over the route identified by 1861, the difficult tasks had been correctly identified, and modern engineers think it was not possible to improve the choice of the route. Alternative measures of risk, like difficulties selling PR company bonds, do not allow to directly assess investor belief over technical uncertainty in a context of: i) economic uncertainty and short run profits – the Civil war; ii) important price distortions due to postwar booms (1868-72); and iii) general distrust over those controlling both companies – as indications of the corruption scandal had already been brought to the public by the press during construction.

Finally, it is also necessary to acknowledge and consider carefully why entrepreneurs might have declared the PR to be profitable and also requested subsidies. It is certainly not obvious why they behaved in such a way, but it clearly points out the existence of incentives to lie by the entrepreneurs. Entrepreneurs had incentives to *underestimate* private profits and regional costs and *overestimate* national gains when in Congress to obtain the right of way. When approaching capitalists, they had incentives to *overestimate* private profits.

### **3. ‘Expectations’ as derived from a counterfactual model controlling for the entrepreneurs’ incentives to lie**

In an attempt to study the entrepreneurial decision while also controlling for the potential biases entrepreneurs’ declarations may imply, a counterfactual model was developed. The model studies the entrepreneurial decision whether to build or not the PR taking into account exclusively purely transport market incentives and assuming that entrepreneurs could buy the right of way for a fixed fee and can get all the funding they needed from the capital market.

The model’s behavioural assumptions are based on the approach developed by the entrepreneurs to frame the construction decision, as evidenced by their documents. Entrepreneurs used to infer demand for the PR by identifying initially observed traffic and prices with the existing transport modes and then, using the intuition behind the concept of the elasticity of demand, to reason how traffic levels would change as transport price (i.e. the PR price) increased or declined.<sup>29</sup> Finally, entrepreneurs also indicated expected construction and operation costs. Thus, it is possible to use the entrepreneur’s reports to derive a simple model of entry into the transport market for the PR.<sup>30</sup> The parameters of the model were derived from information sources used by the entrepreneurs and publicly available before 1861, to conform to the ex-ante approach of the paper.<sup>31</sup>

The results of the simulation model indicate several findings. First, if the observed transport price is taken as a ceiling price, the PR should not have been expected to be profitable as sea transport had substantial cost advantage over rail. Second, entrepreneurs were aware the PR would provide new good benefits. Travel time and safety would be dramatically reduced by the introduction of the PR, particularly for eastern-western US freight and passenger traffic. If entrepreneurs priced PR rates to capture rents derived from these new good benefits (as some declared they would), and if these benefits were proportional to what had been observed for small time and safety savings achieved during the 1850s, then the PR should have been expected to be profitable. Third, the comparison between declared expectations and the simulation outcomes revealed a key information advantage for entrepreneurs. Judah implicitly assumed an elastic demand and explicitly proposed the PR should reduce prices. Dodge implicitly assumed an inelastic demand and explicitly proposed to increase prices. Note that both behaviours are credible profit maximizing outcomes (in the

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<sup>29</sup> Judah (1862) pp. 51-2. Note it is only argued that entrepreneurs knew about the intuition behind the elasticity of demand, not that they called it elasticity, not that they would calculate it in the same way we do today, or that they would derive it in same way we do today.

<sup>30</sup> The full model is presented and discussed in detail in Duran (2008).

<sup>31</sup> The full details of the parameters used may be found in Duran (2008).

sense of game theory equilibrium concepts) given the implicit assumption about the elasticity of demand in each case. Moreover, not only both behaviours were credible, but it was difficult to identify in the entrepreneur's reports the implicit elasticity value and it was even more difficult to dispute it. Only when the whole simulation exercise was performed did it become apparent that the scenario suggested by Judah was simply not feasible.

Table 1: *Summary simulation outcomes*

Pricing policy	NPV	Net earnings per year/ construction cost	Construction cost/ Net earnings per year
Maximum pricing equivalent to all sea route observed prices	-25.1	7.8	12.8
Pricing to capture rents from new good benefits	9.5	16.6	6.0

#### 4. Conclusions

Private and public documents written by the three most persistent entrepreneurs promoting construction of the PR were examined. The documents indicate clearly that the entrepreneurs performed substantial and successful efforts to overcome technical and economic uncertainty and they all expected the PR to be profitable. Additionally, the view proposed here also emphasized two important issues overlooked by existing literature. First, the importance of new good benefits delivered by the PR and the potential for rents and profits they created. Second, the PR entrepreneurs were part of a wide group of entrepreneurs in different countries competing to profit from the Asia trade and proposing business projects using different technologies (railroads, canals, clipper ships) and routes. Thus, as technical and commercial uncertainty had been substantially overcome, it is difficult to justify subsidies.

Comparing declared expectations to simulated outcomes allowed highlighting the role of asymmetric information. It has been suggested that entrepreneurs enjoyed information advantages when choosing, implicitly, the elasticity of demand. Depending on the implicit value of the elasticity of demand they could propose a price reduction or a price increase as credible business strategies. Additionally, entrepreneurs initially declared to reduce prices when going to Congress to obtain the right of way. After the right of way had been granted, they went to the capital market to obtain private funding and proposed to increase prices. The simulation analysis performed, however, has revealed that the PR would have not been profitable if prices were decreased. Thus, entrepreneurial behaviour is consistent with opportunistic behaviour based on the possession of asymmetric information.

Finally, more research is still required to understand better the allocation of subsidies. A normative explanation is not consistent with the evidence, as it has been shown above that uncertainty had been greatly reduced and capital markets during this period may be assumed to be large enough to fund any project in the US (Engerman, 1972). Alternatively, a positive explanation is required. Research presented here suggests that large-scale projects tend to endogenously create distributional conflicts within Congress, as different groups compete to appropriate the benefits and avoid the costs of the project. Additionally, entrepreneurs must have had some bargaining power as they possessed key information on a socially beneficial project. Future research should look for social mechanisms that allow understanding i) the allocation of subsidies or ii) the delay of the diffusion of a large-scale technology as two of the possible solution outcomes of an endogenous distributional conflict.

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## **New Researchers - Session II / A**

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# The boats that did not sail: evidence on the sources of asset price volatility from an eighteenth-century natural experiment

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## 1. Introduction

How much of short run asset price volatility is due to news on the fundamental value of a stock and how much can be accounted for by non-fundamental factors related to the trading process like mispricing or investors' liquidity? This question is difficult to answer since trading activity and information flows usually go together.

The Amsterdam equity market of the eighteenth century offers an ideal natural experiment to approach this problem. In Amsterdam an active trade existed in the shares of a number of English companies (Van Dillen 1931 and Neal 1990). It can be expected that normally all relevant information on the fundamental value of these shares originated from London. Not only did the most relevant developments take place there, the main market for the stocks was also in London, generating highly relevant price data Dutch investors could use (see Neal 1990 and references therein). How did this information reach Amsterdam? Twice a week a packet boat (a sailing boat) left Harwich for Hellevoetsluys (a small harbour town close to Rotterdam) with 'the English letters', containing information on the price movement of the British shares in London and maybe additional information from correspondents or family. This was the main and by far the fastest way information from London could reach Amsterdam (Hemmeon 1912, Ten Brink 1969, and Hogesteegeer 1989). These packet boats could not always sail. At times there was a strong wind from the east and the packet boats from Harwich would reach Hellevoetsluys with a delay. As a consequence the Amsterdam market was deprived of information for a number of days or even weeks. Trading in the English shares continued however. This provides the perfect environment to test the relative influence of news and trading activity on short run price volatility. All price fluctuations that took place after the arrival of news reflected both sources of asset price volatility while price changes in the absence of news were related to trading activity only.

This paper relates to literature in Finance that tries to empirically explain asset price volatility. In general the literature has identified two main reasons for asset price volatility: (1) the arrival of public and private information about the fundamental value of an asset and (2) factors unrelated to fundamentals that are associated with the trading process. Specific examples of such trade-induced volatility are investors' liquidity shocks, mispricing and speculation (Ito, Lyons and Melvin 1998). So far most contributions have highlighted the importance of the information channel (see inter alia French and Roll 1986, Ito, Lyons and Melvin 1998, and Fleming, Kirby and Ostdiek 2006). However, it is difficult to separate information flows and the trading process itself as they tend to come together. This paper uses a natural experiment provided by history that does allow for the separation of trading and information flow. Consequently it is possible to quantitatively assess the individual effects of both factors on asset price volatility. To my knowledge this is the first paper that uses such a clean methodology to do this.

The additional benefit of this paper's approach is that the share price volatility analysed in this paper was generated in a developed and integrated market, making it a relevant comparison with today. In the excellent book *The Rise of Financial Capitalism* (1990) Larry Neal has made a strong argument for the efficiency of capital markets in eighteenth-century Amsterdam and London. Using asset price data for the English shares traded in Amsterdam and London he argues that the market, at least for these assets, was efficient. In addition, Neal

shows that the Amsterdam and London exchanges were well integrated. News arriving with the packet boats from Harwich ensured that Amsterdam investors were well informed about developments in London. Differences in share prices between London and Amsterdam were small and generally short lived. In general it was only a matter of days before the asset prices in Amsterdam would reflect recent developments in England.

This paper takes Neal's findings as a starting point and uses the variation in the arrival of news in Amsterdam to tease out the different effects of fundamental information and trading induced factors on short run asset price volatility. I find that the short-term volatility of the English shares in Amsterdam can for a large part (around two thirds) be attributed to factors unrelated to the fundamental value of these shares.

The rest of the paper is organized as follows. Section 2 discusses the methodology of this paper in more detail. Section 3 presents the estimates of asset price volatility in periods with and without news. Section 4 provides evidence that news only travelled to Amsterdam by packet boat, implying that the identification of periods with and without news is correct. Section 5 concludes.

## 2. Packet boats in the eighteenth century: a natural experiment

As mentioned in the introduction, a number of English assets were traded on the Amsterdam exchange during the eighteenth century: the East India Company (EIC), the Bank of England (BOE) and the South Sea Company (SSC). Data on the prices of these shares are available from the *Amsterdamsche Courant*, which reports prices for three dates a week (so with intervals of two or three days). The dates of arrival of news in Amsterdam are reconstructed using a number of sources, most importantly the *Rotterdamsche Courant* which reports the arrival of boats. Based on this I determine which prices reflected news from England and which prices did not.

Because of data limitations the period of the analysis is confined to the years from 1771 to 1777. Only in September 1771 did the *Rotterdamsche Courant* start to report the arrival of the packet boats. The end date of the sample is determined by a war between England and France that started in February 1778. This war could have generated information that reached Amsterdam before it reached London, making the experiment unsuitable. I therefore decided to omit all information after 1777 from the sample. Empirical tests (unreported) indicate that for the period between 1771 and 1777 news flowed in one direction only: from London to Amsterdam and not the other way around.

Figure 1 shows how the packet boats sailed. The English letters were first taken from London to Harwich by coach. In Harwich they were brought aboard a packet boat that would sail to Hellevoetsluys. In Hellevoetsluys the letters were offloaded and brought to the final destination by coach. There was considerable variation in the time it took for the packet boats to reach Hellevoetsluys. On average it took packet boats three and a half days to reach Hellevoetsluys, but in reality it could take anything between one and twenty days. As a consequence English news reached Holland with varying intervals. Crucially, this variation allows me to compare the volatility of returns in periods with and without news.

For the analysis to be completely clean, the sailing time of a boat should be unrelated to any other information influencing share prices, like political developments. In other words, for my results to be valid sailing time has to be exogenous. Fortunately this is the case as sailing times were completely determined by the direction of the wind. Table 2.1 illustrates this point. The table presents the average wind direction for the days after departure of a packet boat up to the day that it arrived. Every sailing time corresponds with a row in the table. For brevity I only report the sailing times up to 8 days, as sailing times longer than 8 days occurred rarely. The wind direction is reported in degrees, with the North being 360 or 0 degrees, and comes from the observatory of Zwanenburg, a village close to Amsterdam (KNMI).

Figure 2.1: Route of the packet boats



Source: [www.atlasofmutualheritage.nl](http://www.atlasofmutualheritage.nl)

Table 2.1 Sailing time and wind direction

Sailing time (days)	Wind direction (degrees)								
	obs.	t+1	t+2	t+3	t+4	t+5	t+6	t+7	t+8
1	4	237							
2	148	244	244						
3	315	246	246	246					
4	140	332	54	99	184				
5	47	112	85	91	98	152			
6	15	101	77	80	79	67	104		
7	8	106	101	95	96	112	117	187	
8	7	166	55	38	83	71	50	148	124

Source: *Rotterdamsche Courant* and KNMI

Figure 2.1 shows that Hellevoetsluys is situated east-to-south (approximately 100 degrees) relative to Harwich. This implies that if the wind is blowing from the same direction, the packet boats will have serious difficulty in reaching Hellevoetsluys. If, on the other hand, the wind blows from the opposite direction (west-to-north, or 280 degrees) the boats will reach Hellevoetsluys quickly. For any intermediate value the boats are probably able to advance, but their speed will depend on the exact wind direction. Table 2.1 shows that this is indeed the case and that the direction of the wind can almost perfectly explain sailing times. Day t+1 is the first day at sea. For short sailing times the wind direction is close to the optimal 280 degrees for all days. For longer sailing times this is not the case. Take a sailing time of 4 days for example. The average wind direction on day t+1 is close to North (not ideal, but not

dramatic either), but for t+2 and t+3 the wind blows from the East, preventing the boats from advancing. Only when the wind turns south are the boats able to approach Hellevoetsluys.

### 3. The sources of asset price volatility

Based on reconstruction of the dates on which news arrived in Amsterdam I can determine when the share prices of the English Companies in Amsterdam contained new information and when they reflected the same information as the previous price. Based on this I construct returns and I separate the sample of returns in two groups, one with news and the other without.

The return on asset  $i$  ( $R_{it}$ ) can be attributed to two parts:

$$R_{it} = \log P_{it} - \log P_{it-1} = f(F_{it} - F_{it-1}, NF_{it} - NF_{it-1}) = f(\Delta F_{it}, \Delta NF_{it}) \quad (3-1)$$

The first part,  $\Delta F_{it}$ , reflects the arrival of news from England and can be considered a change in the information investors had on the fundamental value of the stock in England. The second part,  $\Delta NF_{it}$ , reflects the change in non-fundamental factors that are related to the trading process. Depending on whether or not news arrives at time  $t$  returns with or without news can be written as follows:

$$R_{it}^{NEWS} = f(\Delta F_{it}, \Delta NF_{it}) \quad (3-2)$$

and

$$R_{it}^{NONEWS} = f(0, \Delta NF_{it}) \quad (3-3)$$

Assuming that the function  $f(\ )$  is separable in  $\Delta F_{it}$  and  $\Delta NF_{it}$  and that these two variables are uncorrelated (both contemporaneously and over time), these expressions can be simplified to calculate the relative contributions of both factors to total asset price volatility:

$$VF_i = \frac{V(R_{it}^{NEWS}) - V(R_{it}^{NONEWS})}{V(R_{it}^{NEWS})} = 1 - \frac{V(R_{it}^{NONEWS})}{V(R_{it}^{NEWS})} \quad (3-4)$$

and

$$VNF_i = \frac{V(R_{it}^{NONEWS})}{V(R_{it}^{NEWS})} \quad (3-5)$$

with  $VF_i$  the return variance that can be attributed to the arrival of news and  $VNF_i$  the return variance that can be attributed to the trading process.

The above exercise was performed on the return data (three observations a week) of the EIC, the BOE and the SSC between September 1771 and December 1777. Return distributions are non-normal, making the variance a poor summary statistic. I therefore use the average absolute deviation from the mean:

$$V(R_{it}) = \frac{1}{T} \sum_T abs(R_{it} - \bar{R}_i) \quad (3-6)$$

with  $\bar{R}_i$  the mean return of stock  $i$ . Table 3.1 presents these volatility measures for the three funds, broken down for returns with and without news. In addition, the table presents estimates of the relative contributions of information and trading activity to total volatility as defined in equations (3-4) and (3-5).

Table 3.1: *Estimates of return volatility*

	$V(R_{it}^{NEWS})$	$N$	$V(R_{it}^{NONEWS})$	$N$	$VF_i$	$VNF_i$
EIC	0.0053	481	0.0032	331	0.39	0.61
BOE	0.0025	480	0.0020	329	0.21	0.79
SSC	0.0030	476	0.0020	329	0.31	0.69

Table presents volatility estimates of returns based on the average absolute deviation from the mean. Returns are calculated according to equation (3-1) and are in fractions.

Source: *Amsterdamsche Courant* and *Rotterdamsche Courant*, September 1771-December 1777.

The table reveals that the relative contributions of information and non-fundamental factors to overall volatility differ for each stock. However for all three companies non-fundamental factors dominate information: the contribution of factors unrelated to information lies between 61 and 79 per cent. Although the arrival of news has an important influence on returns, short run volatility is for the largest part driven by factors related to the trading process.

#### 4. Possible alternatives to the packet boat

The analysis of this paper hinges on the crucial assumption that the packet boat was the only way (or at least the fastest way) by which information could reach Amsterdam. Although the packet boat formed the only official mail service with England (Hemmeon 1912 and Ten Brink 1969, p. 24), it is possible that there were unofficial ways by which English news could reach Amsterdam. It can be tested empirically whether this was the case. Larry Neal has generously made his data on daily share prices in London available. Combining my data with his dataset it is possible to compare the price development of the British shares in Amsterdam and London. If the packet boats were indeed the only channel of information, returns in London and Amsterdam should have been strongly correlated after the arrival of news and this correlation should have broken down in the absence of news.

Table 4.1 presents the results from regressing Amsterdam returns on London returns. The latter are lagged by the number of days it took for the English letters to reach Amsterdam. Regressions results are reported for each stock individually and refer to periods with and without news. From the table it becomes clear that returns in Amsterdam and London are significantly correlated when news is coming in. This correlation disappears when no packet boat arrives: relative to the situation in which news does arrive, both the coefficient and its statistical significance are considerably smaller. This is strong evidence that the packet boat was the only way by which English news could reach Amsterdam.

Table 4.1: *Co-movement returns Amsterdam-London*

	Amsterdam return					
	EIC		BOE		SSC	
	news	no news	news	no news	news	no news
London return	0.3090 (0.0000)***	0.0650 (0.2480)	0.2520 (0.0000)***	0.1090 (0.1300)	0.2660 (0.0000)***	-0.0120 (0.7310)
Constant	0.0000 (0.3140)	0.0000 (0.1630)	0.0000 (0.3630)	0.0000 (0.6110)	0.0000 (0.8540)	0.0000 (0.8180)
R2	0.16	0.01	0.13	0.02	0.12	0.00

Results from regressing Amsterdam on London returns for periods with and without news. London returns are lagged by the number of days it took for the English letters to arrive in Amsterdam.

P-values based on robust standard errors reported in parentheses.

\*\*\* significant at the 1% level

Sources: *Amsterdamsche Courant*, *Rotterdamsche Courant*, September 1771-December 1777 and Neal (1990).

## 5. Conclusions

How much of short run asset price volatility is due to news on the fundamental value of a stock and how much can be accounted for by non-fundamental factors related to the trading process like mispricing or investors' liquidity? In this paper I have used a natural experiment provided by the eighteenth-century Amsterdam equity markets to approach this question. In the eighteenth century a number of British stocks were traded on the Amsterdam exchange and all relevant price information from England reached Amsterdam through the use of mail boats. This paper identifies periods in which these boats could not sail because of the weather and analyses what this lack of information implied for the volatility of the British stocks traded in Amsterdam. I show that asset price volatility during periods without news was around two thirds of the volatility that is observed during periods with news. This suggests an important role for non-fundamental factors in the day-to-day movement of asset prices.

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## Gaming and the playing card trade, 1683-1756

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Gaming was prevalent among virtually all sections of early modern English society and card games were hugely popular. Yet in 1711 the playing card trade was shaken severely when stamp duty was extended to cards. This paper reveals for the first time the huge numbers of packs of cards produced and assesses the impact of stamp duty on the playing card trade. It then analyses the tricky process of collecting the duty, examines some of the ingenious attempts by forgers to evade payment of it, and, finally, raises questions about the significance of taxing cards so heavily.

Playing cards probably arrived in England in the mid-fifteenth century and by the second half of the sixteenth century large numbers of packs were being imported into England.<sup>1</sup> The Company of Makers of Playing Cards was incorporated in 1628 and its responsibility was to control and regulate the domestic playing card trade. In return for tight restrictions on imports of cards, the Company consented to pay the king '2s upon a grosse of Cards in lieu of the customes of fforaigne and imported Cards and also to pay to the King's Receiver for sealing the Cards'.<sup>2</sup> The total duty payable per gross (144 packs) of cards was thus three shillings.

In 1638 an agreement between Charles I and the Company fixed playing card production quotas at 336,960 packs per year.<sup>3</sup> This was a considerable amount, but it pales in comparison to the new production quotas that were formalized by an indenture in 1683, which permitted the Company of Makers of Playing Cards to produce up to 185 gross of packs of cards per week.<sup>4</sup> This equated to 1.2 million packs per year, or approximately 1 pack per 5 heads of population.<sup>5</sup> It is even more staggering when we consider that the quota was apparently set to prevent over-production.<sup>6</sup> The years following the 1683 indenture represented the zenith of English playing card making, but the situation was to change markedly in 1711 when playing cards were made subject to stamp duty.

Stamp duty was not an eighteenth-century innovation. However, while duty had been charged on a range of legal documents at various times from the 1660s, it was the closing years of Queen Anne's reign which 'saw novel and far-reaching extensions' including; shipping debentures, licences for retailing wine, beer and ale, dice, books, newspapers, pamphlets, advertisements and, of course, playing cards.<sup>7</sup> The Stamp Act of 1711 imposed 6d duty on each pack of cards 'made fit for Sale or Use in *Great Britain*',<sup>8</sup> which represented a 24-fold increase on what the cardmakers had previously been paying and understandably caused a great deal anxiety among them.<sup>9</sup> The situation was rather dire; a gross of cards previously sold for 6s would now attract £3 12s in duty.<sup>10</sup>

<sup>1</sup> B. Dietz (ed.), *The Port and Trade of Early Elizabethan London* (London, 1972).

<sup>2</sup> G[uildhall] L[ibrary] M[anuscripts] S[ection] 05963/3, pp. 27-9 (copy of 1628 Charter). All GLMS references cited below refer to the manuscript minute books of the Company of Makers of Playing Cards.

<sup>3</sup> T[he] N[ational] A[rchives]:P[ublic] R[ecord] O[ffice] SP 16/408/1 (1638).

<sup>4</sup> GLMS 05963/3, pp. 104-5 (copy of 1683 Indenture).

<sup>5</sup> All population estimates in this paper are from E.A. Wrigley and R. Schofield, *The Population History of England 1541-1871* (Cambridge, 1989), pp. 528-9.

<sup>6</sup> J.G. Thorpe and M.H. Goodall, *Early London Cardmakers* (London, 2001), p. 27.

<sup>7</sup> E. Hughes, 'The English Stamp Duties, 1664-1764', *English Historical Review*, vol. 56, no. 222 (Apr., 1941), p. 245.

<sup>8</sup> 9 Anne, c. 16 (1711).

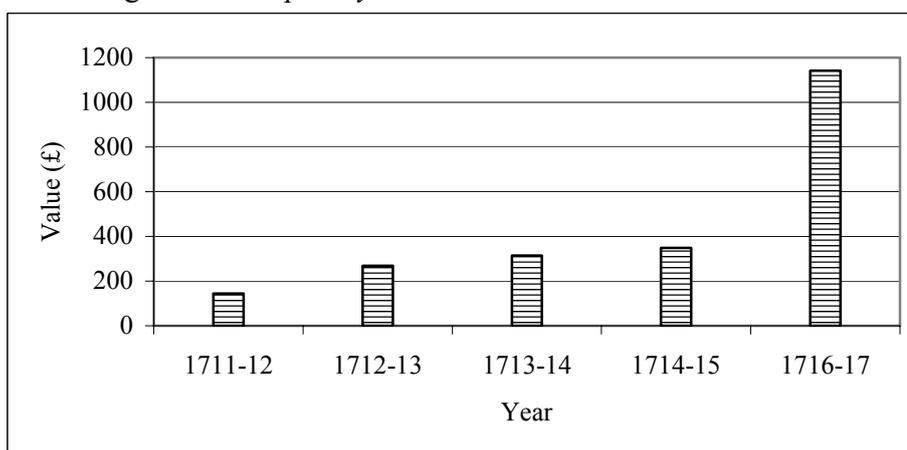
<sup>9</sup> See, for example, *Reasons Humbly Offer'd to the House of Commons, by the Company of Cardmakers, Against the Tax upon Playing-Cards* (London, 1711).

<sup>10</sup> Thorpe and Goodall, *Early London Cardmakers*, p. 29. See also GLMS 05963/2, 186r (1710).

Under the terms of the Stamp Act, it was not permitted for cards to be removed from their makers' premises without first being stamped and sealed. This was to prove that the duty had been paid rather than to denote any particular standard of quality, but it is possible that it was also used as a sign that the cards had not been tampered with because the nature of the seal made it difficult to remove. Every 28 days, makers of playing cards had to enter on oath before the Commissioners of the Stamp Duties 'all the Cards ... which they have made in that Time' and every six weeks pay the duties to the Receiver General of the Stamps, 'under the Penalty of 20l for every Default in making the Entry, and double the Duty for Nonpayment'.<sup>11</sup> During the seventeenth century it had been the responsibility of the agents of the King's Receiver to collect the tax on cards and, at least in some cases, these officials carried out their duties with a ruthless efficiency because they received a cut of the profits. The Stamp Act of 1711 was enforced by a team of eight searchers and surveyors, who were able to enter the premises of cardmakers and 'take an Account of the Cards ... made, under the Penalty of 10l'.<sup>12</sup> If it was found that cards had been removed before being sealed, those responsible faced forfeiture of their merchandise and 'treble the Value' in fines.<sup>13</sup>

The fines for non-payment of the duty were no doubt intended to be prohibitive. But, as figure 1 shows, some cardmakers quickly fell behind with their payments and the arrears owed to the Stamp Office showed few signs of decreasing.

Figure 1: *Stamp Duty Arrears, Cards and Dice, 1711-7*<sup>14</sup>



By 1717, over £1,100 was outstanding and the long lists of debtors, including some of the most senior members of the Company, suggest that the cardmakers were struggling.<sup>15</sup> Fortunately, demand for playing cards appears to have remained strong; figure 2, below, demonstrates that even after the imposition of stamp duty large numbers of packs of cards continued to be produced.

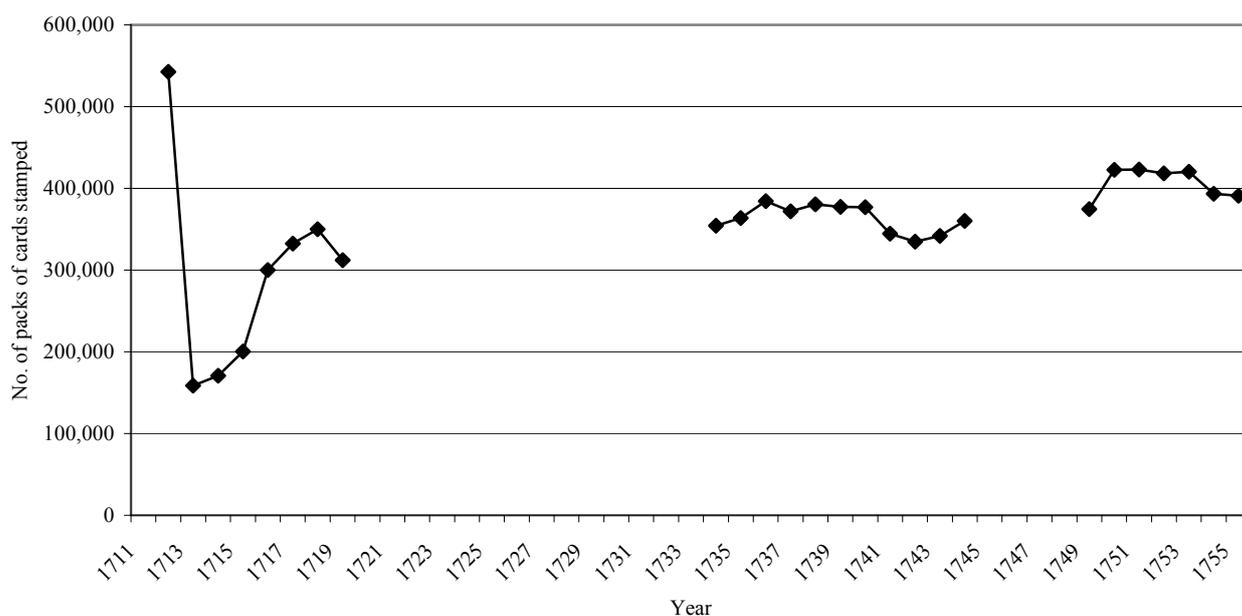
<sup>11</sup> Giles Jacob, *The Laws of Taxation*, (London, 1721), pp. 25-6.

<sup>12</sup> *Ibid.*, p. 25.

<sup>13</sup> *Ibid.*

<sup>14</sup> Calculated from data in W. A. Shaw, *Calendar of Treasury Books* (64 vols., London, 1904-62), vols. 26-32 (1712-18). There are no data for the year 1715-16. See also GLMS 05963/3, *passim*.

<sup>15</sup> *Ibid.*

Figure 2: Packs of Playing Cards Stamped for Duty, 1712-55<sup>16</sup>

Until 1 August 1712 stock in hand could be sealed at a reduced rate of  $\frac{1}{2}$  d per pack and this duly accounted for 480,895 of the 542,727 packs sealed and stamped for duty in 1712, which appears as the initial peak on the graph.<sup>17</sup> Put into context this was roughly one pack per 10 heads of population stamped in one year. Immediately thereafter the number of packs stamped for duty fell to fewer than 200,000 – the increase in duty was really kicking in for the first time.<sup>18</sup> Demand, though, must have remained high because only five years later 350,000 packs were stamped for duty.<sup>19</sup> By the 1730s numbers had crept up a little further and remained fairly stable until the mid 1750s, peaking at 420,362 packs in 1753.<sup>20</sup> On the one hand, it is clear that the yearly numbers of packs of cards stamped for duty never approached the 1.2 million that were being produced in the later seventeenth century. But on the other, we must remember that figure 2 almost certainly underestimates playing card production since, by accident or design, not all packs would have been stamped.

Irrespective of fraud, to which I will return in a moment, the magnitude of stamping hundreds of thousands of packs of cards resulted in administrative and other difficulties. In November 1711, many of the stamp officers were ‘in great Want of their Salarys’ and two months later there were still problems.<sup>21</sup> By July 1712 there were calls for a larger stamp office, without which it would ‘be Impossible to Dispatch the Business of the sd New Dutys’, or cope with the ‘increase in business’.<sup>22</sup> In 1709 there were 107 cardmakers listed for quarterly membership payments in the records of the Company of Makers of Playing Cards, thirty-seven of whom were masters.<sup>23</sup> This should not have been an unmanageable number for the eight searchers and surveyors to deal with, but when we consider that by early 1714 five of the original eight had been replaced, and some of them more than once, a rather less

<sup>16</sup> 1712-18 calculated from data in Shaw, *Calendar of Treasury Books*, vols. 26-32 (1712-18). 1719 calculated from data in 6 Geo. I, c. 21 (1719). 1734-44 calculated from data in TNA:PRO T 1/316 no. 27a. 1749-55 calculated from data in C. J. 27 (1754-57), p. 467.

<sup>17</sup> Calculated from data in Shaw, *Calendar of Treasury Books*, vols. 26-32 (1712-18).

<sup>18</sup> *Ibid.*

<sup>19</sup> *Ibid.*

<sup>20</sup> TNA:PRO T 1/316 no. 27a (1744); C. J. 27 (1754-57), p. 467.

<sup>21</sup> TNA:PRO IR 72/38 pp. 153-5 and p. 159 (1711).

<sup>22</sup> TNA:PRO IR 72/38 p. 169 (1711).

<sup>23</sup> GLMS 05963/2, 179v-181r (1710).

favourable picture is created.<sup>24</sup> What is more, it is probable that those charged with enforcing the Stamp Act were presented with frequent opportunities for personal gain and in 1714 it was noted that the ‘Officers Sent to the Cardmakers to seal and stamp the Cards may be supposed to be guilty in marking more Cards than the Duty is paid for’.<sup>25</sup>

Despite the fact that anyone caught counterfeiting stamps or seals could be prosecuted for felony, this type of duty fraud was a recurring problem. Among those accused of forgery were Anthony Walraven, sentenced to death for forging stamps in 1724, and John Seal, who was saved from the same fate by a legal technicality.<sup>26</sup> In October 1715 the Stamp Commissioners placed a half-page advertisement in the *Weekly Packet* that gave detailed descriptions of two counterfeiters – Mary Richardson and John Word – and, to entice would-be informers, offered a reward of £10 for their capture.<sup>27</sup> Thomas Hill, however, surpassed all of these. Indicted for ‘feloniously counterfeiting and resembling upon a certain Paper and Thread inclosing a Pack of playing Cards, the Impression of a Seal, Stamp, and Mark’, Hill was tried at the Old Bailey in December 1743, found guilty, and sentenced to death. When his garret was searched stamp officers found ‘a Rolling-Press, two flat Stones, one with some Pink-coloured Paint upon it, and a Stone they call a Muller; a Grate to set a Pan of Charcoal upon, to warm the Plate over; red Paint mixed and unmixed; Oil, Whiting, &c. such as they use in the Office for making the Labels’.<sup>28</sup> Unfortunately for Hill his ‘Day-Book’ was also discovered and on examination it revealed that he had ‘sold and delivered to Persons upon Credit, 901 Doz. which is 10812 Packs of Cards, since September last’ but had only ‘entered at the Stamp-Office in that Time 7678 Packs (So that he has sold 3134 Packs more than he has paid the Duty for, besides what he has sold for ready Money)’.<sup>29</sup> If this were not damning enough, Mr Pyne, the King’s Engraver to the Stamp Office, testified in minute detail to flaws in Hill’s stamps and concluded ‘I am thoroughly satisfied they are not the Marks of the Office’.<sup>30</sup>

Although one must assume that the mark of the best forgers was not getting caught, it is unlikely that there can have been many counterfeiters of stamps that were as sophisticated as Hill. After all, as a trained cardmaker Hill was well placed to access the specialist equipment he needed and, via the patronage of his one-time master, Richard Tustian, well funded. Tustian, a master cardmaker who had been censured by the Company of Makers of Playing Cards on a number of occasions, appeared to be complicit in the fraud and perhaps only escaped prosecution because he gave evidence against his former employee.<sup>31</sup> ‘Nothing is a more proper object of taxation than cards, but no duty is so open to frauds’ intoned a parliamentary report from the 1750s,<sup>32</sup> but for every operation as sophisticated as Hill’s, there must have been many simpler frauds; removing stamps with warm water and then reusing them, for instance, was ‘not unusual’.<sup>33</sup> It is extremely rare to have figures such as those allegedly contained in Hill’s day-book, but they clearly have serious implications for the amount of cards evading duty, and thus my earlier calculations about playing card production: almost a third of Hill’s cards were not stamped, while Tustian deposed ‘I sold a great many Cards with the counterfeit Stamp – I believe four or five thousand’.<sup>34</sup>

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<sup>24</sup> TNA:PRO IR 72/38 p. 129 (1711); TNA:PRO IR 72/38 p. 143 (1711); TNA:PRO IR 72/38 p. 431 (1714).

<sup>25</sup> TNA:PRO IR 72/38, p. 207 (1714).

<sup>26</sup> The *Proceedings* of the Old Bailey online [OBP], July 1724, Anthony and Sarah Walraven (t17240708-68); M. Rickards, *The Encyclopedia of Ephemera* (London, 2000), p. 119.

<sup>27</sup> OBP, October 1715, John Seal (t17151012-16); *Weekly Packet*, no. 170 (Oct. 1715).

<sup>28</sup> OBP, Dec. 1743, Thomas Hill (t17431207-69).

<sup>29</sup> Ibid.

<sup>30</sup> Ibid. 3134 packs would have incurred duty of just over £78.

<sup>31</sup> For Tustian’s various misdemeanours see GLMS 05963/2, *passim*.

<sup>32</sup> Cited in Hughes, ‘The English Stamp Duties’, p. 259.

<sup>33</sup> OBP, Dec. 1743, Thomas Hill (t17431207-69).

<sup>34</sup> Ibid.

We have seen that even after the imposition of stamp duty on cards it was not unusual for around 400,000 packs of cards to be produced yearly. Even allowing for wear and tear, large individual orders, and the possibility that new packs were used for each game in organized gaming houses and among elite players, this was a vast number of playing cards. The output of the cardmakers was impressive to say the least, and greater than might have been expected for a Company whose members numbered around 100 in the first decade of the eighteenth century. But supply must have reflected demand, most of which would have been generated by gaming.

Although contemporary discussion about taxation on cards was sometimes coloured by a rather dim view of card play – cards were described more than once as ‘a vaine and unnecessarie comoditie’ – this did not result in any caps being put on their production.<sup>35</sup> Furthermore, the official remit of the cardmakers, as described in their Charter, was steeped in terms which figured cards as a necessity; the Company was to ‘at all times ... make and work such sufficient quantities of playing Cards as shall serve and supply this Kingdome of England...soe as there shall at noe time be any want of that Commodity when our people should have use thereof’.<sup>36</sup> And although there were contemporary arguments which criticized card play but commended cardmaking,<sup>37</sup> when cards were produced in such great numbers there had to be at least a tacit acknowledgement of what they were being used for: it was, after all, not just the making of cards that supported the trade, but also their sale and use.

Despite the difficulties of enforcement and evasion, there were various good reasons for charging stamp duty on cards; demand was high, production was concentrated in London and they were used for recreation rather than sustenance.<sup>38</sup> The government, furthermore, could not tax the turnover from gaming but, through the stamp duty, it could now tax its instruments. Yet there may have been a non-financial motive for taxing cards so heavily. Many statutory provisions against gaming existed, and these were especially geared towards play among the lower orders of society. The statutes, though, were very difficult to enforce and thus anti-gaming initiatives were often sporadic, short-lived and, when they did occur, reliant on the efforts of zealous public officials. Perhaps, then, it was believed that more universal measures were required: making cards subject to stamp duty would, after all, increase their price and might, in the words of one official, provide ‘a good remedy against ye imoderate use of gaming especiallie amongst ye ordenarie and meaner sorte of people’.<sup>39</sup> The cardmakers certainly feared this outcome for in 1711, when petitioning against the duty, they argued that more expensive cards would hinder play among the ‘Common sort’ while leaving comparatively untouched those who chanced ‘many pounds at a game’.<sup>40</sup> But just maybe this was the point and the duty on cards was as much about suppressing gaming as it was about raising revenue.

<sup>35</sup> TNA:PRO SP 16/408/2 (1638) and TNA:PRO SP 16/451/110 (1640).

<sup>36</sup> GLMS 05963/3, p. 30 (copy of 1628 Charter).

<sup>37</sup> Among others, see Sir John Popham in 11 Co. R. 84 ‘The Case of Monopolies’ (1603) and Jeremy Taylor, *Ductor Dubitantium*, (London, 1660), pp. 468-9.

<sup>38</sup> TNA:PRO SP 16/451/110 (1640).

<sup>39</sup> TNA:PRO SP 16/408/2 (1638).

<sup>40</sup> *Reasons Humbly Offer'd to the House of Commons, by the Company of Cardmakers, Against the Tax upon Playing-Cards*.

## Consumption in early modern England: evidence from Huntingdonshire and Yorkshire

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This paper is about changes in the consumption of goods in England and the effects of timescale, social rank and location. In *The Birth of a Consumer Society* McKendrick argued that a consumer boom occurred in England in the third quarter of the eighteenth century.<sup>41</sup> Two subsequent studies of consumption by Weatherill and by Overton & Whittle based on probate inventories did not support the McKendrick thesis but postulated a widespread expansion of consumer goods in the seventeenth and first half of the eighteenth centuries.<sup>42</sup> However, Weatherill only covered the period up to 1725 and Overton & Whittle had relatively few primary sources beyond 1730 and their study period terminated in 1750.

Both Weatherill and Overton & Whittle found that consumption patterns were related to social rank. However, Overton & Whittle had very limited evidence about the possessions of those at the lower end of the social scale. Weatherill did not attempt to examine society as a whole but only people of middle rank. The problems faced by both studies arose because few inventories for labourers survived for their selected locations. Labourers represented the largest social group in most parts of England and evidence about their possessions is important in establishing how far ownership of consumer goods extended down the social scale.

My approach, like Overton & Whittle, was to select two counties: Huntingdonshire, a middling county and Yorkshire in the heartland of industrial change. This study, based on 2,949 probate inventories and over 400 probate accounts, represents the second largest study of consumption using probate records. It is important because it presents the first evidence about consumption based on probate material dated after 1750. Furthermore, it includes data from more than 275 inventories for labourers. Only a brief outline of the results can be presented in this paper.

Ownership patterns of selected consumer goods in Huntingdonshire and Yorkshire provide a mixed picture, somewhere between the two positions of McKendrick and his opponents. Ownership of clocks, knives and forks and items associated with hot drinks all increased markedly after 1750 whereas looking glasses, window curtains and pictures did not, (table 1).

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<sup>41</sup> N. McKendrick, 'The consumer revolution of Eighteenth-Century England', in N. McKendrick, J. Brewer and J. H. Plumb (eds.) *The birth of a consumer society* (London, 1983) p. 9.

<sup>42</sup> L. Weatherill, *Consumer behaviour and material culture* (2<sup>nd</sup> edn. London, 1996); M. Overton and J. Whittle, *Production and consumption in English households 1600-1750* (Abingdon, 2004) p. 7.

Table 1: <i>Ownership of Consumer Goods Over Time and by Location</i>						
	1600-1629	1630-1659	1660-1689	1690-1719	1720-1749	1750-1800
<b>CLOCKS</b>	%	%	%	%	%	%
Cornwall	0	0	1	2	9	N/A
Kent	1	1	18	41	54	N/A
Huntingdonshire	0	1	2	14	24	54
Yorkshire	N/A	N/A	N/A	16	27	43
<b>KNIVES/FORKS</b>	%	%	%	%	%	%
Cornwall	0	0	0	0	3	N/A
Kent	0	0	1	5	13	N/A
Huntingdonshire	0	0	0	3	3	13
Yorkshire	N/A	N/A	N/A	1	1	6
<b>HOT DRINKS</b>	%	%	%	%	%	%
Cornwall	0	0	0	0	6	N/A
Kent	0	0	0	4	27	N/A
Huntingdonshire	0	0	0	5	12	33
Yorkshire	N/A	N/A	N/A	0	4	16
<b>LOOKING GLASSES</b>	%	%	%	%	%	%
Cornwall	1	1	4	4	8	N/A
Kent	3	10	18	36	52	N/A
Huntingdonshire	3	1	7	29	41	43
Yorkshire	N/A	N/A	N/A	19	22	19
<b>PICTURES</b>	%	%	%	%	%	%
Cornwall	0	0	0	1	4	N/A
Kent	2	6	5	6	25	N/A
Huntingdonshire	5	0	1	5	19	20
Yorkshire	N/A	N/A	N/A	7	11	9
<b>WINDOW CURTAINS</b>	%	%	%	%	%	%
Cornwall	0	0	0	1	1	N/A
Kent	6	8	11	16	22	N/A
Huntingdonshire	2	7	5	12	15	13
Yorkshire	N/A	N/A	N/A	8	6	3

Clock ownership in Kent increased significantly around the end of the seventeenth century whereas in Huntingdonshire and Yorkshire similar increases took place after 1750 in accordance with the McKendrick thesis. The sharp rise in ownership of both forks and items associated with hot drinks in Huntingdonshire and Yorkshire also occurred during the period of McKendrick's consumer boom after 1750. In Huntingdonshire, the percentage of people who owned clocks (54 per cent) and forks (13 per cent) in the second half of the eighteenth century exactly reflected ownership patterns in Kent a third of a century earlier. By contrast, ownership of looking glasses, pictures and window curtains in Huntingdonshire increased prior to 1750 as in Kent and there was little change after mid century. In Yorkshire, there was little change in ownership of these goods during the period studied. Cornwall had much lower levels of ownership of all selected goods.

Rank was important in ownership of consumer goods. Examination of ownership of consumer goods by rank and over time is more revealing than examination by rank alone. Gentry were more likely both to own clocks and to acquire them earlier than other ranks. However, other ranks also increasingly started to own clocks so that after 1750, more than half of the inventoried population in Huntingdonshire (54 per cent) and 43 per cent of the

inventoried population in Yorkshire owned clocks. Table 2 shows that after 1750, many ranks including even labourers were almost as likely to own clocks as gentry.

Table 2: *Clock Ownership Over Time and by Rank*

	1600-1649	1650-1699	1700-1749	1750-1800		1600-1649	1650-1699	1700-1749	1750-1800
	%	%	%	%		%	%	%	%
<b>CORNWALL</b>					<b>KENT</b>				
<b>Gentry</b>	0	6.7	33.3	N/A	<b>Gentry</b>	7.3	60.0	69.2	N/A
<b>Yeomen</b>	0	0.4	7.2	N/A	<b>Yeomen</b>	1.6	28.5	73.6	N/A
<b>Husbandmen</b>	0	0	0	N/A	<b>Husbandmen</b>	0	2.6	40.6	N/A
<b>Labourers</b>	N/A	N/A	N/A	N/A	<b>Labourers</b>	N/A	N/A	N/A	N/A
<b>Widows</b>	0	0	0	N/A	<b>Widows</b>	0	12.1	23.3	N/A
<b>HUNTINGDONSHIRE</b>					<b>YORKSHIRE</b>				
<b>Gentry</b>	0	14	60	67	<b>Gentry</b>	N/A	67	48	33
<b>Yeomen</b>	0	8	27	58	<b>Yeomen</b>	N/A	24	37	42
<b>Husbandmen</b>	0	0	45	33	<b>Husbandmen</b>	N/A	0	16	30
<b>Labourers</b>	0	0	1	57	<b>Labourers</b>	N/A	20	9	33
<b>Widows</b>	0	1	10	47	<b>Widows</b>	N/A	5	14	31
<b>Professionals</b>	0	9	29	33	<b>Professionals</b>	N/A	0	23	28
<b>Higher tradesmen</b>	0	3	32	63	<b>Higher tradesmen</b>	N/A	11	32	48
<b>Lower tradesmen</b>	0	1	18	59	<b>Lower tradesmen</b>	N/A	12	25	48

Pounds argued that clocks did not penetrate lower than petty burgesses and yeomen. For Pounds, clocks remained relatively expensive until they were mass-produced in the nineteenth century.<sup>43</sup> Thompson argued that no labourer could have afforded a clock in the mid-eighteenth century. By contrast, Styles argued that clocks were familiar adornments of labourers' living rooms by the end of the eighteenth century and cited the painting *A Cottage Interior* by Bigg as evidence.<sup>44</sup>

Results from Huntingdonshire and Yorkshire did not support Pounds' position that clocks did not penetrate lower than petty burgesses and yeomen. One in five husbandmen owned clocks. Thompson's assertion that no labourer could have afforded a clock in the mid-eighteenth century was also incorrect. It was Styles' argument that it was not uncommon for the labouring poor to own a clock that was consistent with evidence from the post-1750 inventories. Labourers who owned clocks were not confined to those with relatively high inventory values. In Huntingdonshire, two labourers with inventory values of only £8 and £16 respectively owned clocks. In Yorkshire a labourer called Hamshaw died in 1750 exactly at Thompson's mid century point and although his inventory was valued at only £4 it included a clock. Weatherill's study failed to distinguish between widows and spinsters. However, there were significant differences in ownership patterns of consumer goods between widows and spinsters. For example, no spinster had a clock in Yorkshire but one in five widows did.

The large number of labourers' inventories in Huntingdonshire provided a rare insight into their material culture. Table 3 shows a range of consumer goods recorded in the inventories of labourers and for comparison husbandmen. Both occupational groups generally owned basic traditional goods such as beds and chairs. Sheets were more problematic because they were often lost in the generic term linen and there was a different approach to separately identifying sheets in Yorkshire.

<sup>43</sup> N. J.G. Pounds, *Hearth and home: a history of material culture* (Indiana, 1989) p. 201.

<sup>44</sup> J. Styles 'Georgian Britain' in M., Snodin and J. Styles, (eds.) *Design and the decorative arts Britain 1500-1900* (London, 2001) pp. 181-2.

	Husbandmen				Labourers			
	Huntingdonshire		Yorkshire		Huntingdonshire		Yorkshire	
	No.=53		No.=88		No.=254		No.=22	
	No.	%	No.	%	No.	%	No.	%
Clocks	10	19	12	14	5	2	4	18
Knives & Forks	0	0	0	0	1	0	0	0
Hot Drinks	1	2	0	0	0	0	1	5
Looking glasses	4	8	4	5	9	4	2	9
Window curtains	1	2	0	0	1	0	1	5
Pictures	0	0	0	0	1	0	2	9
Books	3	6	3	3	6	2	0	0
Silver spoons	1	2	0	0	3	1	0	0
Other silver	1	2	1	1	1	0	0	0
Bed Curtains	10	19	11	13	24	9	1	5
Beds	50	94	79	90	230	91	17	77
Sheets	31	58	10	11	138	54	3	14
Chairs	42	79	50	57	167	66	10	45
Stools	21	40	19	22	81	32	9	41
Forms	17	32	25	28	88	35	5	23

There was little evidence that most new consumer goods reached those towards the lower end of the social spectrum. For example, in Huntingdonshire out of 254 labourers, only one recorded a fork, window curtains or a picture. No labourer owned items associated with hot drinks. However by examining rank and timescale together (table 4) there was evidence of some change by the second half of the eighteenth century. The new evidence covering the second half of the eighteenth century shows that clocks and to some extent looking glasses were being acquired by both husbandmen and labourers.

	1600-1649	1650-1699	1700-1749	1750-1800		1600-1649	1650-1699	1700-1749	1750-1800
	%	%	%	%		%	%	%	%
<b>CLOCKS</b>					<b>KNIVES AND FORKS</b>				
Husbandmen	0	1	24	31	Husbandmen	0	0	0	0
Labourers	0	0	3	46	Labourers	0	0	0	8
<b>HOT DRINKS</b>					<b>WINDOW CURTAINS</b>				
Husbandmen	0	0	1	0	Husbandmen	0	0	1	0
Labourers	0	0	0	8	Labourers	0	1	1	0
<b>PICTURES</b>					<b>LOOKING GLASSES</b>				
Husbandmen	0	0	0	0	Husbandmen	0	0	8	15
Labourers	0	0	3	8	Labourers	0	0	10	23

Location was also important and my findings echoed those of other studies. The Huntingdonshire inventories related to 20 parishes. Five parishes had market towns and are located in the three ecological regions of the county. The fifteen rural parishes reflect a geographical spread and relate to both archdeaconry and peculiar courts. In Yorkshire, inventories from three deaneries were studied. Pontefract Deanery in West Riding was the heartland of industrial change and the most populated and prosperous part of Yorkshire.<sup>45</sup>

<sup>45</sup> D. Hey, *A history of Yorkshire: county of the broad acres* (Lancaster, 2005) p. 282.

Rydale or Rydall Deanery in North Riding a mainly rural area comprised high moors and dales and its economy was dominated by agriculture. Holderness Deanery covers most of the plain in the south east part of East Riding where drainage schemes facilitated development of both arable and pastoral farming.<sup>46</sup>

In Huntingdonshire, with the single exception of clocks, consumer goods were much more commonly owned by inventoried persons in parishes with market towns than in more rural parishes. Compared to Pontefract and Holderness deaneries, rural Rydall Deanery in Yorkshire generally had the lowest ownership of consumer goods, (tables 5 and 6).

	1600-1629	1630-1659	1660-1689	1690-1719	1720-1749	1750-1800
<b>CLOCKS</b>	%	%	%	%	%	%
Hunts market towns	0	1	3	11	17	49
Hunts rural parishes	0	0	2	20	32	62
Pontefract	N/A	N/A	N/A	21	35	53
Rydall	N/A	N/A	N/A	6	14	22
Holderness	N/A	N/A	N/A	5	15	19
<b>KNIVES AND FORKS</b>	%	%	%	%	%	%
Hunts market towns	0	0	0	3	4	14
Hunts rural parishes	0	0	0	2	3	11
Pontefract	N/A	N/A	N/A	1	2	8
Rydall	N/A	N/A	N/A	0	0	0
Holderness	N/A	N/A	N/A	0	0	5
<b>HOT DRINKS</b>	%	%	%	%	%	%
Hunts market towns	0	0	0	5	18	41
Hunts rural parishes	0	0	0	3	6	20
Pontefract	N/A	N/A	N/A	1	3	16
Rydall	N/A	N/A	N/A	0	2	4
Holderness	N/A	N/A	N/A	0	6	27

<sup>46</sup> D. Hey, *A history of Yorkshire* (Lancaster, 2005) pp. 4 & 249; M. Overton, *Agricultural Revolution in England* (Cambridge, 1996) pp. 89-90.

	1600-1629	1630-1659	1660-1689	1690-1719	1720-1749	1750-1800
<b>WINDOW CURTAINS</b>	%	%	%	%	%	%
Hunts market towns	3	8	5	15	20	17
Hunts rural parishes	0	3	3	7	9	7
Pontefract	N/A	N/A	N/A	7	8	4
Rydall	N/A	N/A	N/A	0	2	0
Holderness	N/A	N/A	N/A	11	7	5
<b>PICTURES</b>	%	%	%	%	%	%
Hunts market towns	7	0	1	5	28	28
Hunts rural parishes	0	0	1	3	9	9
Pontefract	N/A	N/A	N/A	5	10	9
Rydall	N/A	N/A	N/A	0	4	5
Holderness	N/A	N/A	N/A	14	17	14
<b>LOOKING GLASSES</b>	%	%	%	%	%	%
Hunts market towns	4	1	8	35	53	49
Hunts rural parishes	0	0	5	16	29	33
Pontefract	N/A	N/A	N/A	16	22	21
Rydall	N/A	N/A	N/A	16	4	8
Holderness	N/A	N/A	N/A	29	34	22

In conclusion, to what extent do we see ‘McKendricks’s consumer revolution’ in this data? Cowan suggested that ‘every era’ from the Neolithic to the present has had a consumer revolution. Cowan suggested that what varied between these consumer revolutions was the types of goods and services required.<sup>47</sup> When Dyer proposed a consumer revolution in the later middle ages in his recent book based on his Ford Lectures at Oxford, his consumer goods were ale, cloth, knives even frivolous items such as playing cards and rings. But much of Dyer’s evidence is anecdotal rather than based on extensive examinations of inventories. Dyer admits that his consumer revolution was ‘in a lower key’ compared to the changes in the eighteenth century.<sup>48</sup> Changes in consumption in the early modern period were on a much bigger scale. Can we pinpoint exactly when they took place? There was a trigger point at which change started to happen and a fuller flowering when ownership of consumer goods became widespread among the population.

The new evidence from Huntingdonshire and Yorkshire adds considerably to that produced by Overton & Whittle. Cornwall and Kent appear to be at the opposite ends of the spectrum, with very few consumer goods in Cornwall and prosperous Kent being in the vanguard of consumer change. In a middling county like Huntingdonshire consumer change was taking place largely in the eighteenth century. Ownership of goods such as looking glasses, window curtains and pictures increased in the early part of the century. The availability of the later evidence in the second half of the century shows a number of goods such as clocks, knives and forks and coffee and tea items where ownership increased markedly after 1750. McKendrick was perhaps a little too narrow in confining change to the third quarter of the eighteenth century. Location was also important for, with the exception of clocks, these changes in consumption took place in towns earlier than in the countryside.

Finally, how far down the social spectrum did ownership of these goods spread? Were labourers really excluded from this new consumer world, even by the end of the eighteenth

<sup>47</sup> B. Cowan, *The social life of coffee* (New Haven, 2005) p.257.

<sup>48</sup> C. Dyer, *An age of transition: economy and society in England in the later middle ages* (Oxford, 2005) pp. 147-8.

century? The evidence suggests that for most of these newer goods people like husbandmen and labourers did not own them. The importance of the later evidence is that by the second half of the century some goods such as looking glasses and intriguingly clocks found their way even into the homes of labourers. The consumer revolution was at last beginning to arrive.

## The reconstruction of a metropolis: London's economic topography before and after the Great Fire of 1666

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The Great Fire destroyed the workplaces of thousands. It forced a major re-distribution of London's economic topography, as the city's tradesmen and merchants attempted to reconstruct their economic lives. The changes in the spatial distribution of metropolitan businesses will show what effect the Fire had on London's economic topography, and whether this effect was lasting. The effect on movement of occupation, gender, and age will be examined. Place of business was a vital consideration, as Power (1986) points out: 'choice of residence was probably dictated by considerations of commercial advantage and rent, the two inextricably intertwined'.<sup>49</sup>

Two sources of data will be used to examine the changes in the economic topography of London as a result of the Fire. The first source is the apprenticeship records of the Merchant Taylors' Company, which included information on the place of business of the master. The Merchant Taylors were one of the largest guilds in London. They were also an economically diverse company in terms of the occupations of its members. As such, an examination of the Merchant Taylors' will illuminate a broad cross section of the economy. Most of the apprenticeship bindings also record the occupation of the master. The sample was selected from the 14 years before and after the Fire. As such, the sample should include the majority of Merchant Taylors economically active in London at the time of the Fire. The second occupational group examined are the booksellers. London was the centre of book distribution in England. Also, booksellers were perhaps the single trade group most damaged by the Fire. The trade was synonymous with Paul's Churchyard, an area devastated by the Fire.<sup>50</sup> The method used to chart the topography of the booksellers was a search of the Early English Books Online database for all books published in London in the years 1663-5, 1667-9 and 1676-8. From this, the place of business of the bookseller was extracted.

Table 1: *Place of business, Merchant Taylors, 1652-66, 1666-80 (%)*

Area	1652-66	1666-80
City	51.5	33.8
East of the Walls	7.4	13.3
West of the Walls	18.6	22.0
North of the Walls	13.8	19.6
Southwark	6.0	8.0
Other	2.7	3.3
<b>Total</b>	<b>100 (3532)</b>	<b>100 (2119)</b>

There is clearly a shift in the distribution of the Merchant Taylors after the Fire. The area which experienced the greatest decline in numbers was the City, which experienced a relative decline of nearly 20 per cent. In relative terms, the eastern and northern suburbs experienced the greatest growth. Numbers of Merchant Taylors based in other areas remained more stable. However, the numbers relocating to the East End and Southwark might be underestimated by these figures. These areas were comparatively cheaper to live in than other areas of London, and thus would have been more attractive to poorer masters, who were less likely to take on apprentices, and so would not have been counted in the sampling method.

<sup>49</sup> Power (1986), p. 212.

<sup>50</sup> Raven (2004), p. 430.

Table 2: *Place of business, Booksellers, 1663-5, 1667-9 and 1676-8 (%)*

Area	1663-5	1667-9	1676-8
City	53.1	18.9	49.4
East of the Walls	0	1.3	2.9
West of the Walls	32.5	36.0	31.2
North of the Walls	13.1	43.8	15.9
Southwark	1.3	0	0.6
<b>Total</b>	<b>100 (160)</b>	<b>100 (153)</b>	<b>100 (170)</b>

In the short term, the Fire radically affected the distribution of booksellers. The City experienced a relative decline of over one-third after the Fire, whilst the areas north of the Walls experienced relative growth in numbers of booksellers by around 30 per cent. Numbers in other areas remained relatively stable. However, there seems to have been a return to the pre-Fire distribution after these initial changes immediately after the Fire.

After charting geographical distributions of the Merchant Taylors and the booksellers, the samples before and after the Fire were compared to determine individual movements. This pioneering analysis of individual mobility was done through a process of nominal linkage.

Of the 549 masters who could be linked both before and after the Fire, just over half were based in areas of London directly affected by the Fire. Over 80 per cent of the Merchant Taylors burnt out by the Fire moved their place of work permanently after the disaster, and 3.5 per cent moved but returned to their original address by 1680. In comparison, if a subject was based in an area of London unaffected by Fire, just under one third moved. Mobility, thus, seems to have still been a fairly common occurrence even for traders not based in Fire-affected areas, although it does appear that being fired greatly increased the likelihood of moving.

Table 3: *Type of movement, Merchant Taylors, 1652-66, 1666-80 (%)*

	Region	Fired	Non-fired
Moved within same area	City	27.0	10.4
	North	0	0
	South	0	1.3
	East	0.4	14.3
	West	1.2	16.9
Moved into different area	Into City	1.2	12.9
	Northward	4.7	0
	Southward	6.2	6.5
	Eastward	24.5	14.3
	Westward	34.4	22.1
	Out of London	0.4	1.3
	<b>Total</b>	<b>100 (241)</b>	<b>100 (77)</b>

Movement west was overall the most popular destination, followed by movement east. There are differences in the type of movement depending on if the master was based in a fired area of London. It appears that movement outside of the Walls was more common for Merchant Taylors affected by the Fire, with movement west being the most popular destination, in particular to areas such as Holborn, Temple and Fleet Street. It appears that movement west occurred at high levels whether or not a master was fired, whilst movement to other areas was more likely to be a reaction to being burnt out. The Fire probably accelerated movement west – a trend that had been ongoing for decades.

Table 4: *Movement of Booksellers from fired areas of London, 1663-5, 1667-9 (%)*

Direction	Proportion
Northward	51.0
Southward	0
Eastward	19.6
Westward	21.6
Did not move	7.8
<b>Total</b>	<b>100 (51)</b>

It appears that booksellers not burnt out were unlikely to move – none of the 28 booksellers linked between the 1663-5 and 1667-9 samples changed location. However, those booksellers affected by Fire almost all moved – only four remained in the same place before and after the Fire. The majority of the movement was northward. Most of these moves were from Paul’s Churchyard to around Little Britain. Those who moved westward tended to go towards Fleet Street and the Strand. Eastward movers tended to stay within the Walls, five clustering around the temporary shops in Gresham College. However, there was not a long-term change in the distribution of the London booksellers – by the 1670s the pre-Fire pattern had been virtually re-established.

Table 5: *Long-term movements of Booksellers, 1663-5, 1667-9, 1676-8 (%)*

Type of move	Proportion
Fired, did not move	0
Fired, moved, returned to pre-Fire residence	34.9
Fired, moved, returned to pre-Fire neighbourhood	16.3
Fired, moved, stayed in same residence	4.7
Fired, moved, stayed in same neighbourhood	2.3
Unaffected by Fire, did not move at all	39.5
Unaffected by Fire, moved	2.3
<b>Total</b>	<b>100 (43)</b>

There seems to have been a general movement back to pre-Fire topographical patterns; of the 25 booksellers affected by the Fire, 22 returned to, or near to, their pre-Fire shops. Only three booksellers remained in the same area they had moved to after being burnt out in 1666. It appears, therefore, that even if a bookseller was burnt out as a result of the Great Fire, it was fairly likely he would have returned to his original shop by the 1670s, for the most part after a spell operating in a different area of London.

Table 6: *Trade groups of masters in the Merchant Taylors’ company, 1652-66, 1666-80 (%)*

Group	Sub-group	1652-66	1666-80
Selling	Dealer	13.6	12.7
Craft	Textile dealer	8.3	7.0
	Victualler	6.6	6.6
	Professional	3.5	3.0
	Wood	3.2	3.8
	Metal	4.9	7.8
	Textile	49.6	42.5
	Leather	2.6	3.9
Semi-skilled	Miscellaneous	3.7	5.9
	Builder	2.4	5.1
	Carrier	1.6	1.7
	<b>Total</b>	<b>100 (1805)</b>	<b>100 (2138)</b>

*Note:* Occupational groups taken from Power (1986), table 27, pp. 214-5.

The Merchant Taylors were not a homogenous company. The apprenticeship bindings (mostly) record the exact occupation of the master. From this, a rough hierarchy of trade groups for the Merchant Taylors was constructed. There appear to be differences in the occupational distributions before and after the Fire. After 1666, it appears that craftsmen within the company became more diversified in their occupations after the Fire, with proportionally fewer being involved in textiles. This may be due to the long-term tendency for manufacturing to move out of London after the mid seventeenth century, as well as the long-term decline in textile prices in England at the time.<sup>51</sup> The main change was the increased proportion of Merchant Taylors involved in the building trade. Clearly this was a response to the building boom after the Fire. Occupation varied with region. Before the Fire, the City had a far higher proportion of dealers than other areas of London. However, after the Fire, the proportion of dealers east and west of the Walls grew, in response to the growing population density of these areas. The proportions of craftsmen appear to be fairly similar before and after the Fire.

When changes in individual occupations were examined, it was clear that occupational mobility was certainly not uncommon for Merchant Taylors. Over 10 per cent of the sample changed their trade. Builders and craftsmen working with wood appear to have experienced the highest levels of occupational turnover. This is unsurprising given that these trade groups were comparatively low status, and had the cheapest manufacturing and trading stock. For the most part it appears that occupational changes were in related industries. Changing occupation was not always accompanied by movement in workplace. Just under half of the masters who changed their occupation did not move their place of work.

Table 7: *Ages of Merchant Taylors linked before and after the Fire, by geographical movement, 1652-66, 1666-80 (%)*

Age	Fired, moved	Fired, did not move	Not fired moved	Not fired did not move	Total
29 or below	17.5	12.9	28.6	25.3	<b>21.0</b>
30-9	38.1	38.7	31.4	40.0	<b>37.8</b>
40-9	25.8	32.3	31.4	24.0	<b>26.9</b>
50-9	14.4	12.9	5.7	4.0	<b>9.7</b>
60 plus	4.1	3.2	2.9	6.7	<b>4.6</b>
<b>Total</b>	<b>100 (97)</b>	<b>100 (31)</b>	<b>100 (35)</b>	<b>100 (75)</b>	<b>100 (238)</b>

The ages of some of the sample of linked Merchant Taylors could be calculated by use of the company's freedom records, which give a rough approximation of age. Age may have had a slight bearing on movement after 1666, although there is no significant statistical difference between the ages of the masters who moved and did not move.<sup>52</sup> For those masters burnt out by the Fire, slightly higher proportions of Merchant Taylors under the age of 29 moved workplace after the Fire, rather than returning to their original address. In comparison, masters between the ages of 30 and 49 seem to have been more likely to return to their original workplace. When age is linked to geographical movement, it appears that masters in middle age were slightly more likely to remain in the City, whilst younger and older masters showed a slightly greater proclivity to move outside of the Walls. When age is linked to occupation, it appears that the younger Merchant Taylors had a fairly different distribution of occupations compared to the older age groups in two main ways. They were less likely to be engaged in textiles, and far more likely to be engaged in building. This reflects the flexibility

<sup>51</sup> Styles (2000), 129; Shammas (1994), pp. 483-507.

<sup>52</sup> Masters fired: Testing using Kolmogorov-Smirnov test at 95%: D=0.092 and the critical value is 0.281. Therefore, the null hypothesis of no significant difference is accepted. Masters not fired: Testing using Kolmogorov-Smirnov test at 95%: D=0.112 and the critical value is 0.278. Therefore, the null hypothesis of no significant difference is accepted.

of the younger masters not yet fully established in one trade, and able to react to changing economic conditions.

Women played an important role in the metropolitan economy. However, this role was certainly limited. It was usually as the widow of a master that women had the right to trade independently.<sup>53</sup> There are low proportions of female masters in the Merchant Taylors' sample. Women accounted for only 1.6 per cent of the 1652-66 sample, and 3.5 per cent for 1666-80. There appear to have been slightly more women involved in bookselling. However, the proportion of women in bookselling declines over time. For the 1663-5 sample, 5 per cent of the booksellers were women, falling to 3.3 per cent in 1667-9, and 0.6 per cent in 1676-8.

Female Merchant Taylor topographic structure was similar to the overall pattern. It does not appear that gender had a statistically significant effect on economic topography for the 1652-66 or 1666-80 samples.<sup>54</sup> As the numbers of booksellers are lower than the Merchant Taylors, it was not possible to examine the effect of gender on their topography in the same way. However, superficially, gender does not seem to make a great deal of difference for the topography of female booksellers either.

The occupational structure of female Merchant Taylors was similar to the overall pattern. There was no statistical difference in the occupational structure of females, both before and after the Fire.<sup>55</sup> The similarity between female and male occupational structure in the Merchant Taylors is probably due to the fact that most females operating in the company were widows. As such, it would have been likely that they would have continued the trade of their husband, as a great deal of their economic experience and connections would have been gained in the trade of their late husband.

In summation, the Fire had a significant effect on the topographical distribution of London's economy, although there were significant differences between the two trade groups examined. The booksellers, the smaller and more homogenous group, appear to have returned to pre-Fire topographical patterns after short-term changes immediately after the Fire.

The Fire forced four out of five of the fired Merchant Taylors to move permanently. These movements were far more likely to be long-term than for the booksellers. Overall, the Fire appears to have led to an increase in the numbers of Merchant Taylors based in the northern and eastern suburbs. Movement to the west did occur in response to the Fire, but it also appears to have occurred from non-fired areas. Clearly this was a long-term trend that would have occurred regardless of the Fire.

Gauging the effect of the Fire on occupational changes in the Merchant Taylors Company was problematic, as the numbers recovered with sufficient information were low. However, it appears that there was around a 10 per cent occupational turnover, usually between related trades. It was also problematic to measure the impact of age. However, it is probable that younger masters were more likely to be mobile. Superficially, gender does not seem to have had a great effect on change after the Fire in terms of topography and occupation.

Economic considerations were central in the planning of London's recovery after the Fire. As Keene (2001) points out, 'trade was the prime force which conditioned the reordering and rebuilding of the city'.<sup>56</sup> Elaborate rebuilding schemes were eschewed in favour of practical reconstruction, which in addition to London's wholly essential place in the English

<sup>53</sup> Brodsky (1986), p. 141.

<sup>54</sup> 1652-66: Testing using chi-squared at 95%, calculated value of chi-squared is 7.024, tabulated value is 9.49, and therefore the null hypothesis of no difference is accepted. 1666-80: Testing using chi-squared at 95%, calculated value of chi-squared is 5.473, tabulated value is 9.49, and therefore the null hypothesis of no difference is accepted.

<sup>55</sup> 1652-66: Testing using chi-squared at 95%, calculated value of chi-squared is 1.260, tabulated value is 5.99, and therefore null hypothesis of no difference is accepted. 1666-80: Testing using chi-squared at 95%, calculated value of chi-squared is 9.209, tabulated value is 11.07, and therefore null hypothesis of no difference is accepted.

<sup>56</sup> Keene (2001), p. 30.

economy, meant the metropolitan economy was able to recover quickly. Therefore, London's Merchant Taylors and booksellers operated in a paradigm that was designed to make sure that they could rebuild their businesses and economic lives as quickly as was feasibly possible to do so. Thanks to the continuation of London's economic function, they did not face a reduction in market size, and so, to an extent, could often recover their pre-catastrophe equilibrium.

## Using tithes to compare landlord and peasant cropping patterns at fourteenth-century Oakington

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The history of agrarian production in medieval England is richly documented in the many surviving manorial accounts. Yet while these accounts allow for close study of demesne agriculture, they obscure what was happening on non-demesne lands. Although recent research has sought to understand peasant agriculture through modelling peasant budgets and reconstructing tithe receipts, there remains a tendency to equate demesne farming with medieval agriculture as a whole.<sup>57</sup> The misconception that peasant and demesne agriculture did not differ significantly is compounded by a propensity to define agrarian success in terms of yield ratios and market participation. Analysis of the tithe receipts from the Crowland Abbey manor of Oakington demonstrates not only that peasant and demesne cropping patterns differed, but also that the tools used to measure demesne productivity are inappropriate to the measuring of peasant agrarian success.

Oakington was the administrative centre of Crowland Abbey's three Cambridgeshire manors, which perhaps explains the surprising detail found in its manorial accounts.<sup>58</sup> The most informative of these are the reeve's accounts dated from 1360/1 to 1398/9, which record amounts of grain received as tithes alongside receipts of grain from the demesne. In order to address the relationship between peasant and landlord cropping strategies, these receipts have been collected to create two sets of data for analysis. The problem of the unknown quantity of land under peasant cultivation has here been solved by converting the tithe (t) and demesne (D) receipts into percentages of the total, creating sets of proportional values describing the cropping patterns of the two sectors.<sup>59</sup>

Oakington inhabited a flat, undifferentiated landscape more typical of the midlands champion to the west than the East Anglian fens with which it often associated. Because of this landscape, agriculture at Oakington was practised on common fields in a three-part rotation that remained essentially unchanged for the entire period covered by the reeve's accounts.

Table 1: *Example of field rotation at Oakington*

	Wheat	Mixtil	Drage	Black Peas	Oats
1363/4	Milnfield	Milnfield	Milnfield/Westfield	Westfield	Westfield
1364/5	Morfield	Morfield	Morfield/Milnfield	Milnfield	Milnfield
1365/6	Westfield	Westfield	Westfield/Morfield	Morfield	Morfield

Given that the late fourteenth century is considered to have been a period of sustained change in cropping patterns, the rigidity displayed in the pattern of field use at Oakington calls into serious question the adaptability of agricultural systems in areas where communality was the defining feature.<sup>60</sup>

<sup>57</sup> H. Kitsikopoulos, 'Standards of Living and Capital Formation in Pre-Plague England: A Peasant Budget Model', *Economic History Review*, 2<sup>nd</sup> ser., 53 (2000), pp. 237-61; C. Dyer, *Standards of Living in the Later Middle Ages: Social Change in England, c.1200-1520*, (Cambridge, 1989); B. Dodds, 'Estimating Arable Output Using Durham Priory Tithe Receipts, 1341-1450', *Economic History Review*, 57 (2004), pp. 245-85.

<sup>58</sup> F. Page, *The Estates of Crowland Abbey: A Study in Manorial Organisation*, (Cambridge, 1934).

<sup>59</sup> Data tables available upon request.

<sup>60</sup> For example B. Campbell, *English Seigniorial Agriculture, 1250-1450*, (Cambridge, 2000).

To consider for a moment the initial hypothesis that because the demesne and non-demesne sectors were cultivating the same land, there was essentially no difference in their overall systems of production. Because this model proposes that the only variable in cultivation was the cultivator, we would expect to see correlation linking the two datasets using Pearson's product-moment correlation coefficient. Yet this equation shows the only possibly significant result in oats, where, because of the small quantity needed for fodder, the demesne came to rely on tithe receipts toward the end of the period covered. Furthermore, there is no correlation between the fluctuations in the proportions each crop comprised of the two sets.<sup>61</sup> The correlation between the two crops and the average each crop comprised of the total receipts from tithe and demesne lands are summarized below.

Table 2: *Pearson correlation coefficients between %D and %t*

<i>WHEAT</i>	<i>MIXTIL</i>	<i>DRAGE</i>	<i>WPEAS</i>	<i>BPEAS</i>	<i>OATS</i>
0.0194	-0.2477	-0.1121	0.3298	-0.3884	-0.5946

Table 3: *Average percentage each crop comprised of D and t*

	<i>WHEAT</i>	<i>MIXTIL</i>	<i>DRAGE</i>	<i>WPEAS</i>	<i>BPEAS</i>	<i>OATS</i>
%D	11.41%	10.56%	57.98%	2.27%	13.94%	3.83%
%t	6.95%	7.86%	66.27%	0.74%	14.17%	1.37%

This does not necessarily mean that there is no correlation. Pearson only tests linear correlation in a model that considers the relationship between two variables, creating too simple a scenario to accurately reflect the complicated systems of agriculture in which both tenants and lords participated. A more complex model using regression further tests the relationship between t (peasant tithes) and D (demesne receipts). Because  $x$  predicts  $y$ , taking %D as  $x$  (the predictor) and %t as  $y$  (the response variable), if demesne and non-demesne lands were put to proportionally similar uses, it would be expected that %D would demonstrate a significant relationship with %t. Again, this is not the case, nor do the results indicate significant response when time or fields are added.

These results indicate that the proportions of crops sown on demesne and non-demesne lands were fluctuating independently of each other, and it can therefore be assumed that some other set of stimuli was affecting cropping patterns. Recent discussion surrounding modes of agrarian production has focused on market opportunities in an increasingly commercialized economy.<sup>62</sup> In this, much has been made of the shift to more lucrative pastoral products, the increased sowing of crops meant for commercial rather than consumptive purposes, and changing attitudes towards land management.<sup>63</sup> However, using David Stone's method of examining the relationship between grain prices expressed as percentages of wheat and changes in proportions of crops grown, at Oakington prices do not appear to have affected the acreage of demesne. It should also be noted that wheat was sold only 6 times in the 38 documented years, mixtil was sold 10 times but at an average of only 10 per cent of the total receipt, and while drage was frequently sold outside the manor, the average amount sold comprised only 11 per cent of the receipt in contrast to the 77 per cent on average which was sent to other Crowland estates. In fact only peas were routinely sold with any frequency and in any real quantity, being sold outside the manor for all but one year of the period covered, and at an average of just over a quarter of the total amount received.

<sup>61</sup> All figures reference CUL Q.Box 6.

<sup>62</sup> B. Campbell, 'Matching Supply to Demand: Crop Production and Disposal by English Demesnes in the Century of the Black Death', *Journal of Economic History*, 57 (1997), pp. 827-58; J. Masschaele, *Peasants, Merchants and Markets: Inland Trade in Medieval England, 1150-1350* (Basingstoke, 1997).

<sup>63</sup> In particular Campbell, *English Seigneurial Agriculture*; D. Stone, *Decision-Making in Medieval Agriculture*, (Oxford, 2005).

But although the demesne was not being cultivated for direct market participation, it cannot be assumed that the non-demesne sector was equally unconcerned with commercial opportunities. However, the receipts of the tithes show no significant response to the prices received. Part of this may be because manorial officials enjoyed advantages in marketing their products that would have been unavailable to peasants, but the complete lack of a demonstrable relationship between prices and proportions of tithe receipts using either Pearson or regression analysis points to a disregard of outside markets similar to that displayed by the demesne. What then are we to make of these unresponsive peasant cropping patterns? The answer lies not in external considerations but in internal perceptions of agrarian success, particularly in attitudes towards crop stability and functionality.

To measure the success of peasant agrarian production in terms of internal factors, it is necessary to understand the principle part played by Oakington's position at the fen-edge. Oakington benefited neither from the vegetation and wildlife of the fens, nor the well-draining soils further inland. The predominate brown earth Oakington and Milton series display a tendency to waterlogging and gleying.<sup>64</sup> In short, the land was flood-prone and offered little in the way of extra-agricultural occupation. Given this, it should be noted that the primary constituent of the Oakington series, the Lower Greensands, are so called because of the high amounts of potassium-rich glauconite.<sup>65</sup> Because potassium plays an important role in regulating the osmotic functions of cells, it is perhaps not a coincidence that in this wet region Oakington was founded on soil best suited to arable cultivation. Common field cereal cultivation was dependent on pastoral husbandry, which itself was reliant upon abundant grassland for livestock. Pasture in this region is scarce, and while meadow is always accounted for at the end of the reeve's accounts, pasture is not.<sup>66</sup> The lack of permanent pasture at Oakington is further indicated by the yearly account of land put into the foldcourse, suggesting a system of agriculture in which even the fallowing of fields was strictly regulated to compensate for insufficient grassland to sustain either animal or cereal husbandry.<sup>67</sup>

Maintaining common field cultivation under these circumstances required a ready labour supply. This was possible at Oakington where small tenant holdings combined with lack of other economic opportunities would have necessitated reliance on wage labour by the majority of the tenants.<sup>68</sup> Kitsikopoulos has calculated that even at 18-acres a peasant family would have to find wage-work 80 days out of the year to balance income and expenditure, so the fact that tenants at Oakington were deemed 'full-landed' at 15-acres points to a system in which wage labour was of particular importance.<sup>69</sup>

Given that the majority of tenants at Oakington would have been unable to produce more than a subsistence-level existence from their lands, the decisions they made with regard to cropping patterns is of even greater significance. It is in this light that the reeve's accounts must be examined. In order to assess peasant attitudes toward stability, proportions of %t have been tracked over time and then considered in conjunction with trends in yields per acre and per seed. To do this, the yield data have been plotted and the linear trend lines have been compared to changes in %t per crop. The positive and negative trends demonstrated over time in the datasets of %t and each of the yields is summarized in the table below.

<sup>64</sup> C.A.H. Hodge, *The Soils of the District Around Cambridge (sheet 188)*, (Harpenden, 1966).

<sup>65</sup> J.R. Heckman, and J.C.F. Tredow, 'Greensand As a Soil Amendment', *Better Crops with Plant Food*, 88 (2004), p. 16-7.

<sup>66</sup> H.E. Hallam in Hallam (ed.), *The Agrarian History of England and Wales: Volume II, 1042-1350*, (Cambridge, 1988), p. 337.

<sup>67</sup> T. Williamson, *Shaping Medieval Landscapes: Settlement, Society, Environment*, (Cheshire, 2003), p. 165.

<sup>68</sup> The 1344 rental shows 26 'fullondid men', 7 'five-acre men' 4 croftmen and 2 cottars, Page estimates the 'full-landed' men were half-virgaters with 15 acres, while the rest held five acres or less (Page, *Crowland Abbey*, p. 89). CUL Q.Box 6 l. 36 (1397/8) indicates the presence of eight cottars.

<sup>69</sup> Kitsikopoulos, 'Standards of Living'.

Table 4: Trends of crop yields and crop percentages of tithe receipts<sup>a</sup>

	Yield qr/acr <sup>b</sup>	Yield per seed <sup>c</sup>	%t
Wheat	+	+	+
Mixtil	+	+	+
Drage	-	-	-
Black Peas	/	/	-
Oats	+	+	+

<sup>a</sup> Showing positive (+), negative (-), and stable (/) trends.

<sup>b</sup> Yield is taken from the amount of grain received per acre as estimated by in the reeve's Accounts.

<sup>c</sup> Yield is taken from the amount of grain estimated per acre in the reeve's Accounts and divided by the amount sown per acre.

The immediate question raised by these trends is whether the receipt of the tithe was in fact simply a function of the increase or decrease in yields. However, the percentage of overall change in the yields is more marked than the percentage of change in %t over time. This method tests proportionality rather than real receipts to remove this bias, and because these yields are calculated from the demesne, they are meant to act not as precise figures for peasant yield ratios, but as markers of trends over time.

In view of this, the changes in cropping patterns are significant and show a marked shift in emphasis away from crop stability and toward a willingness to accept high risk for high returns. Wheat and mixtil had the highest potential yields, but these yields were extremely unstable, while drage and peas were consistently lower yielding, but much more stable in their returns, although drage shows a slight downward trend. Drage and peas were not only the most stable crops in terms of yields, but also the most flexible in terms of the purposes to which they could be put. Peas could be used as a green manure, as a nitrogen-fixing ground cover, as a food source for people and fodder for livestock; the dietary importance of drage was in its malt, and it could also be consumed as pottage or fodder. Yet oats were used only for unprocessed consumption as pottage or fodder, while the most soil exhaustive crops, wheat and mixtil, were only used for human consumption.

Overall the yields at Oakington were surprisingly high, routinely meeting or surpassing the expected yield to seed ratio.<sup>70</sup> The high levels of potassium (K) in the soil would have helped to offset the effects of waterlogging, and because growth in oats can be more affected by low K availability than other crops, the increase in pure cropped oats and their accompanying high yields is unsurprising. K levels might also explain the increase in mixtil production, as rye is a heavy K consumer. Additionally, the relationship between nitrogen (N) and wheat productivity is well-known, as is the importance of low N levels in barley used for malting.<sup>71</sup> Following wheat and mixtil with drage and oats was an effective method of dealing with changing soil nutrients over the course of the year. Attentiveness to soil quality is consequently demonstrated by the increasing yields over time in the crops that required the most intensive cultivation.

The tightly controlled foldcourse, the sowing of legumes before fallowing, the preference for less-exhaustive peas, barley, and oats over wheat and rye, and the high concentration of available wage labour, combined with the unusual mineral composition of the soil account for this productivity on demesne lands. While this does not necessarily

<sup>70</sup> B. Campbell, 'Arable productivity in medieval England: some evidence from Norfolk', *Journal of Economic History*, 43 (1983), p. 382.

<sup>71</sup> M. Ouknider, P. Jacquard, D. Elkhyari, 'Competition in Vicia-Sative L and Avena-Sative L.2. Effects of water and nutritional stresses on biomass and allocation of resources', *Agronomie* 11 (1991), 821-28; R.M. Mohr, et al, 'The influence of nitrogen, phosphorus and potash fertilizer application on oat yield and quality', *Canadian Journal of Soil Science* 87 (2007), pp. 459-68.

translate into equally high yields on the lands from the tithe receipts, most of the same aspects apply – the small-holdings would have allowed plenty of time and attention to be spent on soil preparation, the common fields necessitated the same crop rotation on the same soils, and drage and peas were in fact more prevalent on non-demesne than demesne land. That the overall changes in %t follow the overall trends of demesne yields is indicative of a level of productivity related to that of the demesne – that this relationship existed solely between demesne *productivity* and changes in %t and not in changes between %D and %t reveals conscious decision-making processes that, while possibly rooted in demesne agriculture, were not dependent upon it.

Analysis here has shown that there existed no significant direct relationship between demesne and non-demesne cropping patterns. However, further testing of long-term trends reveals a mediated relationship existed through yields over time in conjunction with landscape and the socio-economic circumstances resulting from a culture of small-holding. Even within the confines of the inflexible common fields at Oakington, peasants were able to maintain long-term production strategies through subtle changes in cropping. These changes shifted the balance from stable, multifunctional, lower-yielding crops to restrictive, potentially high-performance crops with variable yields. This changing emphasis on the part of peasants with small holdings demonstrates that they had achieved what they considered to be a system of production which afforded them sufficiently dependable returns. That these cropping strategies were not responsive to outside market prices reveals the inward focus of peasant production objectives on small holdings. Peasant cropping strategies were thus the result of the interplay between a series of complex biological, social, and structural factors. It is therefore misguided to define agrarian success solely in terms of maintaining yield ratios or increasing cash flows. The real measure of agrarian success was not the ability to maintain stability, but the ability of peasants to consciously reject stability in favour of risk.

# Comparative evolution of institutions: property rights on land in the Ottoman Empire and modern Turkey

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## 1. Introduction

Many institutional economists including Nobel Prize winner Douglass North showed that the quality of institutions is positively linked with economic performance. In particular, it has been argued that income levels and growth rates of countries with secure property rights are higher than that of other countries where property rights are not properly protected. In the light of these findings, we investigate the evolution of property rights on land in the Ottoman Empire and modern Turkey in a historical perspective and conclude that because of the state ownership of land, i.e. insecure property rights, the Ottoman Empire failed to catch up with her European rivals in the period of industrialization and modern Turkey, inheriting these bad institutions, never managed to reach the income levels and growth rates that she desired.

As it is commonly known, in pre-capitalist societies, agriculture is the predominant sector of the economy. Bearing in mind this information, the most important property right that needs to be protected in such economies is the rights on land. In other words, land ownership structure greatly matters for economic performance. If individuals own their lands, they will have higher levels of incentives to invest. However, if somebody else has the power to confiscate individual's property, this incentive to invest will be lower, in some cases non-existent. Thus, it can be concluded that more secure property rights in land ownership leads to higher investment, which in turn increases both income levels and growth rates.

In order to understand the economic performance of the Ottoman Empire and modern Turkey, it is imperative to look at the institutional formation and evolution of these two successively established countries. Hence, in this paper we will investigate why certain types institutions were chosen and applied over other alternatives and how they changed throughout the course of time.

## 2. Ottoman Land Regime

The main form of land ownership in the Ottoman Empire was what was called the *timar* (fief) system. The basics of this system include the fact that the state grants a certain amount of land to a person in return for military service. The person who is granted with fief (called cavalryman with fief/*timarli sipahi*) not only attends campaigns but also has to bring auxiliary horsemen in proportion with his land size. In other words, these people constitute a part of the Ottoman army and are paid by collecting taxes from the peasants. Hence, they are soldiers and they are not engaged in agricultural production themselves.

The production belongs to the peasants who pay in kind taxes to the state. These cavalrymen are also responsible for monitoring peasants and distributing land to farmers within their fiefs. Yet, they have neither financial nor administrative nor judicial immunity (Pamuk, 2005). State officials can enter these lands with permission from the central government in order to conduct financial control. Similarly, cavalrymen with fief (*timarli sipahi*) are monitored via civil servant inspections for administrative purposes. On the other hand, local judges perform judicial duties. In addition, since the bare ownership of the land belongs to the state, the cavalryman does not have the right to sell, donate, bequeath, mortgage or transfer (Inalcik, 1994). Although this system started as a non-hereditary system, with the halt to the expansion of the conquered land, it became hereditary (Moutafchieva, 1988). Finally, if the cavalryman fails to fulfil his military duty or allows the peasants under his jurisdiction to leave the land uncultivated for more than three years, then the state has the

right to take back the land. If these conditions are not satisfied, the land cannot be taken away without a just cause.

### 3. Ottoman Land Regime and Feudalism

Some forms of feudal systems were observed in medieval Europe, New France and in Japan. In European feudalism, the lord grants a piece of land (and a castle) to his vassal as a payment for his services. The vassal and the lord have a special contract that bound them together. The vassal takes an oath of fealty and homage in order to acknowledge his lord that he would serve him as his warrior. On the other hand, the feudal lord was obliged to provide military protection, security and assistance for his vassals. The fief given to the vassal in exchange for his allegiance could be taken away from him, in the case of default (Duus, 1976). In the same way, the vassal could leave his lord if the lord failed his obligations to him. Furthermore, fiefs, during the early feudal era, were not hereditary and could be acquired by the son only when he himself became a vassal. Yet, it became hereditary at the later stages.

Secondly, the *timar* system can also be compared to the *seigneurial regime* in New France in late the seventeenth and eighteenth centuries. In the latter system, the King of France granted plots of lands to individuals called seigneurs with the aim of settling in the colony. The similarities of the two systems can be categorized as follows: first of all, in both cases, government prevented to create a large landed class and encouraged settlement and cultivation. Secondly, the rights of *timar* holders and of the seigneurs were limited. A seigneur's rights included status and honour within the society, collection of taxes, imposing *corvees*, taking away the lands of *cessitaire* (habitant) who did not cultivate, and reserving the right to fish. Thirdly, neither seigneurs nor the *timar* holders could have exclusive use of the land that they possessed. They could only retain a certain part of the land for their own use, which are the domain and the *hassa ciftlik* for the seigneur and the *timar* holder respectively. However, it is important to mention that although all seigneurs had a domain, not all *timar* holders had a *hassa ciftlik*. And finally, both the seigneur and the *timar* holder distributed the land to the peasants for cultivation. Yet, in the case of the former, farmers applied for the seigneurial lands and the seigneur had no right to refuse to cede lands without a reasonable cause (Trudel, 1967).

Between the tenth and fourteenth centuries, the power of the emperor in Japan was weak, but the power of the *bakufu*<sup>1</sup> was very strong. It is said that the feudal period of Japanese history starts with the first *bakufu*, *Kamakura Bakufu*, with its first shogun Yoritomo. During this period, Yoritomo ruled the country by ties of vassalage. He granted *shiki* (land rights) to the *gokenin* (honourable horsemen) in return for complete loyalty. In addition, the *gokenin* were charged with guarding of the *bakufu* headquarters during peace time and serving as armed soldiers in the wars (Duus, 1976). Yoritomo established his stability of power by distributing lands to these vassals for perpetuity, yet in regions far away from their native provinces, just as Ottoman sultans granted *timars* where the individual has no local power.

The similarities in Japanese and Ottoman feudalism in the above-mentioned eras are that both had relatively strong central powers, although in the case of Japan, the power is centralized in the hands of warriors, not the emperor. There are requirements for military services from the vassal in return for tax collection from the peasants. However, the rooted local nobilities were so much more difficult to remove in Japan than in the Ottoman Empire. Hence, in the end, *daimyo* (landlord class) power and general feudal institutions lived for a long time in Japan, whereas in the Ottomans such rises in the power of the landed class were continuously suppressed.

<sup>1</sup> *Bakufu* literally means a tent government. It is actually the political institutions that ruled Japan from 1185 until 1868 according to the customs and institutions of warriorship (Duus, 1976).

#### 4. The Evolution of the Ottoman Land Regime

How the *timar* (fief) system came into existence can be explained by using evolutionary game theory. Before the Ottomans, other systems, which resemble the fief (*timar*) system, existed in the areas where Ottomans conquered. For instance, in Anatolia, particularly Anatolian Seljuks, Persians, and their neighbours used a system called *ikta*. In this system, tax farms were divided and granted to soldiers by the central government in return for military service. The system was hereditary and the granted land could be taken away by the state in cases of misbehaviour towards peasants and failure to conduct military duty. Hence, *ikta* and *timar* systems are almost identical (Koprulu 1999, Moutafchieva, 1988). On the other hand, in the Thrace area, Ottomans found an intact land regime called *pronias*. Under the *pronoia* system, estates were given to both civil and military high officers, monasteries and private individuals. The recipient, who was granted the estate for a limited period of time (usually one lifetime), had to serve as a heavily mailed knight and bring a certain number of horsemen (depending on the size of his estate). Moreover, the recipient could not sell or bequeath the estate, although s/he was exempt from taxes and public works. S/he also had the right to exclude imperial officers from his lands and had a limited power of jurisdiction over the peasants (Kantorowicz, 1965).

Since very similar systems existed and survived in the lands occupied by the Ottomans, we can assume that the normal population was satisfied with maintaining the status quo. In other words, suppose that everybody in the population takes action X (keep the fief regime). But there is a small fraction,  $\varepsilon$ , which are mutants who follow action Y (a different regime). Since this is a large population, the probability of a person who takes X being matched with a mutant is  $\varepsilon$  and probability of a normal person being matched with a normal is  $1-\varepsilon$ . Suppose the payoffs are as follows:

Figure 1

	X	Y
X	2.2	0.0
Y	0.0	1.1

Source: Osborne (2004), p. 395

This shows that the expected payoff of a normal person is:

$$2(1 - \varepsilon) + 0(\varepsilon) = 2(1 - \varepsilon) \tag{1}$$

Similarly, the expected payoff of a mutant person is:

$$0(1 - \varepsilon) + 1(\varepsilon) = \varepsilon \tag{2}$$

If  $\varepsilon$  is smaller than  $2/3$ , then  $2(1-\varepsilon) > \varepsilon$ ; which means the expected payoff of every normal person is greater than the expected payoff of every mutant. In this case, the action X is evolutionarily stable or is a best response to the environment. Given that the action X is an evolutionary stable equilibrium of this game, it can be concluded that Ottomans keeping the existing land regime is a stable outcome, which will persist until new random disturbances affect the environment.

Outside disturbances to the system start in the fifteenth century. There are three main external impacts that cause changes to the normal action X from keeping the fief system to a new system. First of all, due to worsening economic conditions, rural populations in Europe started to migrate to the cities. This, in turn, led to commercialized agriculture to feed the increasing urban population. Secondly, technological improvements in shipbuilding and seamanship opened the way to geographical discoveries. The new colonies of the Western European states provided huge amounts of silver and gold, which spread to Europe and to Asia. The rise in money resulted high levels of inflation. The Ottoman Empire, who could not compete with the flow of bullion, had to debase her currency. Lastly, the spread of soldiers with firearms caused an increase in the power of the European armies against others. As a

response to this development, the Ottomans raised the number of waged soldiers of the central army with proper military education (in the beginning of 1550, the number of waged soldiers rose from 13,000 to 38,000) and the cavalrymen who fought with bows, arrows, and swords, sharply lost importance (Pamuk, 2005).

The above-mentioned disturbances caused the normal population to take action Y and mutants to take action X. In this case, the expected payoff of a normal person (left hand side) is greater than that of a mutant (right hand side), if  $\varepsilon$  is smaller than 1/3:

$$1(1 - \varepsilon) + 0(\varepsilon) = (1 - \varepsilon) > 2(\varepsilon) + 0(1 - \varepsilon) = 2\varepsilon \quad (3)$$

Hence, action Y (change the system) is an evolutionarily stable equilibrium.

Although the change demanded by the population, especially by the cultivators, was towards more private property rather than state ownership of the land, because the central authority in the Ottoman Empire was very strong, the ownership remained in state hands. The new introduced system was tax-farming (*iltizam*). According to this system, the right to collect taxes from the peasants was taken away from the cavalrymen and was auctioned and granted to private individuals in return for a lump sum. The difference between this paid sum and the tax collections constituted the profits of the tax farmer (*multezim*). In the beginning, the rights were granted only for one to three years, which functioned properly for a period of time. Tax farming was profitable for the state, because it was a risk-free method of tax collection. In addition, it provided the necessary urgent income to the treasury. Nevertheless, from the peasants' side, the system was a total failure. Tax farmers, who were motivated by profit maximization, increased the pressure on the cultivators. Observing the dissatisfaction of the peasants, the state intervened and in 1695, introduced a similar system called *malikane* that is granted for a lifetime. The peasants' status improved by a small degree as the system evolved into being a hereditary system; however, neither the state nor the peasants were fully satisfied with this new outcome.

In the *Tanzimat Devri* (Reform Era), which occurred in the mid-nineteenth century, the far-sighted emperors tried to improve the peasants' conditions and to increase the tax revenue by eliminating the old institutions and introducing new codes to regulate the land regime. By this time, many individuals abused the state ownership system and confiscated state lands. In addition, there were other private landholdings<sup>2</sup> in the Ottoman Empire, particularly held by local notables and high-ranking civil servants such as judges and former viziers. These lands were generally non-arable lands given by the Sultan himself. Moreover, by reclaiming dead lands that are owned or used by nobody, an individual can obtain freehold title of the land. The reclamation process has certain rules that have to be followed, regulated by the code. All these, the existing freehold lands and conversion of state lands into freeholds, show that there has been a movement towards private property. This movement persisted and formed the basis of the land regime in modern Turkey.

## Conclusion

The Ottoman land regime was based on state ownership and granting these lands as fiefs in return for military service. Because of this structure, the incentives to invest were very small; hence the Ottoman Empire failed to catch up with her contemporary European rivals. However, with random disturbances changing the motivations of the population, the state land regime evolved and today private property principles prevail in modern Turkey.

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<sup>2</sup> There were different types of private landholdings. First of all, there was *memluk arazi* (true freehold) where the bare ownership belongs to the individual with the right to collect taxes. Second, there was *malikane-divani* (dual ownership). Here, the bare owner is the individual, but the state has a *divani* share, the share to collect taxes. In addition to the taxes, the peasants have to pay rent to the owner. Third, there was *eskunculu mulk* (private land with armed men), where either the land itself or the tax revenue is granted to the individual as freehold property; however, the owner has military obligations. Different from fiefs, the owner has the right to sell, donate, bequeath, mortgage and transfer his grant.

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## Changing with the Yellow River: an environmental and economic history of Hebei, 1048-1128

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The period between the eighth and twelfth centuries is regarded as a transitional age in Chinese economic and social history, which, as scholars have pointed out, is marked by the shift of the economic centre from north China to southeast China, agricultural advancement, commercial expansion, and the flourishing of urban society.<sup>3</sup> These signs of economic growth, however, are evident mainly in the lower Yangtze delta in south China according to previous studies. Then, can the experience of the lower Yangtze delta explain the situation in the whole country? How are the other parts of China during this transitional period, especially north China, the previous Chinese food granary? Does the growth in the south suggest a definite economic degradation in the north? If yes, to what degree does north China's economy degrade?

My research aims to approach these questions by giving a regional case study on a northeast-China province, Hebei, in the eleventh century. Different from previous opinions that Hebei's economy was greatly damaged by wars, political separation among warlords, and nomadic invasions, I propose to show, firstly, that Hebei's failure to recover and develop its traditional economic form, agriculture, in the favourable social environment is due largely to the deterioration of its natural conditions (for example, the increase of natural disasters, the changes of its landscape, and the rapid depletion of its natural resources). Secondly, Hebei's agricultural degradation did not shadow its other economic sectors with the same fate, but accompanied the flourishing of silk, ceramic, iron, and coal production and the commercial prosperity in different parts of the province. Subregional economic diversities became very prominent in Hebei in this century.

This paper will not cover the whole research, but examines only one of the significant environmental factors, the Yellow River's shifts and floods between 1048 and 1128. It argues how these changes undermined the natural foundation of Hebei's agriculture, forced Hebei's population to decline, and led different parts of the province to adjust their economic activities in distinct ways.

### **The Yellow River floods and their impact on Hebei's population and agriculture**

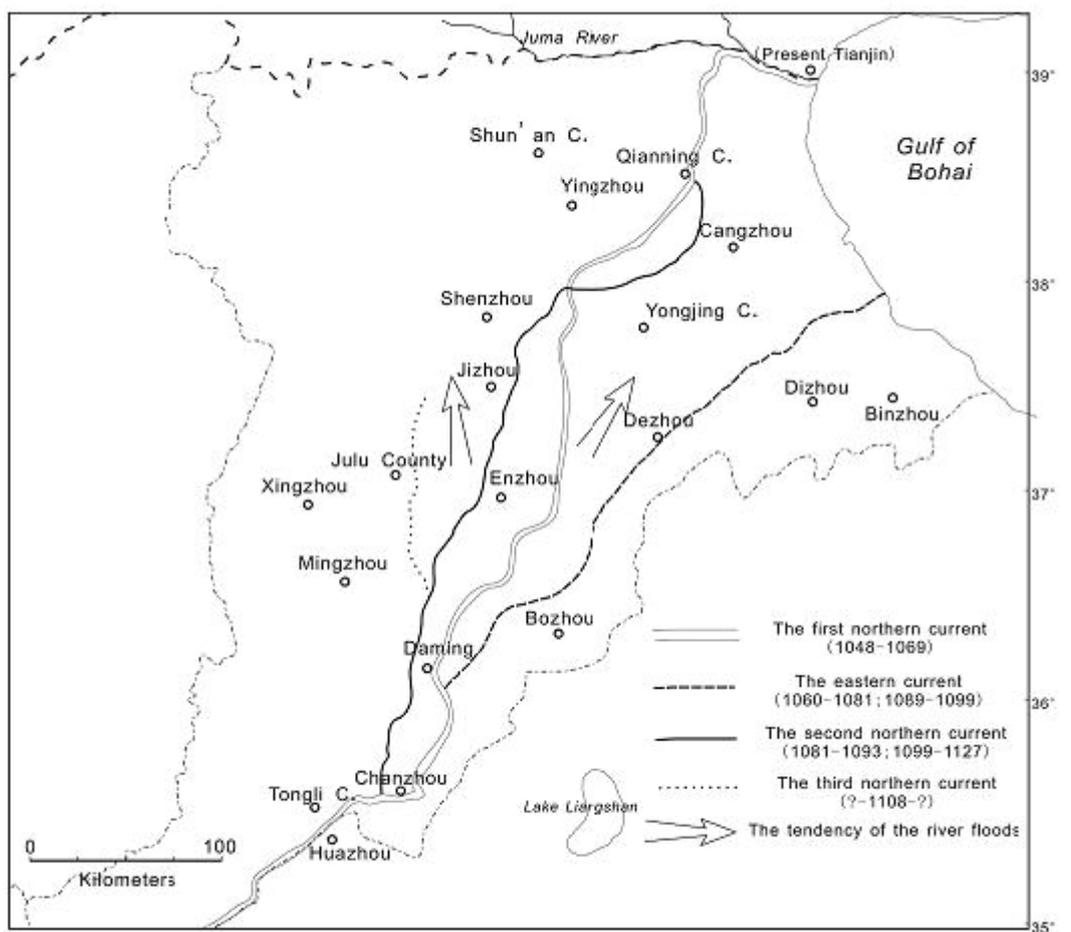
Located in northeast China, the vast, low-elevated plain of Hebei is embraced by mountains in the north and west, the sea in the east, and China's second largest river, the Yellow River, in the south. This geographic setting today, similar to that before the eleventh century, had a dramatic change in 1048.

In the sixth lunar month of 1048, the Yellow River burst its northern bank and shifted its course into Hebei after having edged this province's southern border for a thousand years.<sup>4</sup> It thus scoured a northward course, stretched 600 kilometres throughout the central plain, and then turned north-eastward into the sea, (map 1). From 1048 to 1128, this northern course swung and shifted on the Hebei Plain, inflicting immense human catastrophes. Reportedly, serious floods that killed or displaced up to 1 million people occurred at least in 1048, 1068, 1077-8, 1099, and 1108; in addition, nearly three hundred thousand in 1056 and five hundred thousand in 1081 perished and were driven to flee due to the floods.

<sup>3</sup> Most influentially argued by Chi Ch'ao-ting (1936), Shiba Yoshinobu (1968), and Mark Elvin (1973).

<sup>4</sup> *Xu zizhitongjian changbian*, vol. 165, p. 3965.

Map 1: Northern Courses of the Yellow River (1048-1128)



To a considerable extent, these disasters suppressed Hebei’s demographic growth in the eleventh century. As table 1 shows, although Hebei’s registered household numbers in 1078 and 1102 double the number between 980 and 989, which is quite small due to the war damage and dropping-off from registration, they cannot catch Hebei’s demographic level in the mid-eighth century. And more importantly, given the stable political circumstances enjoyed by the whole country, Hebei failed to join the dramatic demographic boom which brought the country’s population up to 1 hundred million at the turn of the twelfth century (on average five persons per household). Its share of the country’s population keeps descending.

Table 1: Hebei’s household numbers during the eighth-twelfth centuries<sup>5</sup>

Year	729	754	980-9	1078	1102
National household number	7,417,185	9,069,154	6,108,635	16,546,450	20,264,307
Hebei household number	1,220,826	1,547,784	605,479	1,232,649	1,163,780
Proportion	16.46%	17.07%	9.91%	7.45%	5.74%

Beside the demographic loss, the immediate damage from the disasters was imposed on Hebei’s agricultural production. According to the harvest records collected from various Song-Dynasty documents, 18 good and bumper harvests are reported in the 47 years before the Yellow River’s 1048 shift, mostly from the whole province or from its southern and central parts. Only 12 good harvests are reported in the next 53 years of this century, mainly from the western, south-eastern, and sometime southern parts of the province. Central Hebei where the Yellow River passed through and provoked frequent floods saw no record for good

<sup>5</sup> Figures collected from various volumes of the Jiu tangshu, Taiping huanyu ji, Xu zizhitongjian changbian, and Yuanfeng jiuyuzhi.

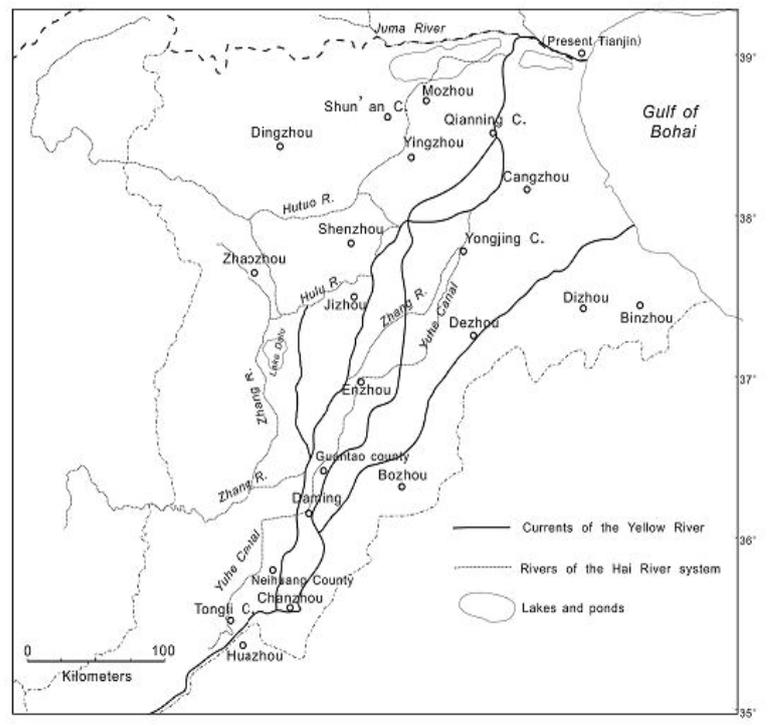
harvests after 1048. Meanwhile, the records of poor harvests, food shortage, starvation, and famines appear more in number and higher in severity: 8 years report food shortage and starvation from 1001 to 1047, while nearly 30 years report food shortage and serious famines from 1048 to 1100. Dreadful circumstances as some statesmen witnessed, ‘fathers and sons ate each other’, occurred in the flooding years of 1048, 1068, and 1099.<sup>6</sup>

Provided much of its central plain was damaged by the floods, Hebei could no longer produce sufficient food to feed its people, refugees, and military troops. Here, we do not have clear figures to indicate how much grain Hebei produced, consumed, or imported for the civilian need. But for the military population, three to four hundred thousand in the second half of this century, it constantly required 6.15 million mixed measurements of grain and other materials every year, of which only 8 per cent was provided by Hebei’s own production, while the remaining 92 per cent relied on importation.<sup>7</sup> In contrast to its previous status as agricultural exporter in the eighth century and self-sufficient producer in the ninth and tenth, Hebei now became a large consumer and heavy fiscal burden to the central and local governments.

### Environmental consequences of the river disasters

What I concern more, however, is not these phenomena of agricultural recession, but the deterioration of the natural foundation for Hebei’s agriculture (for example, water and soil) which, I believe, for a long-run pinned down Hebei’s potential to recover and develop its agriculture and to regain its position as China’s granary as in the eighth century – a key point to understand the medieval China’s economic transition. Before 1048, despite some changes in the political geography, few changes happened to Hebei’s natural geography and natural resources. The shift of the Yellow River’s course in 1048 struck this stable landscape in a dramatic way, firstly by disordering Hebei’s local water systems, taking over their river courses, and forcing some of them to change courses and flood.

Map 2: *Hebei’s water systems, 1048-1128*



<sup>6</sup> *Xu zizhitongjian changbian shibu*, vol. 3, p. 125.

<sup>7</sup> *Xu zizhitongjian changbian*, vol. 184, p. 4450.

Secondly, being deposited by the Yellow River's heavy silt, many local streams and lakes were blocked and even dried up permanently. For instance, the Yuhe Canal, crossing Hebei over 500 kilometres, used to serve as the essential link between Hebei and its southern neighbours for transporting military and commercial goods to the empire's northern frontier since the early seventh century. This Hebei's artery, being extensively blocked by the Yellow River's silt after 1048, could no longer carry boats in the late eleventh century – a further disaster to Hebei which suffered severe food shortage and thirsted for external relief.<sup>8</sup>

The more far-reaching environmental consequences are soil salinization and sandization in the central part of Hebei. The excess water of the floods accumulated on this low-elevated plain, inundating its arable lands and enhancing the saline and alkaline contents in the soil. Song sources, either official reports, memorials, literature, or miscellaneous writing, indicate that many lands could hardly support tilling and planting, but turned to be ponds from which local people fished and collected wild food to make a living, or to become so salinized that people could extract salt from them. Where the Yellow River's floods spread and its course passed, the River's silt, mainly sand, quickly deposited. Blown by wind the sediments formed extensive sand dunes. In southern Hebei such sandy landscapes were frequently witnessed from the late eleventh century. And throughout the following centuries till the mid-twentieth, it caused sandstorms year by year, seriously damaging the local agricultural production.

The deterioration of Hebei's landscape and soil was further exacerbated by the depletion of vegetation, due largely to flood-control efforts. As one of the periods suffering severe floods, the eleventh century saw important innovations in hydro-technology, especially using vegetal materials (timber, wooden sticks, grass, hay, crop straw, etc.) to build fascine dykes. According to the dyke-construction regulations in this century, to build one fascine dyke costs 38,500 to 0.7 million bundles of wood and grass, meaning 2,300-46,000 m<sup>3</sup> in volume.<sup>9</sup> Given a similar amount destroyed during the construction, the mean figure of the actual amount for a single dyke is 0.8 million bundles. After the initial construction, there followed the annual maintenance cost of 0.2222 million bundles for each dyke. Provided at different time the dykes were built, let us assume a dyke sustained 40 years on average during 1048-1128; thereby, it required nearly 9 million bundles for its overall maintenance cost.

Calculating in this way, a single dyke in Hebei would cost nearly 10 million bundles of vegetal materials, roughly 0.58 million m<sup>3</sup>. Before the River shifted into Hebei, only five dykes whose names were recorded in Song documents were located inside Hebei; this number then soared to 43 between 1048 and 1128. Thus, during these 80 years, an overall amount up to 25 million m<sup>3</sup> of vegetal materials was used to protect the Yellow River's course in Hebei. But, even this huge number is an underestimate, because fragmentary sources show that emergent and serious floods brought up the cost drastically, and Hebei's actual fascine dykes were much more than the 43 whose names were recorded.

This tremendous amount of vegetal materials was largely collected from Hebei. As a consequence, for the first time in its history this region experienced a serious shortage of vegetal resources. Timber falling was pushed further from the plain into remote mountains; plants growing along local rivers were cut down to repair the Yellow River's banks; economic plants, especially mulberry trees, were frequently damaged, too. A vicious circle occurred during Hebei's environmental changes in this century: the Yellow River's floods → cutting trees to prevent the floods → vegetation deterioration and land erosion → increasing floods from the local rivers.

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<sup>8</sup> *Song shi*, vol. 95, p. 2356; *Xu zizhitongjian changbian*, vol. 278, p. 6810, and vol. 393, p. 9583.

<sup>9</sup> According to the *Hefang tongyi*, vol. *shang*, pp. 12-13.

### Regional economic diversities

I have no space here to discuss in detail how the river disasters and their environmental consequences impacted on Hebei's social economy. But two significant economic changes have to be pointed out. Firstly, Hebei's traditional agricultural production suffered remarkable recessions due to the direct damage from disasters, the shrinkage of arable lands, the decline in land fertility, and the shortage of agricultural labour force (high mortality, displacement, and the switch of occupation from agriculture to others like the water management and river maintenance).

Secondly, this agricultural recession did not occur equally in all parts of Hebei, but mainly in its central plain; to adapt to the changes in their external environments, other Hebei's subregions searched for distinct economic paths and showed great variations. South-eastern Hebei, for example, experienced an agricultural boom after the removal of the lower course of the Yellow River from this area. In the late this century, it produced nearly 30 per cent of the country's delicate damask silk, 20 per cent of its plain silk, and 18 per cent of its silk floss and thread, much more and better in quality than most of the other provinces.<sup>10</sup> Registered household numbers, given the better living conditions and the resettlement of emigrants from central Hebei, increased 70 per cent to its mid-eighth century level, in contrast to stagnation or decline in the other Hebei areas.

And western Hebei, although it did not enjoy similar agricultural development, became the country's most important industrial area. The ceramics it produced continue to be found in Northeast and Southeast Asia and the Persian Gulf. Its iron mining yielded 24 per cent in the 1060s and 38 per cent in the 1070s of the whole country's output, approaching 10,000 tons per annum.<sup>11</sup> And for the first time, the industrial boom brought along the fuel crisis in this province (just consider nearly 0.2 million tons of wood being used per year to smelt cast iron) thus stimulating the production and consumption of coal. The wide utilization of coal, at least in the aspects of the ceramic and iron production, fostered many technological innovations.

Regional diversities in economy, doubtlessly, drove the interflow of commodities both inside Hebei and between Hebei and other parts of the country, or, farther, other countries. Apart from the silk, porcelain, iron products, coal, salt, and timber mentioned above, grain, the most wanted thing in this province, became a significant item at Hebei's market. We surprisingly find that Hebei's commercial prosperity was to a considerable extent a result of Hebei's frequent disasters, poor harvests, and its heavy burden of military population. Until the late eleventh century, this province became the top commercial tax payer to the central government among all provinces.

### Conclusion

The so-called 'Tang-Song transition' is not merely a south-China phenomenon; eleventh-century Hebei did experience an extraordinary economic transition. But different from many south-China provinces where the improvement of agriculture and other economic sectors were both evident, Hebei's circumstances, full of subregional diversities and imbalance among different economic sectors, were rather complicated. Then, some Joseph Needham-style questions arise here: why did the hydro-technological advancement in the eleventh century fail to protect Hebei against the river disasters? Why did Hebei's agriculture not revive after the disastrous Yellow River removed in the early twelfth century? Why did Hebei's flourish in manufacture, industry, and commerce fail to carry on after the eleventh century but declined along with its agriculture until the twentieth century? These questions shall be pursued in other sections of my research by drawing on the empire-wide political, economic,

<sup>10</sup> Based on the figures from the *Songhuiyao jigao*, 'Shihuo', 64: 1a-11b.

<sup>11</sup> Despite disagreement among scholars, I give this more conservative and prudential estimate based on the *Songhuiyao jigao*, 'Shihuo', 33: 12b-14a & 27b-28a, which is argued in detail in the relevant section of my research.

and environmental history during the eleventh and twelfth centuries. But none of these questions could be fully explored without understanding Hebei's environmental changes in the eleventh century, especially the course shifts and floods of the Yellow River.

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## Postwar parallels: central planning in East and West German higher education from the mid-1960s

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Despite the huge differences in the social systems of East and West Germany, there were a number of intriguing parallels in the development of their respective systems of higher education. One involved the attempt by both central governments to impose a ‘manpower demand’ approach to the structuring of higher education, coupled with a much greater emphasis on applied research in higher education and closer links with industry in order to promote technological progress. While the attempt, and failure, to do this was not unique to the Germanys, this paper will argue that the failure of the strategy in the Germanys was due as much to political manoeuvring, entrenched socio-economic networks, and over-complicated bureaucracy as to the difficulty of adapting the slower cycles of higher education to rapid technological change.

### Restructuring West Germany

Perhaps the most obvious parallel feature of postwar East and West German higher education was the marked expansion of higher education provision, as the following table demonstrates.

Table 1: *Student Numbers in Higher Education East and West Germany 1951-84 (1955=100)*

East Germany		West Germany	
Year	Students	Year	Students
1951	42	1955	100
1955	100	1960	152
1960	136	1965	190
1965	149	1970	256
1970	192	1975	634
1975	183	1980	837
1980	174	1984	1,087
1984	173		

Sources: R. Rytlewski and M. Opp de Hipt, *Die Deutsche Demokratische Republik in Zahlen 1945/49 – 1980*, (Munich, Verlag C.H. Beck, 1987), p. 159

Statistisches Bundesamt, *Wirtschaft und Statistik*, issues 1956 – 1990 (selected tables)

Expansion was not initially a deliberate policy decision in West Germany. Indeed, an inherently elitist, undemocratic, and autonomous professoriate stated its wish to retain higher education as “an organic order of spiritual protection and learning ... against the incursion of fanatical masses of students and instructors”.<sup>1</sup> The persistence of this attitude over the next several years is demonstrated by the following OECD table.

<sup>1</sup> Karl Jaspers cited in Steven P Remy, *The Heidelberg Myth: the Nazification and Denazification of a German University*, (Cambridge, Mass., Harvard University Press, 2002), p. 120.

Table 2: *Predicted growth in numbers of Abiturienten\* to 1970*  
(based on average annual growth rate from 1959)

Country	Abiturienten 1959 in 1000s	Predicted Abiturienten 1970 in 1000s	Predicted % Increase
Yugoslavia	38.1	94.4	148%
Norway	4.9	13.0	165%
France	59.1	150.0	154%
Belgium	10.4	20.8	100%
Sweden	10.5	25.0	138%
Italy	55.6	116.6	110%
Denmark	3.8	8.5	124%
Netherlands	10.0	20.0	100%
<b>W Germany</b>	<b>51.4</b>	<b>53.3</b>	<b>4%</b>

\*Those leaving school with qualification for higher education

Source: OECD Third Survey of Educational Provision in Picht, *Die Deutsche Bildungskatastrophe*, (Olten und Freiburg im Breisgau, Walter-Verlag, 1964), p. 27.

Pressing economic and political imperatives intervened, however, to force change. These included an upturn in population numbers, the increasing democratization of society, the growing influence of supra-national organizations such as the EEC, and greater exposure to the education systems and political and economic agendas of other countries. Most urgent from the federal government's standpoint, however, were the increasingly manifest deficiencies in the areas of the natural sciences and technology and the widening technological gap between Germany and the USA. This was particularly critical in the light of an accelerating brain drain to the US and the building of the Berlin Wall in 1961 which effectively cut off the flow of refugees from East Germany, who, to a large extent, had been compensating for the lack of qualified manpower in the West. Moreover, rapidly changing industrial technology required an increasingly flexible labour force and the constant acquisition of new skills. In order to remain competitive internationally, therefore, more graduates, especially in science and technology, were essential.

The education system was duly reformed; however, the size and relentlessness of the consequent demand for higher education places completely overwhelmed capacity. Nor were the preferred study options, namely medicine, philosophy, and the humanities, considered economically desirable by a government anxious to acquire more engineers and scientists. By the end of the 1960s, therefore, the federal government refused to continue expanding capacity to meet individual demand on both financial grounds, calling it a "*Faß ohne Boden*" (bottomless pit),<sup>2</sup> and because of the potential impact of an oversupply of the 'wrong' type of graduate on the labour market. Entry was restricted to an increasing number of courses, but the government's main objective was to tailor higher education provision to the manpower needs of the economy. To that end it commissioned large numbers of manpower forecasts over a number of years, most notably those of Riese et al in 1967,<sup>3</sup> Widmaier in 1967,<sup>4</sup> and Alex et al in 1972.<sup>5</sup> Unfortunately for the government, there were very substantial

<sup>2</sup> Klaus von Dohnanyi, 'Vorlage zur 13. Sitzung des Planungsausschusses für den Hochschulbau' am 23.10.1972, in BAK B 247/27 Ausschuß für Hochschulbau des Wissenschaftsrates.

<sup>3</sup> Hajo Riese, *Die Entwicklung des Bedarfs an Hochschulabsolventen in der Bundesrepublik Deutschland*, unter Mitarbeit von Thomas Kempf, Alexander Krafft und Helmut Schweikert, Wiesbaden 1967.

<sup>4</sup> Hans Peter Widmaier, *Bildung und Wirtschaftswachstum, Modellstudie zur Bildungsplanung*, unter Mitarbeit von B. Frey, M. Altwegg, A. Krafft und P. Lardi, in *Bildung in neuer Sicht*, Schriftenreihe des Kultusministeriums Baden-Württemberg zur Bildungsforschung, Bildungsplanung, Bildungspolitik, Vol. A, No. 3, July 1967.

<sup>5</sup> L. Alex et al., *Angebot und Bedarf an hochqualifizierten Arbeitskräften in der Bundesrepublik Deutschland bis 1980 – Arbeitskräftebilanz und Intensivanalyse*, 1972.

discrepancies between all the studies, most notably in the predicted needs for graduates in the humanities, engineering sciences and medicine. Where there was consensus, however, it was that, by 1980/1, there would be a need for double the number of graduates in the workforce and thus a further significant expansion of higher education. Such expansion, however, appeared virtually impossible without substantial reform of the structural framework of the old elite universities. Indeed, a report from the Working Group for Higher Education Didactics asked the *Hochschulen* to consider whether the traditional forms of academic teaching were sufficient or even relevant for the modern age.<sup>6</sup>

Supported by organizations such as the German Association of Technological and Scientific Organizations which had consistently bemoaned the lack of a future-oriented dynamic in the system, the Minister for Education and Science proposed the breaking up of faculties into smaller units, the systematic publication of research results, improved contact between higher education institutions to share research findings and improve the effectiveness of scientific study, and collaboration with employers to create suitable courses of study for specific areas of employment.<sup>7</sup> However, although the institutions themselves conceded that some changes might be necessary, most of their favoured measures focused on the further limitation of student numbers. Action on reform was, therefore, patchy at best and frequently non-existent,<sup>8</sup> for reasons both financial and political. In fairness, because financial responsibility for education rested largely with the *Länder*, large-scale reform would have seriously overstretched the resources of the smaller states such as Schleswig Holstein and the Saarland. More pertinently, though, achieving change required the cooperation of the federal government, the individual *Länder*, and that of every single institution of higher education within them. It also required consultation with, and the agreement of, a significant number of related organizations including the Committee of West German Rectors, the Education Board and the Scientific Council, “all working in a spirit of mutual distrust and conflicting interests” described as “organized anarchy and professional bureaucracy at once”.<sup>9</sup> It is probably fair to state, therefore, that the defining characteristics of policy-making in the higher education sphere were multilevel bargaining and resistance to reform. Hence, the country continued to produce twice as many humanities graduates as any other type.<sup>10</sup> It would be the mid-1980s before any substantive swing to the engineering sciences became evident.<sup>11</sup> Moreover, the political and educational infrastructures hardly altered through two decades while student numbers continued to expand exponentially, reaching well over 1.5 million by 1989. The concomitant problems of increasing student/teacher ratios, overcrowding, and underfunding were all detrimental to the research capabilities of the institutions.

### Restructuring East Germany

In the East the issue of the retention of the traditional German university system simply did not arise. Right from the start the goals of higher education, dictated by the State Planning Commission, were expected to conform to the needs of the economy. The expansion of

<sup>6</sup> Werner Thieme, ‘Arbeitskreis für Hochschuldidaktik, Erste Mitteilung’, Nov. 1967, in BAK B 251/1276 Akten des Deutschen Bildungsrats 1965-1975.

<sup>7</sup> Letter from Klaus von Dohnanyi to Theodor Heidhues 26 Sep. 1972, containing ‘Vorlage zur 13. Sitzung des Planungsausschusses für den Hochschulbau’, pp. 4-14 in BAK B 247/27 Ausschuß für Hochschulbau des Wissenschaftsrates 1972-3.

<sup>8</sup> Stand der Maßnahmen nach Länderangaben (Ziffern entsprechen dem 4. Rahmenplan) in Tischvorlage zur Sitzung der Arbeitsgruppe Kapazitätsfragen’ am 17. 1975, pp. 3-16 in BAK B 304/858 Akten der Ständigen Konferenz der Kultusminister in der Bundesrepublik Deutschlands.

<sup>9</sup> Helga A. Welsh, ‘Disentangling the Reform Gridlock: Higher Education in Germany’, Working Paper 02.7, Program for the Study of Germany and Europe, Wake forest University, 2001, p. 6.

<sup>10</sup> Statistisches Bundesamt, *Wirtschaft und Statistik*, (Stuttgart und Mainz, Verlag W. Kohlhammer GmbH), issue 1980, p. 470.

<sup>11</sup> Statistisches Bundesamt, *Wirtschaft und Statistik*, (Stuttgart und Mainz, Verlag W. Kohlhammer GmbH), issue 1985, pp. 392-3.

higher education, particularly in chemistry, engineering, mathematics, and the natural sciences was seen as crucial in order to produce the requisite number and type of graduate employees and researchers capable of producing, managing, and exploiting technological progress. If the first postwar years were concerned with renewal and reconstruction, the first two five-year plans in 1951 and 1956 prioritized the raising of the technological level and an increase in labour productivity which was then estimated to be around 15 per cent lower than that of West Germany. The aim was to “catch up and overtake” West Germany in per capita consumption of most consumer goods and food through the attainment of the “world level” of technology in the shortest possible time,<sup>12</sup> for which more engineers, natural scientists and, increasingly, subject-specific economists were deemed necessary.<sup>13</sup> Indeed, perhaps the most important driver of the East German push for technological progress was this economic competition with West Germany, tied in with the desire to increase the status of and legitimize the new nation in the eyes of both eastern and western Europe.

Three successive reforms in 1945-9, 1951-2 and 1968 completely transformed the higher education system through a process of denazification, democratization and sovietization. Centralized control was established, the academic year was extended from seven to ten months to include long periods of relevant work experience,<sup>14</sup> and curricula were changed with the introduction of much more narrowly specialized courses. The new institutions created, such as the Institute for the Construction of Heavy Machinery in Wildau, were almost exclusively technical in nature and were typically sited close to an area of relevant industrial production in order to tighten the links between research and practice.<sup>15</sup> The third higher education reform also saw the ‘profiling’ of higher education institutions. This was the development of complex centres of teaching and research in specific scientific areas geared toward special foci (*Schwerpunkte*) determined by the Five-Year Plans and based on the type of industry in the immediate area of the institution concerned.<sup>16</sup> Additionally, the large industrial associations (*Vereinigung Volkseigener Betriebe*) were required to finance new equipment for academia while state funding for research largely ceased in favour of contract, task-based funding from industrial enterprises or ‘social partners’.

Theoretically perhaps, increasing specialization under tight central control should have substantially assisted economic development through a focus on particular economic sectors. The problems lay in practice. Attempts to create scientific autarchy resulted in the virtual cessation of regular scientific contact with the West, effectively isolating the country from the scientific discoveries which were facilitating the development of Western technology. The ideology that only comprehensive and detailed planning could fine-tune supply to economic and societal demand also proved wanting in reality. Within higher education, successive expansions were consistently poorly planned and executed and were always under-funded and under-resourced, thereby further compromising both the quality of research and the education of the students. All research projects were determined by the Plans, but many of the R&D planners simply lacked the relevant technical knowledge, resulting in poorly conceived and supervised projects carried out without the requisite material, technical, or manpower resources. Moreover, many projects had to go through as many as 61 different consultative and administrative processes before being approved, greatly delaying their adoption and

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<sup>12</sup> Manfred Rexin, ‘Die Entwicklung der Wissenschaftspolitik in der DDR’, in Peter Christian Ludz (ed.), *Wissenschaft und Gesellschaft in der DDR*, (Munich, Carl Hanser Verlag, 1971), p. 100.

<sup>13</sup> Information über die Einschätzung der Leiter zentraler und territorialer Staatsorgane zu den bisherigen Ergebnissen der Aussprachen zur Konzeption in ihrer Verantwortungsbereichen’, 20 Jan. 1984 in SAPMO, DY 53/1085.

<sup>14</sup> *Protokoll des III. Parteitages der Sozialistischen Einheitspartei Deutschlands*, (Berlin, Dietz Verlag, 1951), p. 397.

<sup>15</sup> *Ibid.*

<sup>16</sup> Erläuterung zur weiteren Entwicklung der Lehre und Forschung an den Universitäten und Hochschulen der DDR’, from the Staatssekretariat für das Hoch- und Fachschulwesen, 5 Jan. 1966, SAPMO, DY 27/5832, pp. 20-4.

further impairing the synchronization between technology planning and the national economic plan.<sup>17</sup>

The demotion of basic research in favour of applied, and increasingly, production-oriented research may have been a feature in both countries but the degree to which it was implemented in East Germany simply did not square with the rhetorical demands of the government for pioneering technological breakthroughs and long-term perspective planning. By tying research ever more tightly to production through making industry responsible for its financing, there arose an irresolvable tension between the longer-term horizons of the researchers and the shorter-term aims of the industrial and agricultural collectives, whose first priority remained the fulfilment of their monthly and yearly Plan targets. Despite the common view of the party leadership that all results of scientific research and all new design ideas should be incorporated into production, there were constant and seemingly insurmountable difficulties in translating innovation into production, not least because the introduction of new technology to the workplace inevitably slowed production for a time, thus endangering plan fulfilment targets and therefore enterprise bonuses. The same applied to the introduction of new product designs; market research to determine precise customer demand was both neglected and ignored because it was easier and cheaper for firms to continue to produce older and increasingly obsolete products. Hence, innovation went unrewarded, the technological gap between the two Germanys widened considerably (particularly in more progressive areas such as electronics and plastics) and labour productivity fell to 40 per cent of the West German level by 1988.<sup>18</sup>

### Conclusion

Government attempts to tailor the provision of higher education to conform to the predicted manpower needs of the economy proved largely unsuccessful in all the industrialized countries which attempted it for a number of reasons. One was the difficulty of evaluating those needs in terms of the appropriateness of the skill levels of the current workforce and of second-guessing the pace of technological development and the skills levels needed to cope with it.<sup>19</sup> As Blaug argues, attempts to forecast manpower demand over any longer than a one or two-year period were “hopelessly inaccurate and little better than guesswork”.<sup>20</sup> Another was the inability to reconcile the much longer, slower-paced cycle of higher education reform with the increasingly rapidly evolving technological revolution. Other reasons, common to both East and West Germany, were political policy and ideology and the associated level of bureaucracy. In West Germany’s decentralized political framework, which might have been expected to be more responsive to market demands for increased numbers of technical and scientific graduates, politics and bureaucracy allowed vested interests to hijack the process. In East Germany the inflexibility created by over-centralization and an inefficient planning system hindered the country’s adaptation to a rapidly altering technological environment and prevented the realization of official policy.

<sup>17</sup> Raymond Bentley, *Technological Change in the German Democratic Republic*, (Boulder, Col., Westview Press, 1984), pp. 62-9.

<sup>18</sup> Raymond Bentley, *Research and Technology in the Former German Democratic Republic*, (Boulder, Westview Press, 1992), p. 41.

<sup>19</sup> Ulrich Teichler and Bikas C. Sanyal, *Higher education and the labour market in the Federal Republic of Germany*, (Paris, Unesco Press, 1982), p. 6.

<sup>20</sup> Mark Blaug, ‘Where Are We Now in the Economics of Education’, in Mark Blaug (ed.), *The Economics of Education and the Education of an Economist*, (Aldershot, Edward Elgar Publishing, 1987), p. 132.

## Irregular attendance and the gender literacy gap of 1870

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In the United States prior to the Civil War it had been policy in the former slave states to fine, whip, or imprison individuals who instructed slaves or free blacks to read or write. As a result of these draconian laws, it is estimated that only 10 per cent of slaves were literate on the eve of the Civil War.<sup>21</sup> Once freed, blacks vigorously pursued new educational opportunities through self-help, peer learning, and taking advantage of new schools established by the Freedmen's Bureau and Northern Aid Organizations. Evidence of this tremendous effort is shown in the census figures on literacy, as by 1870 over 25 per cent of blacks 10-15 years old living in ex-Confederate states could read.<sup>22</sup>

While many young blacks flocked to new educational opportunities, not all groups pursued these opportunities equally. While the racial gap in educational outcomes in the decades following the Civil War is well known and has been detailed in the literature, the gender gap in educational outcomes has not been widely discussed.<sup>23</sup> Young black females in 1870 had rates of literacy that were higher than their black male counterparts. Black males 10-15 years old who lived in the South had a literacy rate of 25.9 per cent, while their female counterparts had a literacy rate of 28.9 per cent. Although females had higher rates of literacy, males had rates of school attendance very similar to those of females. The rate of school attendance for males 10-15 years old living in the South was 11.3 per cent, while for females it was 12.5 per cent. If males and females attended school at a similar rate why the large gap in educational outcomes? New data from the Bureau of Refugees, Freedmen, and Abandoned Lands helps shed some light on this confounding gap in achievement by revealing that male enrolment in schools was much more irregular than female enrolment during the spring and summer months. These findings indicate that traditional census measures of school attendance paint an incomplete picture of school attendance during this time period and are the reason for the seeming disconnect of school attendance and literacy outcomes. In addition to explaining the disconnect between actual and measured school attendance, this paper will examine some of the possible explanations for irregular enrolment among young black males living in the South.

The Bureau of Refugees, Freedmen, and Abandoned Lands, more commonly known as the Freedmen's Bureau, was an agency established by the United States government at the conclusion of the American Civil War to aid the transition of former slaves to their new lives as freedmen. One of the main activities of the bureau was helping to establish a system of schools for the freedmen. To chart the progress of these schools, the bureau kept extremely detailed records on the schools activities. The information collected by the bureau included the number and location of schools, student progress in specific subjects, the number and makeup of teachers, and the number and makeup of the students enrolled in these schools each month.

The data used in this study is on the makeup of the student body and was obtained from the Aggregate Statistical Report of the Bureau of Refugees, Freedmen, and Abandoned Lands. This is national level data for the time period of November 1866 to April 1870. From this data one can observe the pattern of monthly enrolment during this time period. The data quickly reveals that the makeup of the student body, especially with respect to gender and age, changed greatly from month to month. More specifically, male concentration spiked in the

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<sup>21</sup> Cornelius, Janet Duitsman. *'When I can Read My Title Clear'*.

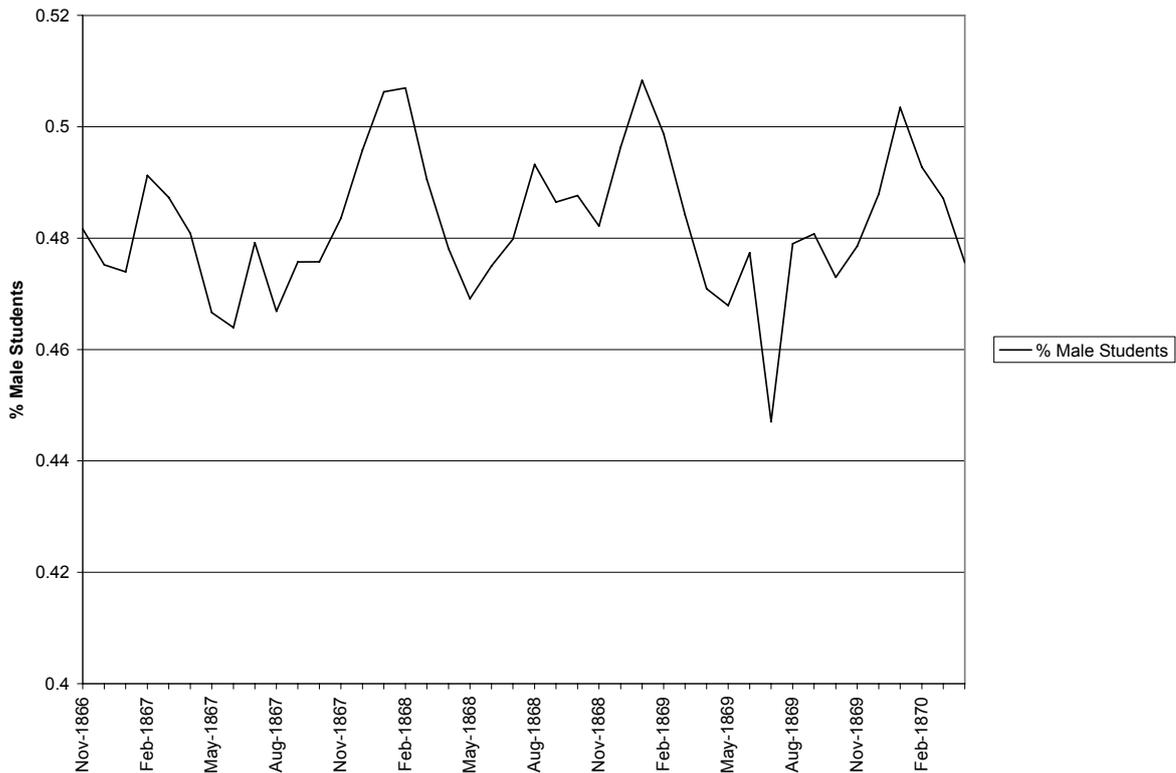
<sup>22</sup> Literacy rates were calculated using the IPUMS of the 1870 Census.

<sup>23</sup> For an extensive description of the racial educational gap see Margo (1990) or Collins & Margo (2003).

winter and decreased in the spring and summer months. Figure 1 displays the percentage of enrolled students that were males.

While males on average made up slightly more than 50 per cent of the student body in January, their representation in the student body was lower throughout the rest of the year – as males on average made up only 46 per cent of the student body during the spring and summer months. While males in the winter months had similar rates of enrolment in bureau-aided schools, this enrolment was much more sporadic than the enrolment of females throughout the rest of the year.

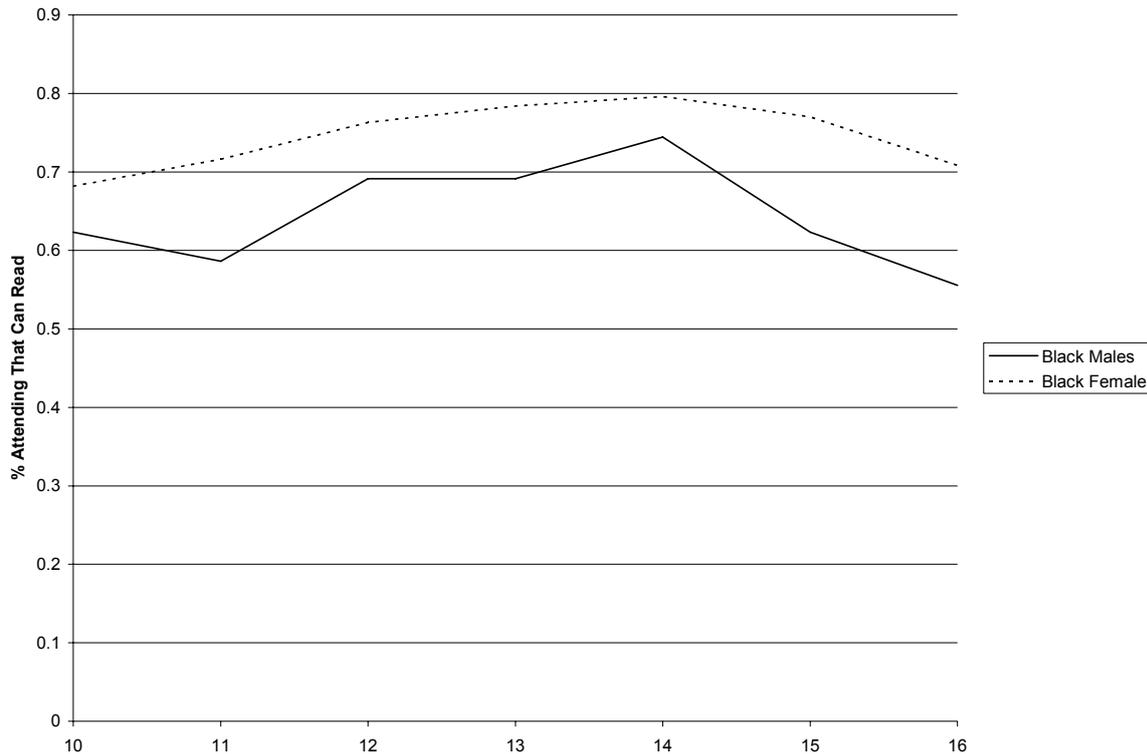
Figure 1



This variability in enrolment along gender lines has troubling implications for the reliability and usage of census school attendance measures. The measure used by the Census to gauge school attendance was self-reported by the child or head of household on whether they had attended school in the past year. This means that an individual who attended school one month was treated the same as someone who attended school for the entire length of the school year. While males and females had similar rates of attendance using the narrow census definition, in actuality male attendance in bureau-aided schools was much more irregular, as males dropped off school rolls at a higher rate month to month. These findings seem to explain both the seeming contradiction of similar rates of male and female school attendance and the simultaneously large gap in literacy outcomes.

While the bureau data indicates that males were on average enrolled for less time during the school year, there is a worry that this phenomenon was just present in those counties with bureau-aided schools. Fortunately, it is possible to delve further into the census data to examine whether irregular male enrolment was an isolated or widespread phenomenon. If black males attended school less regularly, school attendance should have been less effective in raising the literacy rates of those individuals who attended school. If this is the case one can restrict the sample to just those individuals attending school and look at their literacy rates. Figure 2 displays the literacy rates of 10-16 year old blacks living in the South.

Figure 2



The figure clearly displays that black males attending school were less likely to be literate. While 76.8 per cent of black females 10-15 years old attending school were able to read, only 70.3 per cent of black males 10-15 years old could do likewise. For each age, males attending school had lower rates of literacy than females of a corresponding age.

In addition to the direction of the gender literacy gap, the magnitude of the gender gap is very plausible. Looking at the Freedmen’s Bureau attendance data, one can calculate month-to-month enrolment as a percentage of peak enrolment for each sex during 1869. Making an assumption that all students who attended school in 1869 did so in their respective peak months, one can estimate the equivalent months that males and females were enrolled at bureau-aided schools. Using this method, I estimate that the average female was enrolled for 9.17 months, while the average male was enrolled for 8.82 months. This indicates that the average male was enrolled for approximately 96 per cent of the time an average female was enrolled. While the literacy rate of black males attending school was 91.5 per cent of the female literacy rate, enrolments probably underestimate the discrepancy between the regularity of male and female school attendance.

In addition to detailing these patterns of attendance this paper attempts to explain the factors that played into irregular school attendance. The fact that total enrolment and male concentration in the student body dropped in the spring and summer months and remain low in the early fall indicates that the crucial planting and harvest periods could have driven students out of schools and onto farms. This paper tests whether farm areas and certain crops were correlated with irregular school attendance. In addition to testing whether the concentration of certain crops led to irregular attendance, this paper also controls for a litany of county, family, and personal characteristics that could influence school attendance.

The measure used as a proxy for the regularity of school attendance is whether an individual attending school was reported as literate. If an individual attended school on a more regular basis, school attendance, as measured by the census, would be more effective in increasing literacy. Thus, in areas where attendance is more regular an individual counted as attending school would have a higher probability of being literate.

Information on an individual's school attendance and literacy status was obtained from the Integrated Public Use Micro Sample of the 1870 Census. Observations are at the individual level. The population studied is individuals 10-15 years old living in the former confederate states. The age group chosen is the prime school aged population. While younger individuals would have been included the Census does not have information on the literacy of those under the age of ten. In addition to having information on school attendance and literacy outcomes, this source provides a wealth of information on the personal and family characteristics of an individual. Data on crop mix, manufacturing activity is obtained from the Census of 1870 and was digitized by the ICPSR. Equation 1 displays the equation that will be estimated, where  $X_i$  is a vector of individual and family characteristics,  $\Psi_C$  is a vector of county characteristics, and  $State_s$  controls for state differences in literacy rates.

$$\text{Prob}(\text{Can Read}=1) = f(\alpha + B_1 \text{Gender} + B_2 \text{Crop Mix} + B_3 X_i + B_4 \Psi_C + B_5 \text{State}_s + E_i) \quad (1)$$

The crop mix variables used in the equation are the value of cotton production and the value of orchard crops as a percentage of total farm output. The harvesting of these crops were likely to attract child labour as the urgency to pick the crop was great and the labour was not as physically demanding as sugar and other crops. The equation also accounts for the general literacy level of the community by including the adult white literacy rate. To account for the level of industrialization the manufacturing wages per capita is included. Finally, individual and family characteristics used in the estimation include age dummy variables, whether an individual was classified as a mulatto, lived in a farm area, the total real estate wealth of the family, and the literacy status of the individual's mother and father. The marginal effects of this equation were estimated using a probit model.

Table 1 displays the results of this estimated equation. After controlling for observables, the estimates indicate that black females 10-15 years old attending school had literacy rates 7.8 percentage points higher than males the same age. This shows that the gender differential is not being driven by differences in observable characteristics. Surprisingly, farm status and crop mix seems to have had little impact on the literacy status of those attending school. Most surprising is that cotton concentration was not correlated with the probability an individual attending school was literate. Cotton harvesting was a job in which a child's labour was valued greatly, as it favoured hand dexterity over raw strength. Also surprising was that the marginal effect on whether an individual lived in a farm area is not statistically significant.

Some other personal characteristics were found to be related to literacy in the manner expected. Mulattos attending school were more likely to be literate. Mulattos had a higher probability of being free prior to the war, had higher incomes, and likely faced less discrimination. The estimates also indicate that a father's literacy status had a large impact on the probability that an attending child would be literate. While this is not surprising, it is confounding that a mother's literacy and the white literacy rate in the county were not estimated to be significant factors.

The results are mixed for the two economic variables chosen. The level of industrialization in a county seems to have had a large positive impact on literacy. In contrast, real estate wealth seems to have been unrelated to the probability an individual attending school was literate. This seems to contradict the literature showing that if parents have low incomes and are credit constrained they will invest less in the education of their children.<sup>24</sup>

<sup>24</sup> See Becker & Tomes (1986).

Table 1

Dependent Variable: Can Read (10-15 Year Old Coloured Population)				
Independent Variable	dF/dx	Standard Error	z	x-bar
Value of Cotton/ Farm Output	0.083412	0.056159	1.48	0.3596
Value of Orchard Crops/ Farm Output	-0.640171	1.628980	-0.39	0.0079
Manufacturing Wages Per Capita	<b>0.0116978*</b>	0.002070	5.57	7.1594
White Literacy Rate in County	-0.036256	0.100590	-0.36	0.8382
Farm Area	-0.056499	0.046971	-1.23	0.2120
Female	<b>0.0784826*</b>	0.030446	2.57	0.5099
Mullatto	<b>0.0686432*</b>	0.032593	2.01	0.2170
Female * Farm Area	0.006999	0.061875	0.11	0.1081
Father Can Read	<b>0.1185796*</b>	0.032690	3.35	0.2459
Mother Can Read	0.059711	0.039677	1.44	0.1840
Real Estate Property	0.000003	0.000007	0.52	386.51
State Dummy Variables		Yes		
Age Dummy Variables		Yes		

This paper has detailed a previously little discussed gap in literacy outcomes. Black females living in the South in 1870 had literacy rates significantly higher than their male counterparts. This gap existed despite census measures showing these two groups had similar rates of school attendance. While males and females attended school during the past year at a similar rate there was a vast difference in the consistency of their attendance. Using data from the Freedmen's Bureau, this paper finds that males dropped on and off school rolls at a much higher rate than females during this time period. The irregular attendance of black males rendered their school attendance less effective in instilling literacy. These findings are backed up by census data showing that black males attending school were less likely to be literate than females attending school. Preliminary estimates on the causes of irregular attendance are inconclusive. Gender, the level of industrialization in a county, and personal characteristics, such as skin colour and parental literacy seem to have had a large impact on the probability an individual attending school was literate. Surprisingly, whether an individual lived on a farm and crop mix seem to have had little influence.

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## Scottish local authorities and the development of the NHS, 1939-60

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The development of the Scottish health service, during the period 1939-60, is only beginning to be documented in detail, and the historiography has not fully considered the influence of local authorities. Local authorities provided health services within Scotland prior to the establishment of the National Health Service (NHS) and were key players within the health policy network which negotiated the NHS (Scotland) Act, 1947. This paper will consider three key themes within this relationship, including: the impact of the relationship between the Scottish Office, the Department of Health (DHS) and the local authorities on the negotiations leading up to the 1947 Act; the impact of local authorities on the implementation process; and the way in which the relationships formed affected the operation of the NHS.

The Scottish health service prior to the NHS was distinctive from its English counterpart. Such distinctions were particularly noted in 1913 when the Highlands and Islands Medical Service (HIMS), which provided free health care for the population of that region, was established. The HIMS was the first service to provide a range of free health services and incorporated a salaried General Practitioner (GP) service.<sup>25</sup> Furthermore, the need for advances in the Scottish health care system was recognized through the publication of the Cathcart Report in 1936, the Hetherington Report in 1943, and the establishment of the Clyde Basin Experiment in 1939. These reports and experiment in social medicine created a consensus within Scottish political and medical spheres that a comprehensive, regionalized health care system was necessary. Morrice McCrae argues that the consensus over Scottish health services was so widespread that the NHS was accepted with very few areas of conflict.<sup>26</sup> Jacqueline Jenkinson also acknowledges the smooth passing of the NHS (Scotland) Act in 1947, attributing this to the autonomy Scottish health services held before the Scottish Board of Health was established in 1919.<sup>27</sup> According to her view, the centralization of health services dispelled the fears of the Scottish medical profession of local authority control. The consensus that McCrae and Jenkinson highlight does not reveal the entire story.

My study uses policy network theory to analyse NHS development within Scotland. Policy networks occur when information is exchanged between interest groups and the government, acknowledging that the interest group has a concern over a policy area.<sup>28</sup> The approach taken in my study is in accord with the European literature dominated by the theoretical considerations of Rhodes. Rhodes identifies five types of network: policy/territorial community, professional network, intergovernmental network, producer network and issue network.<sup>29</sup> The prominence in both Scottish and UK political spheres of the Scottish Office make it an exceptional case. The uniting of central and sub-central interests, according to Rhodes, was embodied in the welfare state as professional groups became prominent in policy making and agencies such as the NHS were removed from regional control.<sup>30</sup> Scottish policy formation, however, can be seen as part of the central-local relationship whilst also having some autonomy from central government.

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<sup>25</sup> M. McCrae, *The National Health Service in Scotland: Origins and Ideals, 1900-1950*, (East Linton, 2003), p. 15.

<sup>26</sup> Ibid, p. 229.

<sup>27</sup> J. Jenkinson, *Scotland's Health 1919-1948*, (Bern, 2002), p. 443.

<sup>28</sup> M.J. Smith, *Pressure, Power and Policy*, (1993, Hemel Hempstead), p. 56.

<sup>29</sup> R.A.W Rhodes, *Understanding Governance*, (1997, Buckingham), p. 38.

<sup>30</sup> R.A.W. Rhodes, 'Territorial Politics in the United Kingdom: The Politics of Change, Conflict and Contradiction', in *West European Politics*, 10 (Oct 1987), pp. 27-8.

The health policy arena is usually typified as a professional network due to British Medical Association (BMA) dominance.<sup>31</sup> I would argue that there is a dual network, because an intergovernmental network was also established between the DHS and local authorities. As local authorities already administered health services, they should have had a strong position within the network. Within the intergovernmental network three associations represented local authorities: the Convention of Royal Burghs (Royal Burghs), the Association of County Councils (Counties) and the Scottish Counties of Cities Association (Cities).

### **Negotiations prior to the NHS (Scotland) Act, 1947**

Each association made representations at meetings held with the Secretary of State and the DHS. The liaison committee consisted of 15 members from the Associations and five members from the DHS.

The analysis of liaison committee discussions demonstrates that local authorities voiced their fears over the proposals within the NHS White Paper, 1944. The White Paper proposed that the Secretary of State for Scotland would be accountable to Parliament for the administration of the NHS. To assist the Secretary, the Central Health Services Council for Scotland would be established. Additionally, a tri-partite service would be established around GP, hospital and local health authority services. The hospital and specialist clinic services would be removed from local authority administration whilst they would continue to administer auxiliary services such as district nursing and maternity and child welfare.

Thomas Johnston, Secretary of State for Scotland, was central to setting the group dynamics in the discussions. Jenkinson attributes the relative smoothness of talks within Scotland to the strong leadership of Johnston.<sup>32</sup> Johnston certainly set the tone for the discussions of local authority views. His opening statement suggested that local authorities would have central administrative control within the NHS.<sup>33</sup> Johnston created an environment in which local authorities felt at ease over the new health service. Johnston, however, wanted hospital service administration to be undertaken by the DHS, thus keeping control of wartime services. Throughout discussions in March 1943, all three Associations agreed with the principles of an NHS administered by local authorities.<sup>34</sup> The Associations were under the impression that local authorities' place in administrative control was safe, and they could agree certain changes resulting from the establishment of the NHS without jeopardizing their central place in its administration.

Nevertheless the Associations brought up many problems they perceived with the proposals, such as: representation on central boards and committees; the dominance of the BMA; and the removal of hospital services from local authority control. The Associations showed no sign of cooperating to gain a position of strength within the discussions. Archival research has not found any evidence that the Associations discussed a joint strategy for retaining health service administration prior to the meetings with the DHS.

When considering the establishment of joint hospital boards,<sup>35</sup> for example, local authorities had many concerns. The Cities were vehemently opposed to the removal of hospitals from their jurisdiction, as they felt they could adequately administer hospital provision.<sup>36</sup> The Burghs, however, were not against the Boards provided hospital ownership remained with the local authorities.<sup>37</sup> Although the Cities and Burghs had common ground here, they did not discuss a united strategy. The Burghs saw the prospect of their attachment

<sup>31</sup> H. Eckstein, *Pressure Group Politics*, (1960, London), p. 154.

<sup>32</sup> Jenkinson, *Scotland's Health*, pp. 423-44.

<sup>33</sup> NAS, HH101/4, National Health Service Consultation with Local Authorities, 8<sup>th</sup> March 1943.

<sup>34</sup> *Ibid*, 8<sup>th</sup> March 1943 and 18<sup>th</sup> March 1943.

<sup>35</sup> The boards were to be created by joining local health authorities to administer hospital services in each area.

<sup>36</sup> NAS, CO1/4/167, NHS (S) LA 13, Local Authority Associations Liaison Committee, 29<sup>th</sup> April 1944.

<sup>37</sup> *Ibid*, 15<sup>th</sup> May 1944.

to larger, more dominant local authorities as a loss of administrative control. The local authorities were not only working individually against the Scottish Office, but were also attempting to keep autonomy from each other. Local authority concerns were dismissed by the DHS, as Joint Boards would provide both a simpler financial structure and more flexible staffing arrangements.<sup>38</sup> Nevertheless, the DHS suggested that day-to-day administrative functions would be delegated to local authorities.<sup>39</sup> Throughout the discussions, the DHS made many assurances that local authorities would receive administrative authority of the hospital and GP service at some stage. It appears that the suggestions put forward by the DHS were merely ways of silencing the varied concerns raised by local authorities.

The Department implied that the Secretary of State did not want to remove any functions from local authorities. Simultaneously they were not willing to reach agreements that satisfied all of the Associations. The lack of accord between the Associations is clear throughout the discussions. This allowed the DHS and the Secretary of State some flexibility during the discussions, and suggests that they were going through the motions of negotiation and were willing and able to imply local authority dominance to gain agreement, without conceding local authority control of hospitals. On the appointed day, 5<sup>th</sup> July 1948, the NHS (Scotland) Act 1947 left local authorities with an auxiliary role within the health services.

### Implementation

Policy-making, however, does not end with the passing of an Act. Smith believes the implementation process was central to policy development because it continued the bargaining process as network members undertook implementation.<sup>40</sup> Consequently, less dominant organizations have an opportunity to influence the implementation process. Recognizing this link between policy and implementation can distinguish between what is agreed through policy and what is implemented in practice. Considering the implementation of the NHS Act is critical for understanding the development of the NHS and the reaction of local authorities.

The implementation of the NHS (Scotland) Act was not as effortless as many historians would argue.<sup>41</sup> Local authorities saw the changes in their remit as a loss of power and tried to increase their influence within the health sphere. During 1952/3, the Associations united to demand increased representation on the Scottish Health Services Council.<sup>42</sup> The Council was central in providing advice to the Secretary of State on health matters and increased representation would amplify the influence of local authorities. The DHS did not agree with the local authorities' position that the number of representatives should be increased. In a letter to the Associations, the DHS replied that 'the members with local government experience are expected to make their primary contribution under the head of local authority administration', as public opinion was voiced through Westminster.<sup>43</sup> The letter clearly places local authorities at the bottom of the political chain, subordinate to Westminster and the Scottish Office. Local authorities merely advised the Secretary on administrative matters relating to local authority health services. Furthermore, the DHS letter states that local authority health services were adequately provided for through their Standing Advisory Committee, which was 'heavily weighted' in their favour.<sup>44</sup> The DHS position made it difficult for local authorities to influence larger NHS issues in any credible way. The policy network had not opened the implementation process as a means of increasing influence

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<sup>38</sup> Ibid.

<sup>39</sup> Ibid.

<sup>40</sup> Smith, *Pressure, Power and Policy*, p. 53.

<sup>41</sup> Jenkinson, *Scotland's Health*, p. 443.

<sup>42</sup> The Council consisted of 35 members, only five of which were local authority officials.

<sup>43</sup> Glasgow City Archives, D-TC 8/16B/23 7, Letter from T.D Haddow, 7<sup>th</sup> April 1953.

<sup>44</sup> Ibid.

through these committees. Local authorities were placed at the lower end of the hierarchical political chain allowing the DHS to keep them in their preferred auxiliary role.

### Operation

Local authorities continually attempted to increase their influence through individual issues associated with their provision of services. Local authority influence, however, depended on whether the DHS felt the issue affected the wider NHS. The issue of unmarried pregnant mothers, for example, caused much discussion between the local authorities, DHS and National Assistance Board (NAB) in the late 1940s and early 1950s. Caring for these mothers was an issue which could come under either the NHS (Scotland) Act or the National Assistance Act. Mothers were often housed within Salvation Army Homes for a four-month period, two months before confinement (birth) and two months after. These mothers had no permanent home in which to live. The NAB provided assistance on the basis that the women were in residential accommodation.<sup>45</sup> This was therefore a matter of great importance to both the mother and baby.

Many DHS civil servants believed that this was a matter for the NAB to deal with, although they did consider many solutions such as local authority autonomy in decision-making and making it a joint health and welfare matter. It was, however, brought to their attention that many of the women were experiencing their first pregnancies and had a high risk of complications.<sup>46</sup> Consequently, their care would become a health matter due to the medical attention required. In this case, no one was taking responsibility for the care of the expectant mothers. The NAB thought this was a matter between the DHS and local authorities, whilst local authorities and the DHS thought this was primarily a welfare issue. The DHS thought that local authorities had the right to choose under which Act they instigated a particular service and were not required to intervene. The DHS welcomed the solution whereby mother and baby homes were considered as the women's normal homes. Therefore, the local authorities could care for the mothers in the same way as other pregnant women whilst the NAB could continue welfare assistance.<sup>47</sup> Negotiations between the DHS, local authorities and NAB defined the role of the local health authority and the Assistance Board providing clarity in this area and created straightforward arrangements for the mother and baby homes and the expectant mothers.

On other issues, however, the local authorities were not allowed to influence the implementation of policy. The provision of maternity outfits, i.e. packs that were provided to expectant mothers for home confinements, was such an issue. The maternity pack included items such as sterilised maternity pads, cotton wool and cord ligatures.<sup>48</sup> A range of methods was employed by local authorities to supply maternity outfits. Many women were advised to ask their GP for a prescription for these packs; however, many GPs were unwilling to provide a service out with their remit. In areas such as Glasgow, however, the local authority midwives provided the packs.<sup>49</sup> In a meeting with the DHS, local authorities commented that some items from the maternity outfits could be supplied by GPs. The meeting resulted in local authorities accepting that it was their duty to supply outfits, but requesting authority to charge for these supplies.<sup>50</sup> The DHS, however, reminded local authorities that they did not have such authority and would have to bear the cost themselves.<sup>51</sup> The local authorities had to accept that they were responsible for providing maternity outfits.

<sup>45</sup> NAS, HH61/30, Accommodation of Expectant Mothers, 1949-57.

<sup>46</sup> Ibid, Memo to L C Watson, 28/6/49.

<sup>47</sup> Ibid, Memo to Mr Forrest, 20/6/53.

<sup>48</sup> GCA, D-TC 8/16B/23 5, Letter to Town Clerk, Glasgow, from Counties of Cities Association, 22<sup>nd</sup> September 1950.

<sup>49</sup> Ibid, Letter to Town Clerk, Glasgow, from Stuart Laidlaw, 5<sup>th</sup> October 1950.

<sup>50</sup> Ibid, Letter to Town Clerk, Glasgow, 13<sup>th</sup> July 1951.

<sup>51</sup> Ibid.

It is interesting to note that the DHS consulted with the BMA on this issue. Within the network dynamics, the BMA was the primary force in negotiating the NHS Act, whilst local authorities tended to be sidelined. In resolving the issue over maternity packs, this dynamic was reinstated to compel local authorities to fulfil their duties. The influence of local authorities did not prevail on this issue. The hierarchical nature of the relationship between the DHS and local authorities, along with the backing of the BMA, defeated the local authorities. Although local authorities managed to influence some areas on a case-by-case basis, they were unable to influence central NHS issues.

### **Conclusion**

The transition to the NHS was not as smooth as many historians would assert. The policy network established allowed the DHS to create a strong position allied to the BMA, and set in place a hierarchical relationship with Scottish local authorities. The DHS made assurances that local authorities would receive administrative authority for the NHS at a later stage, putting local authorities at their ease. The lack of unity among the three local authority associations, who were unable to capitalize on shared resources and knowledge in the bargaining process, strengthened the position of the DHS. As a result the NHS (Scotland) Act, 1947, placed local authorities in an auxiliary role within the tri-partite health service.

Policy network theory acknowledges that policy formation continues with policy implementation. During the implementation process, local authorities attempted to assert greater influence within the network. By requesting increased representation on boards and committees and by influencing individual issues, local authorities tried to reassert a position of authority. The network, however, had firmly placed local authorities in a hierarchical relationship with the DHS, a subordinate relationship which did not allow local authorities the manoeuvrability to influence the NHS to any great extent. The DHS continually used their position and the strength of the relationship with the BMA to keep local authorities in their auxiliary role. Considering Scottish local authorities within the establishment of the NHS in Scotland highlights a general consensus over an extension in health services, but the transition to the new service was filled with conflicts over implementation and disagreements over its operation.

## **Feminism and marxism in the All India Democratic Women's Association: a leftist approach to the women's question in contemporary India**

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What has kept this peculiar diverse group of people speaking so many languages, practicing so many religions together? In all this, a kind of slogan or a binding principle coined by historians of India who worked on Indian history we found when we went on to do women's studies, were extraordinary commonalities of issues, commonalities of approaches, understanding and expressions of problems by women across this massive diversity, multiple cultures, religions, and languages.<sup>1</sup>

Vina Mazumdar's quote describes the diversity and complexity of women's movements that the researcher has to keep in mind. 'The Indian women's movement is decentralized into very loosely allied organizations, some of which are associated with political parties but many others are "autonomous" and have specifically rejected any such affiliation.'<sup>2</sup> It is impractical to speak of one Indian women's movement since there are countless women's groups and associations. Despite much discussion amongst historians and activists the term "Indian women's movement" is used throughout much of the literature. Nonetheless, I use the term "women's movements" throughout this paper because it is necessary to establish the differences within the movements. A single term neglects and underestimates the role played by the numerous groups that exist considering their varied origins and ideologies.

According to Brinda Karat, the first woman elected into the Politburo of the Communist Party of India (Marxist) (CPI(M)),<sup>3</sup> there has been little documentation, and even serious research, on the roles and contributions of women who were inspired by a socialist vision of social change in taking forward women's movements for equality in India.<sup>4</sup> As a very significant women's group in India, the All India Democratic Women's Association (AIDWA), in Hindi known as Akhil Bharatiya Janavadi Mahila Samiti, has 'recognized the importance of the participation of women in the general democratic movement without which no emancipation of women or the emancipation of working people could be achieved'.<sup>5</sup>

AIDWA was founded in 1981, during its first women's conference in Chennai. Individual branches are active since the independence struggle, for instance in Maharashtra, West Bengal and Kerala. AIDWA, as the biggest women's association in India, perceives itself as a spearhead of contemporary Indian women's movements and as the one organization that is able to achieve women's emancipation and equality due to its sheer amount of members. The analysis of AIDWA is particularly important because it gives a new insight into left wing women's movements and the way such movements operate. AIDWA anticipates establishing equality and emancipation for women at an all India level, which is an impressive and striking initiative, yet one which exposes the flaws and limitations of AIDWA as an organization, especially since half of its membership is from West Bengal. The vision of an all India movement confronts women with challenging issues such as conflicting regional differences, relationships between the centre in New Delhi and various regional tendencies,

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<sup>1</sup> Vina Mazumdar, Interview December 8, 2006, New Delhi.

<sup>2</sup> Leslie J. Calman, "Women and Movement Politics in India," in: *Asian Survey*, 29, 20, 1989, p. 940.

<sup>3</sup> Razdan, Deepak, "Four new faces in politburo" in: *Hindustan Times*, April 12, 2005, p. 15.

<sup>4</sup> Brinda Karat, "Introduction", in: AIDWA, *Expanding Dimensions on Dowry*, (New Delhi, AIDWA, 2003, p. 1.

<sup>5</sup> Vimal Ranadive, "Feminists and Women's Movement" in: Krishnaraj Maithreyi, *Feminism. Indian Debates*, Research Centre for Women's Studies, 1990, p. 51.

the relation between political parties and women's movements as well as its local diversities. The contradictions between the national and the state level are crucial to an all India organization while at the same time India's political culture experiences a shift from national politics to state politics.

AIDWA activists support the argument that the women's question is incorporated into the social question and the class struggle, and not distinguished as an individual aspect of gender relations. The group's main concern is the emancipation of Indian women but refuses to be labelled feminist. For AIDWA, the women's question is interlinked with social and economic conditions, and only a change in the general conditions can bring a change for women and their status within the society. The notion of being different seems to be rooted very deeply in the consciousness of Indian women, the colonial experience, and their understanding of women's emancipation. It appears that AIDWA is struggling with the idea of feminism as well as the concept of marxism which might have to do with the ambivalence to the Western concept of feminism, the diversity of the Indian women's movement, the diversity of Indian feminism, or the sex-blindness of marxism itself.

Following *Towards Equality*<sup>6</sup> and the Emergency a wide range of organizations came into existence in the late 1970s and early 1980s. Sudha Sundaraman, General Secretary of AIDWA, sees the Indian women's movement today as being in a very good position with a lot of potential and great recognition. She refers to the Indian women's movement as a single movement which emphasizes AIDWA's objective of addressing women's issues for the whole of India. 'Women are willing to take their issues forward if the organizational strength to bring them forward is guaranteed. Indian women are directly concerned with almost all issues that arise in society, and that is one reason why women are increasingly coming together.'<sup>7</sup> She argues that the needs and goals need to be canalized in the right direction. Sundaraman further accentuates AIDWA's potential due to its perception, its networks, and the capacity to take up different issues such as violence against women, communalism, economic questions relating to women as part of the working class, etc.<sup>8</sup>

An issue that emerged during the late 1980s is the subject of 'feminism' suggesting differences between party-affiliated and autonomous women's groups. AIDWA as an independent left-oriented and party-affiliated women's organization is committed to achieving democracy, equality and women's emancipation. AIDWA activists observe the "women's question"<sup>9</sup> in India in a different context from other countries, especially those in the West. According to members of the AIDWA Central Executive Committee (CEC), the women's question is interlinked with social and economic conditions, and only a change in the general conditions can bring a change for women and their status within society.<sup>10</sup> AIDWA is represented in 23 Indian states. Though the numbers in membership vary regionally, the organization was able to either maintain or increase its membership during the last decade.

Activists strongly emphasize their independence from the party. It is not necessary to be a party member to become a member of AIDWA, but coincidentally office holders at the centre in New Delhi and the states' centres are also members of the CPI(M). Some leading AIDWA activists are married to important CPI(M) members. The question about

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<sup>6</sup> *Towards Equality*, published in 1975 in the wake of the International Decade of Women, reflected on the shortcomings of Indian women and pointed out government policies implemented in the Indian constitution that were not realized. The report was conducting on an all India based research and concluded with suggestions for improvements for women's lives.

<sup>7</sup> Sudha Sundaraman Interview, April 27, 2005, New Delhi.

<sup>8</sup> Ibid.

<sup>9</sup> AIDWA activists refer to the "women's question". The term is also used in the contemporary literature on Indian women, similar to the term "Indian women's movement." AIDWA refers to the term with a clear set of questions in mind, stated in their constitution as their primary agenda: equality, emancipation and democracy.

<sup>10</sup> Sundaraman, April 27, 2005.

independence from the party is countered by the argument that AIDWA has its own constitution and conferences where women elect officers. Marxist ideas they follow are not controlled or given by the party. They act independently and might differ in their opinions on specific issues, such as liquor consumption.<sup>11</sup> Nevertheless, the repeated emphasis on independence seemed sometimes forced and questions were rather perceived offensively. AIDWA activists all agree on the issue that the organization's capacity to intervene is not limited due to its marxist orientation.

AIDWA's constitution mirrors conflicting aspects between the marxist and the feminist angle. Women's issues are mentioned but not as chief targets. AIDWA's constitution subsequently follows the marxist idea of liberating the whole society which will therefore bring emancipation of women automatically, as propagated by AIDWA members. Some aims appear particularly feminist such as:

- To strive for the social, cultural, educational and mental upliftment of women so that women can develop as responsible and democratically conscious citizens capable of providing leadership in all fields.
- To struggle for the implementation of all legal and constitutional rights for women and to ensure that the struggle for equality covers all fields – social, economic, educational, familial and cultural.
- To fight against all forms of social evils and feudal legacies such as dowry, child marriage, polygamy etc.
- To fight for equal rights in free choice in marriage, divorce and implementation of the law in relation to monogamy.

On the contrary, the following AIDWA's aims are marxist rather than feminist:

- To express solidarity with working class, peasants, youth and students and other sections of the people who are struggling for their legitimate rights.
- To express solidarity with the people and specially women, who are struggling all over the world against every kind exploitation, for world peace, against imperialism and neo-colonialism and for National Liberation.
- To fight in cooperation with all other organizations for the improvement of the living and working conditions of the people.<sup>12</sup>

CEC members are concerned about the impact of Western feminism and express their disagreement, though their programme lists these particular feminist issues first which leads to a possible conclusion that Indian feminism is not that different from feminism practised in the west. A possible difficulty lies in the contradictions within Indian society as well as different definitions of marxism and feminism. It appears that AIDWA activists are not sure how to define feminism since they are preoccupied with the negative connotations of the term, or perhaps they do not believe that individual issues relating to women's rights equate with a feminist position. However, there seems to be a consistent need to discuss western feminism even though no necessity to compare to western women's movement exists.

Madhu Kishwar, chief editor of the women's journal *Manushi* avoids using the term feminism and is reluctant to call *Manushi* a feminist journal due to its negative connotations in the Indian context. The response to the magazine would be prejudiced since 'anyone working for women's rights in India is automatically assumed to be a feminist'.<sup>13</sup> According to Kishwar, the magazine would be neglected by Indian women because the 'term is alien to

<sup>11</sup> Sundaraman, April 27, 2005.

<sup>12</sup> AIDWA, Aims & Objects Programme Constitution of All India Democratic Women's Association (New Delhi: ADWA, 1999), p. 3-4.

<sup>13</sup> Madhu Kishwar, "Why I do not call myself a Feminist: in: *Manushi*, No. 61, 1990, p. 2.

women in India [since] it is inadequate to [its] purposes [and since it] has too often become a tool of cultural imperialism'.<sup>14</sup> She emphasizes that feminism is too closely related with western women's movements, which are assumed to be unconstructive and anti-men. Kishwar emphasizes that the Indian women's movement has followed a different path and cannot be compared with women's movements in other countries, especially western countries.

AIDWA focuses in its work and publications on the destructive potential of feminism. The leftist women feel that the 'idea disrupts the left parties and the organized women's movement'.<sup>15</sup> AIDWA is clearly distancing itself from using the term feminism. They want to achieve emancipation in a common struggle with men and after transforming society as a whole. Brinda Karat states: 'One of the strengths of the women's movements in India has been the influence of progressive trends within the movement which have prevented it from being trapped in a one dimensional approach of an all embracing "sisterhood" in a never ending battle between women on the one hand and men on the other'.<sup>16</sup> Their experience with colonialism and the struggle for independence highlights that the Indian women's movement has pursued a different path. 'One distinctive feature of the movement and one which indicates its independence, and, indeed, criticism, of the West is its frequent refusal to accept the application of the "feminist" label'.<sup>17</sup> They do not want to be limited to pure gender issues in their work, since they do not agree with the categorization of women as women.

AIDWA has been involved in active politics since 1981, and still faces difficulties of acceptance by politicians and other women's groups which depends on their affiliation with the CPI(M). It appears women are still fighting for acceptance within the party itself. The problem of non-acceptance might have to do with the general misapprehension between marxism and feminism. 'Many marxists typically argue that feminism is at best less important than class conflict and at worst divisive of the working class'.<sup>18</sup> Marx, Engels, or Zetkin never considered gender as a separate entity requiring special attention outside the class struggle. This controversy contributes to the dilemma AIDWA faces, a fight for acceptance in society, in the CPI(M) and amongst women themselves. Most Indian marxists have looked at women within the economic and social system, but failed to acknowledge women as women and their relation to men. 'Whilst marxist analysis provides essential insight into the laws of historical development, and those of capital in particular, the categories of marxism are sex-blind [...] only a specifically feminist analysis reveals the systematic character of relations between men and women'.<sup>19</sup>

Indu Agnihotri, from the Center for Women's Development Studies and CEC member, indicates that without the help of the CPI(M) it would have been impossible to get where they are today. Due to the mass base of the party they were able to establish themselves as an independent wing among left-oriented groups.<sup>20</sup> She undoubtedly acknowledges the influence the CPI(M) had in the beginning for AIDWA, its institutional strength and political influence that facilitated the women's group with organizational power. Agnihotri agrees with the leading notion of AIDWA being a dependent women's wing of the CPI(M), but emphasized that she never felt that dependence. She felt the strength of the mass movement and the support of the political organization. She does not recognize this aspect as negative or as a

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<sup>14</sup> Kishwar, "Why I do not call myself a Feminist", p. 2.

<sup>15</sup> Ilina Sen, "Feminists, Women's Movement, and the Working Class" in: *Economic and Political Weekly*, Vol XXIV, 1989, p. 1639.

<sup>16</sup> Brinda Karat, "Introduction" in: AIDWA, AIDWA. Perspectives, Interventions and Struggles (2001-2004), pp. 7-10.

<sup>17</sup> Catherine A. Robinson, Tradition and Liberation. The Hindu Tradition in the Indian Women's Movement, (Surrey: Curzon Press, 1999), p. 2.

<sup>18</sup> Heidi Hartmann, "The Unhappy Marriage of Marxism and Feminism: Towards a more and progressive Union" in: *Capital and Class*, No. 8, 1979, p. 1.

<sup>19</sup> Hartmann, "The Unhappy Marriage of Marxism and Feminism", p. 1.

<sup>20</sup> Indu Agnihotri Interview December 15, 2005, New Delhi.

disadvantage. According to Agnihotri, the Indian women's movement today stands where Indian politics stands, it is full of possibilities yet there are problems. The strength of the women's movement is to a large extent tied to the strength of the Indian democracy. AIDWA means by marxism 'a political perspective which is social transformation which addresses issues of class differences and in the case of India the caste system. The two are inseparable; it cannot be one or the other'.<sup>21</sup>

When asked about feminism, and whether it is applicable to India, Agnihotri replied: 'The understanding of feminism, the concept of feminism has evolved and changed from what it was in the 60s. All those [Indian activists] studied the history of western feminism, understanding that there are different streams of western feminism in terms of class, ideological and country based perspectives. Women in third world countries have developed their own movements. Their perspective is clearly different because their needs are different'.<sup>22</sup> AIDWA members seem unable to define themselves in relation to feminism; however, there is no necessity to define themselves in relation to feminism and the western movements. This leads to the conclusion that within the left-oriented women's movement there is neither a clear set of ideas about feminism nor marxism. AIDWA is striving to be a unique movement within the contemporary Indian women's movement, but it seems to have difficulties combining the idea of marxism with the concept of feminism.

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<sup>21</sup> Agnihotri, December 15, 2005.

<sup>22</sup> Ibid.

# Child labour laws and the end of child labour in the US: evidence from American manufacturing censuses, 1900-20

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## 1. Introduction

During the first decades of the twentieth century, the United States experienced an increasing concern for the working conditions of wage earners. Under the ‘Progressive Era’, and for the first time in American history, states began to produce an increasing amount of labour legislation. New laws established limits to maximum working hours, minimum wages and even instituted workers’ compensations. However, the issue that generated the most agitated debates and controversies was that of child labour. Unfortunately, this was justified: labour participation of children peaked in 1900 when one in every four children was reported to be engaged in some ‘gainful occupation’. Alarmed by the extent of child labour, groups of intellectuals and philanthropists quickly organized child labour committees with the purpose of banning the employment of children. Very soon, committees across America were actively requesting not only the enactment of efficient child labour laws, but also the enforcement of the existing statutes.

The results of the ‘crusade for children’ were remarkable. Between 1904 and 1920, child labour legislation mushroomed: every state of the Union passed some new child labour law or improved the existing statute. Even the federal government attempted to regulate child labour on two occasions: in 1916 and 1919. By 1930, only 5 per cent of children worked and most of them did it in agricultural jobs; ‘child labour’ was simply not a problem anymore.

Despite the dramatic decline in child labour, historians have typically understated the importance of new child labour legislation (Landes and Solomon, 1972). Indeed, the fact that child labour declined immediately following the introduction of the laws does not necessarily mean that the laws ‘caused’ that decline. Alternatively, there could be some other reason, simultaneous to the introduction of the law that explains the decline in child labour. Immigration (Osterman, 1980), unskilled labour-saving technological change (Brown, Christiansen and Phillips, 1992), (Nardinelli, 1980 for the UK) and income increases (Goldin, 1979) have been credited as the real causes to the ending of child labour.

Another reason why the *post hoc, ergo propter hoc* approach could be misleading occurs in the case of reverse causality, i.e. if causality runs from child labour to the legislation (Landes and Solomon, 1972). A number of political economy papers have stressed the channel from lower child labour to child labour laws (Doepke and Zilibotti, 2005), (Galor and Moav, 2006), (Krueger and Donohue, 2005).<sup>23</sup>

Clearly, child labour laws were designed to curtail the employment of children mostly in the industry and mining sectors. The effects of the legislation are to deprive the industry of a source of cheap labour, thereby increasing labour costs and reducing industrial output growth. Therefore, a natural test for the effectiveness of CLL would come from the comparison of industries that are very dependent on child labour in states with and without the legislation. If dependent industries grow faster in states without the legislation, this would provide evidence on the causal effects of the law. Alternatively, if the growth of highly-dependent industries is unaffected by the introduction of the legislation, the reverse causality hypothesis (among others!) would be supported by the data.

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<sup>23</sup> For a recent survey of this literature, refer to Doepke and Krueger (2006).

## 2. Identification Strategy

In order for my paper to identify the causal effect of the legislation I exploit the fact that there is a technological reason why initially some industries use child labour and others do not. In addition to this, I need that the CLL are exogenous to the industries. This could be argued on the grounds that the legislation was mostly sponsored by philanthropic organizations and that, in any case, most of the industries in my sample are far too small to influence that state political process.

The outcome variable I will be considering is the real value added growth, measured as the compounded annualized rate of growth. The basic model I will estimate in this paper is then:

$$Y_{j,s} = \alpha + \beta_0 X_{j,s} + \beta_1 U_i + \beta_2 V_s + \beta_3 CLL_s \cdot CL\ Dependence_j + \varepsilon_{j,s} \quad (1)$$

where  $Y_{j,s}$  is the chosen outcome variable.  $X_{j,s}$  includes the variables other than the interaction that vary at both state and industry level like industry size in the state; or the proportion of total value added produced by industry in the state.  $U_j$  contains the initial dependence on child labour to be defined later. Finally  $V_s$  includes a whole set of controls for state specific characteristics such as illiteracy rate, state investment, initial income per capita and a whole set of demographic controls.

*Child Labour Dependence* is an industry-level variable indicating the degree to which industry  $j$  used child labour when there were not any restrictions to child labour employment. The *CLL dummy* indicates whether state  $s$  has a child labour law enacted at the period. This interaction represents the extent to which the combination of *Child Labour Dependence* and *Child Labour Law Dummy* depresses growth and is the variable of interest in this study.

## 3. Main Results

In this section I present the results of my estimation of equation (1) above. I try four alternative specifications including a number of state and industry controls. In the final specification I concentrate on the interaction term alone and allow for a full set of industry and state controls. The results are presented in table 1.

Table 1: *Basic Specification*

	(1)	(2)	(3)	(4)
Ln. Wage Earners	0.004 (0.002)	0.01 (0.003)***	0.003 (0.004)	0.016 (0.006)***
Ln. Real Capital	0.005 (0.002)**	0.012 (0.003)***	0.002 (0.004)	0.007 (0.004)
Prop. Manufacturing	-.012 (0.002)***	-.026 (0.005)***	-.013 (0.002)***	-.030 (0.006)***
CL Dependence	0.327 (0.067)***	0.303 (0.068)***		
CLL	-.0003 (0.005)		0.004 (0.004)	
State Investment 1900-10	0.02 (0.007)***		0.019 (0.005)***	
Black (%)	0.119 (0.041)***		0.143 (0.035)***	
Urban (%)	-.038 (0.02)*		-.034 (0.017)**	
Illiteracy (%)	-.082 (0.092)		-.131 (0.077)*	
Foreign (%)	0.005 (0.036)		0.007 (0.029)	
Ln. Patents	0.003 (0.009)		0.005 (0.008)	
Ln. State Income 1900	0.019 (0.012)		0.016 (0.011)	
CLL&Dependence	-.301 (0.106)***	-.304 (0.104)***	-.248 (0.096)***	-.232 (0.094)**
<i>N</i>	2154	2194	2154	2194
<i>R</i> <sup>2</sup>	0.043	0.074	0.427	0.458
Industry Dummies	NO	NO	YES	YES
State Dummies	NO	YES	NO	YES

Note: OLS coefficients from regression 1 in the text. Dependent variable: Annual Compounded growth rate of value added for the period 1910-1920. Robust standard errors in parenthesis. \*, \*\*, \*\*\* denote 10.5 and 1% significance respectively. Unless otherwise specified, all the variables correspond to 1910. CLL refers to 'effective' child labour laws, that is, child labour laws combined with factory inspection and compulsory schooling. CL dependence is the median proportion of children employed industry-wise in 1900.

The coefficient of interest is the interaction between child labour dependence and CLL. This interaction is similar to a second derivative: the differential effect of a child labour law for industries that are highly dependent on child labour compared with those that are not. The point estimates for the interaction of child dependence and child labour laws range between: -0.2 and -0.3 and they are significant at conventional level. Their effect on growth rates will depend on the percentage of children initially employed. For the average firm, employing about 2 per cent of children, this effect could imply a decline in growth of the order of 0.4 to 0.6 percentage points per year. The other variables I include in the first regression have interesting and plausible signs. In particular, the proportion of urban and black population, and state income are all proxying for the initial level of development, which explains their signs.

In general econometric terms specification (1)-(4) looks good. The interaction coefficient is surprisingly stable across specifications. This is interesting as the number of controls used in each of the regressions varies dramatically. In the baseline case, a full set of 153 industry dummies and 48 state dummies are included. This contrasts with the mere 13 controls included in specification (1). In spite of these differences, the effect on the coefficient is mild, not affecting its statistical significance. The explanatory power of the regression ( $R^2$ ) rises significantly after the introduction of a full set of industry dummies. This result just suggests that most of the variation in annual growth rates of industries have to do with omitted industry-specific characteristics. More importantly for my argument, the negative and significant effect subsists even when I control for industry-specific growth.

#### **4. Robustness**

Obviously industries may vary across the different states for a number of reasons other than their child labour dependence at the beginning of the period. In this section, I perform a number of robustness checks in order to rule out other alternative explanations. First, I check whether the results are sensitive to the definition of child labour dependence. In order to do so, I construct a child labour dependence based on child employment in census dates before 1900. Failure to find an effect of child labour dependence so defined would cast doubt about the universality of my results.

After proving the robustness of the results with respect to the dependence measure in table 2, I turn my attention to the definition of child labour laws. I consider alternative specifications including a plain dummy for CLL, this dummy interacted with the working permit requirement or the compulsory schooling requirement. Again, the results of table 3 show that the effect is there even if we define the child labour law in a slightly different way.

Another set of robustness checks (table 4) restricts the sample according to the initial level of child labour dependence or the initial relative size of the industry. In principle, only industries that were initially employing children should be affected by the laws. On the other hand, in order to deal with political economy concerns, I restrict the analysis to small industries. Arguably, even if the laws were self-imposed once children were not necessary in the industry, this should hold true only in large industries capable of lobbying for a law. Small industries simply received the legislative shock exogenously.

Finally, I try alternative estimation procedures (table 4) that are more robust to aberrant observations. These estimation procedures are based on the median (LAD) or on a recursive weighted OLS procedure (robust regression). Again, although the results are smaller, the general findings are confirmed.

Table 2: *Other CL Dependence Measures*

	(1)	(2)	(3)	(4)
Ln. Wage Earners	0.017 (0.006)***	0.013 (0.006)**	0.016 (0.006)***	0.011 (0.006)*
Ln. Real Capital	0.007 (0.005)	0.005 (0.005)	0.007 (0.004)	0.006 (0.005)
Prop. Manufacturing	-.032 (0.007)***	-.022 (0.006)***	-.031 (0.006)***	-.022 (0.007)***
Children 1880&CLL	-.084 (0.057)	-.106 (0.065)*		
Children 1890&CLL			-.156 (0.092)*	-.210 (0.11)*
<i>N</i>	2057	2057	2194	2194
<i>R</i> <sup>2</sup>	0.459		0.457	

Note: General notes apply (see table 1). Columns 1 and 3 estimated by OLS with robust standard errors. Median regression coefficients with bootstrapped standard errors (200 reps.) reported in columns 2 and 4.

Table 3: *Other CLL Laws*

	(1)	(2)	(3)	(4)
Ln. Wage Earners	0.016 (0.006)***	0.016 (0.006)***	0.016 (0.006)***	0.016 (0.005)***
Ln. Real Capital	0.007 (0.004)	0.007 (0.004)	0.007 (0.004)	0.007 (0.004)
Prop. Manufacturing	-.031 (0.006)***	-.031 (0.006)***	-.031 (0.006)***	-.032 (0.006)***
CLL Alone	-.130 (0.088)			
CLL&Papers		-.188 (0.093)**		
CSL Alone			-.157 (0.089)*	
CLL				-.247 (0.095)***
<i>N</i>	2194	2194	2194	2142
<i>R</i> <sup>2</sup>	0.457	0.457	0.457	0.463
Sample	ALL	ALL	ALL	But NC & SC

Note: General notes apply (see table 1).

Table 4: *Other Robustness Checks*

	(1)	(2)	(3)	(4)
Ln. Wage Earners	0.016 (0.006)**	0.022 (0.007)***	0.012 (0.005)**	0.012 (0.004)***
Ln. Real Capital	0.002 (0.005)	0.005 (0.006)	0.006 (0.005)	0.006 (0.003)**
Prop. Manufacturing	-.023 (0.007)***	-.044 (0.008)***	-.022 (0.008)***	-.023 (0.004)***
CL Dependence&CLL	-.270 (0.102)***	-.314 (0.138)**	-.157 (0.091)*	-.160 (0.093)*
N	1609	1434	2194	2194
R2	0.457	0.474		0.495
Est. Method	OLS	OLS	LAD	Robust
Sample	<i>CL Dep &gt; 0</i>	<i>PropManuf &lt; 1%</i>	<i>Whole</i>	<i>Whole</i>

Note: General notes apply (see table 1). Robust standard errors for specifications (1) and (2). Bootstrapped standard errors (20 reps.) in specifications (3). Specification (4) is a regression where observation with large residuals are reweighted in order to attenuate their impact (robust regression, Huber (1964)). Bi-weights set to 8 times the median absolute deviation from the median residual.

## 5. Conclusion

This paper examines the consequences of child labour legislation on the manufacturing sector of the United States. Examining this case is interesting for various reasons. From purely historical reasons, child labour legislation offers a unique example of a resounding public policy whose effectiveness has been questioned. In addition to this, the study of the implementation and economic consequences of a historical child labour law may be important in order to understand the difficulties of eradicating child labour in developing economies of today.

I find out that CLL have a deleterious and potentially big effect on industrial growth. This effect ranged from a negligible growth effect to over 1 per cent per year for industries employing children extensively. These results are both plausible and consistent with the behaviour of industries: rather than enjoying the ride after the CLL got passed, as the modern political-economy models would suggest, industries fought fiercely against the ban.

Other than to shed some light on the issue of child labour and the effect of legislation, this paper contributes to the literature in at least two other ways. First, I use a previously unexploited source of data (US manufacturing census) in order to give a novel answer to the question of child labour in America.

Second, my methodology is inspired on a very well-known methodology of the development economics literature. In particular, I identify a channel through which child labour laws should affect some industries more than others. Exploiting this source of variation, I go around reverse causality issues at a state level. This is so because it is possible for me to compare industries that received the shock and those that did not *within* the same state. In a word, this methodology allows me to conclude that it is not the growth rate that explains the law, but rather the law explaining the growth rate.

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# The evolution of public social spending in Spain, 1850-1963

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## Introduction

The rise of the Welfare State during the twentieth century has changed dramatically the role of the state in the economy and the mechanisms of social protection. This process has been much studied, especially in the case of the great expansion that took place after World War II, and there are several theories about its determinants. Some authors have emphasized the influence of structural variables such as GDP per capita and ageing (Wilensky 1975, Pampel and Williamson 1989), while others have stressed the importance of political factors, as the role played by left-wing parties (Korpi 1983, Hicks 1999) or catholic parties (Wilensky 1981); or the extension of voting rights and voter turnout (Lindert 2004). Similarly, variables as the distribution of income (Alesina and Rodrik 1994, Persson and Tabellini 1994) or trade openness (Huberman and Lewchuk 2003) also seem to be important for the evolution of public social spending. Many of these works have focused on the period after World War II, but authors like Lindert have also emphasized the importance of analysing the early stages of the development of the Welfare State.

The development of the Welfare State in Spain in the long term has not been carefully analysed yet, especially from a quantitative perspective. Most of the available data on public social spending in Spain only cover recent periods. For the years after 1980, the Ministry of Labour has published some exhaustive data within the Labour Statistics and Social Issues Yearbooks, and Barrada (1999) has recently estimated a series that starts in 1964. However, for the previous years the only available series is Comin (1985), and the information it provides is too aggregate to be useful (for example, spending on poor relief, social security, and pensions of the civil servants are included in the same item). Moreover, this series includes expenditures that, according to OECD definitions, cannot be strictly considered as “social”. Finally, Lindert (2004) has also offered some scattered numbers on Spanish social spending since 1880, although only for a few years and based on the small amount of information on the issue that is internationally available.

In this paper I show a new estimation of the evolution of public social spending in Spain for the period 1850-1963. This new series is based on the OECD definitions of public social spending, in order to ensure comparability with the series available for other countries.<sup>24</sup> The series includes public spending on social protection and its distribution among different items.<sup>25</sup> Therefore, it allows analysing both the tendency of global public social spending and the changes in its composition. In line with SNA-93 (System of National Accounts 1993) and OECD definitions, public expenditures which are aimed at providing protection in case of natural disasters, such as earthquakes or floods, are excluded from this series. Pensions paid to retired civil servants are also excluded, because they are viewed as employer-financed insurance schemes and therefore considered as private pension systems. Similarly, since the objective is to quantify the size of government activities in the field of

<sup>24</sup> In the international comparison below, for the period 1960-81 I use OECD data; and for 1880-1930 I use the figures estimated by Lindert (1992) according to the OCDE definitions.

<sup>25</sup> I classify public social spending in 10 different items: poor relief; health; accidents; pensions; sickness; maternity; unemployment; family; active labour market programmes, and other expenditures. The first item includes subsidies to charity institutions, and the second subsidies to hospitals and other health institutions. Next 5 items include subsidies to accidents, pensions, sickness, maternity, and unemployment insurances. “Family” includes family allowances and subsidies to large families. The item “active labour market programmes” includes subsidies to labour exchanges, public works for alleviating unemployment, and other policies aimed at creating employment.

social policy, compulsory-contributory social insurance schemes are not considered public. Only public subsidies to these schemes (but not contributions from employers and workers) are included in the series.

Public expenditures on education are also excluded from the estimates, because there are already two series of the evolution of public spending on education in Spain for this period.<sup>26</sup> Moreover, spending on education is usually analysed separately from the rest of social expenditures. Finally, the series does not only include central government's spending, but also social spending carried out by local and provincial public administrations.

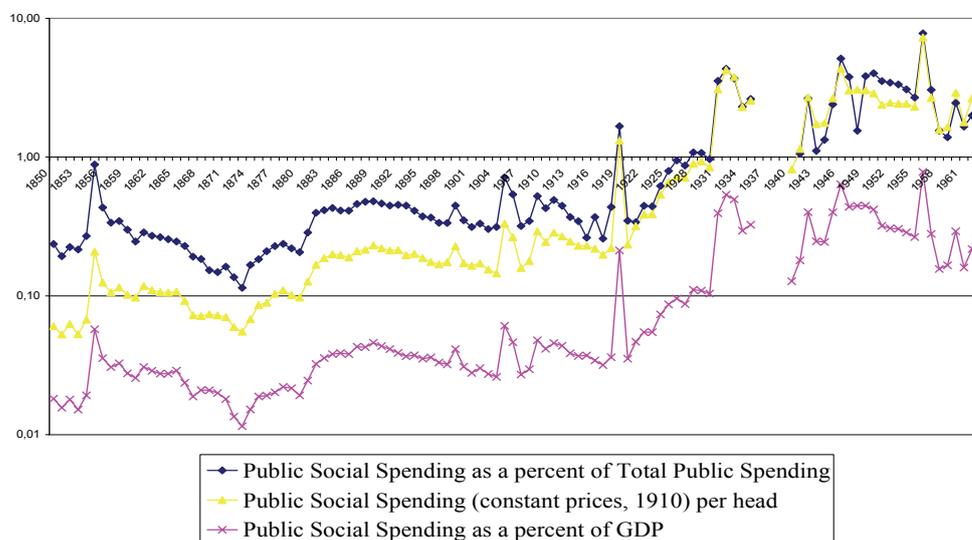
Regarding the sources, the series are the result of careful examination of public budgets,<sup>27</sup> and information from the National Institute of Social Insurance (*Instituto Nacional de Previsión*). In the case of provincial and municipal institutions I use data from the Spanish Statistical Yearbooks (*Anuarios Estadísticos de España*).

### Main long-term trends

As in Lindert (2004), I use the ratio between public social spending and GDP as the main indicator of welfare state development. However, in order to rule out the possibility of overestimating (underestimating) public social spending increases in periods of economic crisis (high economic growth), graph 1 compares that indicator with the evolution of public social spending per head, and public social spending as a percentage of global public spending. The graph shows that the evolution of central government's spending followed the same trends in all three cases. This is not surprising, since both the evolution of global public spending and the evolution of population are related with the evolution of GDP, and allows carrying out the analysis on the basis of the ratio between social spending and GDP.

Graph 1

Public Social Spending of Central Government, 1850-1963



Source: For social spending, my own data; for population: Maluquer (forthcoming); for global public spending: Comín and Diaz (2005); for GDP: Prados de la Escosura (2003).

According to the main tendencies observed in graph 1, it is possible to identify four periods in the long-term evolution of the central government's social spending: 1) a first period of fall and recovery of public social spending between 1855 and 1880 approximately; 2) another period of stagnation from 1880 to World War I; 3) a third period of growth of public social

<sup>26</sup> Instituto de Estudios Fiscales (1976) and Comín (1985).

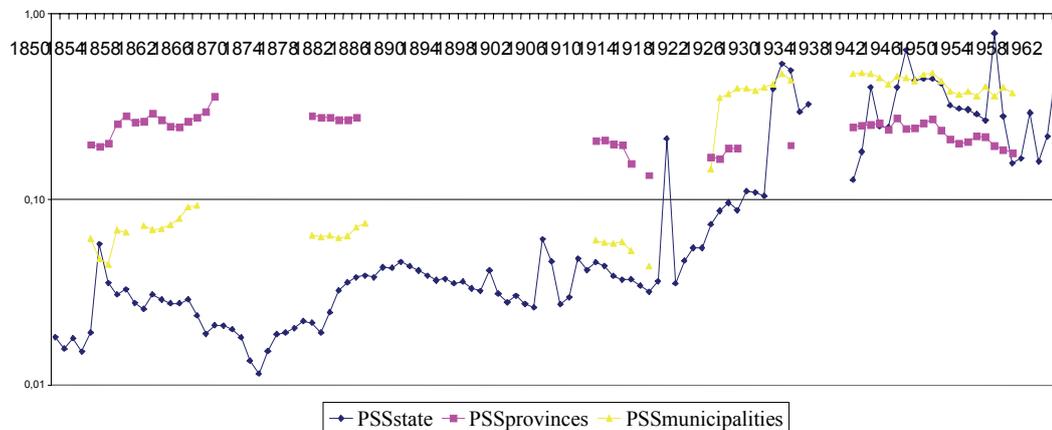
<sup>27</sup> The two main public sources used for making the series are *Cuentas Generales* and *Presupuestos Generales del Estado*.

spending from World War I to 1936 (the year when the Spanish Civil War broke out); 4) and finally a fourth period, during the years of Franco’s Dictatorship, where social spending fell considerably from 1947 to 1958/61, after recovering prewar levels in 1946.

Regarding sub-central governments’ spending, graph 2 shows that the social spending of provincial and municipal institutions was actually higher than central government spending during almost the whole period. On the other hand, sub-central governments’ expenditures do not seem to have risen (fallen) when central government spending was falling (rising). On the contrary, along the period 1911-30 they evolved in parallel with central government’s spending, and during the years 1940-58 all series showed a similar tendency. Nevertheless, in the thirties central government’s spending increased considerably and sub-central spending did not. But only between 1854 and 1884 do central and sub-central spending seem to have followed an opposite path, although the lack of data for the period 1868-79 prevents us from drawing definite conclusions.

Graph 2

**Public Social Spending of different levels of government, 1850-1963**



Source: own elaboration

The last distinctive feature in the long-term evolution of public social spending is its low level throughout the whole period. Between 1850 and 1963, central government’s social spending did not reach 1 per cent of GDP, while global public social spending (including sub-central governments’ expenditures) did not reach 1.5 per cent of GDP. These ratios are very low, especially compared with current levels of social spending, although they are not so distant from those of some other OECD countries during the period. Finally, trends in the evolution of social spending in this series are similar to those estimated by Lindert, although levels are slightly lower in the former (table 1).

Table 1

	1880	1890	1900	1910	1920	1930
Spain (Lindert’s estimates)	0	0	0	0.02	0.041	0.064
Spain	0.02	0.04	0.03	0.04	0.04	0.11

Source: Lindert (1992) and own elaboration

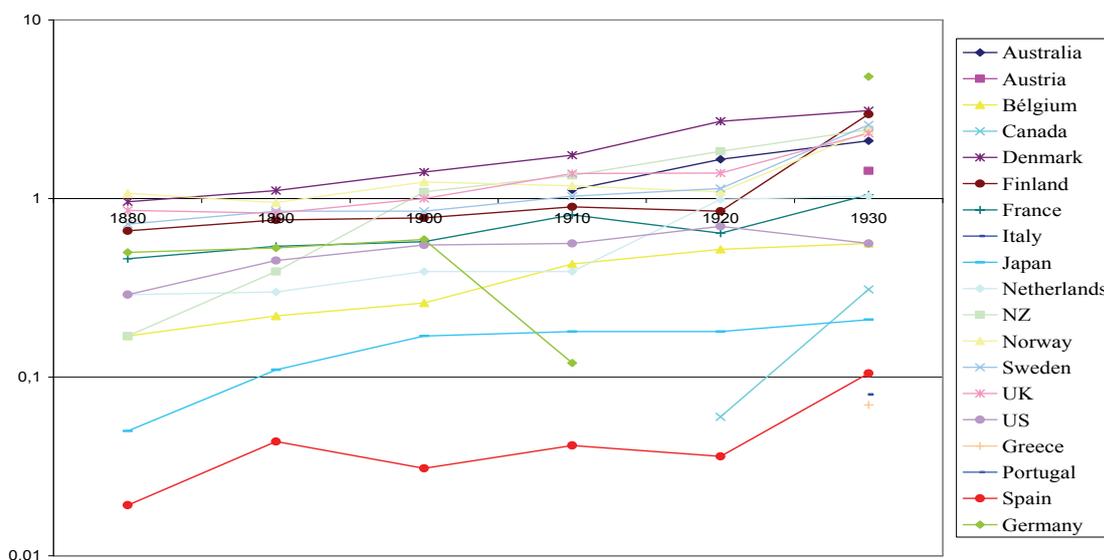
**Evolution of public social spending from a comparative perspective**

The series I present in this work includes information about social spending undertaken by both central and sub-central governments. Nevertheless, for many years data on the latter are lacking. Therefore, in the following international comparison I will only consider Spain's central government social spending. Anyway, as I said before, sub-central government's social spending evolved in parallel with central government's spending. Therefore, not including the former should only introduce changes in levels but not in tendencies.

Graph 3 shows the evolution of public social spending for several OECD countries during the period 1880-1930. Social spending was lower in Spain than in most other countries throughout the whole period. Nevertheless, in 1930 the number of countries that had exceeded the barrier of 1 per cent of GDP was limited to the north-European countries, Germany, Austria, France, Australia and New Zealand. By contrast, countries as Belgium, the United States, Japan, Canada, Italy, Portugal or Greece were below 1 per cent of GDP, like Spain. Actually, as is shown in table 2, the evolution of Spanish public social spending before 1930 was similar to that followed by other south-European and east-European countries, which had low levels of social spending until 1920 and a growing trend from then on.

Graph 3

**Public Social Spending as a percent of GDP, 1880-1930**



Source: Lindert (1992); for Spain own elaboration

Table 2: *Public Social Spending*

	Italy	Greece	Portugal	Yugoslavia	Bulgaria	Rumania	Spain
1880	0	0	0	0	0	0	0.02
1890	0	0	0	0	0	0	0.04
1900	0	0	0	0	0	0	0.03
1910	0	0	0	0	0	0	0.04
1920	0	0	0	0	0	0	0.04
1930	0.08	0.07	0	0.09	0.02	0.05	0.11

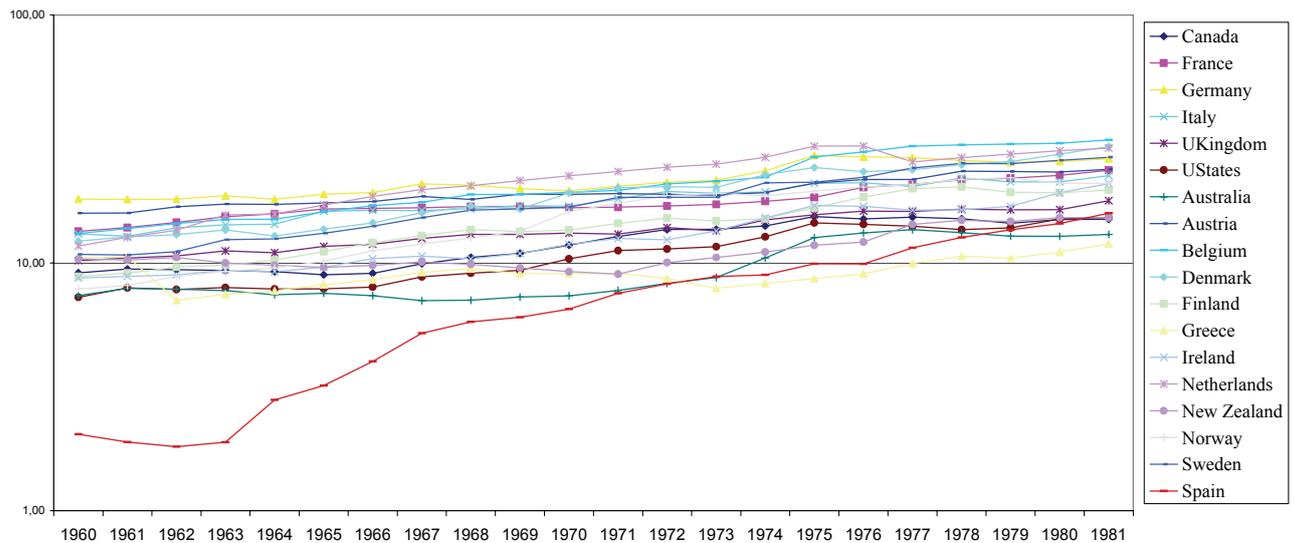
Source: see graph 3

By contrast, during the years 1960-3 public social spending in Spain not only was lower than in OECD countries, but also clearly lower than in other south-European countries as Italy and Greece. This suggests that, between 1930 and 1960, Spanish public social spending followed a very different path from most Western European countries. Probably this anomalous

evolution started after World War II. In fact, during the 1930s, the rise in public social spending that had started after World War I continued at a fast pace and, in the first half of the 1940s (after the Spanish Civil War) public social spending experienced a quick recovery of the prewar levels. Nevertheless, after World War II, while public social spending was growing rapidly in most of OECD countries, it declined in Spain almost continuously from 1947 until 1959/61. Only after 1962/3 did social spending in Spain showed a fast-growing trend towards convergence with the rest of OECD.

Graph 4

Public Social Spending\*, 1960-81



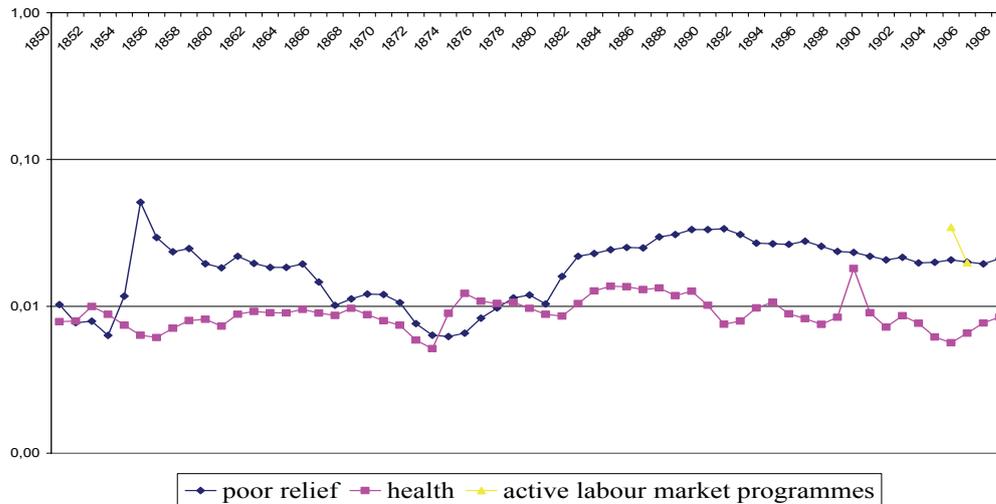
Source: OECD (1985); for Spain: until 1963 own elaboration; since 1964 Barrada (1999)  
 \*including contributions from employers and workers to social security

**Changes in the composition of public social spending in the long term**

Public social spending in Spain not only experienced changes in its long-term growth rate, but also in its composition, especially since 1909. As graph 5 shows, before 1909 government’s central spending consisted of spending on poor relief and subsidies to public health institutions. Only in 1905 and 1906 did the central government allocated some resources in public works for alleviating unemployment. Nevertheless, between 1909 and the outbreak of the Spanish Civil War in 1936 a wide diversification of public social spending took place. This diversification process happened because of the gradual introduction of several social insurance systems, such as the voluntary pension insurance scheme in 1909 (compulsory since 1919), the voluntary maternity insurance in 1923 (compulsory since 1931), and the voluntary unemployment insurance in 1931. Similarly, subsidies given by central government to large families and to the accident insurance scheme during the twenties, and spending on “active labour market programmes” also contributed to this diversification (and growth) of public social spending, (graph 6).

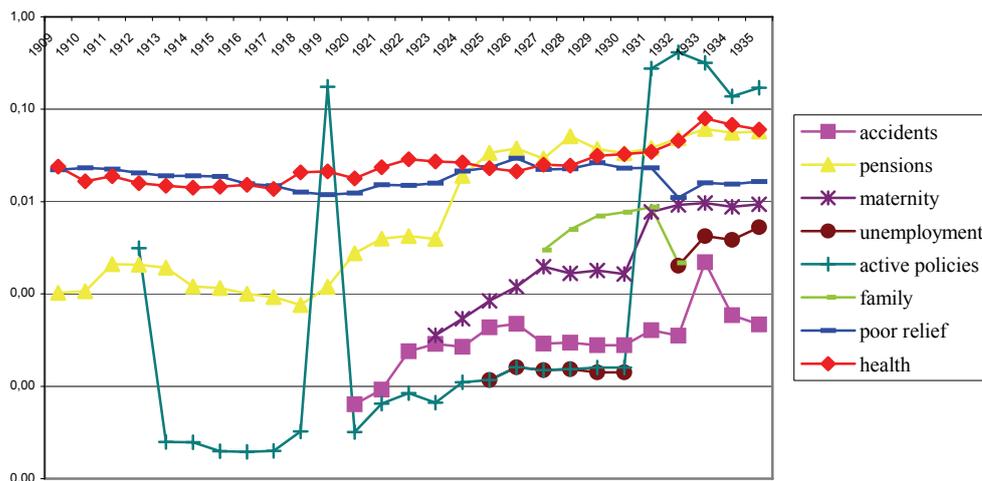
Graph 5

Public Social Spending, 1850-1908



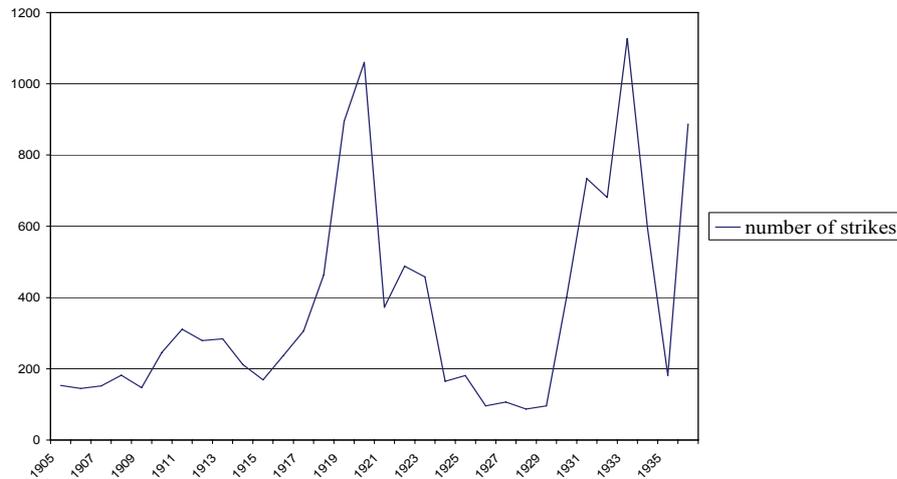
Graph 6

Public Social Spending, 1909-35



This diversification process, which in fact simply meant that the state was assuming new and modern ways of social protection, made possible the growth of public social spending after World War I. However, public social spending reached its higher levels when central government allocated big amounts of resources to a traditional policy: public works for alleviating unemployment (which had only been used by local governments so far, with the aforementioned exception of the years 1905-6). As graph 6 shows, the item “active labour market programmes”, experienced a very important rise both in 1919 and 1931-5, because of the investment in public works for alleviating unemployment in these years. Actually, in 1919 investment in public works provoked an increase in public social spending from 0.04 per cent of GDP to 0.21 per cent. Similarly, in the period 1931-5 public works provoked an increase in public social spending from 0.12-0.18 per cent of GDP to 0.33-0.54. Nevertheless, this kind of social spending was not permanent, but depended on (and was very sensitive to) the socio-political situation. Both the period after World War I and the first thirties were periods of social unrest and intense labour disputes (graph 7).

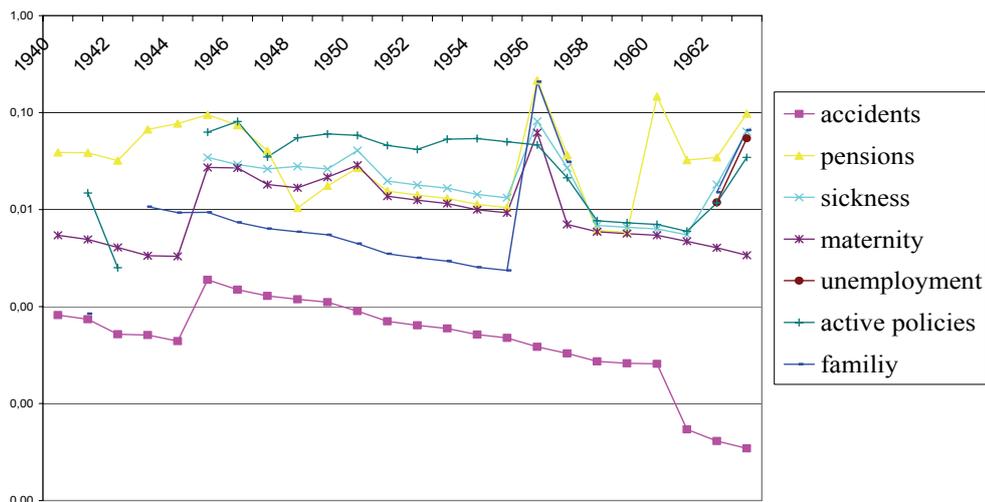
Graph 7  
**Strikes, 1905-36**



Source: Silvestre (2003)

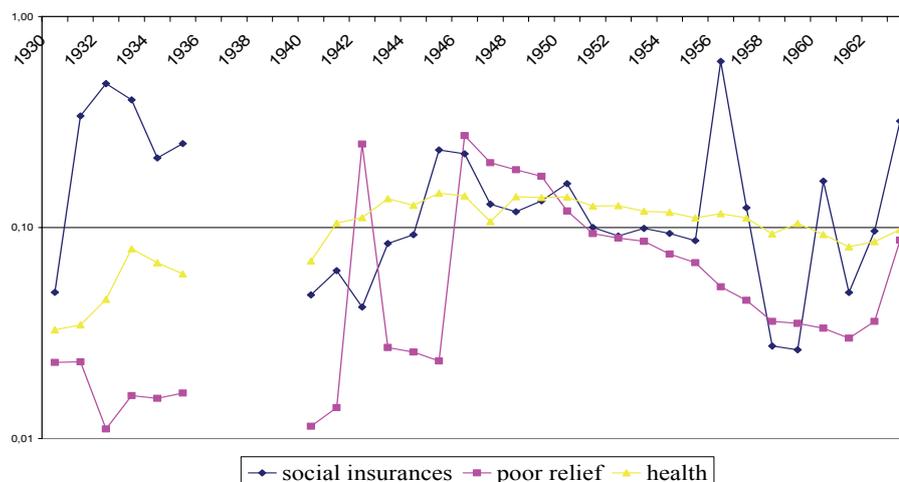
After the Civil War, during Franco’s Dictatorship, the diversification process that had started in 1909 continued, through the creation of the family allowance in 1939 and sickness insurance in 1942. However, public subsidies to social insurances schemes fell as a percentage of GDP between 1940 and 1959/61 (graph 8). During this period an increase in the relative size of public spending on poor relief also took place, thanks to the extraordinary growth that it experienced between 1940 and 1946. Similarly, the relative size of public spending on health also increased during the Dictatorship. Actually, this kind of spending continued the growth started in the thirties and never fell below the prewar levels, (graph 9).

Graph 8  
**Spending on social insurances, percent of GDP, 1940-65**



Graph 9

## Public Social Spending as a percent of GDP, 1930-63



### Conclusions

The series shown here offer new quantitative information on a period of the Spanish Welfare State that had not been sufficiently studied so far. Moreover, since the series is based on OECD definitions, it is comparable with similar data available for other countries. The new series also has a high level of disaggregation, which allows a more in depth analysis.

Broadly speaking, the new data illustrates the rise and diversification that took place in Spanish public social spending in the 1920s and the early 30s, when the state was assuming new and modern ways of social protection. On the other hand, until the outbreak of the Civil War in 1936, and even during the early 40s, the evolution of public social spending in Spain seems to have followed a similar path to other countries of the European periphery. Nevertheless, in the period after World War II a process of divergence took place because, while most European countries experienced a fast growth of public social spending, this fell in Spain. As a consequence, by 1960 public social spending was much lower in Spain than in most European countries.

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# **ABSTRACTS OF ACADEMIC PAPERS**



## I/A Occupations in the Industrial Revolution

Chair: **Nick Crafts** (Warwick)

**Leigh Shaw-Taylor** et al (Cambridge)

*The occupational structure of England and Wales, c.1820-71*

This paper will analyse the changing occupational structure and occupational geography of England and Wales over the period c.1820 to 1871. The analysis will be based on a number of new datasets of male occupations (all of which will be made generally available in due course) generated by two ESRC-funded projects (RES-000-23-0131 and RES-000-23-1579):

- (1) A dataset derived from virtually every single English and Welsh Anglican baptism register for the period 1813-20 (c.11,300 registers). After 1812 it was a legal requirement, almost universally followed, to record fathers' occupations for legitimate births at baptism. In consequence we have been able to create a dataset of approximately 2 million occupational descriptors for the period 1813-20. This gives us a precise and comprehensive picture of male occupational structure c.1820 at a variety of spatial scales (the parish, the hundred, the registration district, the county and the nation). This is some two decades before county level occupational data become available with the 1841 census. All of these data have been coded to an occupational coding scheme devised by E.A. Wrigley and R.S Davies called Primary, Secondary, Tertiary (PST). This fine-grained system recognizes around 1,000 distinct occupations at its most complex level but at the simplest level codes all occupations to one of the primary, the secondary or the tertiary sectors.
- (2) A series of datasets consisting of the county level data from each of the published census reports from 1841 through to 1871 coded to PST. These datasets differ from the tabulations published by C.H. Lee in a number of important ways. Firstly, the full level of detail in the original source has been retained so there are 400 plus occupations for each census year (rather than the 27 aggregate categories used by Lee). Secondly, one drawback of Lee's scheme is that as much as 10 per cent of the workforce remained unallocated to any sector in some years. With PST this figure is less than 1 per cent removing a major potential source of error between one census and the next. Thirdly, the full age structural detail has been preserved.
- (3) Three occupational datasets for men aged 20 years and over for each of the 625 registration districts of England and Wales for c.1820, 1851, 1861 and 1881. The data for 1851 and 1851 were published in the censuses of 1851 and 1861 (but at no other dates) and to date historians have made virtually no use of them. An equivalent dataset has been created for c.1820 from the parish register dataset discussed above which has been matched spatially to the mid-nineteenth century registration districts. These datasets thus allow us to examine occupational change for c.1820, 1851, and 1861 at a spatial level well below the county.

All these datasets can be tabulated, statistically analysed and mapped at various spatial scales allowing us to reconstruct the changing occupational structure of nineteenth-century England and Wales as never before. This paper will focus primarily on changes in male occupational structure at county level. The first part of the paper will consider a methodological problem relating to the 1813-20 dataset while the second part will present a preliminary overview of the findings.

The methodological problem to be considered in the first part of the paper concerns the 1813-20 dataset. Men described as 'labourer' would mostly have been agricultural labourers; a significant minority of labourers worked outside agriculture. A proportion of 'labourers' therefore need to be allocated to sectors outside agriculture. Since 'labourers' formed 30 per cent of all individuals in the 1813-20 dataset (but varying from a low of 9 per cent in Lancashire to a high of 62 per cent in Bedfordshire) it is clear that the estimated sizes of the

agricultural and non-agricultural workforce are potentially very sensitive to the decisions made over the sectoral allocations of labourers.

The problem does not arise in the subsequent census datasets since a clear distinction was made between agricultural and non-agricultural labourers (in 1851 26 per cent of all labourers in England were non-agricultural). Data provided in the censuses of 1811, 1821, 1831 and 1851 make a number of approaches possible to the issue of how to split the labouring population. Some of these will be presented together with a sensitivity analysis.

In the second part of the paper some preliminary findings will be presented based on one of the solutions to the foregoing problem. Perhaps the most striking finding is that the tertiary sector was much the most dynamic in terms of changes in employment share. Nationally tertiary sector employment increased from around 16 per cent to around 29 per cent of male employment. Moreover, whilst the exact figures varied, the tertiary sector's employment grew dramatically in every single county. The largest single component of the tertiary sector was transport which grew from around 5 per of male employment in 1813-20 to just under 10 per cent in 1871. No remotely comparable growth took place in male secondary sector employment and overall growth in the secondary sectors' share of male employment over this period was very modest. Most of the growth in the secondary sectors' share of male employment associated with industrialization came before 1813-20.

**Peter Kitson et al** (Cambridge)

*The occupational structure of England, c.1750-c.1820*

The terminal date for this paper is set by the existence of the dataset of male occupations for c.1820 described in the abstract for the preceding paper in the session. That dataset records the male occupational structure of virtually all of England's 10,000 ancient parishes deriving from Anglican baptism registers.

The recording of fathers' occupations in Anglican baptism registers only became legally obligatory after 1812. However, some parishes and chapelries consistently recorded fathers' occupations at an earlier date. Data from over 500 baptism registers for the period 1740-99 have been collected as part of an ESRC funded project (RES-000-23-0131). All these parishes recorded occupations for at least 95 per cent of legitimate baptisms for the period for which data has been collected so the usual problems of social selectivity encountered in pre-census sources of occupational data have been minimized. In addition we have data from militia ballot lists from around 600 parishes over the period 1762 to 1798. Thus we have occupational data from around 1,100 parishes (out of 10,000 for England as a whole) for one (and sometimes two) dates in the second half of the eighteenth century. The data come predominantly from the following counties: Cheshire, Hertfordshire, Northamptonshire, Lancashire, The West, North and East Ridings of Yorkshire and Northumberland. These datasets will allow us to reconstruct the occupational structure of these eight counties over the second half of the eighteenth century in some detail and hence make estimates of national occupational structure. All of the occupational data have been coded to the PST system described in the abstract for the preceding paper allowing us to construct consistent estimates of English occupational structure for the period 1750-1881.

Some of these datasets (Hertfordshire, Northamptonshire, the West Riding and Northumberland) have been presented at the EHS conference as county case studies in previous years. This paper will present new parish register data from Lancashire and the North and East Ridings of Yorkshire but will focus on a critical methodological issue. The parish-register sample for these counties is a large but non-random sample of settlements. Given that occupational structures are highly variegated and vary radically from one settlement to another two questions arise. What is the optimal approach to re-weighting the sample and how robust are the results?

Fortunately we have male occupational data from virtually every single parish register for the period 1813-20 (10,000 units nationally) and this provides a basis for re-weighting the

non-random nature of the late eighteenth century sample. The paper will present a number of ways of doing so together with a sensitivity analysis and some preliminary findings.

Earlier preliminary analysis of some of these data, using a rough and ready approach to the sampling issue, tentatively suggested the following major conclusions:

- (1) Lancashire and the West Riding had the remarkably high figure of two-thirds of adult males in secondary sector employment as early as 1750.
- (2) Contrary to prevailing orthodoxy, there does not appear to have been any increase in the relative importance of male secondary sector employment in Lancashire or the West Riding or any other region between 1750 and 1820.
- (3) The economic geography of England in the nineteenth century was not, as has often been argued, a product of the period 1750-1850, but of the period 1500-1750.
- (4) Areas with very high levels of secondary sector employment in the mid-eighteenth century experienced much more rapid population growth after 1750 than agricultural districts. And they did so because of very substantial migrations into these areas from predominantly agricultural districts.
- (5) Nationally there was only modest growth in the relative importance of the secondary sector between 1750 and 1820 and this was driven not by structural change at the regional level but by differential population growth driven by migration.
- (6) By 1750, before the start of the classic industrial revolution period, England already had about 40 per cent of its adult male workforce in the secondary sector.
- (7) In terms of percentage employment share the tertiary sector was much the most dynamic sector across the period 1750-1820.

The paper will conclude by considering how well these preliminary national conclusions stand up in the light of both the new evidence and the more thoroughgoing treatment of the sampling issues.

**Tony Wrigley** (Cambridge)

*Coping with rapid population growth: England in the century preceding the Great Exhibition of 1851*

The rate of population growth in England accelerated sharply in the closing decades of the eighteenth century, reaching a peak in the early decades of the nineteenth century. In no other period of English history have growth rates been so high. In a land long settled and still experiencing many of the constraints inherent in all organic economies, this may be expected to produce severe difficulties. Success in meeting these difficulties depended on the creation of new employment opportunities at a rate commensurate with the growth of the workforce. In general the challenge was met successfully but the new employment opportunities did not increase proportionately with the initial distribution of population. They were strikingly concentrated in limited areas which in turn gave rise to huge differences in regional population growth rates.

It is possible to describe the nature of the changes taking place more fully than in the past because estimates of the populations of individual English hundreds (610 in number) are now available for every tenth year from 1761 to 1841. If individual hundreds are ranked according to the size of the increase in population taking place, it becomes clear how 'lopsided' the growth was. In the bottom quarter of hundreds the annual rate of growth of population was only 0.31 per cent per annum over the period 1761-1841, at which rate a population would take about 225 year to double. In contrast in the fastest-growing tenth of hundreds the rate of growth was 1.67 per cent per annum, at which rate the doubling period is only just over 40 years (see table 1). The contrast in growth rates implies a very high level of net migration between different types of hundreds since there was far less contrast in rates of natural increase than in rates of population growth. Differential rates of population growth are in effect a proxy measure of differential rates of growth in employment opportunity.

The broad picture is clear. In rural, agricultural areas new employment opportunities were limited and if population had risen rapidly in these areas there would have been acute misery. Success overall in coping with rapid population growth was contingent on employment opportunities in urban and industrial areas growing rapidly enough to enable them to absorb both local increase and the 'surplus' population produced by natural increase in the rest of the country. If the period as whole is divided into three sub-periods, 1761-91, 1791-1831, and 1831-51, it appears that in the first and last periods there was little or no pressure from rising numbers in rural areas, but in the middle period, when population growth rates peaked, there is greater evidence of difficulty in that the contrast in growth rates between the fastest- and slowest-growing hundreds was less clear-cut than in either the earlier or later sub-periods. There is also suggestive evidence of difficulties in rural areas in the trends in poor law expenditure in different types of hundred. Whereas in the first sub-period expenditures per head in the fast- and slow-growing hundreds was very similar, in the middle period the level of such expenditures grew much more markedly in rural slow-growing hundreds than in those in which growth was fastest.

Table 1: *Population growth in 610 English hundreds 1761-1851*

<b>1761-91</b>	starting population	growth	% growth overall	% growth p.a.	av. pop. of hundred
England	6,310,340	1,535,336	24.3	0.73	10,345
top 10%	2,102,967	1,066,851	50.7	1.38	34,475
top quarter	3,236,908	1,339,885	41.4	1.16	21,156
second quarter	1,130,578	172,668	15.3	0.48	7,389
top half	4,367,486	1,512,553	34.6	1.00	14,320
bottom half	1,942,855	22,783	1.2	0.04	6,370
bottom quarter	1,055,714	-47,788	-4.5	-0.16	6,900
	share of population in 1761	share of growth 1761-91			
top 10%	33.3	69.5			
top quarter	51.3	87.3			
second quarter	17.9	11.2			
top half	69.2	98.5			
bottom half	30.8	1.5			
bottom quarter	16.7	-3.1			

<b>1791-1831</b>	starting population	growth	% growth overall	% growth p.a.	av. pop. of hundred
England	7,845,676	5,405,865	68.9	1.32	12,862
top 10%	3,059,119	3,295,732	107.7	1.84	50,149
top quarter	4,551,212	4,225,949	92.9	1.66	29,746
second quarter	1,445,285	675,592	46.7	0.96	9,446
top half	5,996,497	4,901,541	81.7	1.51	19,661
bottom half	1,849,180	504,323	27.3	0.61	6,063
bottom quarter	807,155	130,011	16.1	0.37	5,276
	share of population in 1791	share of growth 1791-1831			
top 10%	39.0	61.0			
top quarter	58.0	78.2			
second quarter	18.4	12.5			
top half	76.4	90.7			
bottom half	23.6	9.3			
bottom quarter	10.3	2.4			

<b>1831-1851</b>	starting population	growth	% growth overall	% growth p.a	av. pop. of hundred
England	13,251,541	3,775,939	28.5	1.26	21,724
top 10%	6,054,295	2,801,342	46.3	1.92	99,251
top quarter	8,496,295	3,325,023	39.1	1.66	55,531
second quarter	2,073,248	302,766	14.6	0.68	13,551
top half	10,569,543	3,627,789	34.3	1.49	34,654
bottom half	2,681,998	148,150	5.5	0.27	8,793
bottom quarter	1,358,613	11,424	0.8	0.04	8,880
	share of population in 1831	share of growth 1831-51			
top 10%	45.7	74.2			
top quarter	64.1	88.1			
second quarter	15.6	8.0			
top half	79.8	96.1			
bottom half	20.2	3.9			
bottom quarter	10.3	0.3			

<b>1761-1851</b>	starting population	growth	% growth overall	% growth p.a	av. pop. of hundred
England	6,310,340	10,717,140	169.8	1.11	10,345
top 10%	2,043,341	7,037,289	344.4	1.67	33,497
top quarter	3,316,056	8,750,556	263.9	1.45	21,674
second quarter	1,288,082	1,131,039	87.8	0.7	8,419
top half	4,604,138	9,881,595	214.6	1.28	15,096
bottom half	1,706,203	835,544	49.0	0.44	5,594
bottom quarter	705,335	230,088	32.6	0.31	4,610
	share of population in 1761	share of growth 1761-1851			
top 10%	32.4	65.7			
top quarter	52.5	81.7			
second quarter	20.4	10.6			
top half	73.0	92.2			
bottom half	27.0	7.8			
bottom quarter	11.2	2.1			

## I/B Trade Flows

Chair: **David Ormrod** (Kent)

**Philipp Rössner** (Leipzig)

*The introduction of the English customs system in Scotland in 1707 and the rise of Scottish foreign trade thereafter (1700/1707-60)*

Between 1700 and 1760 Scottish foreign trade underwent a formidable transformation. Imports and exports grew at previously inexperienced rates, roughly tripling between 1700 and 1760 and quintupling between 1736 and 1776. New commodities gained in importance. Scholars have usually focused on the Glaswegian tobacco trades and their micro-economic, as well as geographical advantages in explaining Scottish commercial success. It is suggested here that this explanation is valid yet incomplete, as it disregards certain branches of the trades that evaded recording, but can nevertheless be shown to have been as substantial as the colonial trades. Furthermore there were certain technicalities built into the English taxation system, without which – i.e. had the English Reformation Customs System (1660seq.) not been introduced in Scottish ports by virtue of the Union 1707 – Scotland would most certainly have fared differently. These technicalities co-determined the emergence of a peculiarly Scottish trade pattern after 1707.

During the period Scottish foreign trade rested upon three pillars, which attained similar dimensions in value terms: (1) The colonial trades, which expanded since 1736; (2) the “traditional” trades with England, which expanded at similar rates and in 1760 still surpassed the colonial trades in value terms; and finally (3) the smuggling trades. It will be argued that this commercial pattern was conditioned by the institutional change taking place *qua* the Union 1707 and the introduction of the English customs system in Scottish ports in the following way. (1) The legal colonial trades were stimulated in particular by the drawback on customs duties paid on tobacco, as well as the bonding scheme operated under the same schedule. This system effectively granted long-term credit on liabilities that were excessively high, particularly within a commercial environment that had yet to get accommodated to large-scale and capital-intensive foreign commerce. Furthermore, by the opportunity of shipping tobacco effectively duty free if it was re-exported, an option enjoyed by no other taxable import in eighteenth-century British trade, this system laid the foundations of an overseas trade pattern geared towards tobacco. (2) The overland trades to England were stimulated by the abolition of customs duties on Anglo-Scottish traffic in 1707. Whilst the absence of reliable quantitative sources capturing Anglo-Scottish trade post-1707 does not permit a full discussion of the problem, contemporary estimates suggest that Scotland’s overseas trade statistics only capture about 50 to 60 per cent of her total “foreign” trade at best. The remainder was trade with the old rival to the south, which continued to thrive after 1707, as much as it had in the six previous decades. As late as 1765 for instance, exports to England of cattle and linen, in value terms surpassed imports from and exports to the American colonies, as well as re-exports of tobacco, sugar and rice from Scottish ports to European destinations (“the colonial trades”). These primary and low value-added secondary goods accurately reflected Scotland’s stage of economic development and comparative advantage. Again, the change in the institutional superstructure in 1707 is the key to the problem: the abolition of customs duties upon cross-border traffic between England and Scotland in 1707. Under the legislation established by the English restoration customs system (1660), which remained largely unaltered and applicable throughout the eighteenth century, cattle imported into England had until 1707 been liable to a duty of 7s 1d 2 farthings Sterling per head, or about 24 per cent of its f.o.b. value (at average prices for cattle, c.1700-60). Obviously the abolition of this duty on Scotland’s main export to England (alongside linen) further stimulated the rise of the English market for Scots produce. (3) The third pillar of Scottish commercial activity was the supply of illicit goods to the domestic market. Whilst the

dimensions of the illegal market in tobacco are reasonably well-researched, the illicit tea trades, which have almost completely evaded scholarly attention as yet, attained monetary dimensions similar to the legal and illegal tobacco trades after 1740. Taking tea and tobacco together, and adding illicit trading activities in spirits and other non-essentials such as Indian textiles, all of which prevailed in eighteenth-century Scotland, this yields the third pillar of Scottish commercial activity in the period: trade through the black market sector. A taxation system (English customs system 1660/1707) that either employed tax rates well in the excess of 240 per cent of the products' prime cost (tobacco), or which monopolized the importation of certain non-essentials to certain channels (tea), led to retail prices quoted for legally traded items, that were far in excess of what this economy could bear. Accordingly, alongside a flourishing re-export business, this also caused the rise of a black market sector in Scotland the dimensions of which were spectacular. Evidence will be presented, suggesting that the tea business attained considerable dimensions after 1707, so as to approach or match Scotland's colonial trades ("first pillar of Scottish commerce"), as well as the English link ("second pillar of Scottish commerce") in value terms.

Thus the change in the framework of taxation in 1707 proves an important key to the explanation of the quite spectacular rise of Scotland's foreign trade 1700/1707-1760. The above results will be placed into a European perspective by adding evidence on the trading patterns of the major trading nations of contemporary Europe.

**Paul Sharp** (Copenhagen)

*On the origins of the Atlantic economy: trade in wheat between North America and Britain from the eighteenth century*

This paper aims to give a long-term perspective to the story of the development of an Atlantic Economy prior to the First World War. With very few exceptions, and despite the scholarly enthusiasm for the famous "Grain Invasion" of the late nineteenth century, very little attention has been paid to the trade in wheat between America and Britain in the eighteenth century. Indeed, politicians and farmers of the mid- to late nineteenth century seem to have been under the impression that the importance of grain imports from North America started in their time, and economic historians seem to have been content to accept this. This might in large part be due to a lack of available data. The Customs House in London famously burned down in 1814, taking with it nearly all records of England's international trade and customs revenues prior to that date. Fortunately, however, detailed records of Britain's imports of wheat from the American colonies and the early years of the United States have in fact survived.

After the office of Inspector General of Imports and Exports was established in 1697, the first imports of wheat from North America are recorded in the 1720s, but for many years they were at a low level. From the 1760s, however, Britain began its transition to being a net importer of wheat. The Corn Law of 1774, which ushered in a period of almost free trade in grain, was met by a flood of imports from North America – reaching levels comparable to those of the mid-nineteenth century at a time when the population was much smaller. However, the War of Independence and a dispute about the dangers of importing wheat infected by the Hessian fly stopped this first invasion in its tracks.

The fact that data for American imports alone remain for the eighteenth century suggests the importance attached to them by contemporaries. Additional evidence for this comes from the fact that, for example, in the face of a return to protectionism in 1791, petitioners from the west of England felt compelled to bring to the attention of Parliament that they were in many years dependent on the supply of wheat from America.

The most striking finding is that from the 1780s – with some exceptions in particular due to trade policy and war – there is a fairly constant percentage rate of increase in wheat imports from North America which only stops in the 1870s, despite that fact that these years have often been considered to mark the start of the Grain Invasion. For Britain, at least, it appears that the Invasion had its origins in the eighteenth century.

**Markus Lampe** (Münster)

*Bilateral trade flows in the European economy, 1857-75*

Foreign trade statistics are among the most prominent sources in macroeconomic history. Much has been written about their quality, especially on bilateral trade flows in the early twentieth century. While Morgenstern (<sup>2</sup>1963) and others dismissed the quality of these data, Federico and Tena (1991) re-examined it gave a positive verdict for aggregate figures. In a study on the geographical distribution of international trade in textiles in 1913, Carreras Marín (2005) found that even data for bilateral flows were fairly reliable if individual country pairs are weighted by their shares in total trade.

The present paper investigates the quality of a large, internationally comparative set of foreign trade data for the period 1857 to 1875 and presents the dataset itself. The dataset is constructed using information at the commodity level and contains import and export values for the UK, France, the Zollverein, the Netherlands, Belgium, Austria-Hungary and the United States, itemized by trade partner. We aim to solve three basic problems of heterogeneity in national statistics of the period: different definitions of aggregates, inadequate “official” pricing, and the misleading practice of crediting imports to bordering countries from where they physically entered, but where they did not originate. The data are comprehensively analysed by statistical tests on the consistency of importers’ and exporters’ records on the same trade flow. A major innovation of the dataset is the systematic transit correction that reassigns countries of origin using immediate partners’ transit statistics thus treating especially the ‘border bias’ inherent in historical trade statistics.

The results of the reconstruction are bilateral trade values for 42 country-pairs, 10 points in time and 21 commodity groups, along with *ad valorem* tariff rates for all commodity groups and countries. They offer new detailed insights into the composition and evolution of trade and tariffs before 1870.

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## I/C Migration and Shipping Companies

Chair: **Katrina Honeyman** (Leeds)

**John R Killick** (Leeds)

*Steerage fares and conditions of travel on the North Atlantic: evidence from the Cope Line, 1820-60*

The emigrant passenger trade, especially in the decade following the Irish famine, is usually considered one of the great tragedies of the Victorian world. Contemporary liberal writers blamed ship-owners and travel brokers, and governments responded with the Passenger Acts. Modern historians have generally accepted this view, but some have challenged the severity of the crisis. The Cope Line shipping records in the Pennsylvania Historical Society offer several new approaches to this question. Copes operated the leading Liverpool to Philadelphia packet line, and carried about 55,000 passengers westwards and 20,000 eastwards between 1820 and 1860. These are probably the only full-scale records of a contemporary packet line in existence.<sup>1</sup>

The Copes were wealthy Philadelphia Quaker reformers and operated high-class ships. However they were keen businessmen, and the technology and conditions of the time inevitably meant steerage travel on even the best ships was rough. The question is how hard were these passages in terms of contemporary conditions and expectations? Fares are one parameter of the equation. It is obvious they were sufficiently low in the 1840s and 1850s not to block the huge transatlantic migration, but the details are fragmentary. The Cope records are sufficiently complete to present for the first time continuous series of westward and eastward fares from 1820 to 1860. The Cope captains often reported cash spot fares on Liverpool to New York transients could occasionally be much lower than standard packet rates to Philadelphia, but the latter are a good indication of general levels.<sup>2</sup>

The Cope records also enable some new assessments of travel conditions. Research using the US Passenger Lists has suggested mortality on the passage was much lower than traditionally accepted, but it is not clear how fully captains reported deaths. The Copes did not keep explicit records of illness or mortality, but the partners' and captains' letters are sufficiently full to somewhat qualify this new view. Secondly successful migrants in Pennsylvania often purchased prepaid passage tickets in Philadelphia to send to relatives in England and Ireland. After presentation in Liverpool thousands of these tickets were returned to the Cope archives in Philadelphia, and several hundred have short messages on the reverse from the senders. These gave the recipients some idea what to expect on the passage, and are a good indication of what contemporaries thought about conditions, which are often considerably less dire than the liberal view.<sup>3</sup>

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<sup>1</sup> MacDonagh, Oliver, *A Pattern of Government Growth, 1800-60: The Passenger Acts and their Enforcement* (1961); Killick, John, *An Early Nineteenth Century Shipping Line: The Cope Line of Philadelphia and Liverpool Packets, 1822-1872*, *International Journal of Maritime History*, (2000).

<sup>2</sup> Coleman, Terry, *Passage to America: A History of Emigrants from Great Britain and Ireland to America in the mid-nineteenth Century* (1972); Keeling, Drew, *The Transportation Revolution and Transatlantic Migration, 1850-1914*, *Research in Economic History* (1999).

<sup>3</sup> Cohn, Raymond, *Mortality on immigrant voyages to New York, 1836-1853*, *Journal of Economic History* (1984); Killick, J.R., *Missives from America: Travel Advice on the Cope Line Prepaid passenger Ticket Stubs, 1845-1870* (Paper delivered to British Association of American Studies Conference, Leicester, 2007). J.R. Killick, University of Leeds.

**Drew Keeling** (Zurich)

*Shipping companies and transatlantic migration costs: the case of Cunard, 1880-1914*

The Cunard Steamship Line pioneered regular steamship service across the North Atlantic in 1840. Twenty years later, it overcame initial reticence towards steerage traffic, eventually becoming the longest-lived transporter of migrants to North America. Apart from an initial study 35 years ago by Liverpool maritime historians Francis Hyde and Robin Bastin (for example, chapter three of Hyde's *Cunard and the North Atlantic*), this long association of Cunard with mass migration has been touched only lightly in previous historical scholarship, however. Cunard was never the largest carrier of migrants from the UK, although it outlasted all its competitors. It was also thought, however, to be inclined (perhaps more so than other lines) to consider migrant carriage a somewhat "distasteful" trade, and to focus instead on services offered to wealthier tourist and business travellers in the first class accommodations of its famously large and fast passenger steamers.

Cunard's voyage accounting records, available from the early 1880s after it became a public company, and examined episodically but not comprehensively by Hyde and Bastin, confirm the importance of luxury class traffic to Cunard. Contrary to their conclusions, however, these records also show incontrovertibly that steerage did not diminish but grew in significance to the company after 1900. Systematic analysis of these voyage by voyage tabulations of passenger volumes, receipts and disbursements, also shows that migrant carriage between 1902 and 1914 was the largest source of Cunard's revenue, profits, and variability in overall financial results.

These records corroborate earlier findings suggesting that migration during these peak years just before World War I had a greater effect on the business of shipping than the business of shipping had on migration. An earlier paper of mine ("The Transportation Revolution and Transatlantic Migration," *Research in Economic History* 19) showed already that Cunard's fares rose over the 1885-1914 period as a whole (when the company's migrant passenger volume grew roughly tenfold). A new quarterly time series in this new paper shows that a positive, not inverse, relationship between fares and migration flows also applied seasonally and cyclically. Rather than lower ticket prices stimulating more migration, migration and prices both dipped during downturns in the US job market. The cyclicity of fares diminished late in the period, however, when cartelization inhibited fare wars from breaking out during economic recessions.

The expenses side of Cunard's operating accounts provides new insights into strategies by which falling operating costs were not parlayed into lower passage prices but were instead invested in faster and roomier ships offering gradually less uncomfortable journeys to all classes of passengers including migrants. The paper also analyses how Cunard's fares, and the business mix between migrants and tourists varied seasonally. A combination of the archival accounting data with other economic data shows that transatlantic fares were not – or at least were no longer by late 1800s – the key constraint on Europeans relocating to North America. A final section discusses reasons why Cunard is probably fairly typical of migrant carriers across the North Atlantic in this period.

**Torsten Feys** (EUI, Florence)

*Prepaid tickets to ride to the New World: the New York Continental Conference and transatlantic steerage fares, 1885-95*

As maritime historian Francis Hyde noted in *Cunard and the North Atlantic*: "the real point to grasp is that it was the steamship which changed the whole nature, organization and profitability of the migrant trade." Only because of the increased organization and commercialization of this trade, based on a system which had been developing since the eighteenth century, was the transatlantic migrant movement able to attain the sheer volume it had. These high numbers allowed the steam shipping companies involved in migrant trade to become some of the biggest companies worldwide.

Although maritime and migration networks have often been treated separately, the commercialization of migrant transport firmly connected both. These networks encompassed the whole Atlantic world connecting state authorities, business and labour interests and individual migrants, yet the key role of steam shipping companies in these networks remains relatively unexplored. This paper will examine how shipping companies tried to take control over the agent-network in the US where the market of return and prepaid tickets (bought in America for someone in Europe to make the crossing) expanded with the introduction of steam. By using the archives of the Holland America Line (HAL) running a service between Rotterdam and New York, the paper will take a closer look at how these companies managed the migrant passage business through shipping conferences.

The business was first entrusted to migrant brokers who had specialized in supplying ships with passengers through a network of migrant agents and subagents during the age of steam. The HAL took the passage business into its own hands first in Europe in 1877 and in the US in 1886. Contrary to prior assumptions, this transition was slow to materialize. Migrant brokers remained important middlemen because of their ties with the agents and because fierce competition between the shipping companies for the trade enabled them to play the lines against each other to their advantage. The more intense the competition between the lines, the higher the commission of migrant brokers and agents, hence the latter had no interest in a stable market of controlled fares to the New World. This pushed the firms to collude, establishing shipping conferences to neutralize the competition among them, fix prices and take control over the agent-network. Based on the correspondence of the HAL head-agent in New York and the minutes of the New York Continental Conference uniting the biggest continental steamship lines this article analyses how successful the conference agreements were. What were the internal and external pressures undermining the conference? What effect did the conference “pool agreements” of the early 1890s have? How did they influence the prepaid and return steerage fares on the North Atlantic?

**Nicholas Evans** (Hull)

*Fares versus Faith: determinants influencing the trans-oceanic Jewish passenger business, 1899-1914*

Approximately 30 million people crossed the Atlantic as part of the growing internationalization of labour markets throughout the era of the Great Migration, as estimated by economic historians and demographers. Of these a small, but often very visible, proportion were Jewish. The arrival of such so-called ethnic aliens created a great variety of reactions, whether they came as refugees, economic migrants or sojourners. Evidence from contemporary newspapers, popular journals, and even parliamentary debates often displayed an alarmist response to the perceived deluge of aliens and alien culture. And yet the business of transoceanic shipping, of which the passenger trade was crucial, brought great economic benefit and prestige to Britain, Germany, Denmark, Holland, and France – the countries where the alien “problem” often generated popular backlash against Jewish, Slavic and other racial groups.

This paper will consider the trade in transoceanic Jewish passengers from Europe to New York between 1899 and 1914. Based on unpublished sources, it will statistically profile the trade via each port and then each shipping line to demonstrate the significance of the Jewish passenger business. Having presented the statistical evidence underpinning the paper, I will consider whether economic or non-economic determinants had a greater influence on the volatile business of shipping Jewish labour. Based upon the applicant’s PhD thesis (examined in 2006) and extensive research on primary and second sources in Europe, North America, and South Africa, it seeks to clarify the significance of economic considerations upon one facet of the transoceanic passenger market. Thus the centrality of the Jewish market to capacity utilization strategies deployed by individual ports and steamship companies throughout the era becomes very apparent. As we shall see, the Jewish transmigrant, often

used to exemplify popular anti-alienism, was an important part of a much wider business that provided greater economic benefits to maritime commerce.

## I/D Colonial Management

Chair: **Nicholas White** (Liverpool John Moores)

**Abayomi Kristilolu** (Independent Scholar, Essex)

*Déjà vu: Oil, Niger Delta and Empire: the militarization of commerce and resource control in pre- and post-colonial Nigeria*

Twice in a period of less than three centuries, oil has been at the centre of dramatic commercial relations between the Niger Delta and the industrial West which left the former with precarious social and political consequences. Palm oil in the nineteenth and crude oil in the twentieth/twenty-first centuries have both exposed the Niger Delta to the more disruptive forces of global economic and political competition that led to its loss of political independence to external forces. First, the suppression of the Trans Atlantic Slave Trade and the introduction of the so-called 'legitimate commerce' in palm oil began a process which culminated in the formal colonization of the Niger Delta and the entire territory that became known as Nigeria between 1898 and 1914. Now, the trade in Nigerian crude oil which began in 1958 and derives almost exclusively from the Niger Delta area has created a new form of imperial encroachment in the Niger Delta represented by the sometimes uneasy but very profitable alliance of multinational oil corporations and local/foreign political elite.

This paper examines the dynamics between the commercial and political contestation in the Niger Delta over two forms of oil resources in the nineteenth, twentieth and twenty-first centuries. It explores the factors which deepened the contestations to the point of armed confrontation and the implication this had on the changing form of imperial manifestation.

**Valerie Johnson** (Cambridge)

*'Empire made me?': British companies and extra-European cross-cultural encounters in an imperial era*

In the early twentieth century, employees of British multinational business formed a substantial group of British abroad. In contrast with Cain's and Hopkins' gentlemanly capitalists, who were principally indirect portfolio investors, these British expatriates were managers who were in direct contact with non-Europeans, principally through the direct employment of tens of thousands of local people. Their cross-cultural encounters form a significant body of evidence, which has been largely overlooked in secondary literature.

As the paper discusses, there was a tendency for British companies overseas to adopt British social mores found in areas of formal Empire, and where these were not already in existence, to create a 'British culture' based on norms often associated with ideas of Empire. But this approach used 'British' norms which were themselves often the product of previous colonial encounters, norms which were in fact not 'British' but hybrids of adaptation and compromise to a foreign environment.

The paper will discuss how the study of British multinationals operating in areas of formal and informal empire therefore shows that their 'British' identity was forged from transnational interaction with non-British peoples overseas, whose own cultures and identities influenced and helped to form ideas of 'Britishness'. Experiences outside Britain on the peripheries of Empire informed and altered company culture overseas, which was then, crucially, transferred back to Britain. The idea of a central metropolitan culture radiating out to the peripheries is seen to be a false one, and can be replaced by the idea of networks of circulating personnel, cultures and influences moving from periphery to periphery, and to and from Britain. From this emerges the paradox of British identity, the very nature of which then, was both defined and undermined as 'British' by these cultural encounters.

**Stephanie Decker** (Harvard)

*The colonial legacy in African management: West Africa and South Africa, 1950s-70s and 1990s-2000s*

The colonial legacy in Africa has determined the development of management on the continent, as the comparison between the historical case of Africanization in Ghana and Nigeria in the 1950s, 1960s and 1970s with South Africa in the 1990s and 2000s highlights. The replacement of white managers with blacks who could previously only occupy subordinate positions in the colonial or Apartheid system experienced similar problems in these countries, despite the fact that Ghana and Nigeria were not settler colonies. In the quest for legitimacy in the eyes of local elites and international community, companies are tempted to resort to ineffectual window-dressing or ‘tokenism’, or failing to develop the talent and abilities of black staff which often face disapproval not only from white but also from less successful black colleagues. In the case of successful promotion of black managers, skilled white personnel is often driven away by the lack of opportunities for advancement for them, while capable black staff is frequently poached with better offers by competitors. The creation of a black elite with significantly higher income than the majority population can also be socially divisive and undermine corporate social responsibility claims.

However, it was the formation of this new elite in politics and business in West Africa that allowed greater cooperation between white-dominated business and African politicians. As their new black partners were increasingly perceived as reliable and competent, African managers were promoted more quickly and to more responsible positions. Yet the reform coalition that had emerged during decolonization between business and government in Ghana and Nigeria showed signs of strain in the 1960s and almost broke down entirely in the 1970s. This, among other things, had a negative impact on economic development and growth. In the first decade after apartheid, South Africa’s white-dominated business has remained in a strong reform coalition with the ANC government, and the relative strength of business and of the coalition is relatively stronger than was the case in either Ghana or Nigeria. Nevertheless, the West African case illustrates that a failure of this coalition can be detrimental. In West Africa, these coalitions became strained because Africanization and African control of the economy was perceived as too slow in foreign companies, and this ultimately undermined these elite coalitions.

## I/E Gender and Consumption

Chair: **Maggie Walsh** (Nottingham)

In recent years, there has been a renewed interest in issues surrounding consumerism. Matthew Hilton's *Consumerism in Twentieth-Century Britain: the search of a historical movement* and the *Cultures of Consumption* research programme are notable examples of research in this area. Focusing specifically on gender and consumption, this panel will explore the role played by the female consumer in a number of organizations and geographical locations. It considers various aspects of consumption (including food, clothes, crafts and domestic appliances), during periods where women were increasingly considered to be knowledgeable and autonomous consumers. Consideration is also given to the contribution of women not only as consumers, but also as producers of consumer goods. The three papers, in different ways, examine how issues of consumption could be intrinsically bound with broader ideological messages; for example, patriotism, national efficiency, the drive towards a utopia, and shifts in discourse regarding domestic roles.

**Valerie Wright** (Glasgow)

*'For Home and Country': The Scottish Women's Rural Institutes and the production and consumption of agricultural produce and 'rural' crafts*

The Scottish Women's Rural Institute (SWRI) was founded in June 1917. It soon became affectionately known as the 'Rurals' by its members. Catherine Blair, a former suffragist, is acknowledged as 'the driving force' behind the establishment of the movement, and was strategic in gaining support. She urged the formation of Rurals as 'a help' in food production and conservation. The necessity of the Rurals for the war effort and later in 'improving the nation' was emphasized. The Rurals remained fiercely patriotic throughout the interwar years with its motto being 'For Home and Country'. As a result it gained the support of the Board of Agriculture for Scotland, with its chairman Sir Robert Greig arguing that Scottish women were 'capable of much more in ensuring the success of the agricultural industry'.

Indeed the Rurals embarked upon its own attempts to improve 'national efficiency'. Members were encouraged to become actively involved in increasing the production and consumption of local agricultural produce in rural areas of Scotland. This was largely channelled through the establishment of what it termed 'rural industries' and 'cooperative enterprises'. Under these schemes it was suggested that members form community based cooperatives for growing crops and vegetables, which would serve the needs of its members with surpluses to be sold on 'wayside' market stalls. Such activities were also extended to the production and sale of 'rural crafts' such as leather craft, basket making, embroidery, and rug making. These products were exhibited and sold at national agricultural shows, with the dual objective of raising the profile of Scottish crafts and earning additional income for their producers. In addition the Rurals continued to work closely with the Board of Agriculture, which encouraged it to become involved in the 'local cooperative marketing' of agricultural and dairy produce such as poultry, eggs, butter and cheese. It was felt that as countrywomen had expertise in the production of such goods their cooperation would stimulate consumption. Consequently it was argued that the involvement of the Rurals would be beneficial for Scottish agriculture.

Therefore, for the 'Rurals' the processes of production and consumption were intimately linked in their work. This paper will consider the way in which the Rurals and its members engaged in the production of agricultural produce, both to serve the needs of the community, and also to raise the profile of Scottish agriculture. Consequently, its involvement in local cooperative marketing of such produce, which in turn stimulated consumption of these goods, will also be considered. Similarly the production and sale of rural craft goods was both functional, in that it earned money for members of the Rurals, and was also a marketing tool for Scottish crafts. It follows that the dual function of the Rurals'

craftwork will also be discussed. Throughout this paper I will also explore the notion that patriotism and attempts to increase ‘national efficiency’ were a guiding influence in the Rurals’ work in these fields.

**Nicole Robertson** (Nottingham)

*Women as organized consumers: the case of the Co-operative Movement*

Traditionally, the labour movement is associated with male workers and issues of wages and production. In contrast, the co-operative movement is concerned with issues of prices and consumption, with the main source of financial support for the retailing societies coming from the female consumer – the so-called “woman with the basket”. The 1844 Rules of the Rochdale Pioneers (from which the modern co-operative movement developed) stated that anyone could join the co-operative society provided they were over 16 years of age. Each member was entitled to one vote whatever the amount of their shareholding, and it was explicitly stated that men and women would enjoy equal voting rights within the society. Co-operative societies prided themselves on equality of rights for all members and equality of access through open membership. This paper explores the concept of membership and participation within various co-operative societies in Britain, with particular reference to female members. How did the co-operative retail societies seek to attract new female members and how did they encourage existing members to visit their local Co-op store?

Melanie Tebbutt, in her work on pawnbroking and working-class credit, has stressed how the management of household resources was generally considered a woman’s responsibility, and that regulating the household expenditure could involve a complex juggling of various demand of credit payments, burial insurance, rent, food bills and other necessities of family life.<sup>1</sup> The dividend from a co-operative society could be essential to the family economy. This paper explores the practical benefits of co-op membership, in particular the role played by the Co-op as an institution helping women, as the chancellors of the family exchequer, to manage the household budget.

The paper also examines the ideological aspect of membership and the drive towards the so-called “Co-operative Commonwealth”. Activists within the movement claimed that membership figures were ‘dull and lifeless unless one appreciates what they represent ... . Every individual contribution, whether in membership, capital or trade, is a voluntary contribution, i.e., a result of a free and willing decision made by an individual person. Every such contribution is an advance toward the Commonwealth’.<sup>2</sup> Leaders within the co-operative movement attached great importance to the role of their female members in the drive towards this utopia. In the pamphlet *Women as Organised Consumers*, Margaret Llewellyn Davies (general secretary of the Women’s Co-operative Guild) argued that it was the purchases made by the “woman with the basket” who would eventually annihilate the capitalist system of trading. She declared that ‘every bar of soap, every pair of boots brought in a co-operative store is helping to break down capitalists, and to destroy autocracy and profit-making in industry’.<sup>3</sup>

Although there were those within the movement who were insistent that only stock made co-operatively should be sold by retail co-operative societies,<sup>4</sup> even when consumers did shop at their local co-operative retail store, it is clear from the records of the local societies that they were not only purchasing co-operative produced and manufactured goods. The *Co-operative News* expressed concern that too many of the movement’s membership were purchasing goods that were not of co-operative manufacture and that co-operative

<sup>1</sup> Melanie Tebbutt, *Making Ends Meet: Pawnbroking and Working Class Credit* (Leicester: Leicester University Press, 1983).

<sup>2</sup> Arnold Bonner, *British Co-operation* Bonner, Arnold, *British Co-operation* (Manchester: Co-operative Union, revised edn 1970), p. 487.

<sup>3</sup> Margaret Llewellyn Davies, *Women as Organised Consumers* (Manchester, 1921), p. 2.

<sup>4</sup> Women’s Co-operative Guild, *Co-operation’s Great Opportunity* (London, 1919), p. 8.

factories were not working at full output because of this.<sup>5</sup> It is clear from the records of individual societies that members did not seek to solely purchase co-operative produced and manufactured goods. As one society recorded, the retail outlets stocked articles other than Co-operative Wholesale Society ones because these were the products that members wanted to purchase. They argued that the member was the key to the situation, and when members would have only co-operatively produced goods, there would be no need for the Society to stock other products.<sup>6</sup> It seems that for most housewives the decision to buy from a co-operative society did not represent a conscious decision to advance toward the Co-operative Commonwealth.

The paper concludes by considering the opportunities women had, beyond the weekly shop, to participate and engage with the co-operative movement. Ellen Furlough's work on consumer co-operation in France discusses the tensions within the movement over the activities for women in the male-dominated co-operative organizations. She highlights that there were few female administrators and 'even the most elementary issue of membership in cooperatives was problematic for women'.<sup>7</sup> This paper argues that in Britain, although women were not perceived solely as consumers, their participation in the administration and leadership in the movement was somewhat restricted. It uses the records of individual co-operative societies to explore women's involvement in the administration and activities of their local retail societies. In this respect, there appears to have been tensions between the image of the co-operative movement and its ideal of 'democratic consumerism' and reality that existed within individual societies.

### **Natalya Chernyshova (King's London)**

#### *Consumption and gender under late Socialism*

In the Soviet Union, as elsewhere, consumption was a gendered issue. As in the West, women were seen as particularly prone to acquisitive urges and vulnerable to the dictates of fashion. These issues became especially prominent in the post-Stalin period when Soviet citizens, just like their counterparts in postwar Western societies, experienced major growth in living standards. However, beyond the apparent similarities with the West, the relationship between gender and consumption under late socialism had important peculiarities. This paper discusses some of these peculiarities with reference to the Brezhnev period, 1964-85, when Soviet society experienced its own consumer revolution.

First there is the role of gender in the acquisition of domestic appliances. In the Khrushchev years (1953-64), household gadgets had been hailed as a way of liberating women from domestic work and giving them time for public involvement and political education. The modern path to emancipation had been seen not in changing social perceptions and roles, but in changing kitchen routines. Under Brezhnev, however, this ideological tool began to malfunction on various levels. As a result of propaganda and production efforts, female shoppers of the late 1960s, 1970s and 1980s were becoming expert consumers. But just as they grew more demanding the state grew increasingly unable to match their expectations with the output of electrical goods. This resulted in shifts in public discourse not only about the role of machines but also with regard to domestic roles.

Second, the Brezhnev era saw the majority of women in employment with personal incomes to spend. Not only did women have expertise in acquiring household gadgets, but also their incomes now gave them more financial autonomy as buyers and more agency in deciding what to buy for themselves and for the household. Furthermore, they were not only consumers but also producers of consumer goods.

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<sup>5</sup> *Co-operative News*, 13 January, 1934, p. 2.

<sup>6</sup> For example, Kettering Industrial Co-operative Society Board Minutes, 31 May 1932.

<sup>7</sup> Ellen Furlough, *Consumer Cooperation in France. The Politics of Consumption 1834-1930* (London: Cornell University Press, 1991), p. 206.

Thirdly, the peculiarities of the Soviet economic system produced distinctive results for another traditionally gendered commodity – clothes. Late socialist trade regularly failed to offer appealing garments to urban professionals, who grew increasingly sophisticated in their demands and got their fashion ideas not from state retailers but from foreign films and magazines. They turned to state or private tailors, the black market, or made their own clothes. Consumers, and not the state or its fashion experts, came to drive popular fashion in the late Soviet Union. Sartorial consumption became a field of negotiation between citizens and the state. At the same time, however, gender became less important here. Not just women but young people, without gender specification, came to be identified as a group primarily and actively interested in buying clothes. New styles were less gender-specific, and sources demonstrate that clothes emerged as an important social issue for both boys and girls.

These concurrent processes – the transformation of women into knowledgeable and autonomous consumers, especially of such popular everyday symbols of modernity as electric durables, and the tendency of age to replace gender as the main differentiating factor in the traditionally gendered field of clothes consumption – form an important part of the story of Soviet society's modernization.

## I/F Politics and Business

Chair: **tba**

**Matthew Bellamy** (Carleton University)

*The Canadian brewing industry's response to Prohibition, 1878-1919*

At the dawn of the twentieth century, prohibition became part of a broader impulse in Canadian life to regulate the economy and enhance public power over private capital. This impulse, and the state intervention that accompanied it, aimed at ensuring that private investments were made for purposes not seen as harmful to society at large. Beginning in 1901, one Canadian province after another went “dry”. Prince Edward Island had the distinction of being the first province to take the plunge into full-fledged prohibition. Then came Saskatchewan in 1915, followed, in 1916, by Ontario, Alberta, Manitoba, Nova Scotia, and, in 1917, New Brunswick and British Columbia. The Yukon Territory and Quebec climbed aboard the wagon in 1918. In March of that year, the newly elected Unionist federal government of Robert Borden stopped, for the duration of the war and one year thereafter, the manufacture and importation of “intoxicating drinks” into provinces where purchases were illegal. By 1918, therefore, Canada had gone dry.

It has long been the position of social and economic historians alike that prohibition was destined to become a basic factor in Canadian life during the early twentieth century. For their part, historians of Canadian business generally agree, concentrating their studies – to the limited extent that they exist – on the efforts of brewers to overcome the obstacles presented during the prohibition era. The existing historiography is, without exception, complimentary of the efforts of Canadian brewers and their ability to survive during this “difficult” period. The consensus, therefore, is that brewers “made the most of their opportunities”.

The paper challenges the existing historiography. Contrary to the established position the paper argues that the unwillingness and inability of the brewing industry to organize itself and lobby effectively, as well as its failure to reach out to other anti-prohibitionists in society (as had been done in Great Britain when, in reaction to vehement attacks by temperance reformers, British brewers and publicans had formed “the trade”), was as much a factor in the onset and continuation of prohibition of beer as were the actions of prohibitionists. The underlying position of the paper is that the brewers had a very real chance of getting beer – “a temperance drink” – excluded from prohibitionist legislation had they been less parochial, more innovative, and far more strategic in thought and action.

The paper draws on the various primary sources at a number of corporate archives (for example, Molson, Labatt, Sleeman, Alexander Keith) as well as at the National Archives of Canada. In addition, the papers of the Canadian Brewers and Maltsters' Association, the industry's testimony before the Royal Commission on Liquor Traffic, and various contemporary journals and newspapers are utilized.

**Tim Cooper** (Exeter)

*Recycling capitalism: the political economy of waste in Victorian Britain*

Economic and business historians have recently begun to take an unprecedented degree of interest in the history of waste, especially waste and the utilization of waste products in the Victorian period. In the main, writers like Carl Zimring and Pierre Desrochers have generally taken an optimistic stance on the achievements of nineteenth-century industrialists in promoting the recycling of industrial waste by-products; they have consequently drawn the conclusion that free markets and private property offer sufficient, or optimal, conditions under which to minimize waste and pollution in an industrial society. This paper takes issue with these conclusions and offers a different interpretation of the significance of the Victorian fascination with waste and the technologies of utilization and recycling.

The main problem with assessing the effectiveness of Victorian industrial recycling is a lack of adequate means to quantify its success. There were certainly extensive waste trades and important industries built upon recycling, but it is far from clear that this was not as much symbolic of failure as of success. Industrial recycling did not succeed in eliminating polluting effluents, gases and smoke, for example, which often presented the most telling environmental problems for both residents and workers in industrial areas. At best displacement, rather than elimination, seems to have been the achievement of industrial recyclers.

Similarly, the evidence employed by historians like Desrochers, namely technical texts on the development of various means of employing waste products usefully – especially the work of Peter Lund Simmonds, *Waste Products and Undeveloped Substances* (1862) – is very far from conclusive. Simmonds did not himself manage to make a fortune from waste, and his work was more often an appeal for continued innovation than a paean to existing achievements. Nonetheless, Simmonds' contributions were part of a larger Victorian fascination with the problem of waste and resources. On the one hand the 'Waste Utilization Question' was partly a response to the apparent contradiction that economic progress brought with it environmental degradation, but it also reflected wider concerns with issues such as the exploitation of imperial environment and the sustainability of Victorian capitalism.

The question of the sustainability of Victorian industrial and economic achievements was coming under considerable scrutiny in the 1860s and 1870s. The debate on the Coal Question had encouraged economists like Jevons and Marshall to contribute discussions of the finite nature of British natural mineral resources that were pessimistic about the ability to conserve resources and maintain industrial progress. They argued that resources should be expended without concern for the future in a heroic promethean effort to achieve the highest level of civilization possible before the inevitable fall. In this context waste utilization might be seen as an economic fallacy; indeed, Marshall suggested that as soon as an economy started to worry about resource use, it had already entered a stage of inevitable regression. Most discussion of the utilization of waste products was far more optimistic than this, however. It owed much to scientific and enlightenment conceptions of improvement, especially the idea that the application of human ingenuity could produce ever more efficient uses of existing substances and by-products. Such a process was even seen as a law of nature, a fact reflecting the influence of 'chemico-theological' ideas in Victorian recycling conceptions.

The imperial context is also of great importance in assessing why waste utilization was so important. Simmonds was widely involved in debates on the nature of unexplored and unexploited 'waste' lying in wait within the Empire. His work partly popularized the efforts of economic botanists and economic entomologists to 'improve' and extend the exploitation of imperial ecologies. This discussion provided a late nineteenth-century variant to earlier debates on the improvement of waste-lands and legitimated capitalist development and imperial exploitation. The utilization of waste thus presents an important link between the environmental challenges of imperial exploitation and those of the domestic British economy. The debate surrounding waste utilization therefore needs to be seen as far more than merely a reflection of the achievements of Victorian capitalism in sustaining its environmental base; it reflected wider arguments concerning the sustainability of industrial progress as a whole and the legitimacy of imperial economic and scientific interventions. Men like Simmonds were involved in the construction of a self-justificatory rhetoric designed to suggest that the existing methods of scientific progress and technological innovation were quite sufficient to solve questions of pollution and finite resources. They provided an interesting and important strand of economic discussion on how capitalism should respond to limits to growth and environmental challenges which arguably traces a line down to contemporary ideas of 'ecological modernization'.

## II/A Child Labour in Industrial England

Chair: **Judith Spicksley** (Hull)

This panel takes as its starting point the view that the time is ripe for a new look at child labour in industrial England. It is one of those many topics in economic history that, having caused considerable debate and moral outrage among both contemporaries and a previous generation of historians, appeared to have been resolved once the parliamentary papers had been reasonably thoroughly trawled and a ‘balanced’ view with regard to children in factories and mines achieved. More recent recognition of the small role that factories played in the child labour market, more thorough examination of the quantifiable evidence provided by published census reports and unpublished census enumerators’ books, and the exploitation of a range of hitherto largely ignored source material in the form of autobiographical evidence and parish documentation – all of this has enabled a more sophisticated and thorough examination of the nature and significance of child labour in industrial England. This panel reflects some of this recent work, and the new perspectives to which it is beginning to give rise.

**Nigel Goose** (Hertfordshire)

*Child employment prospects in nineteenth-century Hertfordshire in perspective: varieties of childhood?*

In 1990 Hugh Cunningham published an article on ‘The employment and unemployment of children in England c.1680-1851’ (*P & P*, no. 126, 1990, pp. 115-50). While Cunningham’s main purpose was to emphasize the lack of employment opportunities for children during the course of these two centuries, both his literary testimony from the eighteenth century and his analysis of the 1851 census report also highlighted the intense regional concentration of factory employment – notably in Cheshire, Lancashire and the West Riding of Yorkshire – as well as revealing a surprisingly strong showing in terms of child employment opportunities in some more southerly agricultural counties – notably Bedfordshire, Buckinghamshire and Hertfordshire. From a detailed analysis of the 1851 Census Enumerators’ Books for the entire county (c.167,000 records) this paper draws attention to the significance of child labour in one of those southerly counties not usually strongly associated with the cutting edge of industrialization: the county of Hertfordshire.

Child labour in Hertfordshire is analysed by age group and gender, with particular attention to employment in the straw plait and hat trades, and consideration of the transition to agricultural labour on the part of young men, and the tension between domestic service and employment in the straw industry for girls and young women. But the analysis goes further than this, showing that even consideration at the level of the county can be misleading, for the child labour market was far more localized than that, creating markedly different circumstances for both children and families in different parts of a county which extended to a mere 632 square miles. These local and regional variations could have profound implications, impacting demographically, educationally, economically as well as socially, implications that extend well beyond the personal experience of the children concerned.

In the final section of the paper, it is argued that Hertfordshire forms only one small sub-set of a larger picture, and the wider remit of this paper will be to briefly consider the broader range of factors that impacted upon child employment in the second half of the nineteenth century, including the rapid changes that occurred across the third quarter of the century, and it will be suggested that the Victorian era – possibly more than any period before or since – exhibited such a diversity of experience that it is more appropriate to think in terms of ‘varieties of childhood’ than it is to think in terms of a homogenous childhood experience.

**Jane Humphries** (Oxford)

*Children in the labour market: the autobiographical evidence*

The paper uses the reminiscences of 617 working-class men who lived through the eighteenth and early nineteenth century to track boys' experiences as they settled into the world of work. The autobiographies contain rich detail on early employment history and so offer rare insight into the child labour market. First jobs provide markers. What were the most popular jobs for children? How did these fit into the labour processes of the time and relate to adult jobs? Crucial questions here are whether children were complements or substitutes for adult workers, and if substitutes did they replace men or women?

The distribution of first jobs can be compressed into broad occupational categories, and then studied over time and in comparison with the distribution of fathers' jobs. Such comparative exercises give a dynamic dimension to an account of children's work. First by comparing the distribution of boys' first jobs across the cohorts, changes in the nature of children's work over time can be detected. Second if first jobs can be taken to approximate the child labour force a comparison of the occupational distribution of first jobs with that of fathers can extend insight into differences between child and adult labour and how these differences developed. In particular the comparisons will answer questions about the emergence of an exclusively child labour market both devoted to part-time and seasonal work and marginal to the main industrial and agricultural activities (Cunningham, 2001; Coninck Smith, Sandin and Schrupf, 1997; Childs, 1992). In this context the autobiographical dataset can be used to shade recent arguments about the mid-nineteenth century "adulting" of the labour force and the segmentation and ultimate disappearance of children's work (Cunningham, 2000).

In addition, intergenerational comparisons between fathers' and sons' occupational distributions highlight the micro processes that restructured the British economy as the industrial revolution gathered momentum. The extent to which sons in particular groups followed in their fathers' footsteps and fathers in particular groups recruited their sons suggests different patterns of expansion and contraction and different levels of self-recruitment across the occupational groups.

Another set of questions revolves around the remuneration of child labour. Information on wages is too scattered to attempt any systematic analysis but can establish the general level of children's pay and how it changed with age. Key here is a comparison with men's and women's wages. At what age could boy workers command levels of pay that approached those of fathers and mothers? It is also possible to say something about the composition of children's pay, that is whether they were rewarded in cash or kind, and to reflect back on power relationships within the family by considering the way in which children's earnings were inserted into family budgets. Who received children's wages and what effect did the status of earners have on children's standing in the family and children's implicit and explicit command over limited resources?

The autobiographies contain useful material on the institutions of the child labour market providing insight into how children found their first job, how frequently children's jobs turned over, the nature of their search for work and how they travelled to work.

Another set of issues involves the child labour process. Did the child work for an adult, with an adult or alone for example? Did the child encounter violence at work and was such violence needed to extract effort from reluctant or time inconsistent child workers. It is also possible to reflect on the purported altruism of the children's parents. Did parents express regret over children's labour and did their guardianship protect the child in the workplace? For example did they remonstrate with supervisors or bosses who drove children or physically abused them? An important issue here is whether parents responded to any adverse effects of work by withdrawing their children from employment.

**Katrina Honeyman** (Leeds)

*'The exploitation of little children?' Parish apprentices and factory work in early industrial England*

As the first children to experience the experimental nature of factory life separate from the protection of family or poor law officials, parish apprentices were potentially subject to rigid discipline and other forms of exploitation. Whether parish factory apprentices encountered more abuse than pre-factory apprentices is hotly contested by historians, yet most now agree that the peculiar features of industrial capitalism originating in the late eighteenth century should be subject to careful consideration.<sup>1</sup> Wally Seccombe, for example, warns of minimizing the difference in exploitation potential between factory manufacturing and pre-industrial work. Industrial capitalism, Seccombe argues, did not inaugurate the use of child labour, but transformed the context.<sup>2</sup> This paper is not concerned with quantifying exploitation but rather aims to assess the experience of parish apprentices, the first generation of textile factory workers, by adapting Clark Nardinelli's concept of indirect exploitation.<sup>3</sup> It considers evidence of compulsion, experimentation, corporal punishment, sexual abuse, intensification of labour and damage to health through a combination of long hours and inadequate diet.

It uses a variety of documentation kept by parishes, including apprenticeship registers and indentures, minutes of meetings of parish officials, and reports of factory visits and inspections, to demonstrate that while the parishes were complicit in the exploitation of their children not least in the involuntary nature of the apprentice binding, parishes varied in the extent to which they 'protected' or 'neglected' the children during the term of their apprenticeship. Business records as well as communication between factory owner and parish officials are also examined to illustrate the range of experience to which parish apprentices were subject. Finally the paper provides evidence of the children's own sense of exploitation, the ways in which they were given opportunities to voice grievances, and the extent to which their concerns were addressed.

Early factory experiments in forms of discipline and supervision and in the length and structure of the working day became embedded in factory practice. All young labour was eventually subject to conditions of work initially tested on parish apprentices. The evidence to be presented in this paper suggests that parish apprentices endured a range of levels of exploitation. Factory regimes varied from the 'brutal' at one extreme to the 'humanitarian' at the other, with the majority falling somewhere in between.

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<sup>1</sup> Sara Horrell and Jane Humphries, "'The exploitation of little children': child labour and the family economy in the industrial revolution', *Explorations in Economic History*, 32 (1995), p. 485.

<sup>2</sup> Wally Seccombe, *Weathering the storm: working class families from the industrial revolution to the fertility decline* (London 1993) pp. 35-6.

<sup>3</sup> Clark Nardinelli, 'Were children exploited during the industrial revolution?' *Research in Economic History*, 11, (1988) pp. 243-76.

## II/B Transport/Agglomeration

Chair: **Max-Stephan Schulze** (London School of Economics)

**Nicholas Crafts** (Warwick) & **Tim Leunig** (London School of Economics)

*Transport improvements, agglomeration economies and city productivity: at what point did nineteenth-century transport improvements raise British wages?*

“New economic geography” finds that the city agglomeration productivity effect comes not only from the size of the city itself, but from the size of its hinterland. Firms in the city are easily able to talk to suppliers, customers and other firms in the hinterland, improving their information set and decision making, whilst those who live in the hinterland can commute to the city, so contributing to agglomeration economies. The nineteenth century saw the rise first of railways and then of trams, allowing such activities to occur for the first time. Did this lead to a rise in productivity? We find that the size of a city’s hinterland had no effect on productivity in the nineteenth century. The cost of train travel, relative to earnings, remained high. But by the first decade of the twentieth century things had changed: train fares fell significantly relative to earnings, and convenient and very low cost trams became common. The productivity effect was real, but lower than is found in Britain today, probably reflecting the relative fall in the time, money and discomfort cost of travel in the last one hundred years. Nevertheless, we estimate that agglomeration economies raised urban wages by around 14 per cent, and GDP in England and Wales by around 8 per cent. This is in addition to earlier social savings estimates, and implies that railways and trams were worth around 14 per cent of GDP by 1906.

**John Langton** (Oxford)

*The economic space of the industrial revolution*

Economies exist in (some argue that they are created by producing) spaces, across which production, distribution and consumption are organized and arranged in relation to each other to produce profit (or exert power). The geographical patterns of activity within these spaces – the nature, distribution, connections and internal structure of any ‘regions’ – are related to patterns of flows within and between production and consumption, and therefore on the capacity, efficiency and shapes of the networks that move energy, commodities, information and capital from place to place. Thus, communication networks create economic space, and different kinds of communication network produce different spatial patterns of economic activities, different distributions and kinds of ‘regions’. The economic space of the English industrial revolution, and of the first Kondratieff Cycle in general, was very distinctive: its economic geographical patterning reflected the peculiar circumstance that (before the railway, steamship and telegraph) the inorganic resources and capital that were combined to allow mass production of commodities, as well as those commodities themselves, could only be moved cheaply and in bulk by organic resources (wind, water and human and animal muscle power), through very sparse networks of inland waterways and seaways; orders, information and money flowed through much denser channels, but still had to be physically carried by people and horses. Economic space was stretched, massively variegated and full of ‘holes’ (before being progressively shrunk, extended and homogenized by railways and internal combustion engines, electricity pylons, telephones and computers). What effect did this have on the nature of the ‘industrial districts’ or ‘regions’ within which the industrial revolution occurred, and what were its consequences for their subsequent development through different configurations of economic space?

**Nikolaus Wolf** (Warwick) **et al**

*The effects of new borders on trade: Central Europe, 1910-33*

An extensive literature on “border effects” in the wake of McCallum (1995) documents the large trade diversion due to political borders. However, these studies suffer from the fact that

borders rarely ever change, and hence that “border effects” are necessarily identified from cross-sectional variation alone. Therefore, the counter-factual question of how trade would change in response to a change in borders (the “treatment effect” of borders) remains unanswered, because trade flows before the introduction of a border are never observed. This paper explores the “treatment effect” of borders on trade by analysing the many dramatic border changes that were imposed and codified by the peace treaties in 1919 across Central Europe between 1910 and 1933. We compiled a new large dataset on *sub-national* trade flows that allows us for the first time to trace the effects of changing national borders over time. Our results indicate that there were large treatment effects of new borders on trade, but that those treatment effects tend to be smaller than the pure cross-sectional effects: most of the new borders followed a pattern of fragmentation across the region that existed already prior to the Great War.

## II/C Liverpool and Empire

Chair: **Sheryllyne Haggerty** (Nottingham)

**John Herson** (Liverpool John Moores)

*Liverpool as a diasporic city*

Liverpool played a pre-eminent role in the worldwide scattering of European peoples in the nineteenth century and it attracted in-migrant peoples through its dynamic growth, its worldwide connections or as residues from its emigrant traffic. This migrant conjuncture tempts use of the term ‘diasporic city’ for Liverpool, and this paper is designed to offer some thoughts on this topic. Liverpool in the nineteenth century was demonstrably a ‘diasporic space’, a ‘contact zone between different ethnic groups with differing needs and intentions’, but such a statement is essentially descriptive.<sup>1</sup> The paper considers the extent to which experience of Liverpool played an *active* role in defining, modifying or even destroying peoples’ diasporic identities. Conversely, it also considers the extent to which the specifically *diasporic* characteristics of migrant groups may have influenced the city’s social, political and cultural life. In other words, the paper considers the impact of diasporic groups *on* Liverpool, and Liverpool *on* diasporic groups, in terms of their origin, the extent to which their diasporic identity was articulated and how that articulation may have changed over time. The focus is on the immigrant peoples as well as on the 12 million emigrants who passed through the port between 1825 and 1913. The paper also reviews the many transients and sojourners, both Liverpool-based and incomers, who may also have been subject to diasporic influences. A minority of self-conscious and articulate groups within a diasporic people may express diasporic identity publicly, but it is always difficult to estimate the strength of such an identity amongst a mass of mostly poor migrants. In day-to-day existence, identities amongst diasporic peoples were inevitably contested to a greater or lesser degree and the diasporic identity might count for much or for little. It was always in tension with the countervailing forces of class, religion, status, culture and British nationalism.

The paper questions whether it is useful to define Liverpool *generally* as a diasporic city. It had a complex and ambiguous identity which reflected interactions and tensions between its various migrant groups, and more comparative work is needed on how these factors influenced the identities of specific diasporic peoples. Consideration of the diasporic influences is linked inextricably to theme of cosmopolitanism, and the paper concludes with some comments on the extent and nature of cosmopolitan culture in Liverpool and Merseyside during its period of most dynamic growth.

**Anthony Webster** (Central Lancashire)

*Liverpool’s Asian networks, 1800-1914*

Liverpool’s role in the Atlantic trade, especially in slaves and sugar, has been well documented by historians. Rather less attention however has been given to the growth of Liverpool’s extensive trade with the ports of India, south east Asia and China during the nineteenth century – yet as early as the 1830s, the tonnage of shipping leaving from and arriving in Liverpool to and from ports in the east vastly exceeded that at other British “outports”. Liverpool was second only in this trade to London. Liverpool became important as the main outlet to India and the east for Lancashire cotton goods, and as a major point of entry for tea, East Indian sugar and a wide range of Asian produce. In this respect, the Asian trade underlined the importance of Liverpool as a truly imperial and global port.

But Liverpool’s role in the development of Britain’s eastern imperial interests was important politically as well as commercially. Liverpool merchants were instrumental in organizing and leading the provincial lobbying which led to the abolition of the East India Company’s monopoly of trade with India in 1813, and later the Charter Act of 1833, which

<sup>1</sup> J. Belchem (ed), *Liverpool 800: culture, character and history*, (Liverpool, Liverpool UP, 2006) p. 14.

also ended the Company's monopoly of the China trade. Indeed the Liverpool East India and China Association, formed in the heated agitation before 1813, survived into the 1870s, only then being absorbed into the Liverpool Chamber of Commerce. Not only was it the earliest East India and China Association – it was also the longest surviving. Its counterparts in Glasgow and London had shorter lives (1830-48 and 1836-c.1860 respectively) and on a number of occasions followed the initiative of the Liverpool organization. Through this organization, and after 1850 increasingly through the Liverpool Chamber of Commerce, the merchants of the city came to not only exert a profound influence over British imperial and foreign policy in Asia, but also to develop important political and commercial connections with chambers of commerce and other mercantile organizations in Singapore, Penang, Malacca Calcutta, Bombay, Madras, Canton and Hong Kong. These supplemented the already close links the Liverpool men enjoyed with other British mercantile organizations in the field of Asian affairs; which included Manchester, Glasgow and London.

These trans-imperial political links enabled Liverpool merchants to have a significant impact on policy in a number of areas. For example, these Asian networks were instrumental during the 1830s and 1840s in breaking down the system of protective tariffs which tended to favour West Indian over East Indian sugar, as well as operating to attack the last vestiges of East India Company commercial privilege in India and south east Asia. Efforts by London merchants to establish a London based central bank for India in the 1830s and 1840s were also thwarted by trans-imperial collaboration in which Liverpool was an active participant. Later in the century, these networks were exercised on such questions as British intervention in Burma between the 1860s and 1890s, the efforts to secure access to the Chinese market and the threat posed to British commercial interests in Siam by French expansionism in Indo-China. Liverpool opinion was eagerly sought by imperial agencies. Following the opening of the Suez Canal in 1869 (at the inaugural ceremony of which representatives from the Liverpool Chamber of Commerce attended), the Liverpool Chamber was consulted on a number of occasions by the Board of Trade for information on the volume of British trade using the canal. All in all, Liverpool maintained a significant presence in the process of British policy formation in respect of Asia during the period.

In general terms, the paper offers two principal arguments. First, in respect of the history of Liverpool, it contends that in the Asian sphere of commercial politics, Liverpool was an active organizer and participant in a trans-imperial lobby. As such, the commercial interests of the City saw themselves as part of a much wider national and imperial community of interests, the defence of which was best effected by conscious collaboration and negotiation between the respective imperial cities and commercial communities. To some extent this is a necessary counterweight to much recent writing on the history of Liverpool, which has tended to stress Liverpool "exceptionalism" and to downplay connections with empire. Secondly, the paper offers the phenomenon of trans-imperial commercial collaboration, through chambers of commerce and similar organizations, as a topic for further consideration in light on the ongoing debate about "Gentlemanly Capitalism". The emphasis in the work of Cain and Hopkins upon the importance of the City of London as the main source of political and economic influence shaping the British Empire is challenged to some degree here, by demonstrating that provincial interests had other, collaborative and trans-imperial channels through which they could exert influence. Of course such channels were also open to City of London interests, and the argument is not that Liverpool or other provincial cities were equal to the capital's commercial elite in the area of policy formation; rather that their presence was much more pronounced than the thesis, as originally cast, contends.

**Nicholas White** (Liverpool John Moores)

*Liverpool shipping and the end of Empire: the Ocean Group in Asia, c.1945-c.1970*

Containerization and Britain's entry into the EEC are usually cited as the principal reasons for Liverpool's economic demise in the 1970s and 1980s. Yet, given the heavy dependence of the port's imports and exports on the non-European world into the post-imperial era, there may be a case for viewing decolonization as a more significant contributory factor in Liverpool's downturn. This paper seeks to explore the links between the end of empire and the Merseyside malaise through examining the experiences of a leading Liverpool-based shipping line, the Ocean (or Blue Funnel or Alfred Holts) group.

The first part of the discussion concerns the significance of Ocean as a key British shipping operation in the Asia-Pacific region, and its relationship with 'gentlemanly capitalism'. We then move on to focus on the ways in which economic nationalism and political turbulence in the decolonization époque affected the group's activities in East and Southeast Asia. In the third section, the degree to which these experiences impacted upon Ocean's performance and strategic management are discussed. Ocean faced a number of threats in the postwar era which were not directly related to decolonization. However, we do discover that the group's diversification (both geographical and 'technological'), as well as the steady loss of Ocean's Liverpool identity, were influenced significantly by the group's political exposure 'east of Suez'. How far the Ocean model might inform an overarching analysis of Liverpool's late-colonial and post-colonial economy is considered in the conclusion.

## II/D Markets and Marketing

Chair: **Francesca Carnevali** (Birmingham)

**Carsten Burhop** (Max Planck)

*Corporate governance and stock market performance of German banks during the panic of 1873*

The law and finance literature has highlighted the relationship between the legal system of a country and financial development. In particular, common law countries have more developed financial sectors than countries with a code-based legal system. Moreover, within a given legal system, corporate governance standards vary substantially between firms. More specifically, firms with high standards of corporate governance outperformed firms with low corporate governance standards during the 1990s in the US. The current paper contributes a historical case study from nineteenth-century Germany to this literature.

We employ a new and unique dataset containing information collected from more than 200 corporate charters from German joint-stock banks for the census year 1872. The banks covered by our sample can be divided into three groups: banks incorporated before enactment of free incorporation; banks incorporated after enactment of free incorporation; banks organized as associations limited by shares (KGaA). Thus, we can investigate if different legal minimum standards relevant for the three groups are visible in different standards of corporate governance. Moreover, we evaluate if variations in corporate governance influence the stock market performance and firm survival of the banks during and after the panic of 1873.

First, we describe corporate governance standards and calculate a corporate governance index. We focus on three areas of corporate governance: voting rights, cash-flow rights, and vertical power relations between shareholders and corporate boards. It turned out that most firms deviated from the rule of one vote per share. In particular, banks incorporated under the concession system had stronger minority rights, whereas firms incorporated after the introduction of free incorporation had fewer restrictions for block-holders. Second, firms founded after enactment of free incorporation had less conservative rules of profit distribution and distributed larger fractions of the accounting profit to the board members. Third, the separation of executive and monitoring rights of the two boards was stricter before the implementation of free incorporation. Jointly and severally, the corporate governance standards were slightly higher for banks incorporated before the enactment of free incorporation compared to banks established after the legal liberalisation.

However, the difference is statistically insignificant. An econometric analysis shows that only firm size has a weakly negative influence on the quality of corporate governance. In addition, the standard of corporate governance in 1872 did not influence the stock market performance of the firms during the panic year 1873. This indicates that the quality of corporate governance was already fully reflected in the share prices in 1872. Consequently, the German stock market seems to have been weakly information efficient. Moreover, the standard of corporate governance was unrelated to firm survival until 1880. Yet, firms established after the implementation of free incorporation had a significantly lower stock market return in 1873 and a significantly lower survival probability than firms established before the enactment of free incorporation. This could indicate that older firms are more stable or that the enactment of free incorporation influenced the quality of firms beyond the quality of corporate governance.

**Leslie Hannah** (London School of Economics)

*The first European integration: logistics, market size and giant plants in the early twentieth century*

Around 1900, the businesses of developed Europe – transporting freight by a different mix of ships, trains and horses – encountered logistic barriers to trade lower than the tyranny of distance imposed on the sparsely populated United States. Highly urbanized, economically integrated and compact northwest Europe was a market space larger than, and – factoring in other determinants besides its (low) tariffs – not less open to inter-country trade than the contemporary American market was to interstate trade. Accordingly, European mines, factories and firms – in small, as well as large, countries – could generally match the scale of those in the United States in the early twentieth century, where factor endowments, demand conditions or scale economies required that.

**Peter Scott** (Reading)

*Mr Drage, Mr Everyman and the creation of a mass market for domestic furniture in interwar Britain*

Previous studies of the development of a ‘mass market’ for consumer durables in interwar Britain have generally emphasized the very limited nature of their diffusion – principally owing to the low discretionary incomes of working and lower-middle class households.<sup>1</sup> Yet these have generally focused either on items to which households accorded relatively low priority (such as electrical appliances) or particularly expensive durables, such as cars.

This paper explores the interwar development of a mass market for new suites of furniture. The domestic furniture sector witnessed particularly rapid growth, real net output rising by some 91.1 per cent over 1924-35. Estimated consumers’ expenditure on household furniture (excluding soft furnishings and floor coverings) in 1938 amounted to £63-64 million – equal to more than twice the sum spent on household electrical goods and comfortably exceeding the £51-52 million spent annually by consumers on new motor cars.<sup>2</sup> The rapid rise in demand largely represented an extension of the market to groups who had hitherto limited their purchases of new furniture: working-class and lower middle-class households. For many such families furniture constituted their largest single item of durable goods expenditure (sometimes involving £80 or more in a single transaction), despite being concentrated at the household formation stage of the family life cycle – a period of particularly low discretionary income.

This paper examines the strategies used by major retailers to extend the market for new suites of furniture to ‘Mr Everyman’ (a term first used as a marketing slogan in the advertising of the mass furniture retailer Drage’s Ltd from the early 1920s). Rapidly expanding multiple chains, which had been relatively unimportant in the furniture sector before 1914, aggressively marketed new suites of furniture via advertisements focusing on liberal hire purchase terms, rather than the quality or characteristics of the product. These and a variety of other guarantees and benefits (including delivery in ‘plain vans’, with no credit references asked for) were promoted via sophisticated national marketing campaigns, entailing exceptionally high ratios of advertising expenditure to turnover. (See table 1).

<sup>1</sup> Chandler, A.D., *Scale and scope. The dynamics of industrial capitalism* (Cambridge, Mass., 1990), pp. 235-392; Broadberry, S.N. *The productivity race: British manufacturing in international perspective 1850-1990* (Cambridge, 1997), pp. 90-92; Bowden, S., and Offer, A., ‘Household appliances and the use of time: the United States and Britain since the 1920s’, *Economic History Review*, XLVII (1994), pp. 725-48; Bowden, S. and Turner P., ‘The demand for consumer durables in the United Kingdom in the interwar period’, *Journal of Economic History*, 53 (1993), pp. 244-58.

<sup>2</sup> Jefferys, J.B., *The distribution of consumer goods. A factual study of methods and costs in the United Kingdom in 1938* (Cambridge, 1950), pp. 269-300 & 350.

Table 1: *Advertising expenditure, HP debts owing, and net trading profit for the four largest UK furniture advertisers, 1933 and 1936*

Company	Advertising	HP debtors	Trading profit
<b>1933:</b>			
British & Colonial Group****	136,365	1,730,964	166,916
Drage's Ltd*	129,297	1,126,414	86,580
Jays Ltd**	121,139	n.a.	23,591
Smart Brothers Ltd	84,689	1,378,672	169,302
<b>1936:</b>			
British & Colonial Group****	220,538	3,052,423	338,273
Drage's Ltd*	159,825	1,492,781	90,349
Jays Ltd**	102,932	n.a.	67,970
Smart Brothers Ltd***	91,518	2,025,406	351,814

Sources: Advertising revenue – *Statistical Review of Press Advertising* (various issues); other data – firms' annual reports and accounts for 1933/4 and 1936/7, held at the Guildhall Library.

Advertising became almost entirely focused on terms, the furniture being rarely shown in any detail. Pressure of competition eventually led more established 'reputable' retailers to copy some of the terms and strategies of the multiples. Meanwhile, by purchasing from a large number of suppliers, the new furniture chains were both able to gain control over design and branding of the goods they stocked and to squeeze manufacturers' margins on account of their market power.

After briefly outlining the changes in furniture manufacturing over the First World War and interwar years, the paper provides an overview of the furniture retail sector. It then charts the efforts of the HP furniture chains to build a mass market, focusing on two of the largest national firms, Drage's and Smart Brothers. Problems arising from 'cut-throat' competition, based around terms, rather than prices, and from the opportunistic behaviour this fostered, are also explored. These are explained in terms of marketing and product design policies that positioned furniture as an 'experience' rather than a 'search' good, together with the nature of market transactions (few repeat purchases, poorly-informed consumers, and limited differences in cost structures between high quality and low quality firms) that allowed lower-quality retailers to advertise more extensively than their higher quality competitors. As the literature predicts, these factors negated the quality-signalling role that is typically characteristic of advertising for experience goods and allowed lower-quality retailers to dominate the market.

## II/E Rural Housing, c.1600-1800

Chair: **Margaret Yates** (Reading)

**Adrian Green** (Durham)

*The variety of 'cottage' housing in Durham and Norfolk, 1600-1800*

Cottagers occupied an awkward space in seventeenth- and eighteenth-century England. Seventeenth-century treatises on tenure found the cottager a problematic category. Even the material definition of a cottage was ambiguous to seventeenth- and early eighteenth-century commentators, since cottages were not easily distinguished from hovels. Though the sense that the cottage was a small *house*, with a household that ought to maintain itself above the threshold of real poverty, endured to form the basis of a more positive attitude towards the cottage from the later eighteenth century. Cottage was also applied as a term for industrial housing, particularly in semi-rural contexts, such as coal and lead mining, and in rural manufacturing districts. The erosion of customary tenure and common rights, alongside the spread of wage-labour, deprived the 'cottager' of access to land, and arguably turned the cottage into the housing of a rural proletariat. This, however, was an uneven process and cottages on commons and small-holdings remained through to 1800, with some vestige of peasant living traditions. This paper explores the varieties and continuities in the material evidence for 'cottage' living arrangements – focusing particularly on arrangements within the house, in terms of both the use of space and 'household stuff' (furnishings, utensils, decorative items and so forth). These findings arise from my current research into the documentary and archaeological evidence for poorer housing in the contrasting regions of Durham and Norfolk. Industrial 'cottage' housing in the coal mining and lead mining communities of County Durham will be compared with the surviving evidence for more rural households in Norfolk. In addition to archaeological evidence for the variety of cottage housing, use will be made in particular of hearth tax records, pauper and probate inventories, and parish overseer and churchwarden accounts.

**Danae Tankard** (Reading/Weald & Downland Open Air Museum)

*The material lives of husbandmen, c.1600-1750*

This paper is based on research carried out as part of a two and a half year Knowledge Transfer Project between the University of Reading and the Weald and Downland Open Air Museum in Sussex. The purpose of the project is to research and write the social and economic history of 10 of the Museum's houses, ranging in date from the thirteenth to nineteenth centuries.

The research presented here examines the history of two of the Museum's cottages, Poplar Cottage, from Washington in West Sussex, built around 1600-50 and Tindalls Cottage from Ticehurst in East Sussex, built around 1690-1725. Both cottages are similar in size and structure, having two rooms within the main range of the ground floor and two rooms above and are heated by a gable-end chimney with a hipped terminal at the opposite end. They have been identified as a type which became widespread throughout the Weald and Downland region from the mid sixteenth-century, usually built as encroachments on common land or on a wayside verge, with little or no adjoining land. Poplar conforms to this type, abutting onto the edge of Washington Common and with less than one sixth of an acre of land. Tindalls is unusual in that it was situated on approximately 25-30 acres of land.

Little comprehensive work has been done on cottages of this type and the socio-economic status of their inhabitants. However, the most extensive research so far undertaken on cottages surviving within the Rape of Hastings in East Sussex suggests that in the late seventeenth century they may have constituted about 15 per cent of all rural housing. Moreover, despite the landlessness or near landlessness of many of these cottages, their inhabitants were far from being the poorest members of their communities: evidence from tax

assessments suggests that the inhabitants fell into a broad economic band representing between 25 and 50 per cent of the parish population.<sup>1</sup> So what was the social status of their inhabitants?

Both Poplar and Tindalls were homes to husbandmen, a large and seemingly amorphous socio-economic group, which has been largely overlooked in recent historiography in favour of broader analyses of the 'poorer' (i.e. those in receipt of poor relief) or the 'middle' sort. Using the social and economic history of the cottages and their earliest inhabitants as a starting point, and drawing on manorial, fiscal, parish and probate records, the first part of this paper analyses the social status of husbandmen in Washington and Ticehurst. It assesses where husbandmen fitted in within the social structure of their communities and evidence for social gradation within the husbandman 'class' itself. For landless or near landless cottages like Poplar it considers evidence for the economic activities of their occupants and whether 'cottagers' can be said to represent a distinct, and possibly inferior, social grouping.

Using a sample of husbandmen's probate inventories and evidence of actual (as opposed to theoretical) household size, the second part of this paper analyses the material lives of husbandmen. The average numbers of rooms listed in inventories is used to assess how typical cottages like Poplar and Tindalls were of husbandmen's houses; and room terminology and the distribution of goods provides important information about the social and economic use of space. Husbandmen generally score fairly low on early modern 'consumption hierarchies' and this is especially true in early modern Sussex. However, changing consumer trends, reflected in ownership of domestic goods, can still be seen in husbandmen's inventories over the period 1600-1750 and it is apparent that even more traditional household goods, like linen, could be used as status signifiers. In conclusion, this paper considers whether it is possible to identify common characteristics of the husbandman 'class' in the period 1600 to 1750 and the applicability of the language of 'sorts' to this socio-economic group.

**John Broad** (London Metropolitan)

*The Parish House in the long eighteenth century*

One of the major features of the Old Poor Law was the rights that it gave to poor families to be housed within their parish of settlement. Enshrined in the Acts of 1598 and 1601 were clauses that allowed parishes to build houses for indigent families. In addition, the poor overseers were prepared to subsidise housing by making rent payments for those families on the slippery slope to a parish pension. It was cheaper, and less disruptive than some of the more dramatic (and frequently abortive) steps taken to institutionalize the poor in workhouses or poorhouses. In parallel, institutionalized charities that had invested in bricks and mortar to produce income for the poor, found in southern and midland England in the later eighteenth century that growing rural poverty reduced their rental income, and many were found fulfilling their objectives by letting their property rent-free. This paper examines two aspects of these phenomena. Firstly it looks at the surviving documentary and material evidence for parish housing for the poor to examine how far, in an age first examining the idea that there were building standards, parishes thought it important to reconcile decent living conditions with concepts of 'less eligibility' that are more familiarly associated with the New Poor Law. Secondly, using material from sample counties across England to determine the minimum extent of parish and charity housing for the poor, and comparing it with evidence of poor rate levels, it examines the extent to which the decision to subsidise housing under the Old Poor Law can be seen as an economically prudent decision.

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<sup>1</sup> Research undertaken by David and Barbara Martin.

## II/F Demography

Chair: **tba**

**Tommy E Murphy** (Bocconi) & **Sandra Gonzalez-Bailón** (Oxford)

*When smaller families look contagious: a spatial look at the French fertility decline using an agent-based simulation model*

Despite some disagreements about specific timing, it is now widely accepted that France was the first country in Europe to undergo a fertility decline. Available data suggests that birth rates there began to fall more or less systematically somewhere after the Revolution, whereas other regions in the continent had to wait no less than another 50 years to do so. But at least two other features – not necessarily unconnected with the first or with each other – make the French decline noteworthy: how long it took and how a considerable degree of internal heterogeneity remained. Throughout the nineteenth century this uneven development took place in a quite distinctive geographical pattern: at least two clear areas of low fertility appeared to spread their influence (the Seine valley and the Aquitaine region) while two ‘islands’ of high fertility kept shrinking (Bretagne and the Massif Central) until they more or less disappeared in the early 1900s. Standard econometric studies can shed some light into the factors driving this apparent diffusion, but to better understand the mechanisms underlying its dynamics we need tools that allow us to look closer at the interaction of individuals and incorporate somehow the spatial dimension. In this paper we use an agent-based simulation model to address that issue.

Even to the naked eye a sequence of maps plotting fertility rates per *département* along the nineteenth century suggest a (slow) diffusion from the Parisian and Aquitaine basins towards the rest of the country. The fact has not gone unnoticed by researchers. Yet, as most explanations incorporating diffusion insinuate that little or no clear economic force contributed to the decline – by relying on the adoption of new behaviour as its main driving force – economists have been reluctant to accept them. Arguably, analysis has been held back in that area due to difficulties in modelling complex systems involving many simultaneous maximizations problems and the interaction of agents in a particular geographical space, but now a growing literature on social networks and diffusion has changed that (Rosero-Bixby & Casterline, 1993; Montgomery & Casterline, 1993, 1996; Montgomery et al, 2001; Kohler, 2001).

Timing of the downfall is also suggestive. There is some disagreement on how to accurately date the beginning of the fall and – consequently – to be sure on when it actually takes places, but even using different measures of fertility it seems clear that a new trend begins shortly after the French Revolution. Many scholars (for example, Flandrin, 1979; Weir, 1983) have suggested in the past that there is indeed some connection between this momentous event and the fertility decline. Interestingly enough, a series of recent papers have pointed out several examples of fertility declines that are related to social upheavals of some sort – not necessarily of democratic or secular nature – where the French case is presented as yet another example of this suggestive regularity (Binion, 2001; Caldwell, 2004; Bailey, 2006). Nevertheless, causal links are certainly not obvious and the underlying mechanisms remain obscure.

We believe that agent-based simulation can overcome some of the difficulties to incorporate these factors in a theoretical framework, and that it can help us understand better the particularities of the fertility decline in France. Until recently, mostly due to technological limitations, agent-based models were rarely present in the toolkit of social scientists. But the increase in computer power and the simplification of programming languages have facilitated access to these techniques and now their use is becoming increasingly more common among researchers in economics, sociology, demography, and political science (Arthur, 2005; Axelrod, 1997, 2005; Tesfatsion, 2005; Gilbert & Troitzsch, 2005). They are still, though,

largely absent in economic history. This paper attempts to fill that gap. By using this technique, and profiting from the above-mentioned developments in the research on fertility behaviour that incorporates social networks and social upheavals as explanatory factors, we attempt to generate a model capable of replicating the particular geographical diffusion of the French fertility decline.

We constructed an artificial society that mimics the spatial characteristics of French *départements* and we populated it with agents following density and age distributions suggested by historical data. These agents were then given some behavioural rules they follow according to their characteristics and the behaviour of the agents in their neighbourhood, and die randomly according to the real mortality rates also suggested by historical records. Hence, this agent-based model incorporates both data on population characteristics and spatial information on the geography of France, to assess how different behavioural assumptions and social network topologies cause variation in the diffusion pattern. In addition to these endogenous forces, we use quantitative data on the Ecclesiastical Oath of loyalty to the Revolution of 1791 to proxy for the institutional impact that the Revolution – exogenous to the model – might have had on the population dynamics of different *départements*. We then assess how the actual heterogeneity of these factors could have affected the emergence of the distinctive geographical patterns.

The paper looks thus at two components of the mechanisms that might drive fertility behaviour. On the one hand, we introduce the effect of the revolution as a heterogeneous and exogenous shock to the population. Individuals in more ‘progressive’ *départements* are more likely to be affected by a shock that makes them want to have fewer children. On the other hand, we introduce different forces of social diffusion. Individuals want to have fewer children, but they do not want to be the only ones in the neighbourhood. In its simplicity the model takes as exogenous the maximization process carried out by individuals, which is understandably crucial in many respects, but it nevertheless allows studying several factors normally neglected because they are difficult to incorporate in standard models, such as geographical diffusion. The statistical analysis of several simulations shows that a combination of both endogenous and exogenous factors help to explain the way in which the diffusion process took place during the evolution of the French fertility decline and suggest some of the mechanisms through which this was materialized.

**Alexander Klein** (Jagiellonian) & **Stuart Basten** (European University Institute)

*Birth-baptism intervals in pre-industrial England and Wales*

The interval between birth and baptism is an important feature in a number of exercises performed to analyse the demographic characteristics of past populations. In particular, where long intervals prevail, the likelihood of infant death occurring before the baptismal rite and hence the problematic nature of determining infant mortality rates is clear. Currently, there is a broad assumption – largely based on the seminal paper by Schofield and Midi-Berry – that birth-baptism intervals steadily increased, reaching their peak in the late eighteenth century. Since then, a number of small-scale studies – largely in the journal *Local population Studies* – have attempted to determine local characteristics of the interval between birth and baptism often with contradictory results. Some hypothesise that children were baptised early in the summer because the weather was fine, while others suggest that the summer was too hot. Some suggest that children were baptised earlier when times were good because they could afford the expense, others suggest the opposite, because these rough times suggested higher rates of infant mortality.

In this paper, however, a much larger sample size is employed to attempt a rigorous statistical analysis, based upon the Cox Proportional Hazards Model. For the first time, an analysis based upon denomination, gender, occupation, period and region will be performed on a national level. Preliminary results based upon a sample north-eastern population suggest the importance of the father’s occupation, denomination, and the characteristics of the town or

village of origin. Specifically, protestant denomination increases the time between birth and baptism, as well as being born in the town with a dominant trade sector. On the other hand, being born to a family of a manual worker lowers the interval between birth and baptism. The results indicate a rather substantial regional variation. Families in Lancashire have a tendency to postpone baptism while those in Northumberland are more prompt in getting their children baptised. Preliminary results also show no significant effect of a child's gender, which calls for further investigation.

Finally, the paper will address the issues which such quantitative analysis cannot explain. These include local christening customs and individual family-based decisions, particularly relating to multiple baptisms. Here a more anthropological approach will be taken. The conclusions of this paper will be that only by combining quantitative and qualitative analysis will a more accurate and nuanced understanding of these important familial decisions be made.

**Kerry Hickson** (Cambridge)

*The standard of living gains generated by the elimination of tuberculosis in twentieth-century England and Wales*

During the twentieth century the population of England and Wales experienced significant gains in their standard of living due to the elimination of tuberculosis. In 1901 tuberculosis represented about 11 per cent of all deaths versus the year 2000, when tuberculosis represented less than 0.1 per cent of all deaths. This has been accompanied by a reduction in morbidity, as measured by the tuberculosis notification rate, which declined by more than 90 per cent over the twentieth century. People suffering from tuberculosis at the end of the twentieth century were not easily recognized by the general public as the pattern of their illness was relatively innocuous and their lives were altered very little. This marks a stark contrast with the beginning of the twentieth century when tuberculosis posed significant social problems and was associated with fear, despondency and death. The veracity of the tuberculosis decline is widely accepted and reported in the literature and the benefit to individuals and society in general has also been postulated. However, to date there is a shortage of quantitative estimates about the value of the elimination of tuberculosis. The analysis presented here will provide an initial effort to fill this void. By developing and applying an original methodology, that can evolve qualitative information (about the health and welfare burden of tuberculosis during the twentieth century) into quantitative data and collaborate with existing health indices (the tuberculosis death and prevalence rate), the paper presents quantitative (monetary) estimates about the value of the elimination of tuberculosis from a health and welfare standard of living perspective, in twentieth century England and Wales.

The contribution of the results are for the estimates they provide about the value of the elimination of tuberculosis in twentieth-century England and Wales in terms of the declining probability of death from tuberculosis, the declining prevalence of tuberculosis, and most originally, the improved quality of life when suffering from tuberculosis. When these features are considered in aggregate it is possible to estimate the standard of living gains, which are calculated to be worth in excess of £30 billion for twentieth-century England and Wales.

In addition to providing original quantitative estimates about the standard of living gains generated by the elimination of tuberculosis, these results corroborate a more sanguine conclusion than that which currently exists in the qualitative literature. This research also provides an optimistic contribution to contemporary health debates which tend to neglect early twentieth century standard of living gains.

### III/A Pre-industrial City

Chair: **Vanessa Harding** (Birkbeck, London)

**Richard Smith & Gill Newton** (Cambridge)

*Rising infant mortality, social status and environment in London, c.1650-1750*

There is now a substantial body of evidence that indicates a significant worsening of infant life chances in England as a whole over the late seventeenth century into the early eighteenth century with a noteworthy negative impact on overall life expectancy. The period was not one in which living standards worsened and in general the consensus would be that *per capita* incomes were rising within a context of favourable labour market conditions. London remains a key setting in which to investigate this phenomenon since it experienced a rapid growth in its size as well as significant environmental changes. This paper will compare infant mortality and more specifically its component parts of neonatal, endogenous and exogenous mortality in three different locations. The first concerns a set of parishes in the eastern half of Cheapside (All Hallows Honey Lane, St Martin Ironmonger Lane, St Mary le Bow, St Mary Colechurch, St Pancras Soper Lane) together covering an area of c.3.08 ha. This was a densely populated area with high value housing that had experienced modest population growth in the century after 1550 but declined slightly demographically after the Great Fire when it was very largely rebuilt. A second area concerns the parish of St Botolph Aldgate (29.8 ha) lying outside the eastern wall of the city but partly within its jurisdiction. Most of the parish was open ground and gardens in 1550 but the population grew rapidly from 1,500 in 1655 to over 11,000 in 1650 and reached 16,000 in 1700 when there was little area which had not been built up. It was one of the poorest parts of the late seventeenth-century city and one of the worst affected by the 1665 plague. A third area concerns the large suburban parish of St James Clerkenwell (128.2 ha) peripheral to the medieval metropolis but merging into the expanded early modern conurbation well before 1750. The parish, having been a small village, reached nearly 11,000 souls by the early eighteenth century. Despite substantial population growth the parish was more mixed in wealth and social status and contained densely settled and open areas.

This spatial diversity of environmental attributes and income levels provides an ideal sample from which to assess the extent to which the worsening of mortality was roughly equal over London as a whole or whether it was more intensive in areas of dense settlement or poor quality housing and low incomes or still evident in areas substantially rebuilt after the Great Fire with inhabitants who had incomes well above the metropolitan average. Data relating to mortality experienced at the level of individual streets will provide a particularly fine-grained basis for investigation of these matters.

**Henry Meier** (Oxford)

*Smallpox mortality and morbidity in late seventeenth-century Westminster*

Our current understanding of disease-specific mortality patterns in early modern London is largely based on the Bills of Mortality, a few parish burial registers that record cause of death and some family reconstitutive studies. However, there is an extant and underused source from the Westminster parish of St. Martin-in-the-Fields, which provides exceptionally rich mortality data: the sextons' day books. Not only do the day books list the names of individuals buried in St Martin's and their accompanying cause of death, but also which street, lane, court or yard the parishioners lived in; their familial status (whether man, woman, youth, maid or child); the burial or funeral fee; frequently the ages of the children who were buried; and occasionally the occupations of the deceased, or parents of the deceased. There are two surviving runs of day books: an intermittent one from 1685 to 1703, and then following a long hiatus, a second run from 1747.

Focusing on smallpox, the first objective of this paper proposes to use the early run of day books (on the later run, see the accompanying paper in this session by Jeremy Boulton and Leonard Schwarz) in order to conduct a micro-examination of the mortality characteristics of an emerging and significant disease in late seventeenth-century Westminster. Exploiting the detailed information listed above, familiar measures such as the seasonality and age-specificity of smallpox will be examined, plus more unusual factors such as the social class of a typical smallpox victim: the burial fee providing quantitative data to test the hypothesis that the disease killed irrespective of wealth and social status. The specific location of those who died of smallpox also allows the disease to be mapped so as to ascertain which regions of St. Martin's were most severely affected. And when combined with the date of each of burial, it is possible to observe how smallpox might have spread across the parish. Was there a specific focal point from which the disease appeared to radiate or were there isolated and unrelated pockets of infection in different regions of the parish? Some of the day books data will be compared and contrasted with John Landers' findings on smallpox from the Bills of Mortality and his family reconstitution of Quakers in Southwark and a few parishes lying in a north western quadrant outside the City walls.<sup>1</sup> Another point of comparison will be the smallpox burials in the large extramural parish of St. Giles Cripplegate.

The second objective is to examine the morbidity or incidence of smallpox. It will never be possible to determine exactly how many people in early modern London were infected with smallpox. However, a potential indicator of morbidity, at least for the poorest inhabitants of Westminster, comes in the form of the extraordinary payment lists within the overseers of the poor accounts. From a sample of three Westminster parishes of varying size, population and wealth – St. Martin-in-the-Fields, St. Clement Danes and St. Paul Covent Garden – all seventeenth-century references to those parishioners receiving monetary aid when sick of smallpox have been identified. Problems though arise over the inconsistent nature of the extraordinary payments lists, which vary from year to year, ranging from detailed descriptions as to the reasons for each disbursement to only citing the name of the recipient and nothing else. The sample nevertheless provides rare quantitative morbidity data which complements the mortality data from the sextons' day books. Various measures will be conducted including a calculation of the case-fatality rate of smallpox through a nominal linkage with the Westminster burial registers.

**Leonard Schwarz** (Birmingham) & **Jeremy Boulton** (Newcastle)

*The pre-industrial urban environment and the pattern of disease in eighteenth-century Westminster*

This continues into the second half of the eighteenth century the analysis of the sextons' day books for St. Martin's that Henry Meier has described for the seventeenth century. During the later period St. Martin's had a population of c. 30,000. We shall examine the pattern of mortality, particularly its geographical incidence. By matching the sextons' data with data on the relative wealthy (Westminster electorate) and the poor (previous entrance to the parish workhouse), as well as a detailed geography that includes maps of the parish sewers, we are able to map the incidence of disease in a manner that has not hitherto been possible for a large British urban area before the later nineteenth century.

London was traditionally the national reservoir of infections and, as Landers has shown, this was reflected in its mortality regime. By studying the data for at least half a century we shall be able to pinpoint this process at the level of the street and the courtyard. We shall, for instance, be able to investigate the extent to which the mortality decline of the later eighteenth century was achieved by a decline in the mortality of certain 'hot spots', such as the workhouse, that may have been exporting fevers into their neighbourhoods. A major difference with the nineteenth century was the vulnerability of immigrants to lethal infection:

<sup>1</sup> J. Landers, *Death and the metropolis: studies in the demographic history of London, 1670-1830* (Cambridge, 1993), pp. 131-61, 203-41

this varied across time and its decline was a major factor in the halving of London's crude death rate during the century after 1740; our data makes it possible to investigate this.

### III/B Industrial Revolution

Chair: **John Lyons** (Miami, Ohio)

**Robert C Allen** (Oxford)

*The industrial revolution in miniature: the spinning jenny in Britain, France and India*

This paper uses the adoption and invention of the spinning jenny as a test case to understand why the industrial revolution occurred in Britain in the eighteenth century rather than in France or India. It is shown that wages were much higher relative to capital prices in Britain than in other countries. Calculation of the profitability of adopting the spinning jenny shows that it was profitable in Britain but not in France or in India. Since the jenny was profitable to use only in Britain, it was only in Britain that it was worth incurring the costs necessary to develop it. That is why the jenny was invented in Britain but not elsewhere. Irrespective of the quality of their institutions or the progressiveness of their cultures, neither the French nor the Indians would have found it profitable to mechanize cotton production in the eighteenth century.

**Mina Ishizu** (Cardiff)

*Commercial finance during the industrial revolution: a study of local, national and international credit*

This paper re-examines the extent to which commercial finance determined the development pattern of the British financial system during the early nineteenth century. It seeks empirically to evaluate the impact of transatlantic trade on the development of the financial system at local level as well as at national and international levels.

The paper accords with a growing emphasis on the mercantile origins of the industrial revolution. The impact of transatlantic trade on the economy is clearly important in explaining the pattern of industrialization. In financial history, this factor remains poorly explored. Many aspects of the British financial system of the late eighteenth and early nineteenth centuries tend to be explained from domestic, London-centred views. As a result, traditional scholarship has placed emphasis on industrial and manufacturing finance in explaining the development of the British financial system and the growth of international trade finance has been neglected.

Understanding the transatlantic influence upon the development of the British financial system involves a geographical shift in research interest from the London-centred or manufacturing-region concentrated tradition of economic/financial history. Considering the growth of Liverpool as a hub of the domestic and the Atlantic economies during the period in question, the paper focuses upon textile trade finance in the port city of Liverpool and its hinterlands in Lancashire. By focusing upon bill finance, this thesis is able to examine the role of the Lancashire banks in financing transatlantic trade in greater depth, than, for example, T.S. Ashton and S.G. Checkland were able to achieve in their classical studies in the 1940s and 1950s.<sup>1</sup>

Until the Bank of England started rediscounting for banking customers in 1797 for London bankers and in 1826 for country bankers, the majority of the Bank's bill discounting for non-banker customers had been done for mercantile customers. In 1800, for example, almost 94 per cent of bills held by the Bank originated from merchants.<sup>2</sup> Further, according to

<sup>1</sup> Ashton, T.S. 'The Bill of Exchange and Private Banks in Lancashire 1790-1830' *Economic History Review*, 15 (1945); Checkland, S.G. 'The Lancashire bill system and its Liverpool protagonists 1810-1827' *Economica*, 21 (1954).

<sup>2</sup> The total bills held by the Bank for discounting was £6,603,000 of which £6,207,000 was discounting for non-banking customers, chiefly merchants engaged in international and domestic trades. Clapham, J. *The Bank of England* Volume I, II (London, 1949), p. 206; see also Shapiro, *Capital and cotton industry in the Industrial Revolution* (Ithaca 1967), Ch.5 for the discussion on textile bills.

Clapham, a significant proportion of bills of exchange were discounted for merchants who were engaged in the distribution of either raw materials or goods of the textile trades.<sup>3</sup> Were these the cotton textile merchants of the rising Lancashire cotton towns and villages? It was unlikely that cotton merchants of Liverpool or Manchester directly used the Bank of England's discounting facilities at that time because the Bank discounted bills mostly for residents of London. But it was likely that large and successful Lancashire firms would have accessed Bank credit via discounting through their London partner firms. As Chapman argued, it was customary for northern cotton firms to go into partnerships with a London firm or firms largely for this purpose.<sup>4</sup> It was thus likely that cotton merchants discounting regularly at the Bank of England acted as London agents for the Lancashire firms. The number of the Bank's discounting clients however seemed to decline in the first half of the nineteenth century. From the 1770s to 1818 the Bank had about 1,200 to 1,400 clients but by 1819 the number had decreased to 943. By 1824 it had fallen to 545 and throughout the mid nineteenth century it was often less than 300.<sup>5</sup> Did this reflect a relative decline in bill discounting for cotton textile merchants in London during the first half of the nineteenth century?

Turning to textile bill discounting in Lancashire, there occurred major changes over the period in question. By 1836 the bill discounting of Liverpool and Manchester branches made up 75 per cent of all the Bank's branch discounting and these were by far the largest.<sup>6</sup> The northwest had grown thus as the largest outlet of the nation's bill discounting – apart from London – by the 1830s.

These observations seem to suggest that a diversion of textile bill circulation or flow occurred in Britain in the first half of the nineteenth century, more precisely from the 1810s to 1830s. This was the period that witnessed the emerging inter-regional bill discounting system in Britain, and no doubt this assisted the diversion. My hypothesis here is that the commercial finance of the northwest textile trade was being diverted from London to the local money markets during the period of major structural changes in the British financial system.

The paper draws upon various source materials including a collection of bills received by Parker & Sons, the Manchester calico merchants; business correspondence and ledgers of two large textile firms, Horrocks & Co of Preston and Lupton & Co of Leeds; and the branch correspondence of the Bank of England in Liverpool and Manchester. Via a detailed analysis of these sources, the paper argues that there occurred a re-route of textile bill circulation at national level during the first three decades of the nineteenth century. It was likely that the long-term shifts in credit terms in textile commerce acted as a causal factor in this diversion of textile bill discounting from London to northwest local money markets. The northern textile firms had enjoyed favourable credit terms provided by suppliers of local goods. No doubt this had helped the firms to venture into new overseas markets in their goods exports. Over-extended credit provision was curtailed in the mid 1820s – more precisely in the commercial crisis in 1825 – the textile merchants now faced demand from their suppliers for cash payments and hence increased their reliance upon credit provision and bill discounting by local banking houses. The first quarter of the nineteenth century saw the maturation of banking institutions in the northwest. The banks were more firmly linked with the national bill

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<sup>3</sup> These textile merchants included the linen drapers and Manchester warehousemen (Bills discounted for them £654,000), woollen factors and warehousemen (£257,000) and cotton merchants (£100,000). Clapham, *Bank of England I*, pp. 206-8.

<sup>4</sup> Chapman, S.D. 'Financial Restraints on the Growth of Firms in the Cotton Industry 1790-1850' *Economic History Review* 32 (1979), pp. 52, 58-9 and Appendix II.

<sup>5</sup> Clapham, *Bank of England I*, p.205.

<sup>6</sup> Data from Table 1 Bill discounting by branch banks of the Bank of England, Birmingham, Liverpool and Manchester 1826-1838, Sekiguchi, Y. 'Bank of England siten keiei to Chuo ginkou seisaku,' *Yokohama Business Studies*, Vol.15 -19, (1994-98) ['The management of the Branch Bank of England and the central bank policy'] p. 9.

discounting system which met the growing demand from the local mercantile community for regular and large credit provision.

**Ahmed S Rahman** (United States Naval Academy)

*The English skill premium puzzle, 1750-1913*

This paper proposes a theory of growth and demography that helps chart the evolution of skill premia in England during its first and second industrial revolutions (approximately 1750-1830 and 1830-1913, respectively). Skilled labour in England earned roughly 60 per cent more than their unskilled counterparts during the first half of the eighteenth century. However skill premia fell during the first industrial revolution to below 50 per cent and remained below 50 per cent throughout the entire nineteenth and early twentieth centuries. This creates a puzzle. Why did the launch of industrialization coincide with a fall in the relative payments to skilled labour? This is particularly surprising since skilled labour grew relatively scarcer during this time, as fertility rates rose while education rates remained virtually stagnant. Furthermore, why did skill premia remain low during the latter half of the nineteenth century, even as technologies grew more complicated and spread to many other sectors of the economy? These facts are at odds with most theories of the industrial revolution, which tend to imply that a rising skill premium is a natural concomitant to economic growth.

Along with this puzzle remain the other aspects of historical industrialization that traditional endogenous growth theories cannot capture. Of course growth theorists have gained a deeper sense of how contemporary progress occurs, but these models cannot be made to explain the qualitative effects of technological changes at the dawn of industrialization. In particular, the accessories of today's technological advances are in many ways completely different from those of the industrial revolution. Today progress is associated with a stable population, high rates of education, great income growth on average and great income disparities within the economy. The world's first foray into modernity two and a half centuries ago, on the other hand, witnessed the polar opposite case of an exploding population, stagnant education, very modest increases in average income and falling income inequality. Traditional endogenous growth theory, able to capture present-time growth, is nevertheless consistent only with a small fragment of human history.

I develop a dynamic model to help solve this puzzle. Using a unified approach such as this has been the *cri de coeur* of Oded Galor, who entreats growth economists to use micro-founded approaches to capture the entire process of development, not merely an episode of it (Galor 2005). Here I conjecture two main things, one concerning technology and one concerning demography. The first assumption is that the inventions of the first industrial revolution were primarily unskilled labour using and isolated to just a few sectors of the economy (such as textiles, steam and water power, and metallurgy). Only in the years after 1830 did the complexity of technologies increase and their scope broaden to many other sectors of the economy (such as steel, chemicals, electricity, transportation, and production engineering) (Mokyr 1990). The second assumption is that English households viewed education as both an investment good and a consumption good. That is, not only did rising human capital generate more household income, it also generated benefits unrelated to gains in income.

The model allows households to change their fertility and education choices as technologies themselves change. Historically knowledge growth has been factor-biased; that is, technological innovation has typically affected different factors of production differently. Therefore I will focus on the skill and labour biases of technology; households in turn will react to growth in these technologies to maximize their welfare. Looking at technologies that are factor-specific has been suggested by Acemoglu (2002) and Voth (2003), among others, as a way to shed further light on the history of industrialization. By analysing the interactions between these technologies and demographic choices, unified growth theory can be pushed into new areas of understanding.

After setting up the model, I use it to simulate an industrializing economy. I find that under these assumptions many of the puzzling features of the industrial revolution become clearer. During the first stages of the industrial revolution (when technological growth tended to be more unskill-intensive) the fall in the relative demand for skilled labour more than offset the fall in its relative supply, thus lowering the relative payments to skilled workers. During the later stages of the industrial revolution (when technological growth became more factor-neutral) technological growth increased the relative demand for skilled workers, while rising incomes increased the relative supply of skilled workers; these offsetting effects kept the skill-premium low. Thus I argue that explaining the non-monotonicity of fertility, gradual rise of education, and fall in the skill premia in England during the eighteenth and nineteenth centuries requires this type of unified approach to economic growth.

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### III/C International Investment

Chair: **David Chambers** (Oxford)

**Rui Pedro Esteves** (Oxford)

*Between Imperialism and Capitalism: European capital exports before 1914*

The historiography of foreign investment in the four decades before World War I routinely classifies German (and also French) capital exports as “politicized”, by contrast with the market-oriented flow of funds from London (Feis 1930, Fishlow 1985). This literature emphasizes the differences in institutional frameworks and regulatory settings between European markets to distinguish between two models of foreign investment: “developmental” and “revenue finance.” Investment of a “developmental” kind was mainly the province of British investors, who benefited from a fairly deregulated market setting and superior financial technology to invest their savings in the most promising outlets abroad. On the contrary, “revenue finance,” as practised by France and Germany did not chase after positive “fundamentals” in the emerging economies of the time. Instead, it was mainly lured by government loans raised to finance wars, military buildup, current expenditure or other “unproductive” aims. These more risky securities offered high yields in the short-run, and were often introduced and promoted in the Continental markets with the connivance or active support of the governments in lending countries.

Although it is undeniable that a measure of political intervention did condition the direction of foreign investment, this interpretation may be questioned. In a period remarkably characterized by low levels of regulation of international capital movements, the implicit hypothesis that more ‘politicized’ financial centres could compete with more ‘market-based’ ones seems contrived. Dissatisfied domestic investors always had the easy alternative of investing their capital through the agency of a foreign financial centre, as London.

Until recently, the only available database of pre-1914 foreign investment covered British capital exports since 1865 (Stone 1999). In the absence of other comparable databases, the literature has exclusively drawn inferences from British data, or from the comparison of aggregate stock measures available for a few dates (often only one, as 1914). Instead, this paper brings new empirical evidence to bear on the question of what were the determinants of European capital exports up to 1913. For that purpose, I compiled a comprehensive dataset of German capital exports between 1883 and 1913. This allows me to compare the patterns of “British” and “German” capital exports, and, hence, to test the conventional view about the distinctive nature of British investment. The results of this analysis are also relevant to research on the patterns of foreign investment in since the 1970s (Taylor and Sarno 1997, Alfaro, Kalemli-Ozcan, and Volosovych 2005).

Following up on Clemens and Williamson (2004), I try to identify the pull factors of foreign investments negotiated in Great Britain and Germany. Three main classes of variables were tested as determinants of capital imports: political conditions in recipient countries, measures of long-term prospects of growth, and institutional characteristics.

The empirical analysis shows that German capital flows responded to long-term prospects of growth of recipient countries (“fundamentals”) as much as British investment. It is hardly counter-intuitive to imagine that German investors were as savvy as their British counterparts, and that German capital markets and German banks tried to compete with their British competitors in placing the most promising issues of foreign securities. This suggests that the sharp distinction in the literature between “developmental” and “revenue” finances is probably a figment of the absence of detailed data on capital *flows*. In this limited information set, “European” investments automatically become “unproductive”, whereas North American or Australasian applications are necessarily “developmental.”

On the contrary, the results imply that the identity of the lender mattered not so much through the degree of political suasion on foreign investment, but because the hierarchy of

pull factors differed between German and British flows. Natural resources mattered more than demographic variables (growth rate and education levels of population) to attract European investment. Next to them, monetary stability also played a prominent role and, in the German case, the quality of domestic political institutions and the colonial affiliation of recipient countries. The latter underscores the conclusion, also reached in studies of contemporary capital flows, that the long-run economic potential is not enough to attract foreign capital, in the absence of supportive political and economic institutions.

**Graeme Acheson** (Ulster, Coleraine), **et al** (Queen's Belfast)

*Rule Britannia!: British stock market returns, 1825-70*

Financial economists have become increasingly interested in the historical returns of financial assets (Goetzmann and Ibbotson, 2006). This interest partially stems from a desire to calculate the expected equity risk premium, which requires long historical periods to reduce the estimation error. In particular, academics and practitioners are interested to discover whether or not the high returns on stock markets over the past 50 or so years are an aberration or are somehow intrinsic to equity as an asset.

Historical series of returns are also of interest to economic historians for at least two reasons. Firstly, indices of returns can serve as a measure of the levels and fluctuations of real economic activity in historical periods where there is a paucity of real economic data. Secondly, series of returns can be used to assess the impacts of major political, legal or technological changes on an economy.

To date, monthly returns data stretching back into the nineteenth century has only been developed for the United States (Goetzmann et al, 2000). The only monthly stock market indices for pre-1870 Britain are the Gayer et al (1940, 1953) monthly index, which covers the period 1811-50, and F.A. Hayek's unpublished monthly index which covers 1820-68. From the perspective of the financial economist, these series are defective because they are indices of price appreciation only. Consequently, in this paper, we develop a series of monthly returns, comprising both capital appreciation and dividends for Britain for the period 1825-70.

Gayer et al's and Hayek's indices can also be criticized because they are small samples rather than including all available stock price data. In contrast, our indices cover the vast majority of stocks traded on the London market and are adjusted for survivorship bias.

A further defect of existing indices is that they are either unweighted in the case of Hayek's or weighted by the number of shares outstanding in the case of the Gayer et al index. This latter index also assigns weights to each industry sub-category based on paid-up capital, but these weights only change five times throughout the sample period. In contrast, we produce unweighted indices as well as indices weighted by paid-up capital and market capitalization, with weights changing on a monthly basis.

When we compare the returns generated in the 1825-70 British equity market with those produced in the United States and with later periods in Britain, we find that this period was a golden era for investors, with investors receiving higher returns yet facing lower risk. We suggest that this finding may firstly be due to Britain enjoying a comparative advantage in this period arising from its position as the first industrial nation, and secondly capital-market imperfections. We also find that in the second half of the twentieth century, dividends constitute a substantially smaller proportion of total returns than they did in the nineteenth century.

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**Mark Billings** (Nottingham) & **Forrest Capie** (City)

*Britain and the end of the first globalization: 'financial crisis', contagion and the British financial system*

The current era is sometimes described as one of unprecedented globalization. An earlier era of globalization is variously argued to have ended with World War One or with the dislocations of the late 1920s and 1930s (James, 2001). Certainly at the beginning of the 1930s the UK economy and some British financial institutions experienced various problems. Contributing factors included: currency crisis and abandonment of the gold standard; payment difficulties of international borrowers, especially those in Germany and central European countries subject to standstill agreements; struggling domestic borrowers in traditional industries; and the background of growing international economic and political tensions.

The aim of this paper is to bring together a variety of evidence to present a coherent picture of the impact of financial stresses on the British banking sector in the 1930s. We combine new evidence on the clearing banks, which played a key role in the UK financial system, with data on a variety of other banking institutions from existing studies on the Bank of England, discount houses, merchant banks and British multinational banks. Data on liquidity, profitability, capital, risk concentrations and bad debts are examined, and we consider the links by which 'contagion' might have been spread and assess the impact of 'crisis' on Britain's financial system.

The impact of the problems affecting the banking sector in the 1930s varied greatly across the different types of institution. Two categories of institution were particularly hard-hit: the merchant banks, whose main business was the financing of international trade, mostly Anglo-German; and the British overseas banks, many of which were heavily dependent on business in Latin America. However, the clearing banks, the largest financial institutions and the key element in the payments system, proved to be sound. The performance of these banks in the twentieth century has been subject to many criticisms, many of these unjustified or exaggerated (Collins, 1998). However, the resilience of these banks contributed greatly to the stability of Britain's financial system at a time when severe problems were found in many other countries. We argue that the range of evidence available provides more comprehensive support for this view than has been accepted previously.

There were many routes by which 'contagion' was transmitted to the British banking system. But the system emerged intact, and we argue was not under serious threat. Withdrawals made by overseas depositors are accepted as having been significant in the 1931 exchange-rate crisis, although the evidence on the nature and extent of these withdrawals is unsatisfactory. But there is no evidence of a 'domestic run' on British banks.

The 'Big Five' clearing banks, the result of the amalgamation process which was complete by 1920, survived well. They were strongly capitalized, had large branch networks, strong earning power, and diversified and liquid balance sheets, in contrast, for example, to their German counterparts. Their alleged conservativeness, although exaggerated, allowed them to cope with their problems and avoid the fate of banks elsewhere. Many more specialized and smaller British institutions, the merchant banks with large exposures to German Standstill debt and discount houses, were effectively bankrupt, kept afloat by a mixture of owners' capital, funding from the large clearing banks and the Bank of England, mergers and changes to market practice. The experiences of British banks operating internationally were mixed, but often poor, reflecting the impact of the Great Depression on many of the countries in which they operated.

Financial and monetary stability underpin macroeconomic stability and there is evidence of that in Britain. The British economy, after a recession only for the years 1929-32, rather than deep depression, then went on to experience its strongest-ever upswing in the years 1932-7. Leaving the gold standard was of crucial importance, but the robustness of the financial system, due in large part to that of the clearing banks, was certainly one factor in protecting the real economy from undue suffering.

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### III/D Medieval and Early Modern Business

Chair: **tba**

**Stuart Jenks** (Erlangen)

*Small is beautiful: why small Northern European firms survived in the late middle ages*

The economic dynamism of the middle ages did not generate uniform business structures. The Italian firms which emerged from the Commercial Revolution were not only large, but they also seemed to have all the advantages, leading the way in such crucial commercial techniques as bookkeeping, insurance, banking (including the development and utilization of letters of exchange) and finance. While these techniques were rapidly adopted by firms in South Germany, they did not find universal favour. In particular, Hanseatic businesses remained tiny, undercapitalized and ignorant of double-entry bookkeeping, insurance and banking. Nonetheless, they survived quite handily.

I propose to examine the reasons for this paradox by taking a close look at the Hanseatic firm, which had a number of advantages not immediately apparent. The small size of Hanseatic partnerships helped to spread risk, and the firms themselves were not only flexible, but also ideal for maritime commerce which did not require huge, long-term capital investment like the big industrial plants characteristic of the South German economy. On the face of it, however, Hanseatic firms could not perform two crucial functions: gathering information on a world-wide scale and making business decisions based on the big picture.

However, the Hanseatic response to the currency crisis of 1399-1402 in Bruges shows that the Hansards had found another way to achieve the same aim. Depending on how serious the problem was, Hanseatic merchants would bring in expertise on a cooperative basis, with ever larger assemblies – ranging from informal consultations of merchants in the counter in Bruges to regional diets and finally the Hanseatic Diet itself – deliberating and developing appropriate strategies.

Dealing with crises on an ad hoc basis gave Hanseatic firms a crucial cost advantage. While Italian and South German companies were forced to rely on expensive salaried factors, with whom they corresponded unceasingly, Hanseatic firms cut fixed organizational costs to the bone without sacrificing functionality.

Therefore, the Hanse was not backward, as scholars have tended to assume, but merely different. More generally, large corporations are not eo ipso better than small firms, as Coase showed in 1937. As he showed, increasing size tends to generate management errors, while the ideal size of the firm is dictated by the relative cost advantage of out-sourcing and conglomeration within a given framework of technology, communications and management science.

**Danielle van den Heuvel** (Cambridge)

*Early modern commercialization and institutional control: the role of retail guilds in the consumer revolution*

During the seventeenth and eighteenth centuries fundamental changes occurred in the retail sector in North-Western Europe. In this period, retail experienced an unprecedented growth as a result of increasing commercialization. Major alterations that took place were changes in consumer behaviour, a growth in the types of products sold, and innovation in sales techniques, which all together resulted in the rise of modern retailing. Much emphasis in the debates on the early modern commercial changes has hitherto been on products, consumers, and customer-client relations. Hardly any attention has been paid to the impact of the institutions – in particular the omnipresent retail guilds – on pre industrial commercial development. This is striking, since research on craft guilds shows that guilds could be decisive in processes of innovation.

This paper assesses the impact of retail guilds on early modern commercialization processes. It investigates how guilds reacted to the upcoming commercialization and whether guilds stimulated or hampered the rise of modern shopkeeping. Particular attention will be given to guild policies concerning admissions and the incorporation of new products in the trade. Both elements are expected to have had a crucial impact on the modernization of the retail sector. The paper mainly focuses on the Dutch Republic, but when possible tries to compare the situation with that in Germany and England. In the end, the paper aims to provide a preliminary answer to the question why commercialization patterns differed in the three countries under scrutiny.

**Esteban A Nicolini** (Carlos III Madrid) & **Fernando Ramos** (Pablo de Olavide)

*A methodological approach to estimating the money demand in pre-industrial economies: probate inventories and Spain in the eighteenth century*

The study of monetary phenomena and the understanding of price determination in modern Europe are too often limited by the scarcity of good-quality datasets on the evolution across time of variables like money holdings, income, or wealth. Until now, the vast majority of economic historians tried to explain the evolution of prices in pre-industrial Europe using the Fisher identity ( $MV=PT$ ) and suggesting hypothesis about what part of the changes in price levels ( $P$ ) can be assigned to changes in the stock of money ( $M$ ), the amount of transactions ( $T$ ) or the velocity of circulation ( $V$ ). Lack of good data implies that, for the whole period between the fifteenth and the first half of the nineteenth century, Fisher identity can only be applied for just a few benchmark years with a margin of errors leaving the analysis of price determination at the level of controlled conjectures (Lindert 1985).

Building on the methodological innovation by Mulligan and Sala-i-Martin (1992) we show that in this paper the information contained in probate inventories can be extremely useful to circumvent that problem. In particular, combining a dataset of 114 inventories from Palencia (North of Spain) between 1750 and 1770 with census information (Catastro de Ensenada) we make a cross-section estimation of a money demand which is the first one ever produced for any period before the nineteenth century. Probate inventories provide information on the money held by the head of the household while the Catastro de Ensenada is used to re-weight the sample to eliminate the bias – common in probate inventories – toward wealthy families.

The results show that the wealth-elasticity of the money demand is consistently greater than 1 (values around 1.4) implying that economic growth and the increase of wealth would have produced (*ceteris paribus*) a larger negative effect on prices than hitherto considered. Our methodology also suggests that, contrary to Goldstone's hypothesis (Goldstone 1984), urbanization would have implied a significant increase in money demand and therefore a reduction in the price levels. These results highlight the potential of probate inventories to improve our knowledge of the monetary history of Modern Europe.

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### III/E State Policy

Chair: **Roger Middleton** (Bristol)

**Neil Rollings** (Glasgow)

*The national competitiveness/firm competitiveness debate in Britain in the 1960s*

Today various league tables of national competitiveness exist and they play an important role in perceptions of the nature of a nation's economy. However, Paul Krugman has famously cautioned against this 'dangerous obsession' of viewing nations like big competing corporations (Krugman, 1994).

However, historians know that concerns with national competitiveness are not new. For example, Tomlinson has shown how in Britain in the 1950s it was related to the growing perception of Britain's relative economic decline. At that time, export competitiveness was one of the key indicators used. Allied to persistent balance of payments crises this perception led government policy from 1945 onwards to focus on the need to increase exports. By the 1960s a third element had strengthened even further the focus on export performance. Nicholas Kaldor became an economic adviser to the 1964-70 Labour government and with that began to stress ideas of export-led growth as a way of improving Britain's economic performance. Unsurprisingly, this emphasis on exports was having a significant impact on a host of economic policies. In particular, US FDI into Britain was encouraged but there was a strong belief that UK FDI was excessive and that domestic investment needed to be increased. Government economic departments made clear their preference for firms to export rather than to create or acquire a foreign subsidiary and tightened exchange control to encourage this. It has been common to consider such measures as being solely about rectifying the balance of payments but, while this was a key consideration, this outlook was also underpinned by concerns about national economic performance and competitiveness.

In contrast, British firms by the 1960s were developing a very different view of the world. US FDI into Britain (and elsewhere in Europe) was increasingly appreciated to be part of a trend towards the internationalization of production and the growth of multinational firms. For British firms to be competitive it was imperative for them to embrace these developments by internationalizing themselves, particularly in the growing markets of the US and Western Europe. For such firms exporting was only one of a range of strategies available where many preferred to invest overseas. Accordingly, the constraints on such direct investment, such as exchange control, became the focus of business criticism and discontent: in the eyes of business, firm competitiveness, and thus national competitiveness, was being held back by these constraints on entering or expanding in these markets. By the late 1960s the Foreign Office had come to endorse this view, railing against the 'antediluvian' focus on exports in the government economic departments.

By setting out the development of these two positions, this paper illustrates how the internationalization of production in the 1960s raised important issues about approaches to national competitiveness and challenged national governments, in this case in Britain, to adapt to this new environment. This tension highlighted different perceptions of competitiveness and ultimately different preferred solutions. Secondly, in relation to this, it shows that the combination of short-term balance of payments concerns and the role of export performance in perceptions of national competitiveness led to an export fetish in government with unintended detrimental consequences for the performance and competitiveness of British firms.

**Valerio Cerretano** (Glasgow)

*The origins of state intervention in industry in Britain and Italy, 1919-39*

Historians have granted a good deal of attention to the theme of state intervention in industry in the interwar period. This theme has however been analysed mainly from a national

perspective. What were the factors encouraging different national governments to intervene in industry? What were the forms of this intervention? This paper seeks to address these questions by looking at the experience of Britain and Italy in the interwar era.

There are at least two motives behind this particular choice. Firstly, in Britain and Italy central banks and governments became massively involved with industry in the period under consideration. Secondly, a wealth of information is available on this theme in both countries.

The Italian historiography tends to emphasize the efficacy of state intervention in industry. The British literature – especially the historiography on the Bank of England's industrial intervention – by contrast, places emphasis on the inconsistency of this intervention in Britain.

One conclusion here is that the severity and length of depression – much milder in Britain than in Italy – in the 1930s greatly accounted for the forms of government intervention. State intervention in Italy, despite the declarations of the Fascist regime, was highly experimental, lacked coherence and was originally planned to be temporary. It was the severity of depression and domestic deflation (monetary policy) which, while threatening the collapse of the banking system, called for more radical solutions (that is for the direct control by the state of certain industrial sectors).

The paper is divided into four parts. Part I reviews the Italian and British literature on this subject matter; part II analyses the economic legacy of the war in Britain and Italy, and compares the financial systems of both countries; part III attempts a comparison of the forms and direction of state intervention in Britain and Italy, with an emphasis on the role of central banks (in both countries these became large industrial owners).

The paper connects primarily with the works of J. Tomlinson, Ross and Ziegler, Forsyth, Greaves, Tolliday, Collins and Bowden, Heim and Bamberg. It aims to add new dimensions to this theme by bridging two differing national historiographies. The originality of this paper largely lies in the comparative emphasis and in the sources (primary material held by the PRO and the archives of the Bank of England).

### III/F Mining and Management in British Coal Mining

Chair: **tba**

**Andrew Perchard** (Highlands and Islands)

*'The Black Jock Manager?' Mine management professionals in the Scottish coal industry, 1911-1967*

The forces of capital and labour have arguably dominated the grand narrative of the nineteenth-century British coal industry. However, by the twentieth century these forces were joined by increasingly distinctive groupings in the forms of mine management professionals and junior officials.

With a few exceptions, histories of both the pre- and post-nationalized British coal industry have either tended to completely disregard managers and the associated mining professions as an entity, or to assume that they were entirely synonymous with private owners or the NCB – to be referred to under the category of ‘management’. By deploying the Scottish coal mining industry as a case study, this paper challenges the latter assumption, and highlights the importance of the study of managers within both structures and as social agents in this and other industries. It suggests that the generally received representation of managers in the historiography has been shaped by the dominant paradigm and coloured by rhetoric rather than detailed research and analysis of the relevant primary sources. Instead this paper shows how structure, process and agency all played a part in shaping the role, actions and composure of managers in the industry.

It does so by comparing trends in the industry in its private and then nationalized formats. Prior to nationalization in 1947, although the experience varied between companies, and even collieries, managers in the Scottish industry were generally afforded a lowly status and operated within limited confines. The Coal Mines Act of 1911 had some impact on the training of managers but most managers had little more than a basic education and received vocational training underground. For those mine management professionals who received formal technical education, this was often carefully controlled by mining companies whose financing of the main mining education providers in Scotland, the Glasgow and West of Scotland Technical College (later Royal Technical College, and after 1964, the University of Strathclyde) and Heriot Watt College (Heriot Watt University) in Edinburgh, enabled them to direct the curriculum, awards-systems and appointment of the staff to the institutions’ departments of mining. Moreover, many managers were little more than technical supervisors, with operational decisions generally taken by colliery agents or boards of directors. The pre-nationalized Scottish coal mining industry duly resembled Elbaum and Lazonick’s observations of ‘atomistic, nineteenth-century economic organization’, with little evidence of the ‘visible hand’ of the professional manager. Yet there were more than stirrings of a conscious mine management profession by the 1930s and 1940s, vocal in its criticisms of the status of managers and the way in which the industry was being run, as well as of their status.

Nationalization greatly altered the status of this profession, with improved pay and conditions for managers, and professional development and career advancement opportunities not generally enjoyed under private control. It initiated also trade union representation and recognition (in the form of the British Association of Colliery Management). Yet the National Coal Board’s production goals and targets placed great strain on colliery managers. In Scotland, this became particularly pronounced after the mid-1950s, with the introduction of the Scottish power loading agreement (1955), with colliery closures at a peak (1958-63), and finally the implementation of the National Power Loading Agreement (1966). It was further exacerbated by periodically inconsistent political intervention at a national level, poorly judged initial planning at a Divisional level, and a reliance on some inexperienced and unsuitable appointees at tactical (and strategic) levels of management.

In their recent survey of the historical development of British management, John Wilson and Andrew Thomson remarked that ‘management needs to be studied in practice as well as in theory’. Many studies of management history (located as they are within wider business literature) can be judged to be strong on the latter; few have eschewed the need for examining managers as conscious social actors within their widest setting. However, despite the importance attached to plant-level management by leading researchers in the field of industrial relations, few historians have devoted time to understanding the social behaviour of managers. At the same time, historical studies tend to assume that managers sit comfortably as members of the middle class. In contrast, colliery managers and associated mining professionals, like a good many managers in other industrial concerns, particularly at operational and tactical levels (as evidenced by a number of postwar sociological studies), were far more likely to have been promoted from the shop floor and have different social and cultural points of reference to their counterparts in commerce or the service industries. Thus this paper assumes a wider significance by highlighting the importance of detailed studies of managers in British industry in the twentieth century within their social context.

**Jim Phillips** (Glasgow)

*Coal industry management and the origins of the 1984-5 miners’ strike in Scotland*

Literature on the origins of the 1984-5 miners’ strike in Britain is generally confined in its focus to peak level relations between the Conservative government, the National Coal Board (NCB) and the National Union of Mineworkers (NUM), and the shifts in energy supply that decisively weakened the miners’ bargaining position. The high politics approach has tended also to narrow the geographical scope of the literature, which concentrates essentially on the divisions between Yorkshire and Nottinghamshire. Developments in the ‘marginal’ coalfields – Scotland, Durham and South Wales – tend to be relatively unexplored. The strike is usually depicted as being imposed, illegitimately, and without a national ballot, on the industry and the miners by the NUM leadership, which refused to accept the logic of the changes in energy supply and opposed any pit closures on economic grounds.

This paper questions these received views, and develops a more rounded perspective on the origins of the strike, by examining the increasingly autocratic management of the industry in Scotland from 1982 to early 1984. In this context the strike is presented as a legitimate and roughly democratic trade union response to the NCB Scottish Area’s managerial style and strategy. It was not imposed externally on Scotland, via the ideological conflict between Conservative government and UK union leadership, but in fact developed much of its national – that is, UK-wide – logic from the conflict between management and workers in the Scottish coalfields.

A number of pits were closed in Scotland from late in 1982 to early in 1984. The strategy of the NCB’s Scottish Area management involved ‘testing’ the supposed militancy of the miners in Scotland – evidenced in national ballots on pay offers in 1981 and 1982 – by making these closures and significant incursions on trade union responsibilities and privileges. Pits with relatively unproductive performance records were targeted, in line with the broad NCB position of responding to changes in energy supply by reducing production costs. New managers were introduced at these pits, the Scottish Area Director, Albert Wheeler, keen to disrupt established relations between colliery managers and union delegates, and a number of the latter were apparently victimised. Disputes were consequently provoked, sometimes where pre-shift emergency union meetings were called to discuss responses to managerial initiatives which contravened joint industrial procedures. Workers subsequently reporting for work a few minutes late were then refused entrance to their pit and sent home without pay. The incremental dissolution of the low level of ‘trust’ – as industrial relations scholars would term it – between management and employees, and the establishment instead of what could be called ‘no trust’ relations, was instrumental to the outbreak of the strike in

March 1984, at which point roughly half of Scotland's miners were already in dispute with local management.

Details are drawn from the key closures – on economic grounds – of Kinneil in West Lothian in December 1982, and Cardowan in Lanarkshire in the summer of 1983, along with developments at Monktonhall in Midlothian, where there was a six-week lock-out in the autumn of 1983, at Polmaise in Stirlingshire, which was threatened with closure from December 1983, and Seafield in Central Fife. The Seafield case in particular demonstrates the various elements of managerial strategy. A new manager was appointed in May 1983, who recurrently sought to explain the colliery's production performance in terms of the low diligence and high absenteeism of the workforce. Dismissals were threatened and in January 1984 joint industrial practices suspended by the manager. The resulting stoppage of work was still in place in March 1984, at which point – shaped by the closure of Polmaise but also by events at Seafield and elsewhere in Scotland – the Scottish Area of the NUM came out on official strike. This coincided with the start of the 'rolling' strike in Yorkshire that then spread across the English and Southern Welsh coalfields. From the perspective of management's conscious quest for confrontation, and deliberate cultivation of 'no trust' relations, the strike, at least in Scotland, ought to be seen as the direct product of workplace conflict as well as the consequence of deteriorating peak level relations in the context of coal's changing market. The paper utilizes perspectives from management and industrial relations as well as historical literature. It examines the concept of trust, and, in arguing that the strike was generated internally in Scotland, explains the collective behaviour of the Scottish miners in terms of their 'value rational' orientation. It is based on NCB and NUM records and materials, Scottish Office and Department of Energy records, reports in the daily press, and participant memoirs and reminiscences.

**Chris Wrigley** (Nottingham)

*After the great coal strike: the government, management and strikes, 1985-92*

The defeat of the coal miners in 1984-5 appears in retrospect to have been decisive and irreversible. The Conservative government appears to have become free to operate unfettered market forces in a strike-free zone. Yet while the dispute was an ominous turning point for the coal industry, it is clear that the Prime Minister, Margaret Thatcher, for some time feared a second round of struggle with the National Union of Mineworkers (NUM). An examination of strike statistics and daily reports to management of even the smallest disputes display an industry still on a short fuse. Moreover, various sources relating to the major ministerial players show that Mrs Thatcher had considerable fears of a resumption of industrial action by the NUM. In this context she was very willing to downgrade market forces considerations in favour of buttressing the Union of Democratic Mineworkers (UDM). Perhaps she felt more grateful to the UDM members than some of her colleagues as she had been in Edward Heath's cabinet and so experienced first hand the mining events of 1972-4.

The levels of unrest after the 1984-5 dispute bear some similarity to the unrest in the coal industry after the 1926 general strike and coal lockout. After both there was a propensity for embittered miners to strike over any friction between them and local management. In both periods miners rebelled against many workplace decisions by management and worked inflexibly by the book on such matters as numbers of workers or their skills for particular tasks. The post-1926 unrest lasted longer. Then there was unrest of almost a guerilla warfare kind, down to 1939. The unrest of the late 1980s was foreshortened by the privatization of the industry. The post-1985 unrest was reported in micro-detail from the various mines. Two examples of telexed/faxed daily reports provide a flavour of coalface concerns.

*2 June 1987 South Yorkshire*

Askern Face B53s Shift Afternoon NUM

Due to shortage of manpower only 14 men sent to the unit. Men demanded full team of 17. There were no more to send to the unit. Men came out in dispute. Loss estimated: 420 tonnes.

*4 June 1987 Western*

Hem Heath (North Staffs). Face 303 Shift Noon NUM

Continuation of dispute concerning face team who walked out on noon shift of 3 June. Team arrived for work but did not go underground. Awaited the outcome of a discussion between the deputy manager and union representatives. The manager instructed the men that they must agree to the deployment to the work required and then discuss their concerns. Men refused and went home. 303s face team on the night shift refused to work. Day shift of 5 June working normally. 4 June noon shift: 19 men affected, 1100 tonnes lost. 4 June night shift: 19 men affected, 800 tonnes lost.

After Margaret Thatcher's departure, ministers were less susceptible to waiving market forces in favour of defending UDM jobs. The scale of closures was even greater than Arthur Scargill had feared. Indeed, the government's announcement in 1992 of a huge closure programme with privatization even made Scargill and the NUM briefly popular with the general public. Closures came faster in Nottinghamshire than in Arthur Scargill's South Yorkshire heartland, an outcome emphatically not desired by Mrs Thatcher. The closures went beyond the levels required by likely future demand. As a result British power stations came to rely on dearer imported coal. The coal industry increasingly looked to 'clean coal' technology in order to maintain coal as part of the UK's energy mix. By December 2007 David Cameron, the Conservative leader, was pledging his party to clean coal. The events of 1985-92, as well as 1984-5, disrupted the UK's energy options.

## IV/A Central Europe

Chair: **tba**

**Scott M Eddie** (Toronto)

*Rural-based industry in Eastern Germany before the Great War*

That the industrial revolution in nineteenth-century Germany was mostly a West German affair seems obvious to even the most casual observer. The East, the land of the Junkers, was the home of extensive agriculture only recently emerged from the fetters of the so-called “second serfdom.” This stereotypical picture of an industrial West and an agrarian East ignores the phenomenon of rural-based industry in the East, a subject also largely overlooked in the historical literature. Using directories of large landed properties that contain information on the number and type of industrial establishments located on these properties, this paper provides a picture of rural-based industry in the seven eastern provinces of Prussia – which accounted for more than two-fifths of the entire area of Germany – between about 1882 and 1907. A surprisingly dense network of mostly small-scale rural industrial establishments averaged about one unit per square mile. More than one-third of all estates of 100 hectares or more had at least one industrial enterprise, but as German industrialization proceeded apace in the late nineteenth century, these enterprises began to disappear; a decline of 15 per cent or more occurred between c.1882 and c.1907.

Comparison with data from tax records for brewing, distilling, and sugar manufacturing shows that the bulk of brewing took place in the cities, but distilling occurred overwhelmingly on the land. C.1882 about two-thirds of sugar mills were found on landed properties of 100 hectares or more, but by c.1907 the figure had dropped to little more than two-fifths. Comparison with data from the industrial censuses of 1882, 1895, and 1907 for other typical rural-based industries shows rather remarkably high shares of the total number of establishments located on large landed estates, but it also shows great inter-industry and inter-province variety.

Further sections of the paper deal with location of industrial enterprises by province, by administrative region, by size of landed property, and by type of owner of the land. Different types of owners tended to specialize in different types of industries: physical persons concentrated on brickworks and grain mills, the Prussian state and monasteries on distilleries, but land owned by business firms was home to the most diverse group of industries. Owners having 12 or more industrial establishments on their estates were a considerably more varied group – both as to social status and over time – than the largest owners of land *per se*, with one-quarter of their number being non-noble persons.

The last section of the paper examines the location of these rural-based industries: regression analysis, using a simple linear probability model, finds that a property’s status as a knight’s estate (*Rittergut*); having a military officer, non-noble person, or business firm as owner; along with increasing size, would each increase the probability of finding an industrial establishment on a rural estate. Decreasing the probability were religious groups, the state, or communities as owners. There were also evident both inter-province and intra-province differences in terms of geographic location.

**Jan Hanousek** (CERGE-EI) & **Alexander Klein** (Jagiellonian)

*School, apprenticeship or work? Children and the family economy in nineteenth-century Bohemia*

Urban families often relied on the income of their children at the end of the nineteenth century. However, unskilled labour was often not the only choice children had. They could attend schools or become apprentices. Therefore, families often faced decisions whether to send their children to work, apprenticeship, or to school.

Several studies examined family decisions to send its children to either school or an unskilled job using detailed data on families. Claudia Goldin's study on nineteenth-century Philadelphia, *Explorations in Economic History* 1979, is among the first which examined labour market participation of children as a family trade-off between child labour and child education. She showed how the number of children and the presence of younger and older siblings influenced child labour market participation and the extent of substitution between the mother's labour participation and home production. Recently, Sara Horrell and Jane Humphries published a study in the same journal which investigated the effect of siblings' gender and age composition on the labour market participation of children in England during the industrial revolution. These studies enlighten, not only the determinants of child labour at family level, but also show the factors which influenced the decision about the human capital accumulation of children.

This paper adds to this debate an analysis of the labour market participation of children for Bohemia's region of Pilsen at the end of the nineteenth century. It examines families' decisions to send children to work as unskilled labourers, to apprenticeship or to school. The analysis uses a probit analysis and examines the association between the age and gender composition of siblings on a child's labour market participation of children. The study's contribution is the examination of apprenticeship to see if it served as a family's source of income or a way of obtaining practical training. Also, it enlightens the family decision-making in the late developing economy and adds to our understanding of the Central European region, so often overlooked in the historical analysis.

Preliminary results show that apprenticeship served more as a way of obtaining a practical education than as an additional source of family income. As for the effect of siblings on labour market participation of children, the presence of older working siblings encourages education of younger siblings – significantly more likely for boys than girls – and discourages labour market participation of older sisters. Apprenticeship turns out to be more often chosen as a way of obtaining education over formal secondary schools. Labour market participation of the mother discourages education and increases labour market participation of boys and home production of daughters.

In sum, the paper investigates the effect of family structure on the labour market participation and education of children. It sheds light on the workings of household economy and the family decision about the human capital accumulation of children.

## IV/B Living Standards

Chair: **tba**

**Jörg Baten & Mojgan Stegl** (Tuebingen)

*Tall and shrinking Muslims, short and growing Europeans: the long-run welfare development of the Middle East, 1840-1980*

How did the standard of living develop in the Middle East over the past two centuries? When did the Western world become clearly better-off in terms of income and health? Those central questions cannot be answered easily, even if interest in this world region has grown substantially over the past years, partly as a consequence of several terrorist attacks in the USA and Europe. Did a long-run relative decline of living standards contribute to the widespread dissatisfaction in the Middle East?

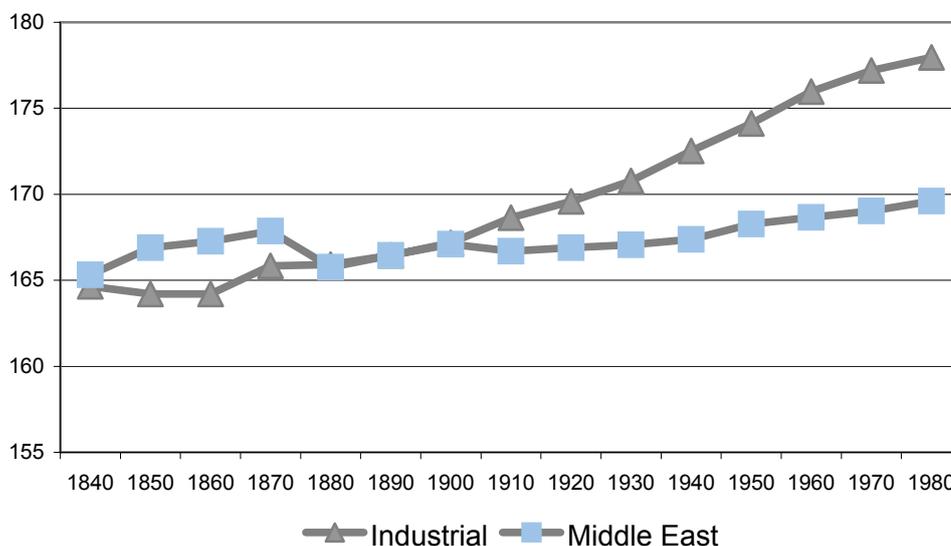
We provide an alternative measure of living standards in the Middle East, using the – by now well-established – anthropometric technique (Komlos 1985, Steckel 1995, 1997). This technique employs human stature as an indicator of the biological components of the standard of living, as heights are normally correlated with nutrition, health, and life expectancy. With our height datasets, we can also cover the rural and farmer populations of Turkey, Iraq, Iran, Egypt, Syria, Lebanon, Palestine/Israel, Afghanistan, Yemen, and the Caucasus region. The Middle East did better than the Western industrialized countries in the mid-nineteenth century. After a period of stagnation until the 1860s, the industrialized countries' heights improved substantially whereas the anthropometric values for the Middle East fell behind in relative terms. The final height of males in 1870 was 167.8 cm on average. This figure was two cm greater than the final height of the industrialized countries.

In this study we have been able to identify the point in time when the Middle East fell back relative to industrial countries, for the first time. With the income levels reached by the beginning of the twentieth century and the onset of huge structural changes, a temporary economic setback significantly influenced consumption patterns and led to permanent changes in the nutritional status of the Middle Eastern populations.

How does this height trend compare with existing GDP and real wage estimates? We find that the Middle East had a good position in anthropometric indicators and real wages during the nineteenth century, less in terms of GDP per capita. Comparing Allen's (2001) real wages estimations with Özmucur and Pamuk (2002) time trends for Istanbul it turns out that in terms of real wages, the industrial countries were also quite ahead of Istanbul in the 1870s, with real wages for the Western cities being almost twice as high. However, this applies mainly to London and Amsterdam. If we consider the industrial countries without those cities, Istanbul had in fact a real wage advantage in the early nineteenth century and wages were more or less equal in the period between the 1840s and the 1890s.

In short, during the early stages of modern economic growth, the integration of hitherto remote Middle Eastern regions into a larger world market had a significant impact on the heights and modest development of the following period. This dramatic relative decline might have added to the widespread dissatisfaction in this world region. The recent events cannot be fully understood without acknowledging the relative decline of this world region. The populations of the Middle East had in fact left the industrialized countries behind until the nineteenth century. Yet since then, the situation has changed and worsened for the Middle East in relative terms.

Figure 1: *Height trend in the Middle East and industrialized countries, weighted by population size*



Sources: for 1840-1930: Stegl, Baten (2007) for 1930-1980: Demographic and Health surveys (DHS)

**Janet Hunter** (London School of Economics)

*Prices, standards of living and material incentives in Japan, 1937-41*

It is widely recognized that by 1945 the extent of material deprivation and malnutrition in Japan was considerable, and that economic collapse was a key factor in Japan’s defeat. This process has been studied by a number of scholars. The position of the economy during the China War years prior to Pearl Harbour, 1937-41, has received much less attention. The focus of this paper is on these years during which the state struggled to establish an efficient planning mechanism that met the needs of the war effort. In maximizing the contribution of labour to the wartime economy, the Japanese government sought to make use of both material and non-material incentives, and the ‘spiritual mobilization’ campaign has been studied at some length by historians. This paper will focus on the issue of material incentives, showing that the decision to expand the conflict in December 1941 was taken in a context in which Japan’s economic vulnerability was already apparent to observers both inside and outside the country.

During these years market operation remained the norm even as state regulation increased. The regulation changed and distorted incentive structures, repeatedly generating new problems that demanded further regulation. One critical factor in sustaining labour productivity – and overall productivity – was the extent to which incentive structures allowed workers to equate increasing efforts with increasing rewards, and the core question addressed in this paper is how far did patterns of remuneration and consumption suggest that such incentive structures continued to exist. The state recognized this imperative even as it sought to hold down prices and constrain consumption, but it can be argued that its efforts in this respect were largely ineffective. The result was that well before December 1941 many workers were experiencing declining real incomes and shortages of goods. This failure of material incentive structures in turn affected work effort, attendance and working hours, and contributed to declining labour productivity and efficiency of production.

The first part of the paper outlines the development of the regulatory system during these years, showing that it was essentially *ad hoc* and lacking in attention to material incentives. In particular, the authorities were slow to realize that price controls could only be effective in the context of some kind of control over distribution. The outcome was that one shortage often led to another, and policymakers had to address shortages of some goods as early as 1938. The second part outlines basic quantitative indicators of workers' living standards, specifically prices, real wages and real income. Japanese economic historians have produced such indices and time series data since the 1970s, but for contemporary observers the most reliable source of such information was the estimates produced by the leading economic journal, the *Tōyō Keizai Shinpō*. As price and wage controls spread, making accurate assessments of real wages and income more difficult, and as confidence in the government's own figures began to wane, it was these data that were used by both Japanese and Western economists to assess what was going on in the Japanese economy. The third part of the paper looks at what workers were able to consume with the income that they earned. It will be shown that from early on in the conflict there were growing shortages not just of luxury goods, but of many basic consumer goods. While shortages became a far greater problem after 1941, and especially during 1943-5, even before Pearl Harbour they were threatening to undermine labour's commitment to the war effort. Shortages were sometimes absolute, but were in some cases relative, the consequence of distributional failures. Ration quotas were increasingly not met. In both cases the result was the emergence of so-called 'outlaw transactions'. Even where workers' incomes may have been sustained, therefore, there was no guarantee that they could purchase what they needed with those incomes. Moreover, trends in other indicators of living standards, such as working hours, leisure time and health, also began to decline during the early years of the China war.

Both Japanese and Western commentators were well aware of these problems, and of their potential impact on productivity and the ability of the economy to sustain a lengthy conflict. Japanese economists, for obvious reasons, sought to put a more positive gloss on their reports, but it is clear that the problems of material incentives that reached crisis point in 1943-5 had much earlier origins, and were exacerbated by inadequate state policies.

## IV/C Italian Finance

Chair: tba

**Paolo di Martino** (Manchester)

*Financial intermediation and economic performance in liberal Italy, 1861-1913*

The relation between financial intermediation and industrial performance during the liberal age (1861-1914) has always been a hot topic in Italian economic history. During the 1960s, Gershenkron provided an interpretative model which linked the rapid development of Italian industry, and the macroeconomic “take-off” since the 1890s, with the appearance of German style “mixed” banks.

After four decades of debate, little of the original Gershenkron’s idea seems to have survived unchallenged. The role of mixed banks has been both reduced and qualified, while the very idea of “take-off” has been replaced by the concept of “modern economic growth”. Nowadays the common view is that Italian industry and economy grew progressively between the country Unification and the First World War, with no major breaks or sudden accelerations but, instead, with deep cyclical fluctuations.

The analysis of the causes of these swings thus became a central issue. Scholars agree on their financial nature (paying a tribute to Gershenkron core argument of the relevance of financial determinants) but strongly disagree on their origin. While one line of research (Warglien 1987) stresses their domestic nature, Fenoaltea (1988; 2004) is adamant in linking Italian financial fluctuations to the international business cycle.

More specifically Warglien maintained that the performance of the Italian industrial sector was affected by a number of financial crises involving commercial banks (the front-line of industrial credit). Fenoaltea downplayed this element, suggesting that the key variable was the amount of British export of capital which, in turn, depended on the state of the business cycle. Because of Britain’s leading role, a reduction of her foreign investment impacted on the amount of financial resources available to all countries, including Italy, which borrowed on the international market even if they had no direct link to British financial institutions.

The aim of this paper is to reconcile these two views which, in our mind, are complementary rather than mutually exclusive. In fact it is possible to argue that while international capital movement dictated the amount of financial resources, their utilization largely depended on the behaviour of the domestic banking system.

Following the literature on asymmetric information and “credit rationing” (Stiglitz and Weiss 1981; Bernanke, 1983), we explore the hypothesis that macroeconomic swings depended on the combination of two factors: the actual availability of financial resources and the ability of banking activity to channel such resources to productive investment. In particular we want to analyse whether or not the impact of exogenous contractions of international financial flows have been amplified by the re-orientation of credit policies from private investment to more prudential assets.

In order to analyse this hypothesis, this paper develops an empirical model in which the rate of variation of industrial production and the rate of growth of the economy are the independent variables, while measures of banks’ investments and proxies for the availability of capital are used together as explanatory variables.

As compared to previous studies on this topic, this paper provides two further elements of novelty:

1. Co-operative banks and saving and loans, and not only commercial banks, are included in the analysis. The rationale for this choice is to incorporate the findings of recent studies demonstrating that these two types of financial institutions were much more actively involved in commercial and industrial activity than previously believed.

2. The study is based on new statistics on GDP, industrial production, and banking investments that have become available in the last decade.

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**Alberto Rinaldi, Marina Murat & Barbara Pistori** (Modena and Reggio Emilia)  
*Migrant networks and Italian foreign direct investment: a cliometric perspective*

This paper studies the interactions between international migrations and Italian foreign direct investments (FDI).

### Theoretical framework

Recent studies in economics show that informal barriers between countries, given by differences in culture, institutions and social norms, obstruct trade and international investments. A contrasting force to these barriers is given by the international migrations of people and, more specifically, by the transnational ethnic and business networks built by immigrants.

A theoretical explanation of the role of international networks is set out in Rauch and Casella (2003): immigrants supply information and provide matching and referral services on business opportunities abroad. The authors develop an economic model of "matching" in the international markets where entrepreneurs search for partners with the aim of joint production. Entrepreneurs endowed with the information and the ties provided by immigrants have higher probabilities of successful matching and earn higher profits. Several empirical studies have found a positive and significant impact of migrants' networks on the flows of trade and investments between countries (i.e. Gould, 1994; Head and Ries, 1998; Dunlevy, 2006).

Italy is a case of a particular interest because, having experienced important flows of emigration and immigration, it allows the study of the links developed by each set of migrant networks. Also, immigrants and emigrants relate to different areas of the world.

According to the network theory, both emigrants and immigrants should have a positive impact on a country's FDI. However, some authors distinguish among ties working within the network and ties linking individuals that belong to different groups. Granovetter (1994) defines "strong ties" the interactions among individuals that take place within groups where each member knows each other, while "weak ties" are those linking groups where not all individuals know each other, either directly or by referral. He maintains that information and innovation are more likely to spread in societies where weak ties prevail. Greif (1992), in an historical perspective, analyses the social and cultural factors, as well as institutions, that provide strength to international ties. He claims, in a similar fashion to Granovetter, that international networks with strong ties promote trade within the coalition but that this may happen at the expense of potentially profitable and more efficient interactions outside it.

### **Stylized facts**

We focus on some factors influencing the strength of ties through time and distance. Among others, these are: i) the frequency of contacts between the migrants and their countries of origin, including return migration, travel between host and origin countries, flows of remittances; ii) the cultural ties, among them the presence of schools of home country culture and language in the host country; and migrants' associations; iii) the institutional ties, including bilateral agreements on immigration between the two countries, as well as laws of citizenship.

We find that, since the historical times of mass emigration, there have been important ties linking Italy to its population of expatriates. The existing links between immigrants in Italy and their countries of origin appear to be weaker and of less significance.

### **Econometric testing**

The relationship between migrants' networks and the Italian FDI is tested by estimating an econometric model (OLS) that takes into account the stock of Italian emigrants abroad and of immigrants in Italy, as well as a number of other proxies for socio-cultural and institutional dissimilarities between countries (quality of governance, religion, regional agreements) that can influence the international exchange. The database covers a time span going from 1990 to 2004 and 51 partner countries.

Our econometric model focuses on "abnormal" stocks of bilateral FDI. It aims at assessing the impact of factors related to the "human dimension", as diasporas and networks, rather than that of all the investments' determinants. The definition of "normal" FDI for a country is that country's total FDI as a fraction of all countries' combined global FDI, i.e. its pro rata share of global FDI. Conversely, according to Goldberg et al (2005) we define the "abnormal" FDI of a country that invests in Italy as that country's fraction of all countries' FDI into Italy, vis-à-vis the "normal" FDI for that country. We also take into account the abnormal Italian investments abroad, considering the part of Italian FDI in each partner country that exceeds or falls short of Italy's propensity to invest globally.

Our main results are that the Italian emigrants abroad have strong and robust effects on the country's abnormal FDI, both inward and outward. Immigrants, on the other hand, exert a weak and non-significant effect on bilateral FDI, in both directions.

### **Historical survey**

This section provides a historical survey of Italian FDI in the twentieth century. We examine some of the most relevant cases of outward FDI carried out by Italian enterprises for which Italian emigrants abroad played an important role: the expansion abroad of the two major mixed banks (Comit and Credit) in the first three decades of the century; the multinational expansion of the major Italian manufacturing firms (such as Fiat, Pirelli and Olivetti) throughout the century; the internationalization process of SMEs in recent years. We also focus on some outstanding cases of inward FDI prompted by Italian emigrants. With regard to both outward and inward FDI the paper analyses the role played by the associations of Italians abroad.

This section confirms the role played by Italian diasporas in providing Italian entrepreneurs with information and knowledge for investment abroad and foreign companies for investment in Italy. They turned out to be relevant especially for the FDI carried out by SMEs.

### **Conclusions**

Our results show that the presence of Italian emigrants abroad significantly promotes both inward and outward Italian FDI, while immigrant networks do not exert a similar effect. The two sets of ties, those potentially provided by immigrants and those supplied by emigrants, relate to different areas of the world. Hence, this evidence may also suggest that the extent of

the Italian FDI is, at least partially, “limited by the extent of the coalition” (Greif, 1992), that is, by the stock and location of Italian emigrants abroad.

## IV/D Rich and Poor in the Middle Ages

Chair: tba

**Guido Alfani** (Bocconi)

*Concentration of wealth in an early modern city (Ivrea, 15-17<sup>th</sup> centuries)*

Wealth concentration and distribution during the early modern age is not a favoured field of study among economic historians. Much more interest has been devoted to income distribution, and research has focused mainly on the period affected by industrial revolution (about 1750-1900).

Surely this is due to the fact that interest in the variation in inequality (of income and of wealth) in the past has mainly originated from the hypothesis of Kuznets<sup>1</sup> (1955), according to which a clear pattern between per capita income and inequality can be discerned. Inequality would be relatively low in pre-industrial societies (modern-age societies as well as poor societies of any epoch), then would increase in the first stages of the industrialization for later inverting the trend and starting to decrease.

Some years ago Van Zanden suggested, for the case of Holland, the existence of a “Super-Kuznets Curve” spanning many centuries, actually connecting “modern” and “pre-modern” growth which as a whole would be associated with a long-term phase of rising inequality, followed by a downward phase only in the twentieth century.<sup>2</sup>

Holland however during the early modern age was probably the fastest growing economy of Europe. On the contrary, Italy is commonly thought to start declining since the sixteenth century. We could thus wonder in which way long-term economic decline influenced wealth concentration.

The paper presents a first case study developed in the context of a broader research project, financed by Bocconi University and other institutions, which aims at studying in a comparative perspective concentration and distribution of wealth in Northern Italy since about 1400 up until the beginning of the industrialization. The case is that of the small city of Ivrea, part of the Duchy of Savoy and placed in Northwestern Italy, for which an exceptional documentation survived comprising censuses, “estimi” (property tax registers) and the much rarer “libri delle correzioni degli estimi” (literally, books of corrections of the property tax registers). After almost 10 years of research I have put together a unique database of information about distribution of real estate and other components of wealth spanning the fifteenth-seventeenth centuries. For the seventeenth century I have been able to reconstruct indexes and measures of concentration on a yearly basis, which allowed me to study in detail the effects on wealth distribution of shocks such as the terrible epidemic of plague of 1630. The data suggests that the degree of concentration of wealth was very resilient, given that after a sharp decrease in inequality at the time of the plague the big patrimonies were very quick to recompose themselves so that a concentration even higher than in the past was reached in just a few years. Inequality also increased due to poor “foreigners” who came to live in the city, filling in the gaps opened by the epidemic.

Ivrea is the perfect example of a community declining both from the demographic and economic point of view during the early modern age, so that it is an excellent starting point to develop the issue of the relationship between decline and concentration of wealth in pre-industrial societies. However, a phase of economic decline seemingly does not correspond to a decrease in inequality, but to a stagnation or even to a slow increase of the value of Gini indexes and similar. This finding poses some problems of interpretation given that it does not fit well in the Kuznetian model as applied to pre-industrial Europe by Van Zanden.

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<sup>1</sup> Kuznets, S., “Economic Growth and Income Inequality”, *American Economic Review*, n. 45 (1), 1955, pp. 1-28.

<sup>2</sup> Van Zanden, J.L., “Tracing the beginning of the Kuznets curve: western Europe during the early modern period”, in *The Economic History Review*, n.4, 1995, pp. 643-64.

Other issues which are discussed in the paper include the theoretical problems raised by the unavailability of information about *every* component of wealth (a census of Ivrea dated 1613 is the rare exception, allowing for deep analysis of the distortions caused by focusing on real estate registered in the *estimi* as a proxy for wealth) and the effects of the new, aggressive stance about real estate of Catholic clergy during the so-called Counterreformation.

**James Davis** (Queen's Belfast)

*Marketing secondhand and low-quality goods in late medieval England*

Medieval secondhand markets existed at the margins of the mainstream exchange process. In the formal market system, quality and price were controlled and standardized by the market, town or guild authorities who enforced a variety of local and national regulations. Breaches of rules were subject to sanction through the courts. However, it could be argued that vendors of secondhand goods often operated at the margins of such regulations, and that they sold used, or low-quality items that did not always conform to the rigid quality constraints set down by law. Instead, many of these secondhand and low-quality products were subject to different consumer expectations and attitudes. Market officials might also view many of these goods as acceptable, even though they were beyond the normal remit of their quality and price controls. Consequently, medieval secondhand markets often operated according to different commercial frameworks than formal markets, particularly in regards to valuation, trust and demand.

The consumption habits of villagers and townsfolk, most of them of moderate means, required the continual services of petty traders, pedlars, tinkers, and hucksters (a notable number of whom were women), who retailed cheap and secondhand goods in the marketplace, from the roadside, or door to door. This would have included locally-produced tableware made from pottery or wood, old brass cooking pans, secondhand clothes, and low quality belts, buckles, and purses. Secondhand marketing has seemingly existed as long as people have exchanged goods. Several historians of medieval England certainly mention the existence of such markets, but they usually make only fleeting references, such as Veale in her study of the fur trade and Hatcher and Barker for the pewter industry. These historians have noted some of the very few documentary instances where certain secondhand goods were subject to specific market regulation and controls, mostly relating to fraud and adulteration. Beyond this, there remains a distinct lack of research and understanding about the medieval importance of secondhand markets, which seem to have existed within and beyond the shadowy margins of formal markets. This lack of research is largely due to the paucity of evidence that means it is difficult to identify the extent of such low-scale commerce. The scope and operation of internal trade in medieval England in itself is hard enough to uncover from the fragmentary sources that survive. Comparatively, secondhand and low-quality marketing lies almost fully below the documentary parapet. Despite this caveat, the trade in secondhand and/or substandard goods is an area that should be considered further by historians of medieval marketing, even if the gaps in the evidence mean that much remains unknowable.

There are numerous historical questions which are worth considering about this trade. At a basic level it is important to identify the practitioners, goods, customers and locations for such marketing activities. However, can we also begin to ascertain the importance and impact of marginal marketing upon the mainstream networks that dominate our extant documentation? How important an economic role was played by such lower-tier commodity markets, and what was the interaction with more formal market structures? Was this merely a sporadic and informal trade between neighbours or were there more organized and important networks in which such goods were exchanged? To what extent were such markets, goods and traders compatible with a seemingly rigorous and paternalistic legal framework in market centres? The legislators and market authorities usually emphasized quality standards and commercial protection for enfranchised citizens, and those who purveyed secondhand or

substandard goods might be considered a threat to such controls. However, there is evidence that officials were prepared to be surprisingly flexible when faced with such exchanges, and they might even provide mechanisms to assist poor sellers and buyers. These institutional attitudes towards secondhand commerce were often compatible with accepted ideas about both the common good and the open and trustworthy marketplace.

This exploratory paper seeks to identify and discuss the possible evidence for secondhand markets in regulations, court rolls, manorial accounts, literature and even archaeology. Such material often provides mere scraps about marginal marketing activity and it is important to recognize the severe limitations of this evidence. Nevertheless, it can perhaps give us an insight into medieval attitudes towards such trade, as well as reminding us that much marketing activity occurred beyond the reach of our surviving documentation.

## IV/E Work and Consumption

Chair: **tba**

**Dave Postles** (Leicester)

*Working in an early-modern small town: Loughborough, 1580-1650*<sup>1</sup>

I would argue that such detailed exploration of the artisan world is especially appropriate at the present historiographic moment.<sup>2</sup>

When considering urban working patterns, the temptation has constantly been to define *occupational structure(s)*. In the context of large incorporated urban places, economic activities at the higher levels were regulated, by guild and other organizations such as the freedom. Structure implies the categorization which historians impose on economic activities in urban centres, which is unavoidable but perhaps would not resonate with contemporaries. Attending to structure(s), however, perhaps also suggests deep, enduring ecological entities which are almost reified and invested with their own agency.<sup>3</sup>

Examining working practices in an early-modern small town perhaps allows a different window onto the issues.<sup>4</sup> The lack of a corporate (conciliar) organization (mayor, aldermen and burgesses, that is, the corporation) removed the control of the admission to the freedom, although apprenticeship regulations still obtained.<sup>5</sup> If, moreover, we divert our gaze away from the upper echelons of the occupational hierarchy, we encounter the economies of makeshifts which constituted the working lives of much of the urban populace.<sup>6</sup> Here, the issue was less structure than contingency. Employment was discontinuous, interrupted, and people – men as well as women – suffered the vicissitudes of being in and out of work: disruption and interruption of work.<sup>7</sup> We might suppose that at this level they did not know from one day to the next what their labour might entail. We might also question whether we should categorize labouring as an *occupation*: it was working, with the emphasis not on what one did, but whether there was work available. Labourers thus suffered not only unemployment, but also underemployment.<sup>8</sup> This arrhythmia, the lack and uncertainty of

<sup>1</sup> There is no discussion here of what kind defined urban work; the two criteria usually invoked are diversity or heterogeneity of occupations and the proportion of work which was not directly agrarian. Perhaps the best examination is P. J. Corfield, 'Defining urban work' in Corfield and D. Keene, eds, *Work in Towns 850-1850* (London, 1990), pp. 207-30.

<sup>2</sup> Claire Dolan, 'The artisans of Aix-en-Provence in the sixteenth century: a micro-analysis of social relationships' in P. Benedict, ed., *Cities and Social Change in Early Modern France* (London, 1992), 174. See now, J. Farr, *Artisans in Europe, 1300-1914* (Cambridge, 2000) and, in particular, D. Woodward, *Men at Work: Labourers and Building Craftsmen in the Towns of Northern England, 1450-1750* (Cambridge, 1995).

<sup>3</sup> So the question is re-directed away from the economic prospects of work to its social and cultural meanings: Randy Hodson, *Dignity at Work* (Cambridge, 2001); Robert A. Rothman, *Working: Sociological Perspectives* (New Jersey, 1987); Patrick Joyce, ed., *The Historical Meanings of Work* (Cambridge, 1987), 'Introduction', p. 14. The civic ethos of these incorporate boroughs is admirably dissected by P. Withington, *The Politics of Commonwealth: Citizens and Freemen in Early Modern England* (Cambridge, 2005). For the historical dimensions of work, Keith Thomas, ed., *The Oxford Book of Work* (Oxford, 1999).

<sup>4</sup> For this category within the urban hierarchy, see now A. Dyer, 'Small market towns 1540-1700' in P. Clark, ed., *The Cambridge Urban History of Britain Volume II 1540-1840* (Cambridge, 2000), pp. 425-50.

<sup>5</sup> J. Lane, *Apprenticeship in England, 1600-1914* (London, 1996) under the Statute of Artificers of 1563.

<sup>6</sup> Woodward, *Men at Work*, 93-115. The term 'makeshift' was coined by Olwen Hufton.

<sup>7</sup> See, in general, S. Hindle, *On the Parish? The Micro-politics of Poor Relief in Rural England c.1550-1750* (Oxford, 2004). We might, however, refer here to the ideology and rhetoric of work: the expectation that people would work and that they would only receive relief when not working; and the dignity of work: M. Pelling, *The Common Lot: Sickness, Medical Occupations and the Urban Poor in Early Modern England* (Harlow, 1998).

<sup>8</sup> Anyone who worked as an unskilled labourer in the building industry in the 1950s and 1960s like my late father (a 'bricky's oppo') would recognize these issues. See also, Woodward, *Men at Work*, 94.

work, was paramount.<sup>9</sup> We might refer to those issues of unemployment and underemployment as structured insofar as they were inherent in the casualization of the labourer's life, but to the labourer personally they were contingent: expected to happen, but uncertain as to *when* they would.<sup>10</sup>

In two respects, then, we must reconsider time and work-discipline in pre-industrial England. First, the pertinent question is perhaps less the imposition of regulation of working time but access to work at all. Second, piece-rates were not quite as predominant as has been suggested; day-rates existed widely, perhaps less so for crafts, but particularly for labourers. To some extent, then, conditions of work in the pre-industrial urban world have been misrepresented.<sup>11</sup>

Reconstructing the full range of work in an early-modern context is difficult. Admissions to the freedom in incorporated boroughs defined only the upper level of urban employment. Where musters or censuses exist, a static representation is available, but such enumeration is infrequent, (for musters) bounded in time, and the categorization is made by officialdom.<sup>12</sup> The more intensive reconstruction through probate material allows a diachronic approach to occupations, but probate material provides only a partial representation and reveals self-evidently occupations achieved at the end of life or in maturity, revealing little of employment processes through the life-course.

The information used here for Loughborough is slightly more robust. The evidence deployed here consists firstly of parish register data recorded between 1636 and 1650.<sup>13</sup> A second source for work comes from churchwardens' accounts from the 1580s and bridgemasters' accounts from the 1570s, which allow a window on certain opportunities for work, which might be anachronistically defined as 'public works'.<sup>14</sup>

### Jon Stobart (Northampton)

#### *Gentlemen and shopkeepers: supplying the country house in eighteenth-century England*

The country house is well recognized as a site of elite patronage of artists, architects and landscape gardeners. As such it was an important vehicle of social and political ambition: a statement of the status and power, as well as the taste and discernment of the aristocracy and landed gentry. In its emphasis on *outcomes* – that is, great houses as the embodiment of social

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<sup>9</sup> E. Zerubavel, *Hidden Rhythms: Schedules and Calendars in Social Life* (Chicago, 1981).

<sup>10</sup> By comparison with the above, S. Rappaport, *Worlds within Worlds: Structures of Life in Sixteenth-century London* (Cambridge, 1989), with its emphasis on both structures and the concomitant roles of livery companies in the metropolis; the two phenomena are inter-related. His emphasis is decidedly on those trades and crafts which later came to comprise 'the middling sort': pp. 22, 25, 27. Rappaport also has the most succinct rehearsal of occupations in the larger incorporated boroughs. For 'structural poverty', K. Wrightson, *Earthly Necessities: Economic Lives in Early Modern Britain* (New Haven and London, 2000), 197. None of the above is to deny divisions within work according to skill (and gender): Joyce, *Historical Meanings of Work*, 'Introduction', pp. 21-2; people would have been conscious of different rates of remuneration at the least, which is approached below. See also, Arthur P. Brief and Walker R. Nord, 'The absence of work' in Brief and Nord, eds, *Meanings of Occupational Work: A Collection of Essays* (Toronto, 1990), pp. 233-51.

<sup>11</sup> Pace, then, E.P. Thompson, 'Time, work-discipline and industrial capitalism,' *Past and Present* 38 (1967), pp. 56-97, structured around a perceived transition from 'task-based time' to clock time. Criticism of Thompson is not new, of course, but has largely focused on the continuation of traditional and customary time into industrialization: Joyce, *Historical Meanings of Work*, 'Introduction', p. 25 and in the same volume Richard Whipp, '“A time to every purpose”: an essay on time and work', pp. 210-36.

<sup>12</sup> J.C.K. Cornwall, *Wealth and Society in Early Sixteenth Century England* (London, 1988), pp. 1-3, 16-17 (Table 1.2).

<sup>13</sup> ROLLR DE667/1.

<sup>14</sup> ROLLR DE2392/1110 (1570-97), ROLLR DE667/62, and ROLLR DE667/112. Woodward, *Men at Work*, which incorporates 'small amounts of information' from some 'sleepy little market towns' such as Louth, Appleby, Howden, Bridlington and Penrith (p. 10). By and large, however, his discussion focuses on regulation of the crafts by guilds. Material for 'public buildings' is collected by Woodward (pp. 5-7), although he was more dismissive of the churchwardens' accounts which he analysed (p. 5).

and cultural capital – this view overlooks the *processes* of consumption and the *systems* of supply which met the needs and wants of the elite. It was through these practices – some mundane and everyday, others more exotic and occasional – that the ambitions and tastes of the gentry were brought to fruition. And yet the recent literature on consumption and material culture has made little attempt to establish how the gentry fitted into wider patterns of behaviour in terms of both shopping and consumption practices.

This paper forms an empirical and conceptual attempt to fill this gap. It draws on the household accounts of the Ferrers family of Baddesley Clinton in Warwickshire to recreate something of the processes through which the material culture of the family home was created. At a practical level, it seeks to identify and map those supplying the Ferrers with goods and services, and to explore the nature of their relationship with the family. In particular, it explores the inter-generational continuities and shifts of consumption patterns and networks as the estate passed from Edward to his son Thomas. The discussion then broadens to consider the ways in which these changing practices, and the resulting material culture of the Ferrers' home, were part of wider processes. Here, attention focuses on the move from an old to new material culture; redefined notions of the 'gentleman', and the often contradictory motivations to consume.

## IV/F Capital and Labour

Chair: tba

**Grietjie Verhoef** (Johannesburg)

*Savings for life to build the economy for the people: the emergence of Afrikaner corporate conglomerates in South Africa, 1918-2000*

This submission addresses the case of the development of business conglomerates in South Africa. Specific reference is made to, not family-based business, but nationalistic motivated business of Afrikaner entrepreneurs. These business groups emerged during the early twentieth century and developed into diversified conglomerates operating in mining, industries and finance.

The South African economy was predominantly based on primary production – mining and agriculture – by the turn of the century. The mining industry was responsible for the emergence of a mining linked nascent industrial sector. Foreign control of the mining sector resulted in the export of dividends to shareholders outside the country. The South African economy developed slowly and remained undiversified until the government introduced protectionist policies during the 1920s to encourage domestic secondary industries. Forces thus affecting the emergence of domestic large business groups were access to capital and markets, which foreign controlled mining enterprises controlled to the exclusion of domestic Afrikaner interests. In 1918 Afrikaner businessmen in the Cape province established an insurance company, SANTAM, and shortly after that SANLAM, a life assurance company, to mobilize Afrikaner savings to invest in diversified business interests. This was a strategy to mobilize capital towards the economic empowerment of Afrikaners in the interest of the development of the South African economy in its own right. SANLAM utilized accumulated assurance capital to assist with the establishment of small businesses. Soon an industrial investment company, a mining house and several financial institutions emerged. These were all capitalized and controlled by Afrikaner capital, with substantial investment by SANLAM.

This paper will explore the diversification of Afrikaner investment in different sectors of the South African economy, whereby economic diversification and overall macroeconomic growth was promoted. The paper will investigate the management strategy of SANLAM and show the contribution of Afrikaner enterprises to the development of the economy. These initiatives originated from nationalistic driven entrepreneurial motives from a minority community, not a family business. The management structure resembled the closed family business structure, which created serious problems decades later with the expansion of enterprises. The paper will indicate how the acquisition drive of Afrikaner business (in an attempt to gain meaningful access in the mainstream South African economy) resulted in a loss of business focus, weak management strategies and underperforming underlying assets.

By the late 1970s SANLAM occupied the third largest market capitalization of a single conglomerate in South Africa. A substantial part of that investment was portfolio investments, which were underperforming. The SANLAM management then embarked on managerial innovation by transferring the portfolio investment into a separate investment concern to be managed by a separate investment management entity. The investment company, SANKORP, relied heavily on the Goold and Campbell (1990) theory of the role of the centre in managing diversified corporations. The formation of SANKORP represented a watershed in big business development in South Africa (as opposed to big business managed from outside South Africa by predominantly British, Continental and USA corporations). SANLAM introduced strategic management planning from the centre of an investment entity in order to introduce strategic management strategies in underlying concerns. SANKORP accordingly restructured massive industrial, financial and mining conglomerates in South Africa. These ‘portfolio’ investments represented a substantial proportion of the South African economy and offered a basis for the globalization of South African business interests. This paper will

explain the managerial innovation introduced by SANKORP into the underlying concerns to address problems of unprofitability, management inefficiency, inadequate financial structure, inefficient organization and technological deficiencies. This restructuring had a major impact on the growth and diversification of the South African economy as a whole during the last quarter of the twentieth century. The operations of SANLAM / SANKORP represent the 'visible hand' of business groups in engineering the diversification and growth of the South African economy since the first decade of the twentieth century, but more tangibly during the last quarter of the century. The history of SANLAM is one of acquisition and concentration into diversified conglomerates (in an attempt to promote Afrikaner access into the South African economy) followed by deconcentration when it became clear that the centre was not necessarily adding value to the underlying concerns any more.

It was also significant that the SANLAM/ SANKORP business group was at the forefront of the political negotiations leading up to the first democratic elections in South Africa in 1994 through its involvement in negotiations with the government since the late 1970s and through its active facilitation of the first Black Economic Empowerment transaction in South Africa in 1993. The paper will explore the impact of this political economic intervention in preserving a market orientated economic dispensation in South Africa after 1994, despite the strong inclination by the ANC as liberation movement and later governing party, towards socialist/communist economic policies. The paper will address the business – government relations as a significant factor towards the growth of South African business and the domestic economy as opposed to the dominant British orientation of financial institutions and mining houses during the first half of the twentieth century.

The role of this Afrikaner business group was more significant, since SANLAM was a mutual business organization. It was not a listed concern (demutualization followed only in 2000) and therefore not subject to shareholder activism. Many underlying assets were nevertheless listed entities, which displayed shareholders' sentiments through weakening share performances. These management strategies will be explored and explained how they responded to shareholder concerns, which led to the first massive unbundling transaction of a business empire/conglomerate in the South African corporate environment during the late 1990s. The outcome was the massive unlocking of value in underlying assets and subsequent capital injection in the South African economy, providing further capital injection for growth. The impact of this corporate activity by this specific business group in South Africa will be the focus of this paper – to illustrate the role of the mobilization of local nationalistic driven or nationalistic motivated capital in the interest of the development of a domestic economy, which had been captured by imperial economic interests since the period of colonial control.

**Steven Thompson** (Aberystwyth Wales)

*From paternalism to industrial welfare: the evolution of industrial welfare capitalism in the south Wales coalfield*

This paper will consider the evolution of industrial welfare capitalism in south Wales over an extended period of 150 years. It will contrast the basic, paternalistic provision made in the iron-making communities of the early nineteenth century, with the provision provoked by Employers' Liability and Workmen's Compensation legislation in the latter part of the nineteenth century, and the 'rational' provision made through the industrial welfare movement and Miners' Welfare Fund of the interwar period. In each of these various periods, the paper will, in very broad terms, explore the nature and extent of provision, the purpose of such provision, and the consequences of such provision for industrial and social relations. By adopting a long-term perspective, the paper will evaluate broad changes in the ideology of welfare provision within a region that was of major importance to the British economy. The examination of this provision will be set in the specific social, industrial and cultural contexts of south Wales in order to better understand the motivations and consequences of such provision.

This paper will also consider the extent to which employers in the region varied in their attitudes towards welfare provision for their workers. Individuals such as Sir W.T. Lewis, described by Sidney Webb as ‘the best-hated man’ in south Wales, and Alfred Mond, sponsor of the Mond-Turner talks in the 1920s, had very different philosophies of industrial welfare capitalism and made very different provision for the workers in their employ. Similarly, provision varied according to industry and to the form of ownership: employers in the various metallurgical industries in the region seem to have been more inclined to make provision than coal employers, while limited liability public companies differed from family enterprises. This paper will evaluate what the welfare provision of different employers in south Wales tells us about their industrial relations strategies and the success with which they were able to pursue and attain their goals through industrial welfare capitalism.

## V/A India: Paths of Development

Chair: **tba**

**Ali Cheema** (Lahore) & **Bilal Siddiqi** (Oxford)

*Colonial village institutions, path dependence and public good provision: do peasant republics serve better than feudal estates?*

Are feudal village-level institutions, set up during the colonial era, inimical to long-run socio-economic development? Does this continue to be the case after decolonization and the introduction of electoral democracy and mass politics? This paper addresses these questions by exploiting variation in the type of village-level local governance institutions set up by the British in Sargodha district in West Punjab (in present-day Pakistan) between the nineteenth and twentieth centuries, and by analysing the difference in public good provision between these distinct types of village institutions over the post-independence period (1951-2003). The paper asks whether landlord-controlled village institutions do better or worse at the provision of essential state-provided public goods relative to peasant-controlled village institutions. While the analysis does not suffer from identification issues that arise in cross-district or cross-province comparisons, we also employ additional identification strategies to control for unobservables, exploiting geographical contiguity between villages, the migrant origins of the initial settlers, and the types of settlement awarded by the colonial government.

Landlord-controlled or feudal village institutions are those where: (a) the British gave private ownership rights over agricultural land and the residential village to non-cultivating individuals or families, and (b) village governance rights were held by this elite in relative autonomy of the state. Peasant-controlled village institutions are those where: (a) cultivating peasants worked as state tenants, and (b) village governance and residential rights resided in the state, which it delegated to a co-ownership of peasants. The paper classifies all 832 villages of the district into these two distinct categories by drawing on a unique database of colonial village inspection reports and colonial village settlement documents (*wajib-ul-arz*) collated from the district revenue archives.

Based on this classification and using a unique database of village level provision of 12 public goods for the years 1951, 1961, 1993, 1998 and 2003, we find that villages endowed with feudal institutions do significantly worse at the provision of essential state services, including electrification, street paving, sanitation, and access to schooling (primary, middle and high) across both genders. We also find significant effects on the quality of schooling, and on related outcomes such as literacy. Our results are robust to different specifications and hold after controlling for many obvious variables, including initial physical endowments and socio-economic inequality. The results persist even after including electoral constituency and winning parliamentary fixed effects, suggesting that feudal institutions lead to worse outcomes within the same political constituency! Our findings indicate that 'entrenched' feudal institutions that escape land reforms, as they have in Pakistan, have adverse long-term political economy and developmental effects that are distinct from their effect on agricultural production and productivity.

**Stephen Broadberry** & **Bishnupriya Gupta** (Warwick)

*The historical roots of India's service-led development: a sectoral analysis of Anglo-Indian productivity differences, 1870-2000*

There are a number of existing studies of comparative productivity and income over the period since the late nineteenth century for members of today's rich-country convergence club (Pilat, 1993; Broadberry, 1998; Broadberry and Irwin, 2007). However, to identify the forces making for economic success, it is also important to examine the experience of countries which have remained less developed and compare them with the experience of the rich world. This paper considers the experience of India since 1870 in comparison with the United

Kingdom. An Anglo-Indian comparison is feasible because much statistical information was collected in India during the period of British rule before 1947, in a form which is relatively easy to compare with Britain. The comparison is also made possible by the impressive reconstruction of the Indian historical national accounts by Sivasubramonian (2000). The Anglo-Indian comparison is also of particular interest because of the recent emergence of India as a fast-growing tiger economy based on services rather than industry, in striking contrast to the case of China (Bosworth and Collins, 2007).

The comparative labour productivity performance can be summarized as follows. Around 1870, output per worker in India was about 15 per cent of the UK level in the economy as a whole, and fluctuated around this level until the end of the 1920s. Between 1929 and 1950, Indian labour productivity fell below 10 per cent of the UK level, where it remained until the 1970s. Since the 1970s, India has begun to catch up on the United Kingdom, but by the end of the twentieth century was still further behind than in the early 1870s. Looking at the sectoral aspects of this relative decline, it is clear that agriculture lies at the heart of India's productivity problem. Whereas in 1870 Indian labour productivity in agriculture was at more than 10 per cent of the UK level, by 1999/2000 this had fallen to around 1 per cent. In industry, Indian labour productivity has been stationary, returning to around 15 per cent of the British level, although there have also been substantial periods of deviation from this long-run level. In services, there has been a trend improvement from around 15 per cent of the UK level in the late nineteenth century to around 30 per cent by the late twentieth century. Since agriculture accounted for around three-quarters of the Indian labour force between the 1870s and the 1970s, and still 65 per cent at the end of the twentieth century, it is clear that India needs to drastically increase agricultural labour productivity if it is to improve its overall productivity performance. The sectoral results also suggest that India's recent experience of service-led growth has long historical roots (Bosworth and Collins, 2007).

The paper proceeds as follows. Section II sets out the basic data sources and methods, analysing the time series evidence on growth rates in the two countries and showing how to combine this with the cross-sectional evidence on comparative levels of income and productivity calculated at purchasing power parity. The results of the sectoral productivity comparison and the differences in the sectoral distribution of the labour force are then presented in section III. This is then followed in section IV by an analysis of differences in the share of the population in the labour force and the implications for comparative levels of per capita income. Section V then considers ways of cross-checking the results, while section VI concludes.

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## V/B Early Modern Credit and Wealth

Chair: **Philipp Rössner**

**Craig Muldrew** (Cambridge)

*The material wealth of the labouring poor in England, 1580-1780: the evidence of probate inventories*

Until now probate inventories for labourers have generally been considered to be rare, but the absolute number of labourer's inventories is still large enough to provide a statistically significant sample. With all other studies on material culture, agriculture and credit which have used probate inventories it is commonly noted that inventories have survived for much greater numbers of wealthier members of society than for poorer individuals many of whom were day labourers – perhaps as much as 40 per cent of the household population in 1700. While this is true in aggregate terms, given the sheer number of inventories which have survived from the sixteenth to eighteenth centuries, the absolute number of labourer's inventories is still large enough to provide a statistically significant sample. I have collected c.1,000 labourers' inventories from the following counties: Cambridgeshire (265), Cheshire (82), Hampshire (166), Kent (259), Lincolnshire (71), and Norfolk (155) and have made them machine readable using the *Item* software program developed by Mark Overton to facilitate the input of the complete data found on each probate inventory in its entirety.

This paper will use this database of inventories to look at the nature of labourers' households and their accumulated household goods. First, however, the nature of the survival of labourers' inventories will be addressed and they will be compared to hearth tax records from the 1660s and 1670s to determine the poverty of labourers who were exempted from the tax in comparison to those rated on one or two hearths. In addition the types of goods present in inventories from the eighteenth century will be compared to the pauper inventories analysed by Peter King to see how many goods inventoried labourers had in comparison to such poor individuals who were entering workhouses. This will provide a means of judging how representative the surviving inventories are of the population of labourers as a whole. Then, the goods possessed by labourers will be examined to see if their value, numbers and quality differed by geographical area, and whether they changed over time. Goods in the inventories such as linen, beds furniture, as well as luxury items such as clocks, looking glasses and eating utensils will be examined. In addition, the number of rooms in houses will be examined, as will hearths and cooking equipment to see how food production could have changed over time and place. This will be compared to other work done on inventories by Overton, Whittle, Dean and Hann, and Lorna Weatherill to determine how consumption patterns of the working poor differed from wealthier members of society.

**Matthew Stevens** (London)

*Credit relationships in fifteenth-century London: evidence from the Court of Common Pleas*

This paper offers an overview and preliminary analysis of credit and debt related litigation brought by, against, and between Londoners in the fifteenth century Court of Common Pleas at Westminster. Presented in brief, are some findings of the AHRC funded 'Londoners and the Law' project currently underway at the University of London's Centre for Metropolitan History. Key issues discussed are: the relative wealth and background of creditors and debtors; the geographical distribution of persons in debt to Londoners; and an assessment of what proportion of debts owed to Londoners appear to be simple-mercantile debts (for example, credit sales / deferred payments) as opposed to loans.

Reflecting on the survey of London's economic hinterland in the later middle ages conducted by Derek Keene and Jim Galloway, this paper will utilize new data from the common pleas to establish in greater detail the nature and variety of social networks

underlying the extension of credit.<sup>1</sup> For example, an attempt is made to determine whether credit relationships with Londoners were typically vertical in nature (i.e. parties of greater substance extending credit to less wealthy parties) or horizontal (i.e. between parties of similar wealth), and if patterns of cyclical borrowing between the same creditors and debtors can be identified. Developing lines of reasoning so far better explored in the historiography of credit at the village level, it is asked whether the presence of more predominately horizontal lines of credit, especially between craftsmen and merchants, might indicate commercial confidence in the urban/rural economy.<sup>2</sup> Conversely, it is also asked to what extent Londoners were seen by the landed gentry as a pool of potential lenders in times of economic hardship. Lastly, attention is also given to where credit arrangements were transacted within the city of London, and by what instruments credit was extended. Data is presented regarding the typical vale of bonds and terms repayment contracted between differing groups of creditors and debtors; particularly, those agreed between two or more craftsmen/merchants, as opposed to those agreed between craftsmen/merchants and gentlemen/yeomen.

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<sup>1</sup> D. Keene, 'Changes in London's economic hinterland as indicated by debt cases in the Court of Common Pleas', in J. Galloway ed., *Trade, Urban Hinterland and Market Integration c.1300-1600* (London, 2000).

<sup>2</sup> For a summary of these ideas see P. Schofield, 'Access to credit in the early fourteenth-century English countryside' and C. Briggs, 'Creditors, debtors and their relationships', (both) in P. Schofield and N. Mayhew eds., *Credit and debt in Medieval England c.1180-c.1350* (Oxford, 2002).

## V/C Protest

Chair: **tba**

**Peter D Jones** (Birmingham)

*Protest and the Parish: contextualizing popular protest in the early nineteenth century*

Despite a continuity of interest, it can be argued that the discipline of English ‘protest studies’ has not moved significantly forward since the most important intervention of its godfather, Edward Thompson, in 1971. The emergence of Adrian Randall’s comprehensive monograph on Hanoverian protest, *Riotous Assemblies*, in 2006 serves to illustrate that though a great deal remains to be said about the subject, historians remain largely faithful to the ‘traditional’ template set more than 30 years previously. This template – of a subtly nuanced narrative of protest (refined by Thompson but sketched out by earlier historians) – has been pivotal in placing the immediate motivations and the *mentalité* of crowds, as well as those of the authorities who sought to suppress them, at centre stage. What it has *not* done is to greatly advance our understanding of the ‘deeper’ social and economic milieu of popular protest. As a result, while a degree of consensus exists over who protested, how they did it, and what their immediate or ostensible motivations were, there remains a significant historiographical gap in our understanding of the local social and economic context of protest in the longer term. This paper aims to address that gap by analysing both the overt demands of protesting crowds and their ‘body language’ within the context of measurable changes in economic and social relations over time.

Focusing specifically on some of the most disturbed parishes in central southern England during the so-called ‘Swing riots’ of 1830, it adopts a microhistorical approach in order to project a three dimensional picture of the social and economic life of labourers in selected parishes in the three decades prior to the disturbances. Recent work by Samantha Williams and others has re-emphasized the increasingly interventionist role taken by parishes in the south of England during this period. However, it has also highlighted that the emphasis of this intervention changed significantly during the two decades immediately prior to the Swing disturbances, reflecting a move away from direct financial assistance to families and the able-bodied and towards the provision of subsidised employment and make-work schemes. My own work supports this thesis, and the current paper seeks to extend it still further, demonstrating that for large numbers of labourers, the parish in south central England during this period acted variously as employer, labour exchange, and as a *de facto* regulator of wages, in addition to its central role as a provider of welfare *in extremis*. This unprecedented extension of the parish into the working lives of ordinary labourers obviously has profound implications for students of popular disturbances during this period. Analysing parish records alongside more normative protest sources such as court records, official papers, private correspondence and reportage, this paper will make the fundamental (but hitherto largely ignored) point that it is impossible to fully understand late-Hanoverian protest without first understanding the backdrop of social and economic relations in the locality against which it took place. This novel approach has a number of advantages over traditional ‘protest studies’: it enables us to track changes in the administration of relief and (crucially) modes of employment over time, and therefore to contextualize the demands and behaviour of protesting crowds much more subtly; it enables us to track the pauper and, to an extent, the working careers of individuals who are known to have taken part in protest, and to provide a much more intimate rationale for their involvement; and it enables us to contextualize specific ‘moments’ of protest much more closely within the social, cultural and economic milieu within which they took place.

**Dick Geary** (Nottingham)

*Slaves and social protest in Brazil, 1780-1850*

Of the 12 million or more slaves forcibly shipped from Africa to the New World almost 40 per cent arrived in Brazil, which was also the last country in the Americas to abolish slavery in 1888. This paper examines the various survival strategies adopted by slaves in Brazil between 1780 and 1850 and argues that the adoption of one survival strategy rather than another reflected a realistic assessment of the chances of success at a particular point in time rather than a permanent identity or state of mind. In this context, therefore, conjuncture and opportunity were all important. Moreover slave strategies were complex and involved – sometimes simultaneously – elements of both ‘accommodation’ and ‘resistance’. Some were individual, ranging from the purchase of freedom (manumission) on the part of both light-skinned, skilled male Creole slaves and African females, and litigation, through petty insubordination to flight, arson, murder and – in the case of women slaves – ‘gynaecological resistance’. Others were collective and resembled the protests of European workers: strikes, go-slows and equivalents of Luddism. The most distinctive and spectacular forms of slave protest, however, were the formation of ‘maroon societies’ (communities of fugitive slaves), which were endemic throughout Brazil in this period, and armed rebellion. Both were informed by African and Afro-Brazilian cultures and commonly witnessed conflict between slaves born in Africa and those born in Brazil (creoles). Slave insurrections were also frequent and were subdued by not only the white elite but the numerous freed people of colour in Brazil, some of whom had become slave owners, slave hunters and even slave traders.

## V/D English Cities

Chair: **tba**

**David Ormrod** (Kent)

*Pathways to modernization and the separation of town and countryside in Britain: London and the South-East, 1580-1914*

This paper discusses the role of urbanization in British economic development, drawing on new information arising from an ESRC-funded research project on rent movements in the long run. The project, involving myself, James Gibson and Owen Lyne, aims primarily to investigate the strength and impact of the ‘urban variable’ in the history of British growth, and to find new ways of measuring and describing its impact in the period 1580-1914. How far was an already productive agriculture a prerequisite for urban expansion, or was the growth of towns the primary stimulus behind agricultural advance and diversification from the later sixteenth century onwards? The core of the project consists of an investigation of the course of comparative rent movements, urban and agricultural, on the estates of the Rochester Bridge Trust (RBT) in London and the South-East. Construction of a rent index permits comparison with other data, including the national farm rents index produced by Turner, Beckett and Afton (1997).

The problems encountered in producing a satisfactory index arise precisely from the very changes which we are trying to identify and elucidate, namely: the build-up of rent arrears, turnover and concentration of tenancies, and dilapidation and the cost of repairs. We find that the characteristic differences between rural and urban property in each of these problem areas accounts for the higher efficiency gains accruing to landlords from urban property. If we could capture these gains in a single word or phrase, it would be: *intensification*. Thus: the pattern of rent arrears was much more stable and manageable in London than on Kent farms; tenancies became highly concentrated in London from 1660-1830, and therefore easier to manage; and the value of urban estate was readily enhanced by changes in use and increased building density, initiated by main tenants.

The dynamics involved are, no doubt, unsurprising. But the RBT material enables us to take a bird’s eye view of the strength of the ‘urban variable’ from 1580-1914 and, when completed, time-series analysis will enable us to identify turning points when change was most rapid. Finally, the rent index will enable international comparisons to be made between one leading city and another, and between one metropolitan region and another. Comparison of our early results with those of Lesger for Amsterdam is interesting, and underlines the differences between a centralized and a decentralized metropolitan region.

**Jelle van Lotum** (Cambridge)

*Internal migration in nineteenth-century England: Redford revisited*

In 1926 Arthur Redford published a path breaking analysis of migration in Britain in the first half of the nineteenth century which remains the standard account today. Redford’s most important conclusions were: 1) That most internal migration between 1801 and 1851 was very short distance. 2) That the large regional shifts in population distribution which took place could nevertheless be accounted for by a series of short stepwise migrations. W.H. Chaloner in the preface to the second edition, published in 1963, noted that 40 years after publication Redford’s general conclusions had not been challenged. This remains the case today. By using the published 1851 census data and especially a 2 per cent sample of the 1851 census comprising nominal/individual level data – that will allow us to go much further than Redford – in our paper we revisit the Redford thesis by answering the following questions: 1) Does an analysis of migration patterns by age indicate that migration patterns in the very late eighteenth century and early nineteenth centuries conform to Redford’s general model? 2) Did migrants into settlements of different sizes vary in their origins? Were longer distance

migrants more or less likely to go straight into large towns than short-distance migrants? 3) How did migration patterns differ between occupational groups? 4) Did whole families migrate together or were migrants primarily single? 5) Can the birthplaces of migrants' children be used to, at least partially, reconstruct the steps involved in lifetime migration?

## V/E Exchange Rates

Chair: **Paolo di Martino** (Manchester)

**Ella Kavanagh** (Cork)

*Independence and interest rate setting: the Irish banks, 1952-70*

Between 1922 (when the Irish Free State was founded) and 1979, the Irish pound was linked one for one and was freely convertible into sterling. Consequently the impetus for changing Irish interest rates came from changes in the (Bank of England) Bank Rate. The Irish Banks Standing Committee (IBSC) was formed in March 1920 “to fix rates for Overdrafts, Loans and Discounts for all banks” (IBSC Minutes, 16 March 1920). In the 1920s and 1930s, the Irish banks adopted a fixed schedule, which they followed for each change in the Bank Rate. By the beginning of the 1950s the schedule was abandoned as it was no longer deemed to be relevant and it was decided by the IBSC that any change in Irish interest rates, following a change in the Bank Rate, would no longer be automatic but would be decided by the IBSC.

This paper analyses the reasons behind the changing relationship between Irish interest rates and the (Bank of England) Bank Rate during the 1950s and 1960s. The independence that the IBSC had previously enjoyed in setting their retail rates began to be eroded as a number of other players, the Central Bank and the Irish Government, started to influence the way that interest rates were set while other factors, besides purely banking considerations, entered into the interest rate decisions. The contents of the minutes of the meetings of the Irish Bank Standing Committee for the 1950s and 1960s are used to analyse the role of the three agents, the Irish Banks Standing Committee (Irish banks), the Central Bank and the Irish Government in setting retail interest rates.

The paper analyses the economic and political reasons for the Irish government’s interference in setting interest rates. The mid-1950s was characterized by economic stagnation. This was followed by the emergence of economic planning in 1958 to combat problems of high unemployment and emigration. The paper examines the emerging and evolving relationship between the Irish Central Bank and the banks. While initially the Central Bank played a minor role as mediator between the banks and the government, during the 1960s the commercial banks began to recognize its potential role as a protector against government interference. The paper highlights the “threats” that were invoked by different governments, at different times, to get the banks to behave more in line with their wishes and why government was willing to incur the cost of interference in banking activities, in order to achieve their objectives. It also documents how the banks responded to these threats. It demonstrates how the banks used their role as lenders to the government to try to retain their independence in setting retail interest rates according to their own banking criteria.

**Christopher Godden**

*Exchange rates and the financial press, September 1931-April 1932*

There has been a tendency amongst interwar economic historians to examine the dramatic effects of the 1931 financial crisis on the British economy purely in relation to Britain’s abandonment of the gold standard in September 1931, and the subsequent introduction of the Exchange Equalisation Account in the spring of 1932. The movement of the sterling-dollar exchange rate between these two events, however, has received comparatively little attention from scholars.

Sterling depreciated rapidly following Britain’s abandonment of the gold standard, moving from \$4.86 to close the year at \$3.36 (although the main fall came after the middle of November). The early months of 1932 saw a recovery, and by the spring sterling had risen to around \$3.80. Eichengreen and Broadberry both interpret the initial fall and subsequent recovery of sterling as an instance of Dornbusch’s theory of exchange rate overshoot,

whereby the interaction between sluggish goods markets and hyperactive asset markets necessitated the exchange rate overshooting its long-run equilibrium.

The purpose of the paper is to conduct a wider survey of interpretations by comparing the Eichengreen/Broadberry explanation with those offered by contemporary writers. The intention here is to widen the scholarly debate surrounding the movement of interwar exchange rates by drawing on the ideas and opinion of the contemporary financial press (and, in particular, on the work of the financial journalist, Paul Einzig) in order to gain insights into contemporary economic behaviour.

A preliminary survey of the financial press from this period has already highlighted a variety of factors that appear suggestive in explaining the dramatic movement of the sterling-dollar exchange. The key theme of this paper will be an examination of contemporary insights into constantly changing degrees of market confidence. It will be argued that many of these insights have been ignored when the events surrounding the volatility of exchange rate movements are examined through the prism of Dornbusch's overshoot model.

One example that will be considered, associated with the upswing of the sterling-dollar exchange during the early months of 1932, concerned evolving market opinion regarding London's future position as an international financial centre. The rise in the exchange was interpreted by Einzig as evidence of a growing realization within the financial markets that other centres, most noticeably New York or Paris, were incapable of capturing London's pre-eminent financial position. America, it was argued, was unable to demonstrate the strength and soundness of her financial machinery, while it became apparent that France was unable to accept the responsibilities that such a position would entail.

Another example that will be examined concerned particular, well-publicised events that financial commentators believed had led international financiers to re-evaluate their interpretation of Britain's financial probity. One such event was the spectacular phenomenon of voluntary early payment of income tax in January 1932.

In its emergency budget, the newly formed National government had both raised the standard rate of income tax from 4s.6d. to 5s., while reducing the exemption limit for unmarried persons from £130 to £100, and for married persons from £225 to £150. With the next instalment of the income tax set for 1 January 1932, the nation had been requested to pay promptly and not to defer payments until the final notice. The amazing response to this request was reported in *The Times* on 2 January 1932 as striking evidence of the 'patriotic way in which every one seemed anxious to help in the national necessity'. In Birmingham, it was claimed that the percentage of the total charge for one district alone was 'about six times' that of the 1931 level; Cardiff officials reported they had 'never known anything like it'; while an official in Leeds described the rush to pay as 'entirely without precedent'. (*The Times* – 5 January 1932). It was later reported that the Exchequer's receipts had improved, in the first nine days of 1932, by over £9.5 million. (*The Times* – 13 January 1932). Although pressure on collectors eased by the second week of January, sizeable payments of income tax and surtax continued until the end of March. Although there was little material effect of such early payments, a number of contemporary financial commentators argued that the press – and in particular the foreign press – had interpreted the actions of British tax-payers as a sign of Britain's determined response to the importance of sound finance.

## V/F Investors

Chair: **Mark Billings** (Nottingham)

**David Chambers** (Oxford)<sup>1</sup> & **Elroy Dimson** (London Business School)<sup>2</sup>

*Keynes the investor*<sup>3</sup>

John Maynard Keynes was an active investor throughout his life, first investing for his own account in 1905. In the early 1920s, he persuaded the Fellows of King's College, Cambridge to allow him, as bursar, full discretion in managing a portion of the endowment fund, called the "Chest". Keynes took personal responsibility for investments made by the Chest, in contrast to the City institutions that Keynes advised, for which decisions were taken in collaboration with others. In addition, this fund was deemed outside the onerous Trustee Acts, which severely restricted the type of securities to be held by the rest of the endowment. The Chest therefore represents the purest test of Keynes' skills as an institutional investor.

A thorough analysis of Keynes' investment abilities is of interest, firstly, because of who Keynes was. Just as importantly, this is also a study of how a sophisticated investor confronted the investment challenges of the interwar years. This period constitutes a major transition point in modern financial history. During these years, Britain moved from the weakly-protected, retail investor, bond-centric investment world of pre-1913 to the more tightly-regulated, institutional investor, equity-centric financial system of the second half of the twentieth century.

Keynes' investment activities were an important part of both his public and personal lives. Yet, they have been dealt with only cursorily in the literature to date. Moggridge (1983) reviews Keynes' personal and institutional investment activities in Vol. XII of *The Collected Writings* (hereafter "CW"), and provides annual performance estimates that suggest Keynes was a star investor, which is confirmed in a study by Chua and Woodward (1983) that used the same data. Westall (1992) gives us an insight into Keynes' influence at Provincial Insurance, but fails to undertake quantitative analysis of his investment record. Skidelsky (1983, 1992, 2000 and 2005) discusses Keynes' investment prowess, but relies heavily on Vol. XII of *The Collected Writings*. Backhouse and Bateman (2006) review all aspects of Keynes' contributions except for investment. Walsh (2007) emphasizes understanding the man's investment philosophy, but does not present evidence on investment performance.

Although Keynes gave something of a commentary on his investment strategies in his correspondence, we do not have a comprehensive picture of the portfolios he constructed. This paper attempts to remedy the situation. The record of Keynes' trading has remained dormant in the King's College Archives, and has not yet been analysed in detail.

We therefore reconstruct Keynes' investment decision-making from these records of portfolios and transactions. Preliminary analysis of his asset allocation policy, his portfolio holdings and their size, yield and industry characteristics indicates he departed dramatically both from the market and from the institutional consensus. Furthermore, his commitment to equity investing was both evident and pioneering. His aggressive purchase of equities in the Chest in the UK and US eventually pushed the equity weighting of the whole endowment over 50 per cent by the 1940s. This was as dramatic and far-sighted a change in the investment landscape as the shift to alternative assets has been in more recent times.

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<sup>3</sup> We wish to acknowledge the support of the King's College Cambridge archivist, Patricia McGuire. Valued comments were received from Peter Clarke, Oliver Dawson, and participants in seminars at the University of Cambridge and University of Oxford.

We also provide the first detailed analysis of his investment ability in the context of the Chest, principally in terms of an event study of his buy and sell decisions. This evidence is not strongly in his favour, although it does appear both that Keynes was a better seller than a buyer. After the crash of 1929, he underwent a major change of heart as to the best way to manage portfolios, and there is some evidence of this shift in the changing pattern of cumulative returns around his buy and sell decisions before and after the end of 1929.

While Keynes' timing abilities improved after his switch to a bottom-up stock picking approach, his major contribution to the performance of the Chest appears to have been his strategic allocation to riskier assets, notably equities. It was not until the second half of the twentieth century that institutional fund managers followed Keynes' lead.

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**Janette Rutterford (Open) & Josephine Maltby (York)**

*The sleeping partners? Women shareholders in England and Wales, 1870-1935*

Until recently, there has been only a small amount of empirical research into the history of share ownership in the UK. There are only a few estimates of the number of investors overall, for example, Michie. This paper presents the preliminary findings of a major study of shareholding in England and Wales between 1870 and 1930 (part of a larger ESRC-sponsored research programme on women, wealth and investment). Drawing upon evidence from company share registers, with a total of approximately 30,000 shareholders in companies listed on the London Stock Exchange, over seven decades, it explores the structure and composition of men's and women's shareholdings in ordinary shares, preferred shares and debentures. It examines shares across all industrial sectors and also shares in domestic, colonial and foreign companies.

A particular concern is to consider the differences in the men's and women's holdings in terms of types of share, amount held, and changes over time. We note a major increase in women's investments over the period, hitherto undocumented and significant differences in male and female holdings. We also note significant differences between men and women in types of shares held and preferred sectors. The geography of male and female investors is also informative.

The research also examines clear regional differences in patterns of shareholding at local and regional scales of analysis. Investors in London and the southern counties had markedly different kinds of portfolios than those in the Midlands and northern counties. Similarly, the geography of investors in particular companies also differed, depending on type of company and characteristics of the shareholders.

These results help to add a new level of detail and understanding to existing studies of investment in Victorian Britain and provide new evidence for the relatively unstudied twentieth century. These results offer new evidence of the financial and economic position of women during a period of important legal and institutional change.

## **ECONOMIC HISTORY SOCIETY ANNUAL CONFERENCE**

**3 – 5 April 2009**

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The 2009 annual conference of the Economic History Society will be hosted by the University of Warwick from 3 to 5 April.

The conference programme committee welcomes proposals in all aspects of economic and social history covering a wide range of periods and countries, and particularly welcomes papers of an interdisciplinary nature. Preference may be given to scholars who did not present a paper at the previous year's conference. Those currently studying for, or who have recently received, a PhD should submit a proposal to the New Researcher session; please contact Maureen Galbraith ([ehsocsec@arts.gla.ac.uk](mailto:ehsocsec@arts.gla.ac.uk)) for further information.

The committee invites proposals for individual papers, as well as for entire sessions (3 speakers, 1.5 hours duration). The latter should include proposals and synopses for each paper in the session, although the committee reserves the right to determine which papers will be presented in the session if it is accepted. If a session is not accepted, the committee may incorporate one or more of the proposed papers into other panels.

For each proposed paper, please send (preferably by e-mail) a brief c.v. and a short abstract (including name, postal and e-mail addresses) of 400-500 words to:

Maureen Galbraith  
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For full consideration, proposals must be received by 19 September 2008. Notices of acceptance will be sent to individual paper givers by 17 November 2008.

Should your paper be accepted, you will be asked to provide the following:

- A brief non-technical summary of your paper for the 'Media Briefings' section of the Society's website (by 5 January 2009).
- An abstract of the paper for inclusion in the conference booklet and website (by 5 January 2009).
- An electronic copy of your full paper, or a web address where the paper is available for consultation (by 2 March 2009).

It is the normal expectation that speakers who submit a proposal for a paper to the Conference Committee should be able to obtain independent financial support for their travel and conference attendance. However, a very limited support fund exists to assist overseas speakers who are unable to obtain funding from their own institution or from another source. Details of this fund and an application form can be obtained from the Society's administrative secretary, Maureen Galbraith ([ehsocsec@arts.gla.ac.uk](mailto:ehsocsec@arts.gla.ac.uk)). It is important that a completed application form is included with the paper proposal and the brief c.v. which are submitted to the conference committee for the September deadline. Only in exceptional circumstances will later applications for support be considered.

**ECONOMIC HISTORY SOCIETY ANNUAL CONFERENCE**

**3 – 5 April 2009**

**University of Warwick**

***Call for New Researchers' Papers***

The 2009 annual conference of the Economic History Society will be hosted by the University of Warwick from 3 to 5 April.

The annual conference opens with papers presented by new researchers. They offer those completing doctorates the opportunity to present their work before professional colleagues and to benefit from informed comment.

The session will be held on the afternoon of Friday 3 April 2009. Those wishing to be considered for inclusion in the programme at Warwick must submit a synopsis by 5 September 2008. This should provide a firm title, a succinct summary of the principal themes and methodology of the paper, and an outline of probable conclusions.

The synopsis should be of not more than 500 words. It must be accompanied by a clear statement of the progress of research, intended date for submission of thesis, and a statement of support from the supervisor. Please note that proposals from researchers at an early stage of their work will not normally be accepted.

Those selected for inclusion in the programme will be asked to submit a paper, 2,250-2,750 words in length, by 5 January 2009 for circulation in the conference booklet and website. Each new researcher will have the opportunity to speak for twenty minutes, followed by ten minutes of discussion. Two prizes of £250 will be awarded for the best papers presented at the Conference by new researchers. The procedure for judging papers will be circulated to all participants.

The Economic History Society is able to offer limited financial support to enable new researchers to attend the Conference when this is not available from their institution.

Synopses, in MSWord, (including name, affiliation, postal and e-mail addresses) and any enquiries should be directed (preferably by e-mail) to:

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