Contents

Section II
POLICY IMPLEMENTATION

Section III
POLICY ISSUES AT NATIONAL LEVEL

CHAPTER 1

Historical Background: 1690 to Present

Jonathan Haughton

1 WHY ECONOMIC HISTORY?

Why take the trouble to study history, and particularly the economic history of a minor European island? Six good reasons spring to mind.

History tests theory. The propositions of economics are often best tested by exposing them to historical evidence. Was Malthus right when he argued that population growth would inevitably outstrip food supply? Irish experience, even during the Great Famine, suggests not. Do farmers respond to changes in the prices they face? Evidence from late nineteenth-century Ireland confirms that they do. Does emigration serve to equalise wages between Ireland and Britain? Data for this century indicate that, broadly speaking, it does. Cicero took this view of history, writing that 'the causes of events are even more interesting than the events themselves' – surely a view espoused by most academic economists!

History gives perspective. Standard economics textbooks typically provide a short-run and partial approach to economic problems. While this may be appropriate for tracing the immediate effects of a shift in demand, or a monetary expansion, it provides fewer insights on the fundamental determinants of economic growth or of income distribution, since these may only be observed over long periods of time. The historian Joe Lee has made the point forcibly, writing that 'while contemporary Irish economics can be impressive in accounting for short-term movements, it has contributed relatively little to understanding the long-term development of the Irish economy'. He argues that most economists are 'blind to either long-term perspective or lateral linkage' and that 'with the exception of a handful of superior intelligences, Irish economists are far more impressive as technicians than as thinkers'.

An important lesson from economic history is that it provides a sense of the fragility of economic growth, and of its intermittent nature. For instance, many look back to the 1960s as a golden era of Irish economic growth. Yet Kennedy, Giblin and McHugh, in their interesting study of Irish economic development in the twentieth century, argue that 'a sense of historical perspective would have encouraged greater modesty about the achievements of the 1960s by recognising that they depended heavily on a combination of uniquely favourable external and internal circumstances'. Of course not everyone is convinced that history is good at giving perspective: in the view of Aristotle, 'poetry tends to express the universal, history the particular.'

History fascinates. While the study of any subject may be justified on the grounds of its intrinsic worth, economic history is particularly interesting. The visible remains of the past are everywhere – ports, houses, crooked streets, and ruined cottages. It is natural to wonder about their origins. Less visibly, our view of history informs our view of who we are, and what our culture stands for. These roots merit exploration. History also has its share of intellectual puzzles: Why were the Céide fields abandoned four thousand years ago? Why was economic growth in the 1950s so anaemic? How did per capita incomes rise faster in Ireland between 1850 and 1920 than anywhere else in Europe? Was the tariff regime of the 1930s a failure?

History debunks. Ideologues of all stripes invoke history to bolster their claims. When John Mitchel argued that 'The Almighty, indeed, sent the potato blight, but the English created the famine' he was revisiting history to support his nationalist position. Marxists turn to the land question as evidence of class conflict. An appreciation of history is essential if one is to make an informed judgement about the solidity of such ideas. Once again, Lee states it well, arguing that 'the modern Irish, contrary to popular impression, have little sense of history. What they have is a sense of grievance, which they choose to dignify by christening it history'. He concludes that 'it is central to my argument that the Irish of the late twentieth century have still to learn how to learn from their recent history'. Although written only a few years ago, this view may already be outdated, prey to what F.S.L. Lyons refers to as the dilemma of the contemporary historian – recent events may still be too close in time to allow for enough historical perspective. On the other hand, there is no such thing as a single correct historical perspective, which is surely the idea behind Oscar Wilde's quip that 'the one duty we owe to history is to rewrite it.'

History instructs policy. Ireland has tried laissez faire (1815–45); import substitution (1930–58); export promotion with foreign direct investment (1958–80). It has had budgetary discipline and chronic deficits, fixed exchange rates and floating, price controls, incomes policies, free trade zones, and public and private enterprise. Out of this varied experience there are lessons. While, in Santayana's famous words, 'those who ignore history are condemned to repeat it', the study of history is not merely to avoid making mistakes, but also to learn what works well and merits copying.

An interesting example of the relevance of history for policy is the 2011 book by Reinhart and Rogoff entitled *This Time is Different: Eight Centuries of Financial Folly*. Their exhaustive review of financial collapses in scores of countries over many decades shows that time and again governments, bankers, and others simply ignored the lessons of the past, rationalising their actions with the thought that no two situations are the same, things had changed, and this time was different. The Irish housing bubble that began in 2000 and collapsed in 2008, bringing down the country's entire banking system, is a case in point.

The Irish case has served as a positive role model too. Ireland's torrid economic growth in the late 1990s interested many in less-developed countries, which too are typically small open economies with a colonial past. Ireland in the twentieth century was a tardy bloomer, and a major theme of this chapter, indeed of this book, is to try to understand why.

History can be misused. Interpretations of history can have real consequences, for good or for bad, because they help form the world view of subsequent generations. George Orwell famously wrote, 'who controls the past controls the future: who controls the present controls the past.' The different versions of history taught in Protestant and Catholic schools in Northern Ireland, for instance, have contributed to an enduring communitarian divide. Nazi teachings on racial purity contributed to the horrors of the holocaust, but Hitler wrote, 'the victor will never be asked if he told the truth.' The antidote to the misuse of history is to inform oneself, to apply an enquiring mind even to received wisdom, in short, to develop some knowledge of history.

The main focus of this chapter is on how Ireland has developed economically. Crotty defines such development as 'a situation where (a) more people are better off than formerly and (b) fewer people are as badly off'. By this yardstick it is necessary to look at population growth, since an economy whose development is accompanied by massive emigration has in some sense failed. This parallels the suggestion of the 1948 Emigration Commission, which proposed that 'a steadily increasing population should occupy a high place among the criteria by which the success of national policy should be judged'.

Economic development also requires that incomes rise (growth), including, or especially, those of the least well off (equality), and this is presumably facilitated by an efficient use of resources (notably full employment).

The starting point, arbitrarily chosen, is 1690, with the consolidation of the Protestant ascendancy. The subsequent years are divided into sub-periods – growth and early industrialisation during 1690 and 1815, rural crisis between 1815 and 1850, the population decline that accompanied increasing prosperity from 1850 to 1921, the intermittent economic development between independence and about 1960, and finally the grand cycle of modern Irish economic growth, hesitation, boom, reverberation, bust, and rebirth stretching over the past half century.

2 FROM BATTLE OF BOYNE TO 1815

Eighteenth Century

At the time of the battle of the Boyne the Irish economy was predominantly rural, although it was no longer a woodland society. Population stood at a little under two million, roughly double the level of a century before, and was growing at an historically high rate of at least half a per cent per year. With the spread of population the forest cover was rapidly disappearing, giving way to both grazing and tillage. The largest town, Dublin, had about 60,000 inhabitants.

The country was an important exporter, especially of grain, beef, butter, wool and, to a lesser extent, linen. Presaging the situation of three centuries later, almost half of all exports went to Continental Europe, notably to France. Earnings from these exports were spent on items such as coal and tobacco, and a surplus on current account amounting to perhaps 10 per cent of exports allowed for the remittance of rents to absentee landlords. Petty, visiting the country in 1672, commented on the large number of people who rode horses, and the high standard of clothing relative to France and most of Europe. He also noted the shabbiness of the houses, of which he reckoned only a fifth had chimneys. The implication was that Ireland was not significantly poorer, and was possibly better off, than most of Continental Europe at that time, although less affluent than most of England.

Income was distributed unevenly. Land was owned by perhaps 10,000 landlords, and six-sevenths of the land was held by Protestants. Much of this was let out to farmers, who in turn frequently sublet small plots to cottiers, or hired casual labour. By one estimate, a little over half of the population constituted a rural proletariat, with minimal access to land and close to the margin of subsistence. The potato had been introduced early in the seventeenth century, but was only an important part of the diet of the poor, although its spread allowed for rapid population growth throughout the eighteenth century.

Growth and Structural Change

The essential features of economic growth during the period 1690 to1815 were a rapid recovery from the war, a period of relative stagnation (1700–20), 25 years of crisis that included two famines (1720–45), and a long wave of sustained and relatively rapid economic growth (1745–1815). The evidence for these is indirect, since few economic statistics were collected at the time, but trade data show a steady increase in exports, with relatively rapid growth between 1740 (£1.2 million) and 1816 (£7.08 million). The structure of exports changed, as shipments of cattle and sheep gave way to beef, butter, grain, and linen.

These changes were driven in part by policy. In 1667 the Cattle Act excluded Irish cattle, sheep, beef and pork from England. The country responded by exporting wool rather than sheep, and by searching for new markets for meat, notably the important provision trade, serving transatlantic ships and the West Indies, and the extensive French market. It also shifted resources from dry cattle to dairying, and butter exports grew rapidly. This process was speeded by the Woollen Acts, passed in 1699, which prohibited the export of wool from Ireland or England to other countries, and imposed a stiff duty on Irish wool entering England. More positively, the granting of duty-free access to England for linen helped that industry.

The significance of English laws for Irish economic growth is a matter of controversy. Writers in the nationalist vein have stressed the ways in which English law handicapped Irish growth, for instance by hampering the development of the woollen industry. However, Cullen has argued that the negative effects were minimal, as producers shifted rapidly and effectively into new lines of production.

The changes in the structure of production during the eighteenth century also occurred in response to an increase in the relative price of agricultural commodities, especially grain. Increasing urbanisation in Britain raised the demand for food, and Ireland was favoured as a source of supply during the Napoleonic wars. The most important effect of this improvement in Ireland's terms of trade (price of exports relative to imports) was to raise the incomes of farmers. Ireland continued to export grain until the late 1860s, when the falling costs of shipping, coupled with the opening up of the American mid-west, brought cheaper grain to Europe.

Agricultural structure was also influenced by the diffusion of the potato. An acre of potatoes could support twice as many people as an acre of grain. Moreover potato cultivation does not reduce soil fertility, and potatoes contain substantial amounts of protein and essential minerals. Cullen argues that as the eighteenth century progressed, cottiers increasingly ate potatoes instead of butter or oats, and sold these instead, using their earnings to buy other goods; thus the shift towards the potato is seen as 'related to commercialisation and the urge to increase cash incomes … for luxuries'.

The expansion of potato cultivation contributed to the dramatic expansion of Ireland's population, from a little more than a million people in 1600 to over eight million by 1841. It was checked briefly by a severe famine in 1740–1, which was caused by a cold summer and led to as many as a quarter of a million deaths. But population growth accelerated after 1750: better nutrition reduced the death rate, and the availability of conacre may have contributed to a reduction in the marriage age. The population rose despite substantial emigration from the northeast, which began early in the eighteenth century, became self-sustaining, and may have been as high as 12,000 annually in the difficult years of the 1770s.

Industry

Industrial change was dominated by the rise of the linen industry, which Cullen calls 'perhaps the most remarkable instance in Europe of an export-based advance in the eighteenth century'. From a low base in the 1690s linen exports rose rapidly, accounting for a quarter of all exports by 1731. The first linen weavers were mainly skilled immigrants, especially Huguenots who fled France after 1685. Duty-free access to the English market helped, and in 1711 the Irish Parliament set up the Linen Board to regulate the industry, spread information, and subsidise projects. Based solidly in the rural areas, an elaborate network of merchants bought the raw linen and undertook the more capital-intensive activities of bleaching and finishing. By the early nineteenth century linen was increasingly spun and woven under the 'putting-out' system; cottiers would be provided with raw materials, and paid in cash for the amount they spun or wove.

Even as late as 1841 an astonishing one person in five stated their occupation as being in textiles, and most of these lived in rural areas. Fully a third of all counties reported in 1821 that more individuals were occupied in 'manufacture, trade and handicrafts' than in agriculture. It has been argued that this type of 'proto-industrialisation' is usually a prelude to full (i.e. factory-based) industrialisation, fostering as it does entrepreneurial skills, monetisation of the economy, and commercial links. In the Irish case no such evolution occurred, although it is not clear why.

Other industries also expanded and modernised, notably those based on the processing of agricultural products, such as brewing, flour milling, and distilling. After 1800 the cotton industry flourished, albeit relatively briefly.

It is important to realise that the industrial revolution did in fact come to Ireland, initially. The organisation of many industries was radically changed, with the establishment of breweries, textile factories, and glass works large enough to reap economies of scale. At first these factories were located where water power was available, but steam power was introduced early too. In the eighteenth century the road network was greatly improved and expanded, at first by private turnpikes and later by local government (the 'Grand Juries'). The first canals were built.

By 1785 Pitt and others saw Ireland as a viable competitor to English industry. But by 1800 this was not the view in Ireland, and it is ironic that the areas that most favoured union were Cork and the south, with their strong agricultural base; opposition was strongest in Dublin and the north.

Distribution of Income and Wealth

The benefits of economic growth in the late eighteenth century were not spread equally. The most evident rift was that between landowners and the large rural proletariat. Rents of a third of the gross output were probably normal. In 1687 Petty estimated rent payments at £1.2 million, of which £0.1 million was remitted to absentee landlords abroad. Rents thus came to approximately double the level of exports, or almost as much as a quarter of national income. It was this surplus, and tithes paid to the Church of Ireland, that financed the magnificent country houses, churches, Dublin squares, university buildings, paintings and follies that stand as monuments to the eighteenth century.

Most farmers were tenants of large landlords, and in turn rented land out to cottiers. Frequently such plots were confined to conacre (potato land), whose quality improved as they were planted in potatoes. Cottiers also performed work for the farmers to which they were attached. Labourers did not have even the security implied by access to a plot of land. The position of these groups did not improve in the 50 years prior to 1745. There then appears to have been a period of rising real wages, which probably stopped in the 1770s, and may never have resumed.

A second divide was between Catholic and Protestant. The Penal Laws placed restrictions on the right of Catholics to purchase land, to worship, to run schools, to vote, to take public office, to enter the professions, to take long leases, and to bequeath property. Barred from the professions and politics, able Catholics often turned their energies towards commerce, and the expansion of trade helped create a significant Catholic middle class. By 1800 the wealthiest Dubliner was Edward Byrne, a Catholic businessman. Presbyterians and Quakers, faced with similar restrictions, also turned to commerce and industry, with some success. Over time most of the restrictions were removed or fell into disuse, and by 1793 Catholics could vote and attend Trinity College, but could not stand for office or fill certain government positions. At times the friction boiled over, as reflected in the strong sectarian component of the insurrection of 1798.

The third divide was between town and country. Dublin grew to be the second town of the UK by 1800, with a population of about 200,000. Cork, basing its role on the profitable provision trade, had 80,000 inhabitants, or approximately the same population as a century later. Third came Limerick, with a population of 20,000; Belfast was still a minor town. That the country was able to support such a significant urban population, and to export increasing quantities of food, reflected a growing agricultural surplus and rising agricultural productivity.

3 FROM 1815 TO INDEPENDENCE

1815 to 1850

The period 1815 to 1850 was one of rural crisis, culminating in the disaster of the Famine. The crisis was reflected in rising emigration. This was also the period when Ireland most clearly failed to participate in the Industrial Revolution that was then in full spate in Britain.

The census of 1841 enumerated 8.2 million people in Ireland, a higher level than any measured before or since, and over half the level of Britain. Since 1750 the population had risen at an average rate of 1.3 per cent per year, which was well above the annual rates recorded in England (+1 per cent) or France (+0.4 per cent).

Yet by the 1830s the growth rate had fallen to 0.6 per cent, due almost entirely to massive emigration, mainly to North America; the Irish accounted for a third of the free transatlantic migration of the period. Without emigration, the pre-Famine population would have grown at a rapid 1.7 per cent per annum, due in part to a very high rate of marital fertility. Life expectancy at birth was 37–38 years, lower than in Britain or Scandinavia, but higher than in most of the rest of Europe.

Living Standards

On the eve of the Famine, Ireland was one of the poorest countries in Europe, as the comparative figures in Table 1.1 show. Per capita income was about 40 per cent of the British level, and contemporary visitors were particularly struck by the shabbiness of clothing and the poor state of rural houses.

Yet if the country was poor, it was also well fed, on grain, potatoes and dairy products. Peter Solar estimates that in the early 1840s potatoes and grain alone provided a substantial 2,500 calories per person for direct consumption,

Table 1.1 Real Product per Capita (UK=100)

	(1) 1830	(2) 1913	(3) 1950	(4) 1992	Population growth (%) 1919–92
UK	100	100	100	100	31[1]
Ireland (South)	40[2]	53[3]	51	73	13
Ireland (North)	–	58	68	–	27[5]
US	65	119	170	142	–
Denmark	61	80	99	112	57
Finland	51	47	66	96	60
Greece	39[4]	26	27	52	109
Italy	65	49	53	102	60
Portugal	68	22	23	61	54
EU-15	–	–	69	102	–

Sources: Adapted by author from: K. Kennedy, T. Giblin and D. McHugh, *The Economic Development of Ireland in the Twentieth Century,* Routledge, London 1988, pp.14–15; J. Lee, *Ireland 1912–1985,* Cambridge University Press, Cambridge 1989; and R. Summers and A. Heston, *Penn World Tables Version 5.1*, National Bureau of Economic Research, Cambridge MA 1995.

[1] GB only. [2] 1841, all Ireland. [3] 1926. [4] 1841. [5] 1984.

two-thirds of it from potatoes. Observers at the time generally thought that the Irish were healthy and strong; they grew taller than the typical Englishman or Belgian. Also compensating for low incomes was the wide availability of cheap fuel, in the form of peat.

Industry and Agriculture

It has become common to consider the 1815 to 1850 period as one of 'deindustrialisation', during which the importance of industry in the economy fell. This is only partly correct. For the island as a whole, industrial output appears to have increased. Large-scale and more efficient production methods were applied to milling, brewing, shipbuilding, rope-making and the manufacture of linen, iron, paper and glass; the road system was improved and reached a good standard; banks were organised along joint-stock lines. But rural industry declined. Thus, for instance, while Bandon boasted over 1,500 handloom weavers in 1829, the number had shrunk to 150 by 1839.

The first cause of rural deindustrialisation was that the woollen and cotton industries wilted in the face of competition from Britain. This prompted Karl Marx to write that, 'what the Irish need is … protective tariffs against England'. On the other hand Ireland was not denuded of purchasing power or exports, for otherwise it could not have afforded to buy British textiles.

A second blow to rural industry was the invention of a method for mechanically spinning flax, which made hand-spinning redundant. It also led to a concentration of the linen industry in the north-east. The weaving of linen was still done by hand, and was boosted by the development. In 1841 Armagh was the most densely populated county in Ireland, testimony to the importance of cottage-based textiles as a source of income.

Despite the rapid fall in prices after 1815, agricultural exports continued to rise, notably livestock and butter and, most dramatically, grain and flour. By the 1830s Ireland exported enough grain to feed about two million people annually, testimony to the dynamism of the agricultural sector, which increasingly used new technologies such as improved seeds, crop rotations, better ploughs, and carts.

The Famine

The most traumatic event of the period was the Famine. After a wet summer, potato blight arrived in September 1845 and spread over almost half the country, especially the east. Famine was largely avoided at first, thanks largely to adequate government relief. But the potato crop failed completely in 1846, and by December about half a million people were working on relief works, at which stage they were ended. The winter was harsh. By August 1847 an estimated three million people were being supported by soup kitchens, including almost three-quarters of the population of some western counties. The 1847 harvest was not severely harmed, but it was small because of a lack of seed. The blight returned in 1848, and in 1849 over 900,000 people were in the workhouses at some time or another. After 1847 the responsibility for supporting the poor had increasingly been shifted from the government to the local landowners who, by and large, did not have sufficient resources to cope. Noting that a few years later Britain spent £69 million on the (futile) Crimean war, Mokyr argues that for half this sum 'there is no doubt that Britain could have saved Ireland'. It is also unlikely that an independent Ireland, with a GNP of £85 million, could have done so without outside support.

As a direct result of the Famine about one million people died, representing an excess mortality of about 3 per cent per annum during the famine years (and 4 per cent in the north-western counties). Ireland was not the only country hit by the potato blight – excess mortality was comparable in the Scottish Highlands, and the excess mortality rates were 2 per cent in the Netherlands and 1 per cent in Belgium – but given its high dependence on the potato, Ireland was especially vulnerable, particularly its poorer and remoter districts. Three-fifths of those who died were young (under 10) or old (over 60), and labourers and small farmers were hit most severely. These unequal effects have led Cullen to argue, controversially, that 'the Famine was less a national disaster than a social and regional one'.

In the course of the Famine, the output of potatoes fell by about three-quarters, the use of potatoes for animal fodder ceased, and food imports rose very rapidly. As a result the amount of calories available for direct consumption barely fell, on a per capita basis. This gives credence to Amartya Sen's contention that famines are rarely caused by an absolute lack of food, but rather by a change in the food entitlements of major groups in society. So, for instance, labourers were unable to find employment when blight reduced the need for harvesting and planting potatoes; without income they could not buy food, and so became destitute.

Distribution

Pre-Famine Ireland probably had a ‘very unequal distribution of income by West European standards’. According to the 1841 census, 63 per cent of the population had access to less than five acres of land, or were ‘without capital, in either money, land or acquired knowledge’. Just 3 per cent were professionals and rentiers, and included the approximately 10,000 proprietors, or 0.12 per cent of the population, who owned at least 100 acres.

Rent, including payments in kind, accounted for about £15 million, or almost a fifth of the national income of £80 million. Presumably the bulk of this rent accrued to the wealthiest 3 per cent or so of the population, implying a very great degree of income inequality. Rough calculations suggest that this group probably had per capita incomes averaging over £100 per annum, compared to a national average of £10, and an estimated £4 for poor households.

By 1845 a rudimentary welfare structure was in place, with the completion of 130 workhouses having a total capacity of 100,000. In practice the numbers living in the workhouses rarely exceeded 40,000, except during the Famine.

There is no shortage of hypotheses as to why Ireland remained poor, and hence uniquely vulnerable by European standards to the chance failure of the potato crop. Thomas Malthus, writing in 1817, considered that population growth was running ahead of food production; however, the more densely-settled countries were not necessarily the poorest ones. Other writers blamed the insecurity of tenancy for low agricultural investment, although it is not clear how insecure tenancies really were. Some have pointed to agrarian violence, or the lack of coal deposits, or inadequate financial capital, or insufficient human resources (especially entrepreneurs), as barriers to economic development. None of these explanations is waterproof, and Ó Gráda wrote recently that ‘exactly why comparative advantage dictated industrial decline for Ireland is still unclear’.

Fewer but Richer: 1850 to 1921

The 70 years following the famine witnessed enormous changes in Irish society and saw the emergence of the modern economy. Over this period per capita incomes more than doubled, and came closer to the British level, while the population fell by a third. A rural middle class emerged, replacing the landlords and squeezing out the rural labourers. Within agriculture, tillage declined, and the production of dry cattle increased. The north-east became industrialised.

The dominant demographic fact of the period is that population declined, from 6.6 million in 1851 to 4.2 million by 1926. Without emigration the population would have risen, by about 1 per cent annually in the 1860s, and by 0.5 per cent annually at the turn of the century, a decline largely explained by a falling marriage rate. Almost 2 per cent of the population left annually in the 1850s; the pace slowed markedly to less than 1 per cent after 1900. The early emigrants were drawn from all areas of the country, but in later years the bulk of the emigrants came from the poorer, mainly western, districts. Over the period 1820 to 1945 an estimated 4.5 million Irish emigrated to the USA, comparable in magnitude to the flows from Italy, Austria and Britain.

Living Standards

Astonishingly, between 1840 and 1913 per capita incomes in Ireland rose at 1.6 per cent per year, faster than any other country in Europe. Where Irish incomes averaged 40 per cent of the British level in 1840, this proportion had risen to 60 per cent by 1913. During this period Irish incomes came from behind, and then easily surpassed, those of Finland, Italy and Portugal.

Part of the explanation is statistical. The Famine, and subsequent high levels of emigration, removed a disproportionate number of the very poor; even if those who remained experienced no increase in their incomes, average income would have been higher than before. The poor were more likely to leave because the gap between Irish and foreign wages was greatest for unskilled labour. In 1844 the wages paid to a skilled builder in Dublin were 14 per cent *higher* than in London, but the wages paid to an unskilled building labourer were 36 per cent lower. A comparable gap persisted until at least World War I.

Incomes also rose because of dramatic increases in output per worker. The north-east became highly industrialised; in the rest of the country agricultural productivity rose rapidly. Almost all of the expansion of the modern industrial sector was in the north-east. While linen output increased slowly, it was increasingly concentrated in factories in Belfast and the Lagan valley: between 1850 and 1875 employment in linen mills and factories rose from 21,000 to 60,000 as power weaving replaced the cottage industry.

The manufacture of boilers and textile equipment needed in the mills helped diversify the industrial base, and provided the skills and infrastructure that were important for the growth of shipbuilding. Harland and Wolff, the celebrated firm that built the Titanic, grew from 500 workers in 1861 to 9,000 by 1900. The shipbuilding industry also provided an impetus for other upstream activities, including rope making, paint, and engineering.

Benefiting from 'external economies of foreign trade' – regular trade links with markets and suppliers, and a financial system geared towards supporting such links – Belfast rivalled Dublin in size by 1901, when it had about 400,000 inhabitants. Londonderry became the centre of an important shirt making industry, employing 18,000 full time workers and a further 80,000 cottage workers at its height in 1902.

By 1907, industrial activity in Ireland as a whole employed a fifth of the work force, making the country at least as industrialised as Italy, Spain or Portugal. Half of all industrial output was exported, Ireland had a worldwide reputation in linen, shipbuilding, distilling, brewing and biscuits, and the volume of trade per capita was higher than for Britain.

It is sometimes wondered why Ireland did not become even more industrialised, more like Clydeside than East Anglia. And related to this question, why did the north-east industrialise while by and large the rest of the country did not? Put another way, why did Irish labour emigrate, rather than capital immigrate?

There was no lack of capital, and indeed from the 1880s on Irish residents were net lenders of capital to the rest of the world, investing in British government stock, railways, and other ventures overseas. The banks may have been cautious at lending, but in this they were no different from their counterparts in England, where industrial development was rapid. Nor is there evidence that skills were lacking. The primary school system expanded rapidly, enrolling 282,000 pupils in state-subsidised schools in 1841, and 1,072,000 by 1887. Whereas 53 per cent of the population was illiterate in 1841, this fraction had fallen to 25 per cent by 1881 and 16 per cent by 1901. Enterprise may have been lacking, although clearly not in the Lagan valley. The absence of coal probably had some effect, not because this raised costs of production unduly, but because coal itself was a big business; in 1914 a quarter of the British labour force was directly employed in coal or iron and steel. Ireland was next door to, and had free access to, the world's most affluent market.

Perhaps the explanation rests largely on chance, the idea that once Belfast grew as an industrial centre, accumulating skills, capital and infrastructure, then it became an increasingly attractive location for further investment – an argument that might also be made about the unanticipated growth spurt of the 1990s.

Agriculture

Between 1861 and 1909 gross agricultural output rose by a quarter; since the rural population fell sharply, output per capita in agriculture more than doubled, a solid performance, but less impressive than that of Denmark, where output per male agricultural worker almost quadrupled over the same period.

This growth masks an important change in the structure of agriculture, which shifted from crops to cattle in response to a fall in the price of grain relative to cattle. Tillage, including potatoes, shrunk by two-thirds between 1845 and 1913. Farmers were not, as is sometimes supposed, slow to change or innovate. For instance, when circumstances demanded it they adopted the creamery system rapidly. And exports of eggs – traditionally a source of revenue for farmers' wives – were almost as valuable as cattle: by 1920, after improvements in the varieties of hens, Ireland had become the world's largest exporter of eggs. Faced with changing prices and technology, wrote Hans Stahl, 'the response of the Irish agriculturalist … was rational and normal'.

Distribution

Between 1870 and 1925 the landed proprietors 'surrendered their power and property', to an increasingly 'comfortable, educated, self-confident rural bourgeoisie', thereby effecting one of the most extensive land reforms in history, although it should be noted that a similar land transfer occurred a century earlier in Denmark, and half a century later in Finland, so the Irish case was by no means unique.

As late as 1870, 97 per cent of all land was owned by landlords who rented it out to others to farm. Just 750 families owned 50 per cent of the land in the country. About one landlord in seven lived outside Ireland, and another third lived outside their estates; the remaining half were not absentees. Two-fifths of all landlords were Catholic.

The agricultural crisis of the late 1870s meant lower agricultural prices and this, coupled with fixed rents, squeezed tenant farmers. By now they felt confident enough to agitate for the 'three Fs' – fair rent, fixity of tenure, and free sale of 'tenant right'. Michael Davitt's Land League forged a link with Parnell and the Irish party in parliament. Their efforts resulted in the Land Act of 1881, which established land courts to hear rent appeals. The courts reduced rents by an average of about 20 per cent, and later courts reduced rents by about another 20 per cent after 1887. In a formal sense this diluted the power of the landlord – Moody refers to it as 'dual ownership' – although it is noteworthy that during the same period real rents fell by comparable amounts in England.

Further efforts prompted legislation that provided tenants with government loans with which to purchase their land, including the Ashbourne Act of 1885, and the Wyndham Act of 1903, and paid 12 per cent bonuses to landlords who sold their entire estates. The result was that 'by 1917 almost two-thirds of the tenants had acquired their holdings'.

With rural depopulation, land holdings increased in size. The number of cottiers working less than five acres fell from 300,000 in 1845 to 62,000 by 1910. The same period saw the 'virtual disappearance of the hired labourer from Irish agriculture', as the number of 'farm servants and labourers' fell from 1.3 million in 1841 to 0.3 million in 1911.

The distribution of income can be considered in other dimensions too. Thus, for instance, Protestants maintained their share of national income. This largely reflected the growth of the industrial north-east, which was dominated by Protestant interests, and the fact that Catholics were more likely to emigrate (and more died in the Famine). Catholics did come to fill an increasing proportion of government and professional jobs, although not in proportion to their numbers. The Catholic Church itself grew rapidly, with a spate of church building between 1860 and 1900, and church going became much more common. The number of Catholic priests, nuns and other religious rose from almost 5,000 in 1850 to over 14,000 by 1900, making it one of the fastest growing professions during this period.

The small towns stagnated, and so did Dublin until late in the century. Kevin O'Rourke contrasts the dynamism of Danish agriculture after 1880 with the slow development of Irish agricultural production, particularly dairying, and suggests that the violence associated with Irish land reform, the diversion of talent from the business of farming to the politics of redistribution, and a deficit of community trust in Catholic parts of Ireland, help explain the difference. In contrast to the rest of the country Belfast grew rapidly. The zenith of its prosperity came during and immediately after World War I, with a boom in shipbuilding and engineering; as David Johnson put it, 'in economic terms the last years of the Union were the best ones'.

4 FROM INDEPENDENCE TO 1960

When it finally achieved independence, the Irish Free State could count some important assets. It had an extensive system of communications, a developed banking system, a vigorous wholesale and retail network, an efficient and honest administration, universal literacy, a large stock of houses, schools and hospitals, 3.1 million people, and enormous external assets. By the standards of most of the world's countries Ireland was well off indeed.

On the other hand the new state faced some serious problems. It had to establish a new government, the civil war had been destructive and had helped prompt 88,000 people to emigrate in 1921–22, the dependency ratio was high – Catholics marrying before 1916 had an average of 6.0 children per family – and the post-war boom had run its course. We now document its subsequent achievements, and evaluate its early performance as an independent country.

1921 to 1932: Agriculture First

The growth model pursued by the Cumann na nGaedheal government was based on the premise that what was good for agriculture was good for the country. Patrick Hogan, the Minister for Agriculture, saw the policy as one of 'helping the farmer who helped himself and letting the rest go to the devil'. This emphasis on agriculture was not surprising. In 1926 agriculture generated 32 per cent of GDP and provided 54 per cent of all employment. The government relied heavily on the support of the larger farmers. The expectation was that not only would agricultural growth raise the demand for goods and services from the rest of the economy, but would also provide more inputs on which to base a more substantial processing sector. The three major industrial exporting sectors at the time – brewing, distilling, and biscuit making – were all closely linked with agriculture.

The essential elements of the policy, which has come to be known as the 'treasury view', were free trade, low taxes and government spending, modest direct state intervention in industry and agriculture, and parity with sterling. Free trade was seen as essential if the cost of farm inputs was to be kept low.

The support for free trade was perhaps surprising given that Griffith had argued that one of the main benefits of independence would be that the country could grant protection to infant industries. On the other hand the government was cautious about making such changes, perhaps for fear of upsetting the financial community, whose opposition to protection was well known, or perhaps because they were, in the words of Kevin O'Higgins, 'the most conservative revolutionaries in history'. The government sought to deflect pressure for stiffer protection by establishing the Tariff Commission in 1926, and appointing members who were, in the main, in favour of free trade. The onus of proof was on any industry wishing to be protected, and the Commission moved slowly on requests, granting few tariffs other than on rosary beads and margarine.

Government spending was kept low, the budget was essentially balanced, and revenues came to just 15 per cent of GNP in 1931. This was a remarkable achievement, given that military spending had trebled during the civil war. One serious consequence was that welfare spending remained low, and in the absence of major government assistance, housing for the less well-off remained scarce.

Ideologically the government did not favour taking a very active role in promoting economic development. Despite this it intervened pragmatically in several ways. The Department of Agriculture was greatly expanded, although the impact of this on agricultural output has been questioned. The Congested Districts Board was replaced by the Land Commission, which transferred 3.6 million acres, involving 117,000 holdings, to annuity-paying freeholders during the period 1923 to 1937. Laws were passed to improve the quality of agricultural output, by regulating the marketing of dairy produce (1924) and improving the quality of livestock breeding by registering bulls (1925). The Agricultural Credit Corporation (ACC) was set up to provide credit to farmers. The government subsidised a Belgian company to establish a sugar factory in Carlow, and provided incentives to grow sugar beet.

A major innovation was the establishment of the Electricity Supply Board (ESB) in 1927. This, along with the ACC, represented the first of the state-sponsored bodies (SSBs) that were established during the ensuing years. The ESB successfully undertook the Ardnacrusha hydroelectric scheme – when it came on line in 1927 it was the largest hydroelectric plant in the world, and by 1935 it provided 80 per cent of the country's electricity. The completion of the project, boosted the country's prestige, and was the most visible accomplishment of the first decade of independence.

In due course state-sponsored bodies were set up in many fields, including air, train and bus transport, industrial credit, insurance, peat development, trade promotion, and industrial development. By the early 1960s, when the most important of these bodies had been established, they employed about 50,000 people, representing about 7 per cent of the total labour force. The SSBs were not the outgrowth of any particular ideology, but were rather 'individual responses to specific situations'. This, along with their ability to attract good managers, may help explain why they are generally considered to have been successful agents of economic development, especially in the first few decades after independence, when the private sector did not appear to be very enterprising.

Parity with sterling was the final ingredient in the development model pursued. Few countries at the time had floating exchange rates, and it seemed logical to peg the pound to sterling since 97 per cent of exports went to, and 76 per cent of imports came from, Britain. The Currency Act of 1927 established an Irish currency, fully backed by British sterling securities; until 1961 Irish banknotes were inscribed 'payable in London'. By linking the currency with sterling, the Free State gave up the possibility of any independent monetary policy, in return for greater predictability in trade with Britain and lower transaction costs.

The economic policy of the Free State in the 1920s was similar to the typical prescription given by the World Bank to less-developed countries in the 1980s: get the prices right, using world prices as a guide, reduce budget deficits, keep government 'interference' to a minimum, and follow a conservative monetary policy. Did it work?

The simple answer is 'in the circumstances, yes in most respects, eventually'. The young nation got off to a rocky start. Between 1920 and 1924 agricultural prices fell 44 per cent; the civil war, which only ended in 1923, arrested investment; after independence, a significant proportion of the skilled labour force left; and the recession in the UK after sterling's return to the gold standard in 1925 reduced the demand for Irish exports. However, between 1926 and 1931 real per capita GNP rose about 3 per cent per annum; exports rose 20 per cent, reaching a peak of 35 per cent of GNP in 1929, and a volume that was not exceeded until 1960. Industrial employment rose by 8 per cent.

1932 to 1939: Self-sufficiency, Economic War and Depression

Fianna Fáil came to power in early 1932, with an economic policy that differed in two fundamental ways from its predecessor; it was ideologically committed to a policy of greater economic self-sufficiency, and it reneged on paying land annuities to Britain. It also came to power during the darkest hour of the Depression, a time when most countries were erecting tariff barriers.

Why self-sufficiency? The case for limiting economic interactions with the rest of the world is more cultural than economic, but it attracted some intellectual support. John Maynard Keynes, lecturing at UCD in April 1933, said, 'I sympathize with those who would minimize … economic entanglement between nations. … But let goods be homespun whenever it is reasonable and conveniently possible'. Perhaps these oft-quoted remarks are out of context, for he went on to argue that only 'a very modest measure of self-sufficiency' would be feasible without 'a disastrous reduction in a standard of life which is already none too high'.

How self-sufficiency? The main instrument used was more and higher tariffs, which rose to a maximum of 45 per cent in 1936, dipping to 35 per cent by 1938. In Europe only Germany and Spain had higher levels by then; Irish tariffs were twice as high as in the US, and 50 per cent higher than in the UK. They were introduced piecemeal and so formed an untidy pattern that, in FitzGerald's view, had 'no rational basis'; Meenan considers that they fell more heavily on finished goods, and so provided an incentive for domestic assembly using imported raw materials. The pursuit of self-sufficiency would justify indefinite tariff protection; in this it differs from the views of Griffith, who saw a role for temporary protection to encourage infant industries to take root.

Self-sufficiency was also pursued by introducing price supports for wheat, which was instrumental in raising the acreage planted to wheat from 8,000 hectares in 1931 to 103,000 by 1936. Somewhat inconsistently, bounties were paid for exports of cattle, butter, bacon and other agricultural products in order to expand the volume of exports, and this resulted in a significant rise in the share of government spending in national income. To foster Irish involvement in industry the Control of Manufactures Act (1932) required majority Irish ownership, although in practice exceptions were usually granted upon request. The Industrial

Credit Corporation was set up to lend to industry, and issued £6.5 million in its first four years of operation.

It is difficult to assess the effect of the policy of self-sufficiency because it became inextricably tangled with the effects of the economic war. Previous Irish governments had recognised an obligation to pay land annuities to Britain, to cover the cost of money lent under the various pre-independence land acts. These came to about £5 million annually, or about one-fifth of government spending and almost 4 per cent of GNP.

On coming to office in March 1932, de Valera refused to continue the annuities. In July Britain retaliated by imposing special duties, initially at 20 per cent and later at 40 per cent, on imports of livestock, dairy products and meat, and also imposed quotas, including halving the number of cattle permitted to enter the UK. The Free State countered with tariffs on British goods, including cement and coal – surprising choices for a country bent on industrialisation. After these escalations tempers cooled.

Under the Cattle-Coal pacts Irish cattle had easier access to Britain, and Ireland agreed to buy British coal. Initially approved for 1935, the pact was extended and renewed in 1936 and 1937, and the Anglo-Irish Trade Agreement ended the 'war', with Ireland agreeing to pay a lump sum of £10 million and Britain ceding control of the 'treaty ports'. Given that the capitalised value of the annuities was close to £100 million, this was considered to be a major diplomatic and economic victory for de Valera.

The combined effects of protection and the economic war were initially dramatic. Industrial output rose 40 per cent between 1931 and 1936. Population stabilised, standing at 2.93 million in 1931 and 2.94 million in 1938 – the first period since the Famine when there had not been a substantial decline – but the amount of unemployment soared, almost quintupling between 1931 and 1934 to about 14 per cent of the labour force by 1935. In large part this reflected reduced opportunities to emigrate to the United States. Despite rapid industrial growth, agriculture stagnated, as exports fell sharply. Where exports and imports together amounted to 75 per cent of GNP in 1926, they constituted 54 per cent in 1938, although this decline pales beside the two-third reduction in trade that the US faced in the early 1930s. The existing manufacturing export industries also suffered some decline. By 1936 import-substituting industrialisation had run its course, and industrial output only rose a further 4.5 per cent between 1936 and 1938. It is widely accepted that the slow growth of the economy in the 1950s was largely because of the inefficiency of the industrial sector that developed during the 1930s.

One other event of this period merits a brief discussion. With the onset of the Depression, Britain erected tariffs on a wide range of items, including beer. This prompted Guinness to establish a brewery at Park Lane near London. Beer had been Ireland's single most important industrial export, and brewing had accounted for 30 per cent of manufacturing value added in 1926. Once the Park Lane brewery was established, there was little incentive to return to the earlier pattern of concentrating Guinness's production in Dublin. In this case British tariffs led to the establishment of an efficient new factory in England, at the expense of Ireland. It is possible that some Irish tariffs did the same in the other direction, although with a smaller internal market it is less likely to have been common. Using tariffs to promote investment and industry in this way has come under increasing scrutiny by economists in recent years, under the rubric of strategic trade policy.

Historical Debate: Was the Drive for Self-sufficiency a Mistake?

Joseph Johnston, writing in 1951, argued that but for the economic war 'our real National Income might well have been 25 per cent more in 1939 than it actually was and 25 per cent more today than it actually is. … The process of cutting off one's nose to spite one's face is sometimes good politics, but always bad economics'. He might have noted that between 1931 and 1938 Irish GNP rose about 10 per cent, compared to 18 per cent in less-protectionist Britain. He might also have questioned how many industrial jobs were really created, noting that while the 1936 census enumerated 199,000 individuals 'involved in industrial occupations', this was only 11,000 higher than the number enumerated in 1926.

Johnston's estimate of a 25 per cent decline has been sharply questioned. Recent research, which tries to recreate what might plausibly have happened in the absence of tariffs, by constructing a computable general equilibrium counterfactual, suggests that the total cost of protection might have been 5 per cent of GNP per year, or £7–8 million annually during the late 1930s, of which perhaps two-thirds is attributable to the economic war. Against this, Ireland gained the treaty ports and received a £90 million write-off on its foreign debt. The expansion of the industrial sector may have provided experience in business management, which was valuable in later years.

Having built high tariff barriers, Ireland was slow to reduce them later, and the average rate of effective protection of manufacturing was still an exceptionally high 80 per cent in 1966. If some of the economic sluggishness of the 1950s was the result, then the protection of the 1930s may appear more damaging; perhaps had Johnston been writing in 1960 he would have been closer to the truth. One may also wonder whether a policy of more selective protection, perhaps along the lines favoured by Taiwan or South Korea, might not have proven more valuable.

1939 to 1950: The War and Rebound

The most important economic result of World War II was that it opened a wide gap between Northern Ireland and the Republic. Between 1938 and 1947 national income grew just 14 per cent, compared to 47 per cent in the UK and 84 per cent in Northern Ireland. Where incomes, north and south, were broadly comparable before the war, by 1947 incomes per head in the Republic had fallen to about 40 per cent of the British level, while in the north they had risen to close to 70 per cent. Why did the south perform so poorly?

Between 1938 and 1943 the volume of exports fell by a half, and imports fell even more. During this period industrial output fell 27 per cent, and industrial employment dropped from 167,000 to 144,000. The main reason was the scarcity of raw material inputs for industry, and the shortage of shipping capacity. Completely reliant on outside shippers until 1941, the government founded Irish Shipping, and moved rapidly to purchase ships, which soon proved their worth. Because of the difficulty of obtaining imports, the country built up significant foreign reserves, and by 1946 residents had external assets totalling £260 million, approximately equivalent to GNP in that year.

The total value of agricultural output fell during the war period, but net agricultural output, (i.e. total output less the cost of non-labour inputs), rose, by 17 per cent between 1938–39 and 1945. This reflected the drastic fall in the use of fertiliser and other inputs, and is generally acknowledged to have exhausted the soil significantly. The structure of agriculture changed, as the area planted in grain and potatoes almost doubled, due in part to the introduction of compulsory tillage.

During the war real GNP fell, especially initially. Living standards fell further as households, unable to find the goods they wanted, were obliged to save more. The stock of capital in industry became run-down. With emigration to the US blocked, population rose, by 18,000 between 1938 and 1946. The unemployment rate stood at over 15 per cent in 1939 and 1940, but declined thereafter to a little over 10 per cent in 1945. The decrease was due to a sharp rise in migration to Britain, reaching near record levels in 1942, as people left to work in factories and enrol in the armed forces.

The war was followed by a rebound, and per capita real GDP rose by 4.1 per cent per annum between 1944 and 1950. This occurred despite the fact that agricultural output stagnated, with gross volume falling between 1945 and 1950, and net output shrinking by 5 per cent. Not surprisingly, 70,000 people left agriculture between 1946 and 1951; yet during this period the unemployment rate fell and population increased. Much of this is attributable to the expansion of industrial production, which more than doubled during the same period.

Government spending rose rapidly in the early war years as the army was increased from 7,500 to 38,000 men. After the war, government spending grew far faster than national income, increasing its share of GNP from 23 per cent in 1945 to 39 per cent by 1951. In large measure this increase occurred as Ireland sought to emulate the 'social investment' of the Labour Party in Britain, by expanding welfare spending.

1950 to 1958: Decline or Rebirth?

It had become standard to consider the 1950s as a period of stagnation and failure. This is a half-truth. Between 1951 and 1958 GDP rose by less than 1 per cent per year. Employment fell by 12 per cent, and the unemployment rate rose. Irish GDP/capita fell from 75 per cent to 60 per cent of the EU average. Half a million people emigrated. Yet between 1950 and 1960 real product per capita grew at 2.2 per cent per year, possibly the fastest rate recorded up to then, and industrial output expanded at 2.8 per cent per annum. Output per farmer grew at a respectable 3.4 per cent per year. Rural electrification spread, and the housing stock improved appreciably. Was the glass half full or half empty?

The key to understanding the 1950s is to note that this was the decade when Europe rebounded; Ireland's performance looks disappointing only by the standards of neighbouring countries, not by historical standards. Much of the emigration reflected the lure of improving wages elsewhere, notably in Britain.

Why did output not grow faster in the 1950s? FitzGerald believes that the key problem was a 'failure to reorientate industry to export markets', considering that 'the naïveté of the philosophy that underlay the whole protection policy was not exposed until the process of introducing protection had come to an end'. By the 1950s Irish industry was supplying as much of the domestic market as it reasonably could, and in order to expand had no option but to seek markets overseas. But since much of the industrial sector could only survive because of protection, it was too inefficient to export successfully, although it was certainly strong enough to lobby against any liberalisation.

To help provide incentives to industries to switch to exporting, export profits tax relief was provided in 1956, and in 1958 the Industrial Development Authority (IDA), which had been set up in 1949, was granted more powers to provide tax holidays for export-oriented companies. The Shannon Free Airport Development Company was set up in 1959.

One might better view the 1950s as a period of transition rather than one of failure, much as it was in Taiwan and South Korea. It has been argued that the economy was in fact in the process of re-orientating itself towards export markets, but that any such change was bound to be slow. As J.J. McElligott put it in the 1920s, when warning of the dangers of protection, 'to revert to free trade from a protectionist regime is almost an economic impossibility'. Exports of manufactured goods rose quite rapidly, accounting for 6 per cent of all exports in 1950 but 17 per cent by 1960. Dramatic as this change was, the increase was from a very low base, and the export sector simply was not large enough to be a potent engine of growth.

An entirely different explanation comes from Kennedy and Dowling, who state baldly that 'the chief factor seems to us to be the failure to secure a satisfactory rate of expansion in aggregate demand', most notably unduly restrictive (in their view) fiscal policy in response to the balance of payment crises of 1951 and 1955. This argument provides an intellectual underpinning for the highly expansionary, and ultimately disastrous, fiscal policy experiment of the late 1970s and early 1980s.

Whatever the causes, the poor overall economic performance created a feeling of pessimism, and this in turn probably deterred investors. As T.K. Whitaker, then secretary of the Department of Finance, put it, 'the mood of despondency was palpable'. In 1958, at the request of the government, he wrote the report *Economic Development*, best remembered now for the optimistic note that it struck in pessimistic times. The report proposed that tariffs should be dismantled unless a clear infant industry case existed, favoured incentives to stimulate private industrial investment, and proposed expanded spending on agriculture. On the other hand it warned against the dampening effects of high taxes. With such measures, it suggested, GNP could grow 2 per cent annually, although it stressed that this was not a firm target. These measures were incorporated in the First Programme for Economic Expansion which appeared in November 1958, but generally not implemented.

Economic growth during the period of the first plan exceeded anyone's wildest expectations, reaching 4 per cent per annum instead of the anticipated 2 per cent. At the time much of this increase was attributed directly to the impact of the First Programme, and support for such indicative planning increased. The Second Programme, introduced in 1963 and designed to run to 1970, was far more detailed and ambitious, forecasting an annual increase in GNP of 4 per cent per annum; industry was to expand 50 per cent and exports 75 per cent during the plan period. When it appeared that these targets would not quite be met, the Second Programme was allowed to lapse. A Third Programme was produced, but quickly sank into oblivion, along with most of the enthusiasm for indicative planning.

5 SINCE 1960

Between 1960 and 2014, Ireland's real GDP grew at an annual rate of 4.4 per cent. This sustained effort increased output tenfold, and saw Ireland catch up economically with even the richest countries of Western Europe. Over the same period the population rose from 2.8 million to 4.6 million, propelled both by a high natural rate of increase, and net in-migration of over half a million between 1995 and 2009.

The experience of economic growth over this half century is summarised in Figure 1.1, where the dark horizontal line indicates the average growth rate. One is struck by the variability in the GDP growth rate from one year to the next, and by the rarity of recession. Although real GDP fell slightly in 1983 and 1986, there was no modern precedent for the sharp recession of 2008–09. After those lean years there is now a robust recovery.

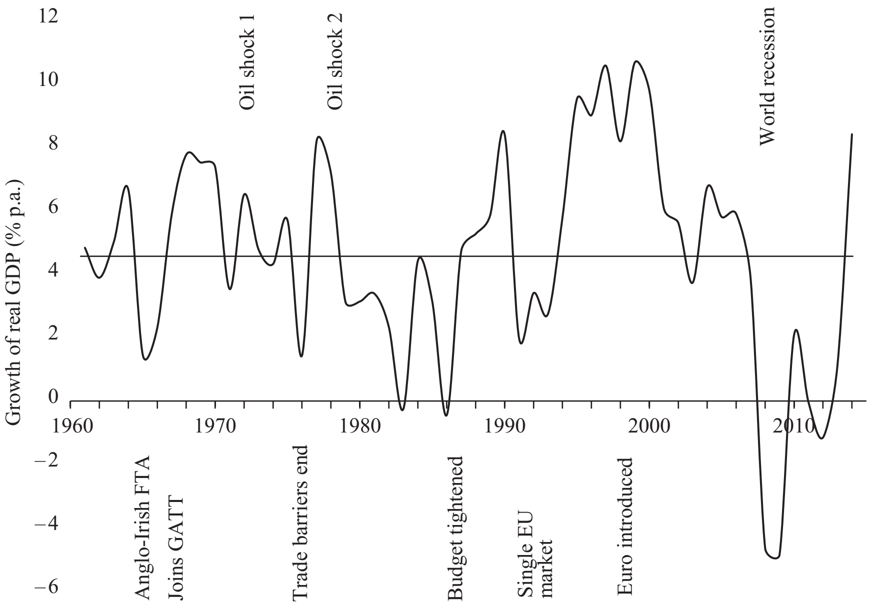
There is more to be said about the pattern shown in Figure 1.1, which we now discuss in more manageable chronological pieces.

1960 to 1979: From Protection to Free Trade

Between 1960 and 1979 real output increased at 4.4 per cent per annum, the highest rate sustained until then. In-migration exceeded out-migration, contributing to population growth. Per capita incomes rose by 125 per cent, kept up with income growth elsewhere in Europe, and significantly outpaced growth in Britain or Northern Ireland.

This first wave of substantial economic growth has been largely attributed to the strategy of export-led growth that the government, heeding the recommendations of *Economic Development*, pursued; less publicised, but important nonetheless, were a notable improvement in the terms of trade (39 per cent better in 1973 than in 1957), expansionary fiscal policy, the boom in the nearby European economy, and the fact that solid institutional foundations had been laid in the 1950s.

Figure 1.1 Irish GDP growth, 1960–2014



Source: Constructed with World Bank data from: *World Development Indicators,* http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators [accessed February 2017].

The policy of export-led growth stood on two legs – trade liberalisation, and the attraction of foreign direct investment. Trade liberalisation called for reducing tariffs; these, by making inputs dearer and by drawing resources away from other sectors of the economy had worked to inhibit exports. Foreign investment, it was hoped, would bring new skills to the country, and help raise the overall investment, and hence growth, rate.

Trade liberalisation was begun in the 1960s as Ireland unilaterally cut tariffs in 1963 and 1964, negotiated the Anglo-Irish Free Trade Area Agreement in 1965, and subscribed to the General Agreement on Tariffs and Trade (GATT) in 1967. These moves also prepared for eventual membership of the European Economic Community.

With a panoply of tax breaks and subsidies, Ireland successfully, although at considerable expense, induced foreign companies to set up branches in Ireland, and by 1974 new industry accounted for over 60 per cent of industrial output. The 10 per cent tax on profits in manufacturing also made the country something of a tax haven, although it did require at least a fig leaf of manufacturing presence.

The final thrust of government policy was wage restraint, viewed as necessary, especially with a fixed exchange rate, to help keep industrial costs at a competitive level. In the 1960s government efforts amounted to exhortation, while in the 1970s wage bargaining was centralised under the National Wage Agreements. Given the option of emigration, the scope for manoeuvre here was small. If real wages were pushed below the British level they would simply stimulate faster emigration, and so could not be sustained.

Into Europe

In 1973 Ireland, along with the UK and Denmark, joined the European Economic Community (now the EU).

Membership immediately led to a reduction in trade barriers. The EU was founded as a customs union, with low internal barriers to trade and a common set of external barriers. By joining, Ireland was committed to trading freely with the other member countries, and by 1977 all tariff barriers had been removed. Many of the remaining, less obvious, restraints on trade within the European Union were dismantled as part of the effort to create a Single European Market. Officially these changes came into effect in 1992, although the full elimination of barriers remains a work in progress.

With lower trade barriers, it was recognised that some of Ireland's industry would wither under the competition, but it was also expected that Ireland would become a good platform from which companies from outside the European Community could serve the European market.

These expectations were met. While Irish exports amounted to 34 per cent of GDP in 1963, and 38 per cent in 1973, the proportion had risen to 94 per cent by 2002, one of the highest in the world. This burst of exports paralleled a similar increase in intra-EU trade that took place in the 1960s, and shows how even small reductions in the cost of trading can have a large impact on the volume of trade.

Membership of the EU also led to a net inflow under the Common Agricultural Policy (CAP), which subsidises farm prices. Higher farm prices help farmers at the expense of consumers, but as a net exporter of farm produce, Ireland was on balance a beneficiary.

Although the bulk of EU transfers to Ireland are farm-related, part consist of transfers from the 'structural funds,' including the Regional Development, Social, and Cohesion funds. In principle these funds might have added to investment and thereby boosted economic growth, but in practice they mainly appeared to have substituted for projects that the government would otherwise have had to finance; they thus made a more important contribution to living standards than to growth. Since 1973, gross receipts from the EU have exceeded €50 billion; net receipts peaked at 6.5 per cent of GDP in 1991, but by 2014 Ireland had become a net contributor to the EU budget, receiving €1.52 billion (of which 80 per cent went to farmers) and paying €1.69 billion.

1979 to 1986: Growth Interrupted

Between 1979 and 1986, per capita consumption in Ireland actually fell slightly and GDP rose very slowly. What went wrong?

Membership of the EU coincided with a fourfold increase in the price of oil (from \$3 to \$12 per barrel) that resulted from the first oil shock in late 1973; a sharp worldwide recession followed.

The government's response was thoroughly Keynesian. The higher price of oil meant that spending was diverted towards imports, thereby depressing aggregate demand for Irish goods and services. The solution adopted was to boost government current spending, and as a consequence the current budget deficit rose from 0.4 per cent of GDP in 1973 to 6.8 per cent by 1975. For a while the policy worked: despite a difficult international situation, GDP growth during the first six years of EU membership was robust.

Then came the mistake, the source of the failure of the fiscal experiment: successive governments were unwilling to reduce the budget deficit, and continued to borrow heavily, so the ratio of government debt to GDP rose from 52 per cent in 1973 to 129 per cent by 1987, by then easily the highest in the European Union. By 1986 the cost of servicing this debt took up 94 per cent of all revenue from the personal income tax. Although efforts were made to solve the problem by raising tax rates, especially in 1981 and 1983, these changes hardly increased tax revenue, suggesting that the country was close to its revenue maximising tax rates: the marginal tax rate on someone earning the average industrial wage was 73 per cent. Much of the additional spending went to buy imports, and the current account deficit widened to an untenable 15 per cent of GDP by 1981. Partly as a result, the Irish pound was devalued four times within the European Monetary System in the early 1980s. In 1986 an estimated IR£1,000 million of private capital left the country, anticipating a devaluation; the smart money was right, and the Irish pound was devalued by 8 per cent in August.

In 1987 the Fianna Fáil government introduced a very tight budget, cutting the current budget deficit to 1.7 per cent of GDP through reductions in real government spending that made Margaret Thatcher's efforts look gentle. Public capital spending, which had manifestly not boosted economic growth (at least in the short-term), was also sharply cut, especially on housing.

The 1987 reform worked, not only because it addressed unsustainable macroeconomic imbalances, but also because of deeper changes in economic policy that began to tackle structural problems. As late as 1980, a third of the workforce was employed by the public sector, including the 8 per cent of employment that was in public enterprises, some of which were thoroughly inefficient (Irish Shipping), or were largely sustained by their quasi-monopoly positions (Aer Lingus).

The first important move was the liquidation of loss-making Irish Shipping (in 1984), which signalled an end to the unconditional state support for public enterprises. The airline deregulation of 1986 was a remarkable success: between August 1985 (pre-regulation) and August 1987 (post-regulation), fares on the Dublin-London route fell by 54 per cent and traffic rose by 92 per cent. The number of visitors to Ireland rose from 2 million in 1987 to 3 million in 1990, with most of the increment carried by air. Emboldened by this success, several of the most visible state enterprises were privatised in the 1990s, including Greencore (sugar), Irish Life (insurance), B and I Line (shipping), and Telecom, followed later by three banks (TSB, ICC, and ACC), and the oil refinery. The retreat from state enterprise reflected a change in attitudes that increasingly favoured the private sector and that has, over time, led to a greater focus on making Ireland an easy place to do business.

In the wake of the 1987 reforms, economic growth resumed, as confidence (and investors) returned and exports boomed, thanks in part to the devaluation of 1986 and to continued wage restraint. By 1992, the ratio of public debt to GDP had fallen below 100 per cent, and the macroeconomic crisis was over.

Reflecting confidence in the new policy regime, sweetened with £87 million in IDA grants, Intel began work on a major plant in 1989 – it is now the company's largest manufacturing facility outside the USA – and this helped ease the way for the substantial inflow of foreign investment by major US firms in the 1990s. But the lessons of the failed fiscal experiment are important and have been largely internalised: fiscal rectitude is important for long-term growth, and taxes cannot be pushed too high.

From Sterling to EMS to Euro

In 1979, in a move that was hailed at the time as foresighted, Ireland broke the link with sterling (which dated back to 1826) and joined the European Monetary System (EMS). The reasoning was straightforward: Ireland had experienced inflation averaging 15 per cent between 1973 and 1979, necessarily the same rate as in Britain, and it was believed that the key to reducing the inflation rate was to uncouple the Irish pound from high-inflation sterling and attach it to the low inflation EMS, which was dominated by the deutschmark. Some also argued – correctly as it turned out – that sterling would appreciate with the development of North Sea oil, and that this would hurt Irish exports. Although over 40 per cent of exports still went to the UK in 1979, about a quarter went to the other EU countries, and so a change in exchange regime was considered feasible.

The adjustment to the EMS was slow and rocky. In the early 1980s inflation actually fell faster in the UK, which stayed out of the EMS, than in Ireland. The slow reduction in Irish inflation towards German levels meant that the Irish pound became overvalued, and had to be devalued within the EMS. The standard explanation is that wage demands – which often respond to recent inflation – were slow to change, so wage increases continued to be too large to be consistent with very low inflation. The lesson here was clear: economic growth and macroeconomic stability can easily be undermined if wage increases get out of line.

By about 1990 Ireland could boast of low inflation, a tight budget, and a falling ratio of government debt to GDP, and it looked as if, after a decade of relative economic stagnation, the decision to join the EMS was finally paying off. Then in late 1992 the EMS fell apart. High interest rates in Germany, resulting from that country's need to finance reunification, caused the deutschmark to appreciate. Sterling was devalued, and the Irish pound ultimately followed, because

32 per cent of Irish exports still went to the UK, and in the absence of a devaluation, Irish competitiveness in the important British market would be too severely compromised.

After the collapse of the EMS, it became clear that a regime of 'fixed but flexible' exchange rates is an oxymoron. Without a viable middle way between floating exchange rates and a single currency, the European Union opted for the latter. The schedule was set out in the Treaty of Maastricht, signed in 1992 and ratified the following year. As the decade progressed, it became increasingly clear that Ireland would qualify to join the euro. At the same time, the Single European Act came into effect in 1992, breaking down many of the remaining barriers to the movement of goods and people among the countries of the EU.

'Tiger' Years

Between 1994 and 2000 Ireland's real GDP rose by 10.2 per cent annually, and employment increased by half a million, from 1.2 to 1.7 million. The stunning economic boom was entirely unexpected. How did it happen? (See also Chapter 8 for a full discussion of this issue.)

Standard economic theory tells us that when economies apply more inputs – the factors of production (land, labour, capital, technology) – then output will rise. Yet during the Tiger years the investment rate was not especially high, and improvements in education and technology were not sudden enough to explain any upswing in economic growth. The puzzle deepens when one notes that despite this, not only did output per worker increase (by a strong 3.4 per cent per year), but employment rose sharply – in stark contrast to the abysmal record of job creation over the previous half century, when Irish employment hardly rose at all.

The simple solution to the enigma runs something like this: with relatively low taxes and macroeconomic stability, and the implementation of the EU single market by 1992 that assured the easy movement of most goods and services within the EU, Ireland by the early 1990s was an attractive destination for US companies wishing to serve the EU market. There was a substantial pool of available well-educated English-speaking workers, and a regime of low corporate taxation and industrial subsidies. This mix proved attractive to highly-productive export-oriented labour-using foreign firms, particularly in pharmaceuticals and high technology. It also had a quick direct payoff, and surprisingly large knock-on effects, boosting the large services sector as the economy found itself in a virtuous circle of expansion: as more households could count on steady earnings, the demand for services, including public services rose quickly, so employment spread to other sectors too.

By 2000, Ireland had caught up economically with its peers in the EU, and the country became the poster child of the benefits of economic integration. The unemployment then stood at 4 per cent, but the wave of American foreign direct investment had also subsided, as rising prices and a shrinking supply of available labour made the country less competitive.

Echo of the Boom

The initial boom might have run its course sooner had Ireland not joined the euro area in 1999. Ireland easily met the criteria for graduating to the euro, and the exchange rate was locked at €0.787564 per Irish pound on 1 January 1999. Ireland, like the states of the USA, no longer has the option of an independent monetary policy. This is not a radical break from the past; an independent monetary policy was not possible when the Irish pound was linked with sterling (1826–1979), and was severely circumscribed during the period of the European Monetary System. The main advantage of a common currency is lower transaction costs, and perhaps a steadier hand at the tiller; the cost is a reduced ability to respond when faced by an external shock or domestic rigidity – for instance, if export prices fall or wages fail to adjust.

Prior to the single currency, credit was more expensive in Ireland than in Germany or France, in part because of currency risk; with the advent of the euro, interest rates were essentially equalised across the euro zone, as money flowed from (low-interest) Germany to (high-interest) Ireland. Irish banks, flush with funds, lent freely; households, increasingly accustomed to higher wages and lower unemployment, took on more loans; the government expanded tax incentives for housing; and inexperienced Irish regulators believed this time was different. The result was a housing boom, sustained by a large inflow of workers from Eastern Europe (mainly Poland and Lithuania), which kept labour costs in check. Although rising prices made the Irish industrial sector less competitive – industrial employment contracted during this period – the expansion in the financial sector, made easier by the use of the euro, offset this to some extent. In 2005 the *Economist* rated Ireland as having the highest economic quality of life in the world, based on an index constructed using data on (among other measures) material wellbeing, health, political stability and freedom, and job security.

Collapse

The ‘party’ could not last. Household debt, which stood at €90 billion at the beginning of 2004, rose to €200 billion by mid-2008, and by 2009 represented a world-leading 215 per cent of disposable income. As early as 2000 the IMF warned that property prices in Ireland were too high and that a housing bubble was in the making; the growing chorus of warnings went unheeded, and house prices doubled between 2000 and 2006 before stabilising in 2007. The bubble burst in 2008, and by 2010 housing prices in Dublin were less than half of their peak level; by the end of 2012 a fifth of commercial loans and 13 percent of all mortgages were in arrears.

By 2009 the major banks were insolvent, and only survived because of a government guarantee to creditors, which in turn required the government to borrow heavily to pay the bill – injecting money into the two largest banks (Bank of Ireland, and Allied Irish Bank), nationalising Anglo Irish Bank, and shifting ‘toxic’ assets with a face value of €74 billion to the National Assets Management Agency (NAMA).

The collapse of the housing bubble coincided with a serious recession – world GDP fell by 0.6 per cent in 2009, the first decline since the end of the Second World War – and this ended any prospects of a rapid recovery for the Irish economy. By late 2010, faced with rapid withdrawals from the banking system, the government was obliged to accept a €85 billion rescue package from the IMF and EU, with its accompanying strictures on taxation and spending.

The result was a serious recession, as real GDP contracted by 4.5 per cent in 2008 and a further 4.7 per cent in 2009. A modest recovery in 2010 was largely offset by further shrinkage in 2011 and 2012. Unemployment reacted rapidly, rising from 5 per cent in early 2008 to 15 per cent by late 2010, where it stayed for almost two years. Emigration rose, and between 2010 and 2015 net out-migration totalled more than 150,000. The poor health of the banking system, overhang of public debt, sluggish recovery of the US economy, and anaemic growth in most of the EU (which anyway has a very limited capacity to boost fiscal transfers to regions that are in recession), meant that recovery was bound to be slow.

‘Celtic Phoenix’

Rebounding in style, the Irish economy has surprised once again, with a total increase in real GDP of over 40 per cent since 2012. Some of this is statistical sleight of hand – in 2015, some airplane leasing companies moved to Ireland, which is the world leader in the field, immediately boosting the country’s capital stock. But much of the recovery is real: the unemployment rate has fallen steadily from 15 per cent in 2012 to around 6 per cent by 2017, and household debt has fallen to about 60 per cent of GDP, in line with the EU average, but half the rate of 2010.

The return to growth reflects the perception that Ireland has been a model pupil at getting its public finances in order. It has been rewarded by improved access to world credit markets, and by early 2014 the government was able to borrow on international markets at an interest rate of just 3.5 per cent. In December 2013 the formal monitoring of government financial decisions by the ‘troika’ of the IMF, European Central Bank, and European Commission came to an end, leaving Ireland with slightly more room for manoeuvre in handling its public finances. Political continuity, and a series of pragmatic economic reforms, have also helped maintain international confidence in Ireland as a destination for investment.

6 A HUNDRED YEARS ON

On the centennial of the Easter Rising of 1916, the Central Statistics Office published a report entitled *Life in 1916 Ireland: Stories from Statistics*. It is worth stepping back for a moment to reflect on the enormous magnitude of economic and social change that has occurred, essentially within living memory.

We live longer, healthier lives. In 1916, out of every thousand births, 81 died in infancy; by 2016 the number was just four. The average person a century ago had a life expectancy of 54, and that has now risen to 78 (for men) or 83 (for women).

Deaths from bronchitis or tuberculosis were common, and are now extremely rare. The living also get married differently: in 2016, just 1 per cent of marriages consisted of civil ceremonies, a number that has now risen to 28 per cent.

We travel differently. Dublin had 96 km of tram lines, compared to 37 km today; and there were 964 train stations around the country, compared to 144 in 2016. But the number of cars has risen, from about 10,000 in 1915 to 2.0 million today, or more than one per household.

We have changed our occupations. In 1911, half of the workforce was in agriculture, compared to five per cent today. A quarter of all employment was in manufacturing, while the proportion has now fallen to nine per cent. And a tenth of workers were domestic servants, a group that has now almost vanished. The service sectors, including information technology, finance, tourism, education, and public administration have taken up the slack.

We are better educated. A hundred years ago, about eight per cent of the population was illiterate, and the rate was twice as high as this in Donegal. Although primary school was required, the attendance rate in 1916 was just 71 per cent compared to 94 per cent in 2012–13. Only 1,400 students sat the Senior exam in 1916, in sharp contrast to the 55,000 candidates for the Leaving Certificate in 2015.

We are more affluent. One compelling measure of this is the proportion of household spending devoted to food and beverages, which was 57 per cent in 1922, and 11 per cent in 2011. Potatoes were still important, grown on 172,000 hectares in 1916; by 2010 the area had shrunk to 12,000 hectares. An estimated 13,000 people migrated to Britain for seasonal agricultural work in 1914, to augment the low incomes they made in Ireland's western counties.

7 CONCLUDING OBSERVATIONS

The significant events of Irish economic history have been marshalled to support a number of different interpretations.

Nationalists emphasise the ways in which the links between the Irish economy and Britain have worked to Ireland's detriment. Writers in this vein have stressed the damage caused by the plantations, the Navigation, Cattle and Woollen Acts, the solid growth during the years of Grattan's Parliament, the lowering of tariffs in the years after the Act of Union, the ineffectiveness of relief efforts during later years of the Famine, and the costs of Ireland's inability to protect its industry from British goods during the second half of the nineteenth century. This approach has typically been used to lead to the conclusion that Ireland would be better off economically with independence.

Support for the nationalist interpretation waxes and wanes with the performance of the economy of the Republic. When independence did not bring a dramatic improvement in growth, and when the import-substitution policy of the 1930s created an inefficient industrial base which stagnated in the 1950s, the advantages of independence came to be seen as less obvious, especially as Northern Ireland appeared to be prospering at the time. However, from 1960 to 1980, when growth in the Republic was faster, and dependence on the British market reduced, the nationalist view became respectable again despite, or perhaps because of, the dismantling of tariff protection.

Outside the Irish context, this view is comparable to the approach of *dependency theorists*, who emphasise the harmful results of links between peripheral areas and the major industrial powers. The main weaknesses of this approach is that it has tended to neglect the potentially beneficial effects of links with the metropolitan area, and has overestimated the ability of independent states to make wise decisions, as exemplified for instance by Ireland's disastrous fiscal experiment in the late 1970s.

Membership of the EU has not made the nationalist view completely obsolete, but it has been stripped of its anglophobic character. There remains space for a nationalism, or perhaps localism would be a better term, to counteract the tendencies of the EU to regulate from the centre what would be better done at a much lower level of government. But Irish support for the EU is typically strong: in the Eurobarometer survey of autumn 2016, 55 per cent of those in the Irish sample said they have a 'positive' view of the EU, the highest rate among the 28 member countries.

Marxists stress the role of the conflict between different classes within the country. Thus, for instance, the Famine and subsequent emigration swept away the greater part of the rural proletariat, paving the way for the emergence of a rural bourgeoisie, which in due course wrested control over land from the aristocracy and provided the leaders of a conservative independent state. In this view the labouring class, whether agricultural or industrial, never achieved enough strength to effect significant social or economic change, and the indigenous capitalist class failed in its mission of creating a dynamic industrial base, thereby forfeiting its right to the perquisites that it continues to enjoy. The conclusion most commonly drawn is that the state needs to take a more active role in filling this entrepreneurial function. Foreign investment by footloose companies is seen as conveying few benefits.

The Marxist view fails to explain why largely non-class conflicts, such as that in Northern Ireland, can persist. It typically overstates the ability of the state and public enterprises to create sustainable jobs; once this prop falls, it is not clear what prescription for economic growth remains.

In reaction against the weaknesses of the nationalist and Marxist interpretations, most recent writers have tended to view economic events as having a significant life of their own, being 'substantially independent of political and constitutional issues'. Hence the role of the Cattle Acts, or the Act of Union, or the replacement of tenant farmers by smallholders, are seen as minor. Economic actors are believed to redirect their energies fairly quickly, and seize the available opportunities. This perspective, epitomised in the large body of revisionist writings of Cullen, could be labelled the *classical economics approach*. In the hands of a new generation of economists this approach to history has become increasingly quantitative.

This view too has its faults, in that it can go too far in neglecting political events and institutional arrangements. In the words of Douglass North, 'institutional change shapes the way societies evolve through time and hence is the key to understanding historical change'. North originally believed that inefficient institutions would be weeded out over time, but in his more recent writings he is less sanguine about this prospect. The *institutional approach* complements rather than supplants the classical economics view, and we have drawn on these two perspectives in writing this chapter.

In the mid nineteenth century Denmark was substantially better off than Ireland, despite facing a similar external environment – both depended on the British market, and both were open to free trade. O'Rourke suggests that Denmark maintained its lead, and (unlike Ireland) expanded its population because it had successfully introduced land reform a century before Ireland, and perhaps more importantly, achieved universal literacy much sooner. More recently, Irish decisions – such as membership of the EU, the adoption of the euro, and the maintenance of a lean public sector – appear to have paid dividends in the form of rapid economic growth. Institutional decisions do have consequences.

The most interesting lessons from Irish economic history are about growth strategies. Economic growth comes from a multitude of sources such as new technology, capital investment, education and training, land reclamation, enterprise, shifting prices, higher aggregate demand and chance. However, these are only the raw ingredients, and must be combined to sustain growth. It is easy to see these ingredients at work. The new technologies of the potato, railways, power weaving and computers have all been influential. Capital spending is essential at all times, although rarely needs to be above a fifth of GDP. Higher levels of education and improved training have boosted labour productivity. Chance brought the potato blight and two world wars. Land reclamation helped fend off famine in the early nineteenth century. Enterprise was at the heart of the introduction of shipbuilding in Belfast. A secular increase in wheat prices radically changed agriculture in the eighteenth century. Low aggregate demand reined in growth in the 1950s.

Recognising the role of these elements is important, but holds few lessons. The study of growth *strategies* is more illuminating. The policy of laissez faire need not guarantee growth, as experience from 1815 to 1850 demonstrates. Nor does a strategy of import substitution necessarily fare better, for while it may have been helpful in the short run in the 1930s, protection left a legacy of inefficient industry in the 1950s. An approach that favours agriculture-led development, such as followed by the Free State in the 1920s, may succeed in raising real incomes, but given the small size of the agricultural sector (2 per cent of GDP in 2012) it is no longer a realistic option. An industrialisation strategy based on attracting foreign capital also has some advantages, but is expensive to implement, and risks leaving a country more vulnerable to decisions outside its control.

As a practical matter Ireland has limited room for pursuing independent economic policies. Fiscal restraint is needed because persistent expansionary fiscal policy does not work well in a small open economy, as the experiment of 1978 to 1987 shows. With the euro in place, monetary policy is not an option. Industrial policy is increasingly circumscribed by the rules that have applied since 1993 to the Single European Market. Recognising the need for greater efficiency, the country has privatised or closed down several state-owned enterprises. Ireland now has only a little more autonomy than a typical state of the United States.

That leaves a narrower and more difficult field for local economic policy. The focus has shifted to the factors needed to maintain 'competitiveness' – what Michael Porter calls the 'microeconomic foundations of prosperity'. This includes bending to such tasks as gearing society to produce entrepreneurs, vitalising indigenous enterprise, providing adequate and appropriate education and training, evaluating public investment more thoroughly, introducing flexibility into the labour market, reducing the disincentives to do unskilled jobs, and fostering competition among firms. Affluence requires efficiency in the public arena – in the provision of services and the formulation and targeting of policy – in addition to efficiency by businesses.

Since wages in Ireland are closely linked with those in Britain and the European Union, once individuals have been equipped with education, economic policy has limited influence on the standard of living they will enjoy in Ireland. What it can still influence, perhaps more thoroughly than was commonly believed just a few years ago, is the number who enjoy that standard of living in Ireland rather than elsewhere.

Suggestions for Further Reading

The literature on Irish economic history is already enormous. A few suggestions for further reading are given here, and much of the information in this chapter comes from these sources.

General History

1 R. Foster, *Modern Ireland 1600–1972*, Allen Lane, London 1988.
2 J. Lee, *Ireland 1912–1985*, Cambridge University Press, Cambridge 1989.
3 F. Lyons, *Ireland Since the Famine*, Weidenfeld and Nicolson, London 1971.

Economic and Social History

1 R. Crotty, *Irish Agricultural Production*, Cork University Press, Cork 1966.
2 L. Cullen, *An Economic History of Ireland Since 1660*, Batsford, London 1972.
3 M. Daly, *Social and Economic History of Ireland Since 1800*, Educational Company, Dublin 1981.
4 K. Kennedy, T. Giblin and D. McHugh, *The Economic Development of Ireland in the Twentieth Century,* Routledge, London 1988.
5 J. Mokyr, *Why Ireland Starved*, Allen and Unwin, London 1983.
6 C. Ó Gráda, *The Great Irish Famine*, Macmillan, London 1989.

7 C. Ó Gráda, *Ireland: A New Economic History 1780–1939*, Oxford University Press, Oxford 1995.
8 C. Ó Gráda, *A Rocky Road: The Irish Economy Since the 1920s*, Manchester University Press, Manchester 1997.

Web references

1 Central Statistics Office. Mainly recent data, but some series stretch further back. www.cso.ie/en/
2 Wikipedia: The Irish economy. https://en.wikipedia.org/wiki/Economy_of_the_Republic_of_Ireland
3 Wikipedia: Economic history of the Republic of Ireland. https://en.wikipedia.org/wiki/Economic_history_of_the_Republic_of_Ireland
4 Wikipedia: Economic history of Ireland. https://en.wikipedia.org/wiki/Economic_history_of_Ireland

Index