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Ireland's Great Famine: An Overview

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IRELAND'S GREAT FAMINE: AN OVERVIEW [1]

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The proximate cause of the Great Irish Famine (1846-52) was the fungus *phythophtera infestans* (or potato blight), which reached Ireland in the fall of 1845. The fungus destroyed about one-third of that year's crop, and nearly all that of 1846. After a season's remission, it also ruined most of the 1848 harvest. These repeated attacks made the Irish famine more protracted than most. Partial failures of the potato crop were nothing new in Ireland before 1845, but damage on the scale wrought by the ecological shock of potato blight was utterly unprecedented (Solar 1989; Bourke 1993; Clarkson and Crawford 2001). However, the famine would not have been nearly so lethal had Ireland's dependence on the potato been less. The experience of other European economies in the 1840s is telling in this respect. In Ireland the daily intake of the third or so of the population mainly reliant on the potato was enormous: 4-5 kilos daily per adult male equivalent for most of the year. After allowing for non-human consumption and provision for seed, the 2.1 million acres (or 0.8 million hectares) under potatoes in the early 1840s produced 6.2 million metric tons for human consumption. That amounted to an average daily intake of 4.6 lbs (or over two kilos) per man, woman, and child. In France, by comparison, the average daily intake of potatoes was only 165 grams in 1852; in Norway in the early 1870s, 540 grams; in the Netherlands about 800 grams in the 1840s; in Belgium 640 grams. A few European regions -- Belgian Flanders, parts of

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Prussia, and Alsace -- came closer to the Irish norm, however (for sources see Ó Gráda 1999: 18, 237). Table 1 (based on Bourke 1993: 90-113; Mokyr 1981) gives a sense of the potato's importance in the Irish rural economy.

TABLE 1: ALLOCATION OF THE POTATO CROP IN THE EARLY 1840s

A. *Human Consumption in Ireland:*

Occupation	*Population (millions)*	*Annual Consumption (metric tons)*
Labourers	3.3	3.9
Cottiers	1.4	0.8
Small farmers	0.5	0.3
Large farmers	0.25	0.1
Textile workers	0.75	0.4
Other workers	0.85	0.4
Professional et al.	0.95	0.3
Total	8.2	6.2

B. *Other Uses:*

Animal consumption: pigs	2.6
Animal consumption: cattle	1.8
Animal consumption: horses and other	0.3
Exports	0.2
Seed and wastage	2.5

In Ireland the potato's initial impact was as a seasonal garden crop, complementing a diet based mainly on oatmeal and dairy products, in the seventeenth century. The precise contours of its subsequent diffusion are controversial, but its consumption rose over time, and by the 1840s poverty had reduced the bottom one-third or so of the population to almost exclusive dependence on it for sustenance. Before the potato assumed such dominance, it arguably lessened the risks of severe famine in a

country where earlier famines (in 1649-52 and 1740-1) had wrought devastation that was probably at least on a par, relatively speaking, with that of the 1840s.

Human consumption accounted for only half of Irish potato production: this meant that in the event of failure the portion normally reserved for pigs and hens acted as a crude buffer-stock. Ireland's moist climate, moreover, gave it a comparative advantage in potato cultivation, and potato yields were high: about fifteen metric tons per hectare. The potato tended to alternate with grain in the crop rotation, and played a useful role in preparing the soil for grain crops, of which oats was the most important. However, the potato's low yield-to-seed ratio exacerbated the impact of repeated shortfalls. Its importance in the Irish diet, coupled with an inadequate policy response from the authorities, made the consequences of repeated shortfalls in the 1840s devastating (Bourke 1993; Mokyr 1981; Rosen 1999).

Ireland was a poor country in 1845, income per head being about half that in the rest of the United Kingdom. The regional contrast between the northeast, which was undergoing rapid industrialization at this time, and the west and the south was marked. Moreover, while there were some signs of a rise in urban and middle-class living standards, the half-century or so before the famine was a period of increasing impoverishment for the landless poor (Mokyr and Ó Gráda 1988). Population rose from about five million in 1800 to seven million in 1820 and 8.5 million in 1845. A rising emigration rate and a falling birth rate offered only partial relief to increasing population pressure (Boyle and Ó Gráda 1986). Moreover, demographic adjustment was weakest in the western and southern areas most at risk. The collapse of a largely home-based textile industry exacerbated the situation in some rural areas, particularly in north Connacht and south Ulster; the result was increasing dependence on the potato and increasing recourse

to seasonal migration during the summer months. The nutritional content of the potato and widespread access to heating fuel in the form of turf eased somewhat the poverty of Ireland's three million 'potato people', who were healthier and lived longer than the poor in other parts of Europe at the time. One indication of this, based on evidence from military and prison archives, is that adult Irish males from the lower end of the socio-economic scale on the eve of the famine were at least as tall as, if not taller than, their English peers (Ó Gráda 1991; Mokyr and Ó Gráda 1996). However, their poverty meant that when the potato failed, there was no trading down to a cheaper alternative food (Ó Gráda 1994: 80-97). Nowhere else in Europe had the potato, like tobacco a gift from the New World, made such inroads into the diet of the poor. It bears noting that the potato also failed throughout Europe in the 1840s. This brought hardship in many places, and excess mortality in the Low Countries and in parts of Germany. Yet nowhere was Ireland's cataclysm repeated (Solar 1997).

The first attack of potato blight inflicted considerable hardship on rural Ireland, though no significant excess mortality. The catastrophe of the Great Irish Famine really dates from the autumn of 1846, when the first deaths from starvation were recorded. By mid-October 1846 four of the country's 130 workhouses were already full, and three months later the workhouses – established under the Irish Poor Law of 1838 – held nearly one hundred thousand people. By the end of 1846 three in five already contained more inmates than they had accommodation for, and many were turning away would-be inmates (Ó Gráda 1999: 50-2). Of those still with spare capacity, a third or so were in less affected areas in the northeast and east. Ominously, however, several more were located in areas already threatened with disaster, but lacking the resources and the

political will to cope. Good examples are the workhouses of Ballina, Ballinrobe, Ennistymon, Gort, Kilrush, Swinford, and Westport.

At first there were the food riots and 'moral economy' protests often associated with famines, but these subsided as hope and anger gave way to despair (Eiríksson 1997b; see too Ó Murchadha 1998: 98-99,170-75). The numbers of crime reported by the police force peaked in 1847, at more than three times the pre-famine (1844) level. However, the nature of crime shifted: incidents of cattle- and sheep-rustling rose eleven-fold, and burglaries and robberies quintupled, while the number of reported rapes dropped by two-thirds. Inmates with no previous conviction formed a rising proportion of the prison population and, in Dublin, proportion of inmates from the distant provinces of Connacht and Munster rose sharply. A further indication of the changing nature of crime and is that the mean height of both male and female prisoners in Dublin's Newgate prison rose during the famine. Some prison inmates, it is claimed, committed petty crimes in order to gain access to prisoners' rations; and that much of famine-era crime was driven by desperation is also suggested by the deaths of some of the perpetrators in prison from famine-related causes (Ó Gráda 1994: 202-4; 1999: 188-91).

The famine did not impact much on Irish politics. The aging leader of Catholic Ireland, Daniel O'Connell, was in poor health at the height of the crisis and died in Genoa in May 1847. An electorate restricted to middle- and upper-class voters increased the representation of O'Connellites in Westminster in the general election of July 1847, but the Irish M.P.s exerted little pressure on Lord John Russell's weak and divided Whig administration. Nor did extra-parliamentary opposition achieve much: the 'rising' of 1848 was an improvised, tragic-comic affair that lasted less than a week.

Ireland's representatives in Westminster were beholden to a tiny, economically-privileged electorate. In June 1847 only two of them opposed a clause inserted into the Poor Law Amendment Act (1847), which drastically reduced the relief entitlements of rural smallholders. Henceforth households occupying more than about 0.1 hectare of land were excluded from public relief. Given the attachment of the poor to their mini-holdings, this clause is usually deemed to have exacerbated mortality. Nor was there much political solidarity within Ireland: in 1849-50 the so-called 'rate-in-aid', a property tax imposed by the authorities in London on richer Irish regions in support of the poorer, provoked strong resentment from political spokesmen in loyalist Ulster (Grant 1990).

The human carnage reached its peak during the winter and spring of 1846-7, but the crisis continued to cost lives for another three or four years. Like all major famines, the Irish potato famine produced many instances of roadside deaths, of neglect of the very young and the elderly, of heroism and of anti-social behavior, of evictions, and of a rise in crimes against property. Like all famines, it produced its grotesque cameos of life turned upside down and of bonds of friendship and kinship sundered:

- In May 1847 two teenage girls sold their hair for 2s 3d (about three times the daily wage of an unskilled worker) to a hairdresser in Clonmel, County Tipperary, 'an original and extraordinary mode of seeking relief' (Ó Gráda 1999: 40).
- In west Kerry a local poet described how young women might venture out at night without fear of harassment from the young blades of the neighbourhood (Ó Gráda 1994a: 73).

- In Ballykilcline in County Roscommon an entire family succumbed to famine fever and was not discovered for a week: the men who carried the corpses 'got weak and had to be given whiskey' (Ó Gráda 1999: 40).
- In May 1847 a mail car traveler sought to help a seventeen-year old girl whose child had died on the roadside between Glin and Tarbert. Unwilling to leave the body with nobody to watch over it, the girl too died 'under the broad canopy of Heaven' (Curtin 2000: 111).
- In Cork Denis Lane was found dead in his prison cell after being brought in for 'forcibly taking meal from carmen' (Ó Gráda 1994: 204; 1999: 40).
- Deaths on the highway gave rise to the term 'road sickness'. In Ballydehob in west Cork in January 1847 'a poor man named John Coughlan from Kilbronoge…was on his way to one of these new roads, that lead to nothing save death, when he fell from exhaustion and…was numbered with the other victims of the Board of Works' (Hickey 2002: 169).
- In May 1847 Thomas Mahon of Ennis relief committee received a letter from 'Captain Starlight', accusing him of inflicting 'lingering death by starvation' on the poor of the town. 'Starlight' berated Mahon and his committee for their meager dole of 'a quart of a pint of porridge and a penny brown loaf for a poor creature for 24 hours'. 'Tempt your dogs with it', he added, 'and in a month you'll have no dogs' (Ó Murchadha 1998: 118-9).
- There were even rumours of cannibalism, at least in the more restricted sense of the flesh of victims being eaten by survivors: in Mayo a starving man was reported to have 'extracted the heart and liver...[of] a shipwrecked human body…cast on shore' (*The Times*, May 23rd, 1849).

The famine was widely reported in the contemporary press at first, both in Ireland and abroad. It elicited a massive response in terms of private donations for a time, especially through the agency of the Roman Catholic Church worldwide and the Society of Friends. Philanthropists in Britain were also moved by Irish suffering, until compassion fatigue set in. Even the Choctaw Nation in faraway Oklahoma subscribed $170 for famine relief. Accessible narrative accounts of the tragedy include Edwards and Williams (1956), Woodham-Smith (1962), Ó Gráda (1994, ch. 8; 1999), and Donnelly (2001).

PUBLIC ACTION

Much of the historiography of the Irish famine addresses this issue. Critics of the stance of British policy-makers during the Irish famine, both in the 1840s and today, castigated them for not doing more. Accusations of tightfistedness were common: for example, the guardians of Fermoy's workhouse in November 1846 pleaded with ministers 'who gave twenty million to emancipate the slaves, who were never so much to be pitied as the people of this country are at present'. In the *Cork Constitution* a month later a correspondent from devastated Skibbereen 'could not help thinking how much better it would be to afford [the poor] some temporary relief in their own homes during this severe weather, than thus sacrifice their lives to carry out a miserable project of political economy' (cited in Ó Gráda 1996: 104). Influential ideologues such as Nassau Senior in the *Edinburgh Review* and Thomas Wilson in the *Economist* urged ministers to err in the direction of economy: according to Wilson, 'it [was] no man's business to provide for another', and redistribution would only shift resources from 'the more meritorious to the

less' (cited in Ó Gráda 1989: 52). These points anticipate modern critiques of relief policy by the likes of Thomas P. O'Neill (1956) and Christine Kinealy (1994).

Supporters of the same policy-makers, then and now, make the points that: (a) the backward character of Irish agriculture made disaster inevitable; (b) much was done in an era when parsimony and callousness were 'exhibited as much to the English as to the Irish poor'; and (c) given widespread corruption in the areas worst affected, further expenditure would have saved few lives (e.g. Daly 1986: 114). In a classic variant of [a], the late E.R.R. Green (1984: 273-4) described the famine as 'primarily a disaster like a flood or an earthquake', by way of implying that there was little that state intervention could have done to save lives.

The choice of appropriate relief measures for Ireland was widely debated in the press and in parliament in the 1840s. Some of the debates have quite a modern resonance (compare Drèze and Sen 1989). At first the government opted for reliance on the provision of employment through public works schemes, the cost of which was to be split between local taxpayers and the central government. The schemes consisted for the most part of small-scale infrastructural improvements; relief considerations constrained their size and location. At their height in the spring of 1847 the works employed seven hundred thousand people, or one-in-twelve of the entire population. The public works did not contain the famine, partly because they did not target the neediest, partly because the average wage paid was too low (McGregor 2003), and partly because the works entailed exposing malnourished and poorly clothed people (mostly men) to the elements during the worst months of the year.

Exasperated by the ineffectiveness and rising cost of 'workfare', and concerned that it was diverting labour from more productive uses in the agricultural sector, early in

1847 the authorities decided to phase out the public works and switch to food aid. The publicly-financed soup kitchens which replaced the public works were designed to target those most at risk directly. The food rations were in effect non-transferable and non-storable. They reached three million people daily at their peak in early 1847, an extraordinary bureaucratic feat. Doubts remain about the effectiveness of a diet of thin meal-based gruel on weakened stomachs, but mortality seemed to fall while the soup kitchens operated.

The drop in food prices during the summer of 1847 prompted the authorities in London to treat the famine henceforth as a manageable, local problem. The main burden of relieving the poor henceforth was placed on the workhouses established under the Irish Poor Law of 1838. Thus the worst hit areas bore the heaviest fiscal burdens. In principal those requiring relief were supposed to pass 'the workhouse test', i.e. refusal to enter the workhouse was deemed evidence of being able to support one's self. In practice, most of the workhouses were poorly equipped to meet the demands placed upon them, and in the event about one-quarter of all excess famine mortality occurred within their walls. Workhouses in the worst affected unions began to fill up in late 1846, and mortality within their walls rose in tandem. Local histories highlight mismanagement and the impossible burden placed on local taxpayers government; and, indeed, the high overall proportion of workhouse deaths due to contagious diseases is an indictment of this form of relief. Several excellent studies of individual workhouses are available. These paint a mainly negative picture of workhouse management, highlighting venality, overcrowding, and incompetence. They also demonstrate, however, how risky employment in the workhouse was: a significant proportion of those so employed perished of famine-related diseases (O'Neill 1956; Kinealy 1994; Ó Murchadha 1997).

Measurable yardsticks of union performance are available: a poorly-managed union might be one that was relatively late to open, or in which mortality from infectious diseases was relatively high, or in which the overall death rate was relatively high (Guinnane and Ó Gráda 2002). For instance the workhouse in Enniskillen, County Fermanagh, opened on 1 December 1845. Enniskillen, 96th in terms of poor law valuation per head, was only 123rd of 130 to open. The late opening of the workhouse left little time for 'non-crisis' admissions before the famine. Moreover, a high proportion of the Enniskillen dead (about 56-57 per cent) perished from infectious diseases. This meant either that they entered the workhouse in a very bad state, in which case they should have been admitted sooner or catered for elsewhere, or else that they contracted an infectious disease within the workhouse from another inmate. Some workhouse managements sought to segregate the diseased from the healthy; some did not. In July 1847 Enniskillen's guardians voted against building a fever hospital, whereupon its medical officer remarked: 'Now that is all over, I have only to say there are 24 persons lying of fever in the house, and the rain is dripping down on them at this moment'. The percentages succumbing to marasmus and dropsy (what today is called hunger oedema), both famine-related conditions indicating severe malnutrition, were also high in Enniskillen relative to neighbouring and similarly-circumstanced unions. Whether inmates succumbing to these diseases acquired them in the workhouse due to inadequate diet, or arrived in a dying state and on the verge of starvation, cannot be known, however. The very high mortality in some workhouses in 1850 and 1851 is evidence of the long-lasting character of the famine in some western areas (Guinnane, McCabe, and Ó Gráda 2004; Eiríksson 1997a; Ó Murchadha 1998).

Traditional accounts of the famine pit the more humane policies of Sir Robert Peel's Tories against the dogmatic stance of Sir John Russell's Whig administration, which succeeded them. Peel was forced out of office in July 1846 when his party split on the issue of the Corn Laws. The contrast between Peel and Russell oversimplifies. Though Peel was more familiar with Ireland's problems of economic backwardness than Whig ideologues such as Chancellor of the Exchequer Charles Wood, the crisis confronting Peel in 1845-6 was mild compared to what was to follow. Moreover, Peel broadly supported the Whig line in opposition, and it was left to his former Tory colleagues to mount a parliamentary challenge against Russell and Wood. It was left to Tory leader Lord George Bentinck to accuse the Whigs of 'holding the truth down', and to predict a time 'when we shall know what the amount of mortality has been'; then, Bentinck added, people could judge 'at its proper value [the Whigs'] management of affairs in Ireland'.

Assessment of the public policy response cannot ignore the apocalyptic character of the crisis that it faced. Nonetheless, the government's obsession with parsimony and its determination to make the Irish pay for 'their' crisis cannot but have increased the death rate. The same goes for the insistence on linking relief with structural reform (e.g. by making the surrender of all landholdings a strict condition for relief). At the height of the crisis the policy stance adopted by the Whigs was influenced by Malthusian providentialism, i.e. the conviction that the potato blight was a divinely ordained remedy for Irish overpopulation. The fear that too much kindness would entail a Malthusian lesson not learnt also conditioned both the nature and extent of intervention (Gray 1999). This stance rationalized caution, circumscribed relief, and shifted the responsibility to Irish property-owners. Compassion on the part of the British elite was in short supply.

Though Ireland was a highly bureaucratized polity by mid-nineteenth century standards, administrators in Dublin and London still faced the challenge of how best to identify and relieve the destitute in remote areas. Critics of relief could point to many instances of red tape, incompetence, and corruption. The case of the workhouses has already been mentioned; cheating and favouritism were also features of the public works and, to a lesser extent, the soup kitchens. On the other hand, the authorities had the benefit of a numerous and able police force and of hard-working and well-informed clergy of all denominations. And relieving officers ensured that many abuses were short-lived (Kerr 1996; Ó Gráda 1999: Ch. 2).

DEMOGRAPHIC CONSEQUENCES

The Irish famine killed about one million people, or one-eighth of the entire population. This made it a major famine, relatively speaking, by world-historical standards. In pre-1845 Ireland famines were by no means unknown – those caused by a combination of war and poor harvests in the early 1650s and arctic weather conditions in 1740-41 killed as high a share of much smaller populations (Lenihan 1997; Dickson 1998) – but those that struck during the half-century or so before the Great Famine were mini-famines by comparison. The excess death toll of a million is an informed guess, since in the absence of civil registration excess mortality cannot be calculated directly (Mokyr 1985; Boyle and Ó Gráda 1986). The record of deaths in the workhouses and other public institutions is nearly complete, but the recording of other deaths depended on the memory of survivors in households where deaths had taken place. In many homes, of course, death and emigration meant that there were no survivors. The estimate does not

include averted births, nor does it allow for famine-related deaths in Britain and further afield (Mokyr 1981; Neal 1998). On the basis of an analysis of a large sample of surviving baptismal registers, Joel Mokyr put the drop in the birth rate at the height of the crisis at one-third. This was the product of reduced fecundity, reduced libido, and a lower marriage rate.[2]

Within Ireland mortality was regionally very uneven. No part of the island escaped entirely, but the toll ranged from one-quarter of the population of some western counties to negligible fractions in Down and Wexford on the east coast. The timing of excess mortality varied too, even in some of the worst hit areas. In west Cork, a notorious black spot, the worst was over by late 1847, but the deadly effects of the famine ranged in Clare until 1850 or even 1851. Infectious diseases – especially typhoid fever, typhus and dysentery/diarrhea – rather than literal starvation were responsible for the bulk of mortality. By and large, the higher the death toll in a county or province, the higher the proportion of starvation deaths. While Karl Marx was almost right to claim that the Irish famine killed 'poor devils only', many who were not abjectly poor and starving died of famine-related diseases. Medical progress, by shielding the rich from infection, has made subsequent famines even more class-specific. As in most famines, the elderly and the young were most likely to succumb, but women proved marginally more resilient than men. The slightly lower excess death rate of women was due to physiological rather than cultural factors (Ó Gráda 1999: 101-04; Mokyr and Ó Gráda 2002).

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[2] There was also a marked decline in the number of rapes recorded during the famine (Ó Gráda 1994: 203).

The famine also resulted in emigration on a massive scale. Again precise estimates are impossible. Though the emigrants were also victims of the famine, their departure improved not only their own survival chances, but also those of the majority who remained in Ireland. True, the Atlantic crossing produced its own carnage, particularly in Quebec's Grosse-Isle, but most of those who fled made it safely to the other side. There thus is a sense in which migration was a crude form of disaster relief, and that more public spending on subsidized emigration would have reduced the aggregate famine death toll (Ó Gráda and O'Rourke 1997). Most of those who emigrated relied on their own resources, though some landlords helped through direct subsidies or by relieving those who left of their unpaid rent bills. For the most part, the landless poor simply could not afford to leave.

While migration saved lives in Ireland, it led to increased mortality across the Irish Sea. In England and Wales mortality was one hundred thousand above trend in the 1846-48 period: however, its distribution between arrivals from Ireland and natives succumbing to famine diseases is not known. There was also a drop in the birth rate in England and Wales in the late 1840s, indicating that the crisis was not solely an import from John Bull's Other Island. In Scotland, virtually all the excess mortality was in the cities. In Glasgow burials doubled in 1847. This might be seen as the result of the influx of destitute Highlanders, but immigration into Glasgow from Ireland easily exceeded that from the Highlands. So the Irish famine may also have been mainly responsible for the fever deaths causing excess mortality in Scotland (Devine 2005; Neal 1997; Ó Gráda 1999: 112-3).

A HIERARCHY OF SUFFERING

Like all famines, the Irish famine produced its hierarchy of suffering. The rural poor, landless or near-landless, were most likely to perish, and the earliest victims were in that category. Farmers found their effective land endowment reduced, since their holdings could no longer yield the same quantity of potatoes as before. They also faced increased labor costs, forcing them to reduce their concentration on tillage. Between 1847 and the early 1850s hundreds of thousands of smallholders and landless or semi-landless labourers were evicted by hard (and sometimes hard-pressed) landlords and by unsentimental land agents. Proprietors employed bailiffs to carry out the evictions and demolish cabins, while the police stood by (O'Neill 2000). Thus it is hardly surprising that although the recorded labour force fell by nearly one-fifth between 1841 and 1851, the number of bailiffs rose by over one-third (Ó Gráda 2001: 125).

Landlords' rental income plummeted by as much one-third while the crisis lasted, while their outlays on poor relief rose. Naturally, historians have linked the high bankruptcy rate of landowners in the wake of the famine to these pressures: in the words of one, 'up to one quarter of all land changed hands as a result of Famine-induced bankruptcy among landowners'. A corollary is that landlords who were spared were too impoverished to buy up the properties that came on the market in the wake of the crisis, leaving the way open to *nouveau riche* shopkeepers and lawyers. These arguments contain a strong element of *post hoc ergo propter hoc*. In reality most of the sales processed through the Incumbered Estates Court from 1849 on were of estates so financially embarrassed that debts accruing from the famine can have accounted but for a small fraction of the total. Alas, the proprietors of such estates were poorly equipped to

help their tenants when the famine struck (see Essay IV below; also Ó Gráda 1999: 128-9).

It is natural to focus on agriculture and on the countryside, but no sector of the economy was unscathed. Banks had to cope with bad debts and massive withdrawals of deposits. Retail sales declined. Pawnbrokers found their pledges being unredeemed as the crisis worsened. Least affected were those businesses and their work forces who relied on foreign markets for their raw materials and their sales. Many clergymen, medical practitioners, poor law officials, and others in contact with the poor paid the ultimate price, dying of infectious diseases.

The relative impact of the famine on different occupational groups may be inferred from comparing the 1841 and 1851 censuses. The overall decline in the labor force was 19.1 per cent. There were 14.4 per cent fewer farmers, and 24.2 per cent fewer farm laborers. Not surprisingly, given their vulnerability, the number of physicians and surgeons dropped by 25.3 per cent. The small number of coffin makers (eight in 1841, twenty-two in 1851) is a reminder that during the famine most coffins were not made by specialist coffin makers. It is difficult to identify any significant class of 'winners' in the 1840s, though the census indicates increases in the numbers of millers and bakers, of barristers and attorneys, and of bailiffs and rate collectors. The huge fall in the numbers of spinners and weavers was partly a consequence of the famine, partly due to other causes (Ó Gráda 1999: ch. 4; 2001).

The famine was also very uneven regionally. Its impact on Ireland's metropolis is worth brief consideration. Dublin's population of 250,000 people contained a large underclass of desperately poor people, but their diet was more varied and less dependent on the Lumper potato (an inferior, tasteless variety) than that of the rural poor. Yet at the

height of the famine Dublin was far from the 'brightly lit, comparatively well fed, slightly neutral country' imagined long ago by economists Patrick Lynch and John Vaizey (1960). Several sources – burial records, censal evidence, religious records, poor law registers – imply excess mortality in Dublin, and not only of unfortunate country people seeking work and relief. Moreover, all creeds were affected: burials in the Society of Friends graveyard in Cork Street rose from an average of fourteen in 1841-46 to twenty-five in 1847-51. Yet the excess death rate in Dublin was but a fraction of that in the west coast (Ó Gráda 1999: ch. 5).

FAMINE AND FOOD MARKETS

Berthold Brecht once wrote that famines don't just happen; they are organized by the grain trade. In Ireland in the late 1840s many poor people doubtless believed that the determination of traders or producers to corner markets or to extract higher prices exacerbated the famine. However, an analysis of price data suggests that at least at wholesale level markets worked more or less as normal. Nor does the evidence of sales at Cork's potato markets support the belief that during the famine traders held back a higher-than-normal proportion of output earlier in the season (Ó Gráda 1999: 134-56). That is not to say that supplies responded to price signals like clockwork: on the contrary, merchants responded cautiously to the challenge of finding substitute foods (mainly maize) for the potato. However, as Amartya Sen (1981: 160) reminds us, 'the law stands between food availability and food entitlement. Starvation deaths can reflect legality with a vengeance'. Alas, for those stripped of subsistence by the blight, the functioning of food markets was somewhat of a red herring.

Table 2, based on a table in an important paper by Peter Solar, is a stark reminder of the point that markets worked slowly. Comparing the two periods, 1840-5 and 1846-50, captures the fall in production but also suggests that imports largely made up for the shortfall in production. However, this ignores the lag between the failures of the potato in 1845 and 1846 and the arrival of large quantities of imports of Indian corn in the spring of 1847. Treating the 1846-50 period as a block muffles the serious supply problems in 1846-7 in particular (Solar 1989; Ó Gráda 1994: 200-1). During the famine Ireland switched from being one of Britain's bread-baskets to being a net importer of food-grains. However, in the winter and spring of 1846-7 more was exports still exceeded imports, presumably because the poor in Ireland lacked the purchasing power to buy the wheat and oats that were being shipped out.

TABLE 2. AGGREGATE IRISH FOOD SUPPLIES, 1840-5 AND 1846-50
(in 1,000 m. kcal/day)

	1840-5	1846-50
Irish production (less seed and horses)	32.1	15.7
Less exports and non-food uses	-11.8	-3.1
Net domestic supplies	20.3	12.6
Plus imports	+0.2	+5.5
Total consumption	20.5	18.1

Source: Ó Gráda (1994: 2000) after Solar (1989: 123)

POST-FAMINE ADJUSTMENT

The Great Irish Famine was not just a watershed in Irish history, but also a major event in global history, with far-reaching and enduring economic and political consequences. In the 1840s the Irish cataclysm dwarfed anything occurring elsewhere in Europe. Nothing like it would happen in Ireland again. Individual memories of the famine, coupled with 'collective memory' of the event in later years, influenced the political culture of both Ireland and Irish-America, and indeed still play a role (Cullen 1997; Donnelly 2000; Ó Gráda 2001). The blight's damage was long-lasting too: although the introduction of new potato varieties offered some respite against *phythophtera infestans* in the post-famine decades, no reliable defense would be found against it until the 1890s.

The famine brought the era of famines in Ireland to a brutal end. Serious failures of the potato in the early 1860s and late 1870s, also due to potato blight, brought privation in the west of the country, but no significant excess mortality. Ireland thus does not lend much support to the claim advanced by Jane Menken and Susan Watkins that famines typically create a demographic vacuum that is quickly filled. Other famines, it is true, seem to fit such a model, but in Ireland in only a few remote and tiny pockets in the west did population fill the vacuum left by the 'Great Hunger', and then only very briefly (Watkins and Menken 1985; Ó Gráda 1994: 190; Guinnane 1997).

What of the Irish famine's long-term economic impact? The relative importance of the arable component in agricultural output dropped sharply in its wake. Crops accounted for nearly two-thirds of net output in 1840-5, but less than a quarter in 1876 and only one-seventh in 1908 (Ó Gráda 1993: 57, 154). The famine resulted in higher living standards for survivors, since it increased the bargaining power of labor. Any negative impact on landlords' income from a declining population was more than

compensated for by the relative increase in the prices of land-intensive output, the disappearance of thousands of uneconomic holdings, and the prompter payment of rents due. Higher emigration was another by-product of the famine, as the huge outflow of the crisis years generated its own 'friends and neighbors' dynamic. The late Raymond Crotty, an agricultural economist, claimed in a classic contribution that most of these changes would have taken place in any case, famine or no famine: the disaster only accelerated structural and demographic shifts already in train. So did the famine 'matter' in the long run? Kevin O'Rourke submitted Crotty's hypothesis to computable general equilibrium analysis in 1991, and found it wanting: the main reason being the profound impact of *phythophtera infestans* on the pasture/tillage balance in Irish agriculture. O'Rourke's simulations suggested that had the potato remained healthy, but allowing for exogenous price shocks and an annual one per cent rise in real wages, by 1870 agricultural employment would have fallen by two per cent instead of the actual forty-five per cent, and potato output would have risen marginally instead of plummeting by four-fifths (Crotty 1966; O'Rourke 1991). Thus the famine, far from being a mere catalyst, was a watershed event in nineteenth-century Irish history.

In the early 1980s, one eminent Irish historian claimed that 'even the scale of the great famine was not unique when seen in the context of contemporary European experience'. That was just before a burgeoning historiography began to reassert the cataclysmic dimensions of the Irish famine. Modern research comes closer to supporting instead Amartya Sen's surmise that '[in] no other famine in the world [was] the proportion of people killed…as large as in the Irish famines in the 1840s' (Boyce 1982: 170; Sen 1995). During the 1990s research into the Irish famine, prompted in part by sesquicentennial commemorations, reached unprecedented levels. Scores of monographs

and articles were published, many of them of high quality (for surveys see Ó Gráda 1996; Daly 2003). These included several studies of the crisis at local level (e.g. O'Neill 1997; Eiríksson 1997; Ó Murchadha 1998; Hickey 2002).

Several issues require further investigation, however. For instance, whether or not the famine led to the decline of certain native industries by reducing the domestic market remains a moot point (Whelan 1999). The long-run impact of the famine on the health of survivors conceived or born during or in the wake of the famine is another un-researched topic (compare Lumey 1998). Other issues calling for further work are: evictions and their impact on mortality, the evaluation of crisis management at the local level, the extent and consequences of famine-induced internal migration, the functioning of food and credit markets at retail level, and the role of maize as a substitute for the potato.

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