

A Poor Inquiry: Poverty & Living Standards in Pre-Famine Ireland

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Famines have been a feature of developing societies for centuries. While many countries have experienced famines, there has been variation in the severity of their effects. This paper aims to add some understanding to why this variation exists by studying to what extent pre-famine living conditions matter for famine outcomes. This will be done using the case of Ireland in the nineteenth century. The Great Irish Famine of 1845-52 has one of the highest famine death rates. The estimated death rate of 12 per cent is second only to the death rate of the Irish famine a century prior (Ó Gráda, 2007). The decades before the Irish famine were characterised by poverty and poor living conditions. The experience of these decades may offer some explanation as to why the Irish Famine was so severe. The period before the famine however has been somewhat overlooked in the historiography, which is largely due to the paucity of data sources. There is one source though which provides great insight into the conditions in Ireland in the decades before the Famine. The *Poor Inquiry* of 1833-6, commissioned by the British Government, sent surveys to clerics and landowners in parishes across Ireland asking questions on the conditions of the poor. More than 1,600 responses were returned, with the reports of the *Poor Inquiry* containing parish-level information on a range of issues, making it a valuable source for studying life in pre-famine Ireland.

In this paper, I address the following three questions. First, how reliable is the *Poor Inquiry* as a source? Second, I ask how pre-famine living conditions varied across Ireland's 2,400 parishes and analyse the covariates of poverty. Finally, I investigate the relationship between pre-famine poverty and famine severity.

Data

This paper uses data I have digitised from the *Poor Inquiry* (Parliament, House of Commons, 1836). The *Inquiry* followed in the steps of the preceding 1832 inquiry in England and Wales. Surveys were sent out to clergy and gentry surveying them on the conditions of the poor in their parish. A total of 7,500 surveys were sent, equating to an average of about five surveys per parish. In total 3,100 surveys were returned to the *Inquiry*, of which 1,636 are in the appendices to the *Poor Inquiry's* reports. These covered 1,187 of Ireland's 2,404 civil parishes.

The *Poor Inquiry* has many advantages as a source. It encompasses over 1,000 different parishes in Ireland and provides the "most substantial and comprehensive examination undertaken of pre-famine society" (Ó Ciosáin, 2010). The responses to the survey contain insight to multiple dimensions of poverty and living standards. I have digitised the answers to questions on topics such as diet, housing, wages, and population.

A great deal of impressionistic contemporary evidence suggested that there had been immiseration of the poor since the end of the Napoleonic Wars (Ó Gráda, 1995). The *Poor Inquiry* tapped into this sentiment by asking respondents "Is the general conditions of the poorer classes in your parish improved, deteriorated or stationary since the Peace, the year 1815?" (*Q.18 Appendix (E)*). A summary of the responses is outlined in Table 1. Mokyr & Ó Gráda (1988) used the responses to this question to form a county-level Subjective Impoverishment Index. Their index showed that conditions at a county-level in Ireland had

deteriorated. However, the responses at parish-level show just less than half of the respondents claimed conditions to have deteriorated.

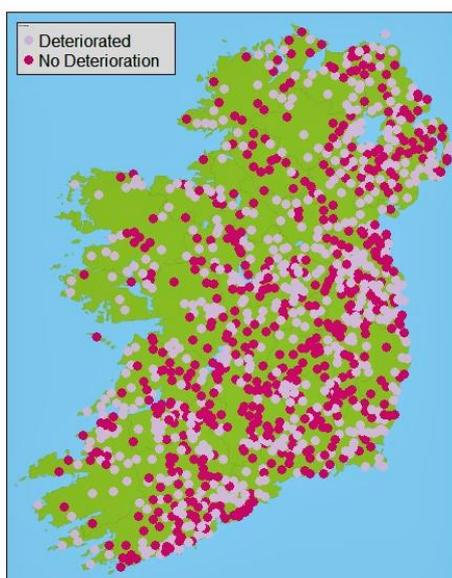
Table 1. *Summary of Responses to Q.18*

Response	Frequency	Per cent
Much Deteriorated	318	21
Deteriorated	410	27
Stationary	355	24
Improved	257	17
Much Improved	106	7
Missing	64	4

Source: Poor Inquiry. Supplement to Appendix (E.)

The five levels of responses are subjective and somewhat arbitrary. What one respondent may see as ‘much deteriorated’ another may record as ‘deteriorated’. To reduce the potential for subjectiveness, I recast the ‘change in conditions’ as a binary variable, where conditions have either ‘deteriorated’ or ‘not deteriorated’. Figure 1 maps the binary measure. Evidence of substantial variation in conditions between parishes can be seen. No spatial pattern is apparent for the reported deterioration.

Figure 1: *Change in Conditions*



The remaining questions cover factors which may contribute to respondent’s views of conditions. I have carried out extensive testing to ensure the robustness of responses. Comparing the sample of parishes in the *Poor Inquiry* to the full population of parishes in the *1841 Census of Ireland* shows those parishes which return surveys are not significantly different to those which do not. Reassuringly, there is also no difference between the types of respondent. Comparing respondents in parishes which return multiple surveys shows no evidence of religious respondents having significantly different opinions to the gentry. This would suggest the evidence given to the *Poor Inquiry* was not driven by political motivation. The average daily wage reported in the *Poor Inquiry* for men is 9d, 6d for women, and 4d for children. These are consistent with O’Brien’s (1921) estimates for the same period. Respondents views of population change have also been compared to the recorded population change between the *1821 and 1831 Censuses of Ireland*. While there are issues with the

recording of population in these censuses (Connell, 1950), they provide a benchmark for comparison. The views of population change reported in the *Inquiry* are consistent with the changes reported by the censuses. Based on the testing carried out, I conclude that the *Poor Inquiry* represents a reliable source to study Irish living conditions. This provides reassurance of both the internal and external validity of the responses found in this paper.

Covariates of Poverty Deterioration

This section tests several hypotheses for the causes and indicators of increases in poverty. The first hypothesis is that parishes in which wages are lower or the cost of living higher will report deterioration due to the higher economic constraints placed on their poor.

The second hypothesis is diet can act as an indicator of increasing poverty. While the Irish diet was dominated by the potato, other food sources are mentioned in the *Poor Inquiry*. This hypothesis will allow me to test if these other sources are related to changes in living conditions.

The third hypothesis is that geography plays a role in explaining poverty. This is driven by the idea that Irish poverty may have some underlying causes. Fernihough & Ó Gráda (2018) present evidence that geographical remoteness was associated with illiteracy and the proportion of 4th class housing.

The final hypothesis is that increases in poverty were caused by population pressure. There is conflicting evidence as to whether Ireland was over-populated. The work of Mokyr (1983) argues this not to be the case while recent work by Fernihough & Ó Gráda (2018) presents evidence of a relationship between population pressure and poverty in Irish parishes.

To test the hypotheses, linear probability models will be used. The dependent variable is the binary variable “deteriorated” or “not deteriorated”. The independent variables will be based predominantly on the *Poor Inquiry*, with some additional variables from other sources such as the *1841 Census of Ireland*. Latitude and longitude will also be included in each specification and standard errors clustered by county to account for any potential spatial forces.

The results can be found in Table 2. They are indicative of poorer parishes becoming poorer. Higher annual earnings, and male and child wages are correlated with lower probability of reporting deterioration. The average daily wage has the largest effect. The foods the poor eat are also important. Oatmeal, butter, or meat being part of the daily diet of the poor all reduce the probability of reporting deteriorating conditions. The oatmeal result may indicate an Ulster effect. Oatmeal was more likely to be eaten in Ulster where industrialization had somewhat limited the immiseration of the poor compared to the rest of the island (Connell, 1950). However, geographical features of a parish are not found to have a significant effect. Proximity to the coast, navigable waterways nor roads influence changing poverty.

Some of the most interesting results are in the relationship between population and poverty. While population density is correlated with increasing poverty, it appears increasing population was not. This is not supportive of a Malthusian hypothesis. Compared to parishes which report a decline in population, those with increasing population are 14 per cent less likely to report deteriorating conditions. The correlation coefficient between deterioration and reported parish-level emigration was just 0.05. Changing conditions do not appear to have been a driver of emigration, which may have masked population pressure. This suggests any deterioration in conditions were not a result of population increases.

Table 2. *Linear Probability Model of Deterioration*

VARIABLES	(1) Probability of Deterioration	(2) Probability of Deterioration	(3) Probability of Deterioration	(4) Probability of Deterioration	(5) Probability of Deterioration
Potato Dependent		0.063 (0.057)			0.023 (0.059)
Milk		-0.031 (0.055)			-0.019 (0.053)
Fish		0.041 (0.036)			0.025 (0.040)
Oatmeal		-0.246*** (0.030)			-0.188*** (0.027)
Bread		0.034 (0.053)			0.069 (0.062)
Eggs		-0.078 (0.071)			-0.081 (0.079)
Butter		-0.179*** (0.040)			-0.111** (0.048)
Meat		-0.138** (0.060)			-0.112 (0.067)
Average Daily Wage	-1.141*** (0.252)				-1.102*** (0.259)
Female Wage	-0.050 (0.057)				-0.065 (0.069)
Child Wage	-0.128** (0.050)				-0.087 (0.059)
Annual Cost of Food	0.171 (0.102)				0.209** (0.090)
Annual Earnings	-0.785*** (0.121)				-0.718*** (0.121)
Rent	0.0818 (0.263)				-0.072 (0.274)
Distance Coast			0.001 (0.001)		-0.001 (0.001)
Distance Canal			0.002 (0.001)		0.001 (0.001)
Distance Road			0.0001 (0.001)		-0.0001 (0.001)
Population Density				0.524*** (0.159)	0.616*** (0.144)
Population Increase				-0.143** (0.065)	-0.120* (0.067)
Population Stationary				-0.223** (0.086)	-0.152* (0.083)
Latitude	0.097*** (0.026)	0.119*** (0.023)	0.105*** (0.036)	0.101*** (0.023)	0.123*** (0.033)
Longitude	0.065* (0.036)	-0.010 (0.029)	-0.022 (0.035)	-0.056 (0.033)	0.081** (0.036)
Observations	1,332	1,338	1,338	1,135	1,131
R-squared	0.125	0.099	0.031	0.042	0.191

Note. Variables in columns (1) and (2) are from the *Poor Inquiry*. Variables in column (3) are calculated using GIS techniques. In column (4) population density is calculated using returns from the 1841 census. Robust standard errors clustered by county in parentheses *** p<0.01, ** p<0.05, * p<0.1

Famine Severity

The previous section has outlined some of the factors which were correlated with increases in pre-famine poverty. The question remains if these factors, along with deterioration itself, made a parish more vulnerable to the effects of the Famine and if they explain why the Irish famine was so severe. To answer this, the parish-level population decline between 1841 and 1851 is used as the dependent variable. The greater the population decrease, the greater the severity of the Famine. The coefficients in this section are standardized and interpreted as the effect of one standard deviation change. The results are found in Table 3. Reporting deterioration does not make a parish more vulnerable to the Famine. However, a 16 per cent increase in the proportion of 4th class housing in a parish equates to 2 per cent fall in post-famine population. It is therefore absolute, not changing, poverty which made some parishes more vulnerable to the Famine than others.

However, some of the correlates of deterioration are also correlated with famine severity. Wages have a positive relationship with population. Parishes with higher male and female wages are likely to have higher post-famine populations. Interestingly, alternative food sources to the potato offer limited protection against the Famine. Eating fish only protects against a one percentage point fall in population. The potato had offered such a high calorie and nutritious diet that other available food sources were unlikely to match its loss.

Geographical features of a parish appear key in explaining differences in famine severity. Distance from the coast and waterways are two of the largest determinants of population change. The further a parish is from these, the greater the population loss. Being 23km from the coast equates to a four per cent fall in population, while being 26km from a navigable waterway leads to a two per cent fall. This would suggest the severity of the Famine had some structural, underlying causes and may help explain why the Irish Famine was so much worse compared to the experience of other countries during times of famine.

As with pre-famine poverty, the results for the effects of population are interesting. No significant effect is found for reported changes in pre-famine population. A parish experiencing population growth in the decades before the Famine does not make it more vulnerable to famine population loss. This, along with the results for pre-famine poverty, is not supportive of the hypothesis that Ireland was overpopulated. If the Famine was a result of, or worsened by, population pressure, it was due to population growth which happened in the century before the Famine, not the decades prior.

Table 3. *Famine Population Change*

VARIABLES	(1) Pop. Change	(2) Pop. Change	(3) Pop. Change	(4) Pop. Change	(5) Pop. Change	(6) Pop. Change
Deterioration	-0.028 (0.592)					0.002 (0.661)
4 th Class Housing	-0.151*** (0.033)					-0.109** (0.040)
Potato Dependent			-0.022 (1.213)			0.012 (1.250)
Milk			-0.029 (0.948)			0.002 (0.998)
Fish			0.088*** (0.683)			0.035 (0.755)
Oatmeal			0.032 (0.783)			0.055* (0.827)
Bread			-0.003 (1.313)			-0.009 (1.238)
Eggs			-0.027 (1.350)			-0.013 (1.535)
Butter			-0.003 (1.273)			-0.007 (1.338)
Meat			0.009 (1.180)			-0.029 (1.332)
Average Daily Wage		0.213*** (4.691)				0.090** (4.874)
Female Wage		0.072** (1.172)				0.043 (1.238)
Child Wage		-0.029 (1.291)				-0.024 (1.394)
Annual Cost of Food		0.043* (0.018)				0.058** (0.019)
Annual Earnings		0.025 (0.021)				0.004 (0.024)
Rent		0.051** (0.056)				0.017 (0.060)
Distance Coast				-0.283*** (0.013)		-0.232*** (0.015)
Distance Canal				-0.175*** (0.016)		-0.134*** (0.020)
Distance Road				-0.002 (0.018)		0.016 (0.023)
Land Value per Acre				0.023 (0.001)		0.090*** (0.0001)
Vested Means '41				0.186*** (0.017)		0.116*** (0.277)
Wages paid in Rent				-0.037 (0.982)		-0.026 (1.013)
Maintained by Holdings				-0.051** (0.588)		-0.080*** (0.624)
Population Density					0.163*** (4.289)	0.041 (4.235)
Population Increase					0.036 (1.315)	0.026 (1.225)
Population Stationary					0.036 (1.716)	-0.003 (1.574)
Latitude		0.166*** (0.384)	0.141*** (0.378)	0.132** (0.521)	0.142*** (0.416)	0.106** (0.568)
Longitude		0.250*** (0.458)	0.433*** (0.389)	0.237*** (0.591)	0.414*** (0.396)	0.159*** (0.733)
Observations		1,314	1,318	1,318	1,098	1,076
R-squared		0.331	0.300	0.401	0.306	0.412

Robust standard errors parentheses *** p<0.01, ** p<0.05, * p<0.1

Conclusion

The findings of this paper build upon existing research to add a new dimension to our understanding of living conditions in nineteenth century Ireland. By using *Poor Inquiry* responses at parish-level as opposed to county-level, it has been identified that less than half of parishes report deteriorating conditions of the poor. When conditions do deteriorate, it appears to be largely a result of the poor becoming poorer.

The results of this paper also add to the Malthusian debate surrounding Ireland. There has been a long-standing debate between both contemporaries of the time and economic historians as to whether pre-famine Ireland was overpopulated. The population measures in both models do not show any evidence of population pressure in the prior decades driving increases in poverty or decreases in post-famine population. At parish-level, there is therefore no evidence found to support a Malthusian view.

The main finding of this paper is the relationship between pre-famine conditions and famine severity. No direct relationship between deteriorating conditions and famine severity is found. However, absolute poverty is found to make a parish more vulnerable to the Famine. Therefore, it is levels of, not changes in poverty which are a key determinant of famine outcome. The evidence of the strong role played by physical attributes of a parish in relation to famine impact speaks to there also being an underlying, more structural cause of some parishes suffering more during the Famine compared to others. This provides valuable lessons for studies of famine. Within a country hit by famine, there can be huge variation in the impact throughout the country. Particular conditions and different underlying characteristics make certain areas more susceptible to experiencing a severe impact of famine compared to others.

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