Famine in Ireland, 1300-1900

Cormac Ó Gráda
University College Dublin

[Email: cormac.ograda@ucd.ie]

Keywords: famine, economic history, Ireland

JEL classifications: N, N5, O1

Abstract: this paper describes the history of famine in Ireland between c. 1300 and c. 1900. Inevitably, most of its focus is on the two ‘great’ famines of the early 1740s and 1846-52.

1An earlier version of this paper was presented at the first conference of the European Historical Demographic Society, Alghero, September 2014. The comments of participants and of Guido Alfani and Peter Solar much appreciated.
Famines have been documented in Ireland since the late seventh century. The medieval chronicle *Chronicum Scotorum (Chronicle of the Irish)*, which covers the period up to 1150AD, noted that in 699-700AD on the heels of a cattle plague and a frost that caused ‘the sea between Ireland and Scotland [to freeze] so that there was travelling between them on ice’, there ensued a famine so severe that ‘man ate man’. Similar short impressionistic accounts of many major famines in the following centuries survive. Yet the historical literature on famine before the eighteenth century is sparse, and the sources to study them are scarce. The public record is reticent and parish registers are lacking. And although several of the lesser famines of the eighteenth and early nineteenth centuries have been the subject of specialist investigations (e.g. O’Neill 1965; Kelly 1988, 1992, 1992-3; Wells 1996), it is inevitable that any study of Irish famines must focus disproportionately on two more recent and better-documented famines, the massive famines of 1740-1 and the 1840s.

1. *Chronology:*

Like Cornelius Walford did for India and William Farr for England, William Wilde, in his contribution to the analysis of famine deaths in the Irish population census of 1851, tried to infer the frequency of famines in the past in Ireland from documentary sources.\(^2\) Certain familiar themes recur in the accounts reported by Wilde—parents selling their children for food, hunger-induced migration, war and pestilence as handmaidens of famine, excessive rainfall and cold as the causes of crop failure and, in a few cases, cannibalism

\(^2\) Wilde’s list has been reproduced in Crawford (1989).
Examples of (presumably) sky-high food prices begin to be reported from the early fourteenth century on—‘wheat for 23s the cranock, and wine for 8d’ (1318), ‘six pence of the old money for a cake of bread’ (1545), 24s for a peck of wheat (1552), ‘potatoes 4s 4d a bushel’ (1741), and so on. Unfortunately, non-crisis reference prices are usually not given, although a report referring to 1601 compares a price of 7.5 shillings per barrel for oats to the ‘ordinary rate’ of one shilling, and it was reported that in February 1728 that ‘oatmeal in may parts of this kingdom [was at] three times the customary price’ (Crawford 1989: 8; Lyons 1989: 63; Boulter 1757: I, 222). Nor is it recorded how long the high prices prevailed.

The uncertainties surrounding such famine chronologies have been summarized elsewhere (Ó Gráda 2009: 26). Still, they have their uses and Clarkson (1989) has tabulated the data presented by Wilde, relying on his own judgment to distinguish between outright famine and less severe crises. By this reckoning the first half of the fourteenth, seventeenth, and nineteenth centuries were the worst affected by subsistence crises. Wilde’s chronology suggests a crisis or famine on average every thirteen years, but famines in the strict sense were less frequent: by this reckoning there were only 29 during this 550-year period.

Some of these famines coincided with crises elsewhere. The Irish famine of the mid-1310s was part of a major crisis straddling the whole of northwestern Europe (Jordan 1995). In Ireland the impact of poor harvests in those years was exacerbated by the scorched earth policy waged by the Scottish warlord Edward Bruce, to the extent that ‘do ithdais na daine cin amuras a cheli ar fod Erenn
(undoubtedly men ate each other in Ireland). Other famines, such as those of the 1580s, the early 1600s, and the 1640s, were linked to colonial wars. The poet Edmund Spencer was a witness to the famine of the 1580s and left an account of it in *A View of the Present State of Ireland* (1596). Sir William Petty, a more prosaic chronicler of famine in the 1640s, reckoned that between 1641 and 1652 87,000 had died ‘of Famine and Cold, Transportation to the Barbadoes, &c’.

Petty’s demographic estimates were often cavalier and imprecise, but this figure tallies with Pádraig Lenihan’s suggestion that Ireland’s population declined by 0.2–0.3 million (or by 15–20 per cent of a population of about 1.5 million) between 1649 and 1652, since the latter combines deaths from plague and famine (Petty 1899: 151; Lenihan 1997). Estimates, even of the most speculative sort, are impossible for earlier famines.

2. The Great Famine of 1740-41:

Both the famine of 1740-1 and that of the 1840s were the products of unprecedented exogenous shocks. The Great Frost of 1740-41 was one of the most severe climatic events to strike northern Europe over the past millennium. Its cause remains unclear: perhaps a volcanic eruption on the Kamchatka peninsula in Russia’s far east was responsible. The arctic conditions led to the destruction of crops, extreme distress, and increased

---

3 This eruption is included in the long list published by Russian specialists (Gusev et al. 2003: 9). A problem with this explanation is that the onset of the cold weather toward the very end of 1739 seems to have preceded an eruption in the peninsula’s Tolbachik volcanic cluster in 1740.

Temperature data for Ireland are lacking, but in central England, where continuous monthly data are available from 1659 on, 1740 was the coldest year on record, with a mean temperature of only 6.8 degrees centigrade (Figure 1). January 1740, when the temperature was seven degrees below the mean, was the coldest month of all, but February 1740 also stands out. Comparable data for Ireland are lacking, but temperatures there cannot have been very different, and several accounts describing the extreme conditions in Ireland survive. In the initial phase lakes and rivers froze; fuel and provisions were scarce; and many people died of hypothermia. Contemporary accounts dwelt on mills that could not grind corn, horses ‘heartless for want of oats’, and potatoes trapped in the ground by the frozen earth. The cold weather even prevented burials on occasion (Delamayne 1767: 11), and frozen soils disrupted crop sowing and economic activity more generally. The price of wheat doubled by June 1740 and, as a result, the price of bread also doubled (Ní Úrdail and Ó Gráda 2015; Swift 1948: 370). Then a poor harvest meant that this high price level was maintained (Engler et al. 2013: 1052); potatoes remained ‘locked in the frost’; famine followed. Nowhere in Europe did the icy weather wreak more havoc than in Ireland, where 1740-41 became known as bliain an áir (the year of the slaughter). Indeed, if the Great Irish Famine of the 1840s was Europe’s greatest

---

4 British Library, Egmont Papers, Addl Mss. 46991, ff4-5 (William Taylor to Lord Egmont 26 January 1740, 29 January 1740); National Library of Wales, Puleston Papers, Ms. 3582 f46 (John ? to Lord Barrymore, January 1740). I am grateful to James Kelly for providing me with these references.
famine of the nineteenth century, the Irish famine of 1740-1 may well have been, in relative terms, the eighteenth-century’s greatest.

In Ireland the famine lasted from early 1740 to mid-1741 (Dickson 1997). The 1741 harvest was a good one and grain prices soon returned to their pre-famine levels. But the famine was more about potatoes than cereals. Its severity underlines the precocious dominance of the potato in the Irish diet, particularly in the southern province of Munster. Although crop failures in 1740-41 were not confined to the potato, the Gaelic poetry\(^5\) inspired by the famine attribute the disaster entirely to the failure of the potato. Already by then, the potato was the main food of the poor—*is féidir ’rá ris gurb é dhá dtrian beatha innse Éire’* (it can be said of it that it provides two-thirds of the sustenance of the island of Ireland)—and is described variously as ‘like manna

---

\(^5\) The extracts cited are taken from Ó Gráda and Ó Muirithe 2010.
from Egypt’, ‘Ireland’s nourishment’, ‘the tree of life’, and ‘the cheapest nourishment of the Irish race’. Its great advantage was that it required ‘neither harrow nor plough, neither sickle nor flail, nor protection against the wind, but went straight from the earth to the fire and dish’. But now, thanks to the frost all that remained were ‘a filthy crust and black streaks inside them’.

While cereal price data are available (Figure 2), unfortunately but inevitably, we have only scattered quotations for potato prices in the 1740s. The Gaelic poetry of the time is silent on them. Still, in the western county of Roscommon the barrel of potatoes that would have cost 3s to 5s a barrel in 1737 or 1738 cost 18s in April 1741 (Ní Chinnéide 1957: 5, 16, 17). A quadrupling of the price of the staple crop suggests a very severe famine indeed. As in the 1840s, the price of potatoes rose much more than that of wheat.

Figure 2. Price of Wheat in Dublin 1740-41 (L per quarter)

Figure 2. The Price of Wheat in Dublin
Source: Steven Engler, private communication
The demographic toll of the 1740-1 famine can only be guessed at, since civil registration was still more than a century away and the evidence from parish registers is very limited (Drake 1968; Dickson, Ó Gráda, and Daultrey, 1982: 164-69; Dickson 1997; Cullen 2012; Engler et al. 2013). An attempt at inferring excess mortality from the decline in the number of hearths between 1732 and 1744 reckons that between 310,000 and 480,000 out of a population of about 2.4 million perished (Dickson, Ó Gráda and Daultrey 1982: 164-8; Dickson 1997: 69, 72.). That is just an informed guess, and the implied proportionate mortality—up to 15-20 per cent of the population—is certainly very high. But a ‘country gentleman’ wrote to Anglican Lord Primate Hugh Boulter in 1741 that ‘by a moderate computation, very near one-third of the poor cottiers of Muster have perished by fevers, fluxes, and downright want’. That would tally with the 200,000-400,000 proposed by the anonymous author of The Groans of Ireland, but his political arithmetic is hardly conclusive:

If but one for every House in the Kingdom died (and that is very probable, when we consider that whole Families and Villages were swept off in many Parts together) the loss must be upwards of 400,000 Souls.

Dublin physician John Rutty was presumably referring to The Groans of Ireland when he noted in his Chronological History of the Weather and Seasons

---


7 Anon, Groans of Ireland, pp. 3-4.
and of Prevailing Diseases in Dublin a claim that one-fifth of the population perished, although he thought that was an exaggeration (Rutty 1770: 86). A medicinal practitioner who worked in Cork during the famine also argued for a lower number, ‘at least eighty thousand’, but offered no source for that number (O’Connell 1746: 327).

The evidence from parish records is very thin, but in the urban parish of St. Mary’s in Limerick and in mainly rural Macroom in County Cork burials in 1740 and 1741 were about four times the average of the immediate pre-famine years; assuming a non-crisis death rate of 25 per thousand would imply an excess mortality of one-fifth. Even worse, in Cullen in County Tipperary a clergyman reckoned that nearly two-fifths of the inhabitants had perished of famine-related diseases by the late summer of 1741 (Dickson 1997: 66-9).

The Dublin Bills of Mortality imply significant excess mortality in the capital in 1740 and 1741, when 3,304 and 2,792 deaths, respectively, were recorded relative to the average of 2,189 deaths in 1735-39 and 1742-45. None of these figures captures all deaths in a city of 130,000 or so, however; the implied non-crisis death rate of 16 per thousand is surely much too low for that. Assuming an under-count of one-third, this would mean an excess mortality of 2,600 or so, about three per cent of the population, in 1740 and 1741.⁸ Of course, death rates outside the capital were undoubtedly much higher. For the sake of comparison, in the 1840s the excess death rate in Dublin was about four per cent, whereas excess mortality in Ireland as a whole was about 11-12 per cent (Ó

⁸ The calculation is \[1.5 \times (3,304 + 2,792 - 2,189^2)\] = 2,600. See Rutty, *Chronological history, passim*; Fagan, ‘The population of Dublin’, 148.
Gráda 1999: chapter 5). In 1740-1 suffering was worst in the south, west, and midlands; in Connacht ‘their food was nettles and salt or some other vegetable if they were lucky, and after consuming such a meal their stomachs swole and they expired’. Fever was so widespread that houses were boarded up as in times of plague in the past (Dickson, 1997: 62-9; Ní Úrdail and Ó Gráda 2015). The province of Ulster, it would seem, escaped relatively lightly. Some may find the temptation to declare the huge estimate of excess mortality noted above strong⁹, but we will probably never know the true number.

Rutty’s Chronological History is our best-known source on the causes of death in 1740-42. It mentions the standard causes of ‘fever, dysentery, and famine’ in that order (see too O’Connell 1746). Also noteworthy are Rutty’s remarks about male mortality in 1741: ‘Another notable circumstance seems worthy of being recorded, in relation to the subjects which this fever generally attacked, both here and in England viz. that they were generally men and those of a middle age, and strong, but few women; also children were but more rarely attacked’ (Rutty 1770: 86-97). This age-gender pattern recalls that of the great influenza epidemic of 1918-19, and may well indicate that deaths from an influenza-like epidemic followed in the wake of classic famine mortality. The wealthy did not starve but they were not immune from fever (Delamayne 1767: 13).

On the eve of the 1740-1 famine Ireland was sparsely populated compared to the mid-1840s—numbers rose from about 2.4 million to about 8.5 million in the interim. What this implies for living standards at the earlier date

---

⁹ As Datta (1990: 102-08) does for Bengal in 1770, but on firmer evidence.
is far from clear. Louis Cullen, rejecting the argument that the famine of 1740-1 was due to the weakness of the economy at the time, points instead to the tension between ‘general amelioration’ and ‘a persistent and profoundly inegalitarian distribution of income’ (Cullen, 2010: 20).

3. A Gap in Famines?

At the height of the 1740-41 famine George Berkeley, philosopher-bishop of Cloyne, feared that the ‘nation probably will not recover this loss in a century’¹⁰. Yet between the mid-eighteenth century and 1821 Ireland’s population grew from about 2.2 million c. 1750 to over 7 million, faster than anywhere else in Western Europe. This implies a rather benign demographic regime by the standards of the day. In a classic and influential contribution K. H. Connell (1950) attributed the rise in population mainly to increasing nuptiality and a consequent rise in the birth rate, but he also attributed some of it to a century-long ‘gap in famines’. Connell linked the ‘gap’ to the diffusion of the potato, which offered both insurance against harvest failure and a healthy food that made it easy for the young couples to marry. The hypothesis oversimplifies, because it downplays a series of well documented, if smaller, famines in 1756-7 (‘agues were rife’), 1782-4, 1800-1 (‘fever, dysentery, scarlatina, ophthalmia, and influenza’), 1816-18 (‘a few unhappy sufferers are said to have died of absolute want of food’), 1822 (‘extensive and alarming distress... famine reported from various districts of the West’), and 1831 (‘some are now bleeding

¹⁰ Berkeley to Prior [19 May 1741], in Works, v. 8, p. 251-252.
their starving cows...'). Still, David Dickson’s analysis of a sample of north Leinster Catholic parishes—where, exceptionally, partial burial data survive—imply that there were no devastating famines in that region at least after the early 1740s (Dickson 1989: 102-3; see too Dickson 2014). And the excess mortality associated with the worst of these other famines—40,000 in the case of 1800-1, perhaps 60,000 in 1816-18—would have been insufficient to cancel out a rate of natural increase of about 75,000 annually. Note too that excess mortality in 1816-18 was far higher in parts of Italy, Switzerland, Austria-Hungary, and Germany than in Ireland. That excess mortality in 1822 was relatively light indicated by the silence of the Board of Health, who had been assembling data on fever deaths and would—most likely—have publicized any significant increases (Ó Gráda 1993: 5; O’Neill 1966).

These smaller famines struck in a context of rural proletarianization and the increasing dominance of the potato. By the early 1840s that reliance was such that about one-third of the population consumed little else (Bourke 1993). Dependence on the potato was captured in the ditty, ‘prátaí ar maidin, prátaí um nóin, is dá n-éireoinn meánoiche, prátaí a gheobhainn’ (potatoes in the morning, potatoes at noon; and if I rose at midnight, it would still be potatoes). Why the potato achieved such dominance in the Irish diet has not been fully explained. Ireland’s rather damp climate, which gave it a comparative advantage in potato cultivation, is part of the answer; so is the potato’s role as a root crop (like the turnip in England) in an expanding acreage under grain. And given Ireland’s relative poverty, the potato’s status as an ‘inferior good’—as

---

distinct from a Giffen good (compare Rosen 1999)—increased its appeal. The sharp drop in the price of potatoes relative to that of oats between the 1760s and the 1790s may also have been a factor (see Figure 3). But whether the diffusion caused population to grow, or was a response to that growth remains moot (compare Livi-Bacci 1981: 72-75; 1997; Cullen 1968; Mokyr 1981). Cullen describes its role as ancillary to grain, ‘reflect[ing] the fact that cereal cultivation intensified in the 1750s and 1760s’ (Cullen 2012: 111), but the evidence adduced above would argue for a more precocious dependence on the potato, especially in Munster. The potato harvest failed before 1845, but shortfalls before phytophthera infestans (potato blight) struck tended to be regionally uneven and once-off failures. Those of 1845, 1846, and after were unheralded ecological disasters.

Figure 3. The Ratio of Potato to Oats Prices 1765-1880

4. *Black '47:*

Like the famine of 1740-41 the Great Irish Famine of the 1840s was one of several famines that struck northwestern Europe at the same time (Ó Gráda, Paping, and Vanhaute 2006). And like its predecessor, it was the worst of the
lot. The ‘Great Hunger’, familiar to many worldwide through Cecil Woodham-Smith’s eponymous classic, has been the focus of both specialist research and popular monographs (e.g. Edwards and Williams 1956; Mokyr 1983; Ó Gráda 1999; Donnelly 2002; Crowley et al. 2012; Delaney 2012; Ó Murchadha 2012; Gray 2014). The outlines of the story are therefore familiar. The famine, the product of repeated failures of the potato, was much more protracted than most famines. While deaths began to mount in the wake of the second attack of potato blight in autumn 1846, famine symptoms persisted in some areas until 1850 and even later. Although a precise count of famine deaths is impossible, there is now a broad consensus on the approximate death toll of about one million (or nearly one in eight of an entire population). Accounts differ as to how much a greater commitment to saving lives would have achieved, but all view the famine as due to a combination of economic backwardness, an ecological shock, and an inadequate and, many would argue, callous official response.

Evictions, amounting in many places to significant mass clearances, were a feature of the period.12 Notorious examples include Aghadrinagh, a townland just outside Castlebar in Mayo, where population plummeted from 314 in 1841 to 9 in 1851, and Toomevara in Tipperary where nearly six hundred people were evicted in in May 1849. Most of the 289 evicted by the Earl of Lucan in Aghadrinagh in May 1848 moved into the nearby town of Castlebar in

the wake of the event; 44 emigrated to England, and seven somehow made it to America. But their eventual fate is unknown (Hamrock 1998: 127-8, 147; for more on evictions see Ó Murchadhá 2011: 113-134; O’Neill 2000).

The famine is well documented in official papers, in the press (which was relatively free at the time but did not circulate widely), and in private papers. Although Ireland lacked a system of civil and parish register data are thin and are usually silent on burials, many aspects of the famine’s demography can be inferred from the detailed and innovative population censuses of 1841 and 1851. The censuses highlight the highly uneven regional character of the famine, and the broad association between population loss on the one hand, and markers such as poor housing, illiteracy, low land valuation per capita, on the other. However, they also indicate that some impoverished areas in the worse affected west such as the Iveragh peninsula in Kerry and west Donegal escaped relatively lightly. The Tables of Death in the 1851 census, compiled by Sir William Wilde, are an unreliable guide to aggregate mortality, but they usefully point to the dominant role of infectious diseases as the cause of death, and to the slight relative advantage of females (Mokyr and Ó Gráda 2002).

Mokyr’s Why Ireland Starved pioneered econometric analysis of the famine. That wide-ranging classic invoked the thirty-two counties of Ireland as a pseudo-time series in attempts, using ordinary least squares regression, to account for material poverty on the eve of the famine and the variation in the death rate across the island between 1846 and 1851. Others have followed suit (McGregor 1989; Ó Gráda 1999: 30-4; Goodspeed 2013). Kelly and Ó Gráda (2014) use a random forest estimation approach to testing [a] and [b] with
barony-level data (n>300). Their finding that population growth in the pre-
famine decades was fastest in marginal areas of poor land and where living
standards were lowest corroborates Mokyr but runs contrary to the Malthusian
presumption that population growth is an increasing function of incomes. In a
review of Thomas Newenham’s study of Irish population, Malthus (1808: 345)
had insisted that ‘although it is quite certain that the population of Ireland
cannot continue permanently to increase at its present rate, yet it is as certain
that it will not suddenly come to a stop’. That was because ‘both theory and
experience uniformly instruct us that a less abundant supply of food operates
with a gradually increasing pressure for a very long time before its progress is
stopt’. The gradual reduction in living standards would reduce nuptiality and
the birth rate, ‘the habits necessary for an order of things in which the funds for
the maintenance of labour are stationary’. But in pre-famine Ireland the kind
of demographic adjustment posited by Malthus was slowest where it was
required most. Had Malthus still been alive in the late 1840s he would
doubtless have seen the Great Irish Famine as an example of the ‘gigantic
inevitable famine [which] stalks in the rear, and with one mighty blow levels
the population with the food of the world’ (Malthus 1798: ch. 7).

On [b] Kelly and Ó Gráda’s analysis confirms the link between
population loss during the famine decade (1841-51) and proxies for pre-famine
poverty such as illiteracy and housing quality: areas heavily dependent on the
land were also, not surprisingly, more likely to lose population during the
famine decade.
5. Markets and Famines

At the height of the famine of 1727-29 the Anglican archbishop of Armagh, Hugh Boulter, described his efforts to relieve scarcity in the north of Ireland thus (Kelly 1992; Boulter 1759: I, 287):

There has been set on foot a subscription here in Dublin, to buy corn from Munster, where it has been very cheap, to send it to the north, in order to keep the markets down; but though we have bought about £3000 of oats, oatmeal, and potatoes there, yet first by the continuance of easterly winds for three weeks, and since by the insurrections of the mob in those parts, not one boat load is yet arrived in the north... There have been tumults at Limerick, Cork, Waterford, Clonmel, and other places to prevent the corn we have bought from going to the north.

Boulter sanctioned severe measures against the rioters, but their effectiveness is not known. By preventing exports the rioters hoped to avert price increases in their own back yard. In so acting they were part of an old and universal tradition of ‘moral economy’ redressers (e.g. Bohstedt 2010; Eiríksson 1997). Boulter’s motives in the 1720s were no doubt in part humanitarian; he would also spearhead relief efforts in Dublin in 1740-1. But they also had a sectarian tinge, since Boulter feared that hunger was forcing his coreligionists in Ulster to leave for America.

In 1740-41 the price of wheat more than doubled in Dublin, while it nearly doubled in England. However, while cereal prices began to fall back in
England after mid-1740, they continued to rise in Ireland until mid-1741. The subsequent decline was mainly the product of better harvest prospects, aided by imports from the American colonies, which began to arrive in significant quantities the spring of 1741.

The markets for cereals functioned more or less as normal in Ireland during the 1840s, in the sense that movements in grain prices closely mimicked those across the Irish Sea (compare Figures 4 and 5b). Data on the price of potatoes and cereals suggest that market failure, at least at wholesale level, bears little blame for excess mortality: markets functioned more or less as normal (Ó Gráda 2005). Figure 5, showing how potato prices rose much more than cereal prices and remained high after cereal prices began to fall, is another reminder that potatoes and cereal were imperfect substitutes. Because international grain markets were much more integrated in the 1840s than a century earlier, price spikes in the 1840s reveal less about local harvest conditions than in the 1740s (compare Solar 2007). As for potatoes, markets on the eve of the famine carried a wide range of varieties, and were subject to rather regular seasonal price fluctuations. Once the blight struck, markets experienced a rush of supplies from nervous producers and merchants. And between early 1847 and the summer of 1848 potato markets essentially ceased to function. Two aspects bear noting. First, the seasonal tempo of supplies rules out hoarding on the part of sellers or panic buying on the part of consumers. Second, the telltale symptoms of potato blight enabled buyers and sellers to distinguish good potatoes from bad, so that prices adjusted to quality (Ó Gráda 1993: 111-21; 2006: 120).
Figure 4
6. Relief:

While the role of famine relief is a key element in the literature on the Great Famine of the 1840s, it features little in that on the 1740s. John Post, foremost historian of the European famine of 1740-41, has argued that that famine was particularly murderous in Ireland and in Norway, ‘fundamentally because public administrations either neglected or failed to carry out the elementary welfare service of safeguarding the poor from hunger and starvation’ (1985: 145). Ireland’s very limited system parochial and municipal poor relief was ill-equipped to cope with the disaster, and the central authorities did little—at any rate, relative to other times and other places. True, Archbishop Boulter fed 2,500 Dubliners every morning and evening during the crisis (Anon. 1747), and it was claimed that ‘but for the charity and humanity of Lord and Lady Mountjoy thousands would perish of the famine’. Again, the munificence of some southern grandees including bishop-philosopher George
Berkeley of Cloyne are celebrated in the Gaelic poetry of the time (Ó Gráda and Ó Muirithe 2011). But all those efforts relied on private philanthropy: contributions from the public purse were not forthcoming (compare Kelly 2012).

As Dickson has noted, subsequent crises, although much less severe, left their mark on official responses. The famine of 1756-7 resulted in modest public funding of relief and a temporary embargo on distilling; that of 1782-4 in an embargo on grain exports; that of 1800-01 in the finance of emergency imports of rice and maize from the United States; and that of 1816-18 in publicly funded public works schemes and the importation of seed grain (Dickson 1989: 106-7).

Much of the literature on the Great Famine of the 1840s has focused on famine relief. Public expenditure on the crisis totaled about £10 million. While that sum almost certainly saved many lives, Mokyr and others have compared it unfavourably to the totals expended on compensating slave-owners in the West Indies in the 1820s and on the Crimean War of 1854-5. And these comparisons do not take into account that most public expenditure on the famine was intended to be a loan, not a grant. It is also true that raising the funds placed the public finances under considerable pressure in 1847, but that was because the political will to increase direct taxation was lacking (O’Neill 1956: 255-56; Mokyr 1983: 292; Read 2015). So far nobody has attempted the ambitious task of estimating how much excess mortality might have been avoided, given more

---

13 See too Luce and Jessop 1956: vol. 8, 251. Berkeley had described the horrors of famine in The Querist (1735-37) but that work refers to an earlier famine, possibly that of the late 1720s.
generous and more effective relief. The literature has been content to highlight the inadequacy and to some extent the counterproductive character of public works schemes, and to criticize the over-reliance on relief within the workhouse system.

Public works are a common form of famine relief and they were already familiar in Ireland before 1845-46. During the Great Famine, however, they were pursued on an unprecedented scale in wintry weather under conditions that were likely to spread disease, and which discriminated against the young, the aged, and the weak. Workers were often paid on a piece rate basis, and payments were hardly sufficient to sustain life (McGregor 2004). Nor were the workhouses equipped to cope with the challenge of famine; their capacity was inadequate, and they relied mainly on local funding, which made a mockery of the ability-to-pay principle. Indeed, the Irish workhouse system, which was never intended to cope with a catastrophe such as the famine, had been established as recently as 1838, and some workhouses had yet to open their doors for inmates when the blight struck. A high proportion of workhouse victims succumbed to infectious diseases, so much so that the risk of infection at the height of the crisis must have deterred all but the most desperate from entering. Mismanagement and corruption at local level compounded the inadequacies of this mode of relief (compare Kinealy 1989; McCabe and Ó Gráda 2009; Ó Gráda 2011). Nevertheless, the authorities imposed virtually the entire burden of famine relief on the workhouse system in the autumn of 1847. The publicly administered soup kitchens that provided food to over one-third of the population at their peak in July 1847 are usually awarded higher marks
than the public works or the workhouses (Compare Ó Murchadha 2011: 87-88; Donnelly 2002: 90-2), but questions remain about the nutritional quality of the gruel administered.

Although migration is a standard feature of nearly all famines, and wandering beggars are often among its first victims, famine migrations are usually temporary. Survivors tend to return home after the worst is over. In this respect the Great Irish potato famine of the 1840s was exceptional and unlike any previous Irish famine in that it also spawned a massive permanent long-distance migration that would long outlast the famine, and that would have a big influence on Irish social, economic, and indeed political history. Although the forced character of that migration, and the hardships and deaths it entailed, were part of the tragedy, without mass migration the death toll in Ireland itself—and almost certainly in Britain too—would surely have been higher. The presence of North America as a distant safety valve let the authorities off the hook: without it, they would surely have been forced to stave off increased migration across the Irish Sea with more generous and timely relief in Ireland. Moreover, despite some deservedly notorious disasters, most of the migrants made it safely to the other side. Most stayed and, by the standards of what they had been used to, prospered (Ó Gráda and O’Rourke 1997). Note, however, that in the 1840s North America was beyond the reach of the poorest and the weakest.

Little is known about the impact on mortality in destination countries. Fernihough’s recent estimate of Irish famine-induced excess mortality in Great Britain in the late 1840s—presumably due to infectious diseases—yields the
high figure of 150,000. This estimate is inferred from civil registration data; a more direct, archive-based estimate by the late Frank Neal returns a much lower figure for 1847 alone (Fernihough 2014; Ó Gráda 1999: 111-12; Neal 1998: 279-80).

7. Conclusion

The impact of the Great Famine of the 1840s on post-famine economic and demographic patterns has been the subject of a good deal of analysis. That famine would seem to be an exception to the claim of Menken and Watkins (1985) that the demographic impact of famines is fleeting or temporary, although Crotty (1966: 35-83) argued, very much in the spirit of Menken and Watkins, that the Great Famine merely accelerated trends already underway since 1815. O’Rourke (1991) rejects this position, countering that the persistence of potato blight (though its impact on yields and prices dictating a shift to pastoral and mixed farming) and the impact of huge surge of emigration in the late 1840s and early 1850s (through the creation of networks that had their own added drawing power on subsequent outflows) meant that the famine did indeed ‘matter’. In different ways, Connell (1957) and Guinnane (1997) have addressed the link between the famine and the subsequent huge decline in nuptiality and increase in mean marriage ages for both bride and grooms. Post-famine Ireland’s status as Europe’s demographic outlier, which lasted for a century and a half, had its roots in the Great Famine. By contrast, it would seem that the demographic vacuum created by famine of the 1740s was quickly
filled à la Menken and Watkins, so that bliain an áir (the year of slaughter, 1740-41) had little medium- or long-term impact on the economy.

In Ireland the era of major famines came to end with the Great Famine. A succession of poor harvests in the early 1860s, in 1879-80, and in the 1890s led to severe privation (Donnelly 1975: 251-75; Donnelly 1976; O’Neill 1989). The rhetorical exaggeration of the Irish Farmers’ Gazette’s claim in 1863 that “the farming classes of this country are worse off in this season than they were in what are called ‘the famine years’” is lent some support by a contemporary economist’s estimate in that same year that the equivalent of more than two years’ rent had been wiped out by crop failures and accompanying declines in livestock numbers (Donnelly 1976: 33-4). The second crisis, during which there were several reports of deaths from starvation in 1880\textsuperscript{14}, was more severe; occurring during a peak of the Land War, it was overshadowed by political developments and largely overlooked by historians\textsuperscript{15}. O’Neill (1989) has rightly drawn attention to distress ‘in restricted areas of a small number of counties’ in 1890-91, 1894-95, and 1897-98, but the hardship he describes would qualify as ‘crisis’ rather than outright famine. And although in both the early 1860s and in 1879-80 there were increases in workhouse admissions (particularly between


\textsuperscript{15} See Geary (2014).
1861 and 1863) and in emigration to the United States and the colonies (which exceeded 100,000 annually in 1863-65 and in 1883)\textsuperscript{16}, excess mortality was low.

Why were earlier patterns not repeated? Part of the answer must be the massive depopulation caused by the Great Famine; as a result, the number of agricultural holdings of an acre or less fell from 140,000 c. 1845 to 88,000 in 1851 (Bourke 1993: 76), and the acreage under potatoes fell by almost half (and potato output by much more, due to the lasting ravages of the potato blight). The net result was higher living standards and a more diversified diet for those survivors who stayed in Ireland. Donnelly (1976) also emphasizes how reliance on maize had outlasted the Great Famine, and that its spread was aided by the increasing commercialization of rural Ireland. More generous relief mattered too. All the same, even though those crises are not usually described as famines by historians and were tiny even by the standards of 1799-1800 or 1816-17, by today's benchmarks they might be considered so: the crises of 2002 in Malawi and 2005 in Niger may well have cost fewer lives, but made global headlines.

As other studies in this volume will attest, famines that kill more than five per cent of an extensive population are very rare. The Irish famines of 1740-41 and the 1840s stand out as exceptional in this respect (compare Lappaleinen for Finland in the 1690s). The massive impacts of those crises are linked to both economic underdevelopment and inadequate responses from

\textsuperscript{16} The data are reproduced in Schrier (1958: 157, 165).
governing elites, but they were exacerbated by the unparalleled character of the shocks—the Great Frost of 1740 and potato blight—that attended them.

BIBLIOGRAPHY:


Delamayne, Thomas Hallie. 1767. *To Francis Bindon, Esq; on a Picture of His Grace Dr. Hugh Boulter* London: Williams.


Geary, Laurence. 2014. "'Waiting and watching for food the live long day": famine and fever in Ireland, 1879-1880' Typescript, University College Cork.


Gray, Peter. 2014. 'the Great Famine in Irish and British historiographies, c. 1860-1914', in Marguerite Corporaal, Christopher Cusack, Lindsay Janssen and Ruud van den Beuken, eds. Global Legacies of the Great Irish Famine, Oxford: Peter Lang, 39-60.


Lappaleinen, Mirkka. 2014. 'Death and disease during the Great Finnish Famine 1695-97.' *Scandinavian Journal of History*, published online 12 August.


Mokyr, Joel. 1981. ‘Irish history with the potato’. Irish Economic and Social History. VIII: 8-29.


<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310</td>
<td>Scarcity in Ireland. Wheat 20s a bushel</td>
</tr>
<tr>
<td>1315-18</td>
<td>Diseases, famine, murder, and incredible bad weather... Corpses eaten, women eat their children... Wheat 40 shillings a crannoc and in some places 4 marks and more a crannoc...'do ithubais na daine cin amuras a cheli ar fodd Erenn (and undoubtedly men ate each other throughout Ireland)'</td>
</tr>
<tr>
<td>1330-31</td>
<td>Famine—so humid, rainy and stormy that summer and autumn were converted into winter tempests</td>
</tr>
<tr>
<td>1339</td>
<td>All the corn of Ireland destroyed: general famine</td>
</tr>
<tr>
<td>1397</td>
<td>Famine—summer and autumn windy, wet and cold</td>
</tr>
<tr>
<td>1410</td>
<td>Great famine in Ireland</td>
</tr>
<tr>
<td>1433</td>
<td>Samhradh na mearaithne (the summer of fleeting acquaintances)</td>
</tr>
<tr>
<td>1447</td>
<td>Men were wont to eat all kinds of herbs.</td>
</tr>
<tr>
<td>1461</td>
<td>Great dearth</td>
</tr>
<tr>
<td>1468</td>
<td>Great scarcity in Ireland</td>
</tr>
<tr>
<td>1478</td>
<td>Hard, niggardly year</td>
</tr>
<tr>
<td>1497</td>
<td>Great famine throughout Ireland... People ate food unbecoming to mention...</td>
</tr>
<tr>
<td>1523</td>
<td>Great famine in Ireland...</td>
</tr>
<tr>
<td>1586-89</td>
<td>Famine following Desmond rebellion; 'they did eat of the dead carrions, happy were they if they could finde them, yea, and one another soone after...'</td>
</tr>
<tr>
<td>1600-03</td>
<td>War-related famine</td>
</tr>
<tr>
<td>1640s-1650s</td>
<td>Succession of war-related famines (see text); 'stealing; carrying off cats; dogs; eating humans; rotten leather; and undressed leather'</td>
</tr>
<tr>
<td>1728-29</td>
<td>Oatmeal in March 1728 in many parts three times the customary price</td>
</tr>
<tr>
<td>1740-41</td>
<td>Major famine (see text)</td>
</tr>
<tr>
<td>1756</td>
<td>Partial famine accompanied by influenza epidemic</td>
</tr>
<tr>
<td>1782</td>
<td>Embargo placed on food exports</td>
</tr>
<tr>
<td>1799-1801</td>
<td>Potatoes scarcely to procured for 7s or 8s per cwt.</td>
</tr>
<tr>
<td>1816-18</td>
<td>Mortality estimated at 40,000–60,000</td>
</tr>
<tr>
<td>Year</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>1822</td>
<td>West particularly hit: little excess mortality [?]</td>
</tr>
<tr>
<td>1839</td>
<td>Potatoes 7d a stone: little excess mortality [?]</td>
</tr>
<tr>
<td>1846-50</td>
<td>The Great Famine (see text)</td>
</tr>
</tbody>
</table>
WP14/11 Johannes Becker and Ronald B Davies: 'A Negotiation-Based Model of Tax-Induced Transfer Pricing' July 2014
WP14/12 Vincent Hogan, Patrick Massey and Shane Massey: 'Analysing Match Attendance in the European Rugby Cup' September 2014
WP14/13 Vincent Hogan, Patrick Massey and Shane Massey: 'Competitive Balance: Results of Two Natural Experiments from Rugby Union' September 2014
WP14/14 Cormac Ó Gráda: 'Did Science Cause the Industrial Revolution?' October 2014
WP14/15 Michael Daly, Liam Delaney, Orla Doyle, Nick Fitzpatrick and Christine O'Farrelly: 'Can Early Intervention Policies Improve Well-being? Evidence from a randomized controlled trial' October 2014
WP14/16 Thérèse McDonnell and Orla Doyle: 'Maternal Employment, Childcare and Childhood Overweight during Infancy' October 2014
WP14/17 Sarah Parlane and Ying-Yi Tsai: 'Optimal Sourcing Orders under Supply Disruptions and the Strategic Use of Buffer Suppliers' October 2014
WP14/19 Johannes Becker, Ronald B Davies and Gitte Jakobs: 'The Economics of Advance Pricing Agreements' November 2014
WP14/20 David Madden: 'Bridging the Gaps: Inequalities in Childrens' Educational Outcomes in Ireland' November 2014
WP14/21 Ronald B Davies, Julien Martin, Mathieu Parenti and Farid Toubal: 'Knocking on Tax Haven's Door: Multinational Firms and Transfer Pricing' December 2014
WP15/03 Ronald B Davies, Rodolphe Desbordes and Anna Ray: 'Greenfield versus Merger & Acquisition FDI: Same Wine, Different Bottles?' February 2015
WP15/04 David Candon: 'Are Cancer Survivors who are Eligible for Social Security More Likely to Retire than Healthy Workers? Evidence from Difference-in-Differences' February 2015
WP15/05 Morgan Kelly and Cormac Ó Gráda: 'Adam Smith, Watch Prices, and the Industrial Revolution' March 2015
WP15/06 Kevin Denny: Has Subjective General Health Declined with the Economic Crisis? A Comparison across European Countries' March 2015
WP15/07 David Candon: 'The Effect of Cancer on the Employment of Older Males: Attenuating Selection Bias using a High Risk Sample' March 2015
WP15/10 Morgan Kelly and Cormac Ó Gráda: 'Why Ireland Starved after Three Decades: The Great Famine in Cross-Section Reconsidered' April 2015
WP15/11 Orla Doyle, Nick Fitzpatrick, Judy Lovett and Caroline Rawdon: 'Early intervention and child health: Evidence from a Dublin-based randomized controlled trial' April 2015
WP15/12 Ragnhild Balsvik and Stefanie A Haller: 'Ownership Change and its Implications for the Match between the Plant and its Workers' May 2015

UCD Centre for Economic Research      Email economics@ucd.ie