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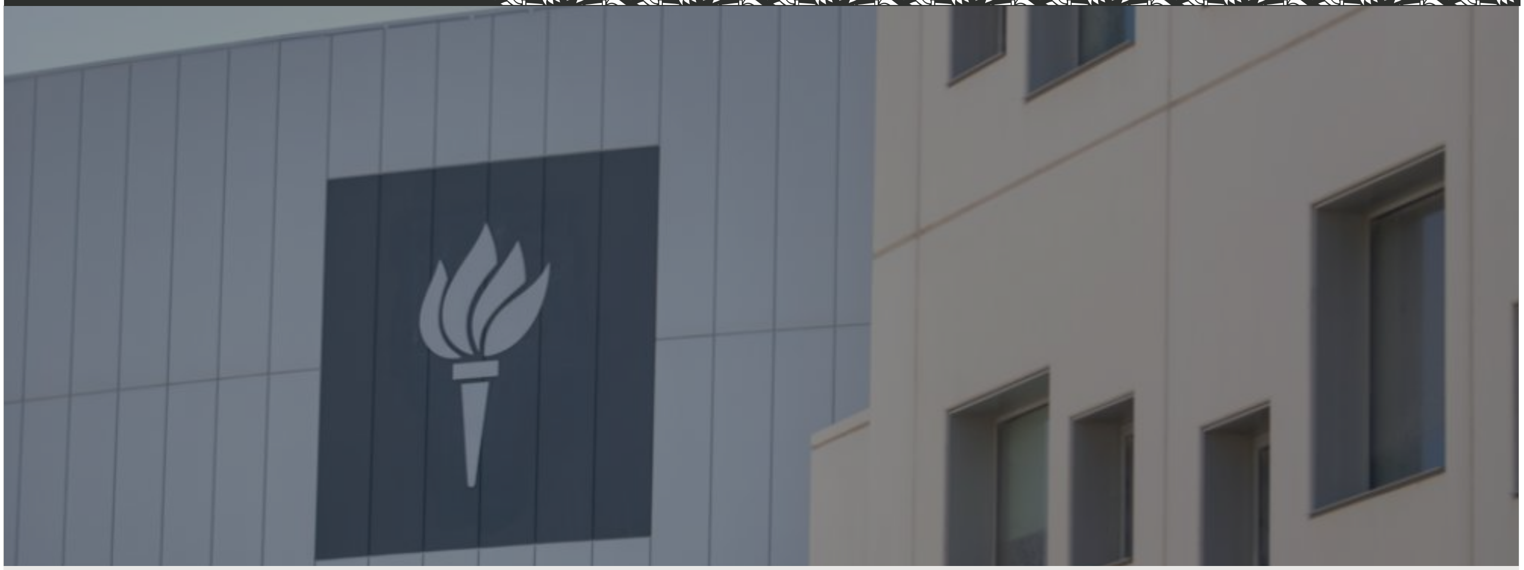

The Irish Economy During the Century After Partition

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Working Paper # 0062
April 2021

Division of Social Science Working Paper Series

New York University Abu Dhabi, Saadiyat Island P.O Box 129188, Abu Dhabi, UAE

http://nyuad.nyu.edu/en/academics/academic-divisions/social-science.html

The Irish economy during the century after Partition[1]

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ABSTRACT:

We provide a centennial overview of the Irish economy in the one hundred years following partition and independence. A comparative perspective allows us to distinguish between those aspects of Irish policies and performance that were unique to the country, and those which mirrored developments elsewhere. While Irish performance was typical in the long run, the country under-performed prior to the mid-1980s and over-performed for the rest of the twentieth century. Real growth after 2000 was slow. The mainly chronological narrative highlights the roles of convergence forces, trade and industrial policy, and monetary and fiscal policy. While the focus is mostly on the south of the island, we also survey the Northern Irish experience during this period.

Keywords: Ireland, economic growth, living standards, trade policy, crises

JEL codes: N14

[1] We are extremely grateful to Frank Barry, Graham Brownlow, John FitzGerald, Eoin Flaherty, Patrick Geary, Ronan Lyons, Morgan Kelly, Peter Solar, Rebecca Stuart, Paul Sweeney, Rodney Thom, and John Turner for their advice and many helpful comments. The usual disclaimer applies.

1. Introduction

Irish economic history was born in the dying decades of the Union of Great Britain and Ireland. The timing was important: a growing conviction that home rule would foster economic growth led to an interest in the economic past.[2] Alice Murray's 1903 history of the commercial and financial relations between the two islands was followed 15 years later by George O'Brien's economic histories of Ireland in the eighteenth and early nineteenth centuries: Charles Bastable, at the rival (and Unionist) Trinity College commented that it was "hard to escape feeling that the author … has been affected by the sentiment which was engendered by the grievances of his country".[3]

Subsequent economic histories of Ireland also reflected contemporary concerns about Irish underachievement, but from very different perspectives. Blaming the connection with Britain no longer carried conviction. Nearly half a century after independence James Meenan echoed the widely-felt sense that "we have used not our qualities to the fullest possible extent", while in a national accounting perspective on that half century Joseph Lee lamented that "every country ranked above Ireland in the early twentieth century pulled much further ahead (while) every country below Ireland either overtook her, or significantly narrowed the gap". A comparative survey by the present authors of economic performance between 1945 and 1988 similarly dwelt on "the reasons … why Ireland's record has been so poor". However, by 2002, when Patrick Honohan and Brendan Walsh published their landmark assessment of Irish economic trends since the 1960s, their quest was for explanations for what they dubbed 'the Irish miracle'.[4] Such shifts reflected both long-term swings and short-term crises in the century since Ireland was partitioned and the south became independent.

The Irish economy is among the world's richest today, though perhaps not as rich as sometimes portrayed. Nor has the path to affluence been a smooth one. Twice,

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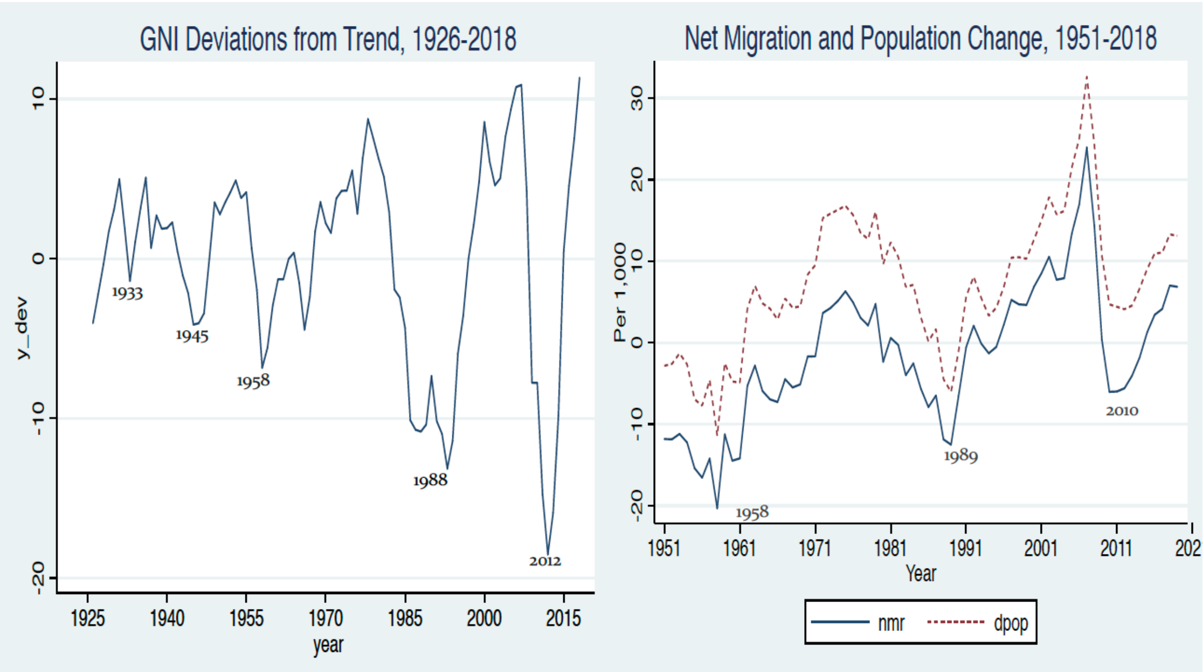
[2] Cullen, 'Irish economic history: fact and myth', p. 119.
[3] Murray, *History*; O'Brien, *Economic History* (three volumes); Bastable, 'Review'.
[4] Meenan, *Irish Economy since 1922*, p. 393; Lee, *Ireland 1912-1985*, p. 514; Ó Gráda and O'Rourke, 'Irish Economic Growth', p. 419; Honohan and Walsh, 'Catching Up with the Leaders', p. 53. Compare Kennedy *et al. Irish Economic Growth*, pp. 118-121.

in the 1950s and the 1980s, the case for the Republic of Ireland being considered a failed economic entity was a strong one. The impact of a post-colonial, but self-imposed, trade dispute in the 1930s and semi-autarky imposed by World War 2 were severe, while that of the financial crisis of 2008 was more damaging in Ireland than anywhere else in Europe, Greece excepted. The impact of these five crises – four of them mainly or wholly self-inflicted -- on economic activity and on emigration, long a sensitive marker of Irish economic malaise, may be inferred from Figures 1a and 1b. In terms of duration those of World War 2 and the 1980s were the worst; it is too soon to include the COVID-related crisis of 2020-21.



(a) GNI, deviations from trend 1926-2018   (b) Migration and Population Change 1951-2018

Figure 1. Five post-independence economic crises

Sources: For GDP/GNI Bolt *et al.*, 'Maddison style estimates' (1926-1994); Central Statistics Office (1995-2018); for migration, Central Statistics Office; *Statistical Abstract*, various years. The deviations from trend in GNI were calculated using a Hodrick-Prescot filter.

Running any new country exacts an economic cost. If the break-up is peaceful and anticipated, the cost may be small. But if the rhetoric of independence is one of economic nationalism and exploitation, separation may be followed by costly inward-looking economic policies. In other words, a new government's freedom to manoeuvre is conditioned by the past. A century ago those who lived in that part of Ireland known until 1937 as the Irish Free State[5] separated from the rest of the United Kingdom because they wanted to be different. Supporters of independence included both moderate and strong nationalists. In economic terms, for the moderates independence meant continued focus on the British market and accentuating comparative advantage by improving quality and by cutting costs. For more radical nationalists, it would entail greater self-sufficiency through industrialisation underpinned by tariff protection in the towns, and a shift from grass to cereals in the countryside. As it turned out, the economic history of Ireland in the 1920s and 1930s would be split in two by the victory of radical over moderate nationalists in early 1932.

It would be incorrect, however, to link the policy shifts introduced by Eamon de Valera's Fianna Fáil administration after 1932 solely to a more inward-looking nationalism. True, the dispute known in Ireland as the Economic War (1932-38) was a classic post-colonial dispute and the Fianna Fáil party was founded on a more populist economic programme than its predecessor. Agriculture suffered badly during the Economic War, as tariffs and government policy shifted it away from its comparative advantage in dairying and live cattle exports. Early accounts of Irish economic development thus emphasised the rise of Fianna Fáil when explaining Irish economic development, or the lack of it, between the 1930s and the 1950s. The subtitle of a pamphlet penned by Trinity College Dublin economist Joseph Johnston at the height of the Economic War read: "Thoughts suggested by a study of the Anglo-Irish experiment in economic vivisection". A colleague in Dublin's other university also had Fianna Fáil in mind when he declared that he "accepted the facts of geography and history instead of attempting to charm them away".[6] But, as we shall see, the protectionist trade policies associated with that party were the norm during the Great Depression era of the 1930s, and in the circumstances some version of them would have been inevitable in any case. A new government's freedom to manoeuvre is conditioned not only by the past but by the international environment of

[5] The Free State would become simply 'Ireland' or 'Éire' in 1937. It became a republic in 1949.
[6] Johnston, *Nemesis';* Meenan, *George O'Brien*, p. 139.

the present, and the interwar period was a difficult era into which to be born. More generally, over the past century Irish economic policy, although on the whole derivative of policy elsewhere and cautious, on occasion took some distinctive twists and turns. Some cost it dearly, while a few were inspired. But in the long run, in a comparative perspective Irish economic performance was just about what an economist with little previous knowledge of the country would have predicted. In what follows, we will describe both what was unique and what was unexceptional.

2. Irish performance in comparative perspective

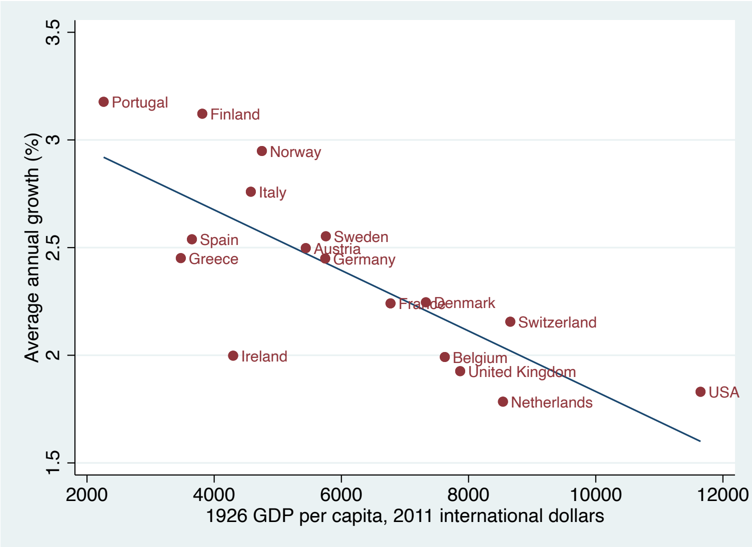
How poor were the Irish on the eve of independence? Wage data fail to provide a clear answer. Although a century ago farm labour earned far less in Ireland than in Britain, Irish urban, and especially skilled, labour did not.[7] Historical national accounts offer further comparative perspective, although economic historians have not as yet extended the official national accounts, which began in 1938, backwards in time. There are however estimates for individual years on the eve of World War I (1907, 1911, and 1914).[8] In a classic, pessimistic account of Irish development since independence, written in the crisis-ridden 1980s, Lee favourably compared GDP per capita in Ireland in 1910 with incomes in eight other west European economies: the point was that it had once been rich, but then became poor.[9] The latest version of the Maddison database places Ireland further down the pre-war European league table than Lee had thought. It was much better off than Finland, Greece or Iberia, and on a par with Italy, Norway and Sweden, but other countries in northwest Europe were between 20 and 60 per cent richer, while UK incomes were 88 per cent higher (Table 1, column 1).

Between independence and the late 1960s GDP per head in the Republic more than doubled; since the late 1960s household consumption per capita, a better

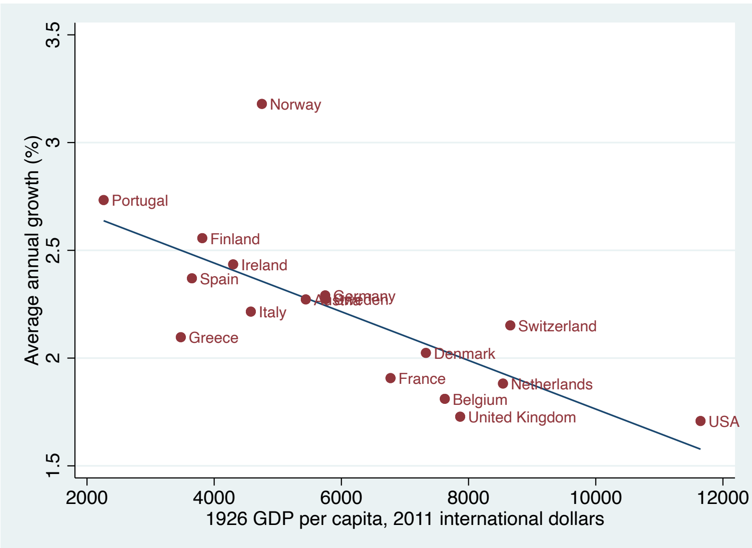
[7] O'Rourke, 'Did labor?'.
[8] Cullen and Smout, 'Economic growth'; Bielenberg and O'Mahony, 'Expenditure estimate'; Ó Gráda, 'Ireland'. See also the symposium in the 2010 volume of *Irish Economic Social History*, summarizing the work of the Historical National Accounts Group that was set up in the 1990s by Kieran Kennedy of the ESRI (Begley, 'Irish income tax returns'; Bielenberg, 'Current position'; Cullen, 'Context and development').
[9] Lee, *Ireland*, pp. 53-4, 513.

measure of living standards in this period, has trebled. Whether this performance was good or poor requires a yardstick. Britain has often been seen as an appropriate comparator, but since Britain was itself an under-performer for much of the period this potentially sets the bar too low. In the 1980s Kennedy *et al*. and Lee reinforced this point by pointing out that, since Ireland was a relatively poor country, it should have grown more rapidly than a core economy like the UK, and achieved higher growth rates akin to those observed elsewhere on the European periphery. The present authors were the first to follow up this suggestion more rigorously, showing that in such a convergence perspective post-1950 Ireland was a notable failure: it grew significantly more slowly after 1950 than it should have done, given how poor it was initially.[10] That paper used the data available at the time (up through 1988), and Figure 2a confirms its dismal conclusion, taking 1926 rather than 1950 as the basis for comparison. By the time the paper was published, however, Ireland had begun its convergence process, which was all the more dramatic for being belated (since by the 1990s there was a lot more catching-up to be done). By 2001, Irish national income had grown exactly as much as would have been predicted given its relative income in 1926, with underperformance prior to 1973 being precisely matched by over-achievement during the 1990s, and Ireland's long run performance remains unexceptional today (Figure 2b). More precisely, in a convergence perspective Ireland performed as well as it should have done in the interwar period (but no-one performed well in the 1920s and 1930s); it underperformed between 1950 and 1973, a period elsewhere remembered as the European Golden Age; it stopped underperforming after 1973, but experienced no overall convergence between then and 1990; and it made up for lost time in the 1990s, over-performing and converging in spectacular fashion. [11] In the 21st century it experienced a spectacular housing bubble and bust, before resuming growth from 2012 onwards. By that stage, however, its GDP statistics had become essentially worthless as a measure of real economic activity in the country, a subject to which we will return below.[12]

[10] Kennedy *et al*., *Economic Development*; Lee, *Ireland*; Ó Gráda and O'Rourke, 'Irish economic growth'. For a similar discussion, see Ó Gráda, *Rocky Road*, and Johnson and Kennedy, 'The two economies'.
[11] O'Rourke, 'Independent Ireland'.
[12] Figure 2 thus uses GNP rather than GDP for Ireland before 1995, and Modified Gross National Income (GNI*) thereafter.



(a) 1926-88



(b) 1926-2018

Figure 2. Initial income and subsequent growth, 1926-1988 and 1926-2018

Sources: Maddison Project Database version 2020. Bolt et al., 'Maddison style estimates'. For Ireland we use GNI* (see below) from 1995 onwards, using adjustment ratios based on CSO data. Before 1995 we use GNP, using adjustment ratios kindly provided by Rebecca Stuart. Her data go back to 1944 so we have simply assumed that GNP was the same proportion of GDP in previous years.

Table 1 provides some comparative data.[13] Columns (1) and (2) show that Ireland, which had not been particularly rich to begin with, had fallen significantly further behind other western European economies by 1958, being overtaken by Finland and Italy. The mid-1950s represented a nadir for the Irish economy, a period when observers from near and far were questioning its future viability. A key public policy document of the time noted that "a sense of anxiety" about Ireland's economic prospects was indeed justified, and that "after 35 years of native government people are asking whether we can achieve an acceptable degree of economic progress".[14] The Irish economy's relative position had barely improved by the mid-1980s (column 3), implying only very mild convergence since the 1950s. Greek and Spanish incomes had by this stage also caught up with Irish ones. However, by 2018 the doleful picture painted by Lee had been reversed, and Irish GDP per capita was bettered only by oil-rich Norway's (column 4).

However, in the Irish case present-day comparisons based on GDP are notoriously misleading because of the considerable share of output—real or otherwise—accruing to foreign-owned businesses. Thus, in 2005 Irish GDP per capita was ranked fifth highest in the world, whereas in terms of GNP per capita—a better measure since it refers to output accruing to Irish residents—it was tenth highest. A decade later the rankings were eighth and twentieth, respectively. Today the gap between Irish GDP and GNP is over thirty per cent. Multinationals distort the Irish national accounts in other ways. When they choose to domicile capital assets such as intellectual property or aircraft in Ireland, depreciation of these assets is included in GNP, while the undistributed profits of multinationals headquartered in Ireland are also included. For this reason the Irish Central Statistics Office (CSO) now calculates GNI*, which excludes these distortions, and which is roughly forty per cent lower than GDP.[15] Ireland was only the seventh richest country in the table in 2018 using GNI* (column 5). An alternative gauge of economic wellbeing is household consumption

[13] In 1940 Colin Clark, a pioneer in national accounting, placed Ireland 9th of 53 economies in terms of income per head of occupied population in 1925-34; later he placed it 12th of 25 economies in terms of income per head of population (as cited in Maddison, 'Macromeasurement', p. 33, 39).
[14] *Economic Development*, p. 5.
[15] Honohan, 'Is Ireland really?'.

per capita and this is shown for 2019 in column 7.[16] In 1985 Ireland's relative standing was similar whether you used this metric (column 6) or GDP, but that is no longer true today. Based on consumption Ireland no longer stands out as being unusually wealthy, with household consumption per head in Ireland being more or less on a par with that in Germany, and well behind levels in the UK and the Nordic countries.

	1913	1958	1985	2018	2018 (GNI*)	1985 (C)	2019 (C)
Belgium	154	166	161	61	102	145	95
Germany	133	174	163	71	106	152	101
Denmark	143	209	187	72	111	192	118
Finland	77	141	156	60	96	139	104
France	127	177	167	60	90	142	93
Greece	43	77	100	36	57	103	63
Ireland	100	100	100	100	100	100	100
Italy	93	138	151	53	83	143	84
Netherlands	148	193	164	73	112	148	94
Norway	101	172	186	131	135	202	161
Portugal	46	69	89	42	68	73	62
Spain	70	84	99	49	79	101	72
Sweden	105	209	174	70	104	154	107
United Kingdom	188	206	152	59	91	127	111
Irish ranking	9th	11th	11th	2nd	7th	12th	7th

Table 1. Irish income per capita in comparative perspective (Ireland = 100)

Sources: Columns (1)-(4) (GDP per capita, 2011 dollars): Maddison Project Database, version 2020. Bolt *et al*., 'Maddison style estimates'. Column (5): Eurostat, with the Irish GDP figures converted to GNI* using CSO data. The figures were kindly provided by John FitzGerald. Columns (6) and (7): household consumption per capita (2010 dollars): World Bank.

To summarize: interwar Ireland's economic performance was poor but not atypical, while it was a striking underperformer during the European 'Golden Age'. Relative decline was halted after 1973, and reversed after 1990. In the subsequent sections we will revisit each of these phases of Irish economic history.

[16] This is household expenditure per capita in constant 2011 international $US.

Health and Inequality

The Cumann na nGaedheal ministers who ruled the new Ireland in the 1920s liked to see themselves as "the most conservative revolutionaries that ever put through a successful revolution". The harsh economic climate in 1924 prompted one of them to cut the old age pension payment by ten per cent and another to predict that "people may have to die in this country and may have to die through starvation". And, sure enough, Ireland had its last brush with near-famine in remote pockets of Connemara in 1925.[17] Soon the electorate would come to expect more. Cumann na nGaedheal's successors, the new Fianna Fáil party, which ruled without interruption from 1932 to 1948, immediately increased public spending on land reform, social housing, export bounties, and the old age pension. As we shall see below, however, more life-threatening hardship lay in store for neutral Ireland during World War 2.

In the century since independence and partition, infant mortality rates have fallen dramatically and life expectancy has grown. But in 1989 Lee castigated Cumann na nGaedheal for the high rates of infant mortality in Dublin in the 1920s and noted how the rate in Northern Ireland dipped below that in the south in 1943 and would remain below it for a few decades.[18] The average life span in the South has risen from under 60 years for both males and females in the 1920s to 68 years for males and 72 years for females in 1960, and 82 years for males and 86 for females today. There were two periods of rapid improvement, in the immediate post-war period and again at the turn of the new millennium. Walsh speculates that the striking rise in life expectancy at birth (e_0) between 1946 and the late 1950s—9 years for females and 7.5 years for males—may have been due to an increasing focus by government on health, symbolized by the introduction of children's allowances in 1944 and the 1947 Health Act.[19] In the 2000s Irish life expectancy began to converge with that elsewhere in Western Europe. Was this due to increased spending on public health, or rising incomes, or did changes in lifestyle play a role? For now, there is no

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[17] Kevin O'Higgins, *Parliamentary Debates Dáil Eireann (PDDÉ)*, 2: 1909, 1 March 1923; Patrick McGilligan, *PDDÉ*, 9: 561-2, 30 October 1924; O'Neill, 'Minor famines'; Ó Gráda, 'The greatest benefit of all', pp. 150-1.

[18] Lee, *Ireland*, pp. 124, 256.

[19] Walsh, 'Life expectancy', pp. 132-3.

obvious answer. While the increase in the 2000s put an end to Ireland's laggard status in the life expectancy stakes, Figure 3 suggests that Ireland still has some catching up to do. The wide gaps in e_0 today between white collar and unskilled workers (6.2 years for males in 2016) and between those living in the most favoured and deprived areas (4.3 years between the top and bottom quintiles) point to the scope for further improvement.[20]

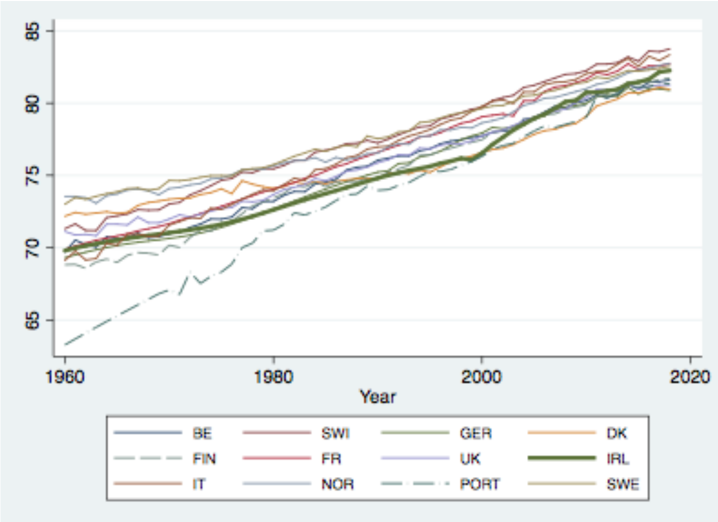

Figure 3. Life expectancy at birth (e_0), European countries, 1980-2017
Source: World Bank

Although Ireland is a small country (84,421 km²), it has long been marked by striking interregional inequalities. In the mid-1950s a friendly outside observer surmised that since GDP per capita in Leinster, the province covering the eastern part of the Irish state, was then about 65 per cent that of the UK, it must have been less than half in the rest of the country. Data on the interregional variation in incomes in the 1960s imply a much wider gap than this between Leinster and the rest. Still, there had been convergence of sorts in earlier decades. For example, the coefficients of variation in private car ownership relative to population halved between 1926 and 1966. Data on income distribution across counties imply no convergence in the 1960s, significant improvement in the 1970s and 1980s, but a reversal of that process in recent years. Meanwhile, the population share of the poorer counties continues to fall. That

[20] Life expectancy in Northern Ireland (78.7 years for males, 82.4 for females in 2016-18) currently lags behind that in the Republic.

of Connacht (the province taking in west central Ireland) and the three Ulster counties in the Irish state was 30 per cent in 1911, 23 per cent in 1961, and just 18 per cent in 2016. Peripherality still matters: the poorest counties today are concentrated in the northwest and along the border with Northern Ireland, and the richest, with the exception of Limerick, in the east.[21]

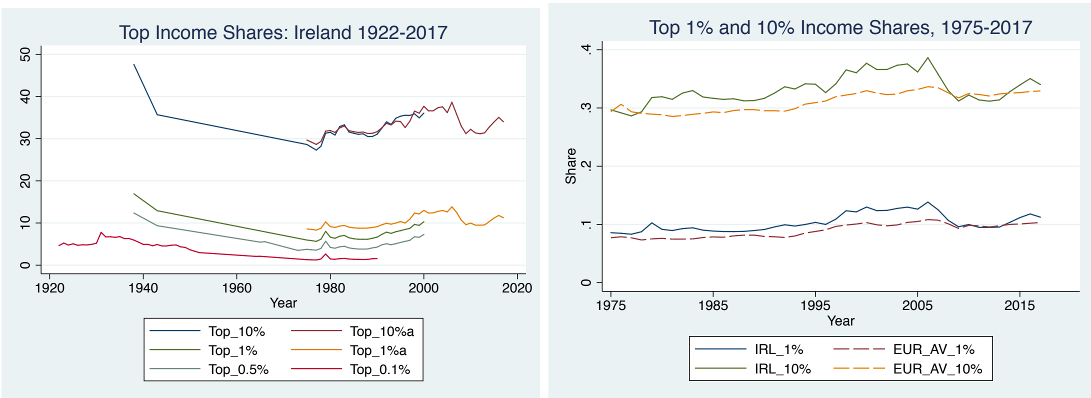

Figure 4. Income Inequality in Ireland since the 1920s

Sources: Nolan, 'Long-term trends'; World Income Database

Surtax data, available from the formation of the new state, track the income share of the richest members of society from the 1920s. The qualitative trends that emerge in Figure 4 are familiar from the experiences of other countries. Top income shares declined from the 1920s to the 1970s, and rose thereafter, although there was a pronounced (but apparently temporary) fall in the wake of the 2008 financial crisis. Comparative data available from 1975 allow us to compare top income shares in Ireland and a sample of 15 European economies. The gap that opened up in the 1970s and accelerated during the Tiger years closed during the crash of 2007-08 and has stayed close to the European average since. Time series data on wealth distribution in Ireland in the past are still too few for any inferences about trends, but a series describing wealth inequality in Northern Ireland using will probates has revealed a drop in wealth inequality in NI between the 1920s and the 1990s, during which period the share of the top 1 per cent halved (from over half to

[21] Carter, 'Irish Economy', p. 137; Ross, *Further Data*; Ó Gráda, *Rocky Road*, pp. 87-8.

less than a quarter).[22]

3. The interwar period

The economy of the Irish Free State (IFS) remained closely linked to that of the United Kingdom in the 1920s. Its new currency, the *Saorstát* pound, was fully backed at parity by sterling bonds. In that way the IFS was spared the inflation and monetary instability that characterised several of the new states created in the wake of World War 1.[23] Fiscal policy was cautious and regressive. The IFS was one of the most open economies in the world,[24] but its foreign trade continued to be overwhelmingly to and from the United Kingdom. In 1924, the first year for which there are data, UK (GB) imports and exports accounted for 79.1 (67.7) and 98.1 (83.6) per cent of the total, respectively. The UK share of imports, it is true, exaggerates because the data refer to country of consignment rather than country of origin. The latter definition was employed from 1936 on, and the share of imports from the UK (GB) dropped markedly as a result, from 72.4 (67.7) per cent in 1935 to 53.3 (51.9) per cent in 1936. Despite the Economic War, much of the Free State's trade came either through or from the UK.

For several centuries southern Irish foreign trade had consisted, broadly speaking, of exchanging products of pastoral and small-holder agriculture for cereals, tropical agricultural goods and manufactures. In 1924 live animals and manufactured, processed, or simply prepared food and drink accounted for six-sevenths of exports, while manufactured goods or their raw materials accounted for over half of imports, and tea, sugar, flour and imported cereals for another quarter. There was little serious effort at changing this pattern in the 1920s; official policy was that exporting meat, mainly in the form of live animals, and dairy products reflected the country's comparative advantage. The main focus of trade policy in the 1920s was therefore on enhancing that comparative advantage by keeping input costs down and improving quality.[25]

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[22] Nolan, 'Long-term trends'; Atkinson and Nolan, 'The changing distribution'; Turner, 'Wealth concentration'.
[23] Compare Lopez and Mitchener, 'Uncertainty and hyperinflation'.
[24] The share of exports plus imports in GDP was 64 per cent in 1924.
[25] George O'Brien, 'Patrick Hogan'. But some lip service was also paid to tariff protection. Excise duties imposed on imported tobacco in 1923 led to the establishment of three major British subsidiaries in Dublin, while tariffs on soap and candles and on confectionery led to the creation of several indigenous

It is true that there was somewhat more to Irish industry in the wake of independence than 'beer and biscuits', exemplified by the Dublin firms of Guinness and Jacobs.[26] Still, in the late 1920s the IFS contained only two dozen or so manufacturing firms with a workforce of 400 workers or more, with nearly two-thirds of them located in Dublin. The biggest manufacturing concern, the Irish subsidiary of Henry Ford & Sons, reached peak production in early 1930 when it was producing about three thousand tractors a month and employing nearly seven thousand men. But a majority were laid off in the following months as the depression began to bite. By 1931 there was intermittent employment for only 1,250, and from 1932 on Ford would treat Cork "like a little assembly plant, as in e.g. Barcelona"[27]. The next largest employer was indeed Arthur Guinness, whose Dublin workforce of 3,200 produced nearly all the 1.5 million barrels, worth £5 million, that were exported annually in the 1920s. Several of the other large firms produced non-tradable goods such as milk, bread, and local newspapers; very few exported anything.

As noted earlier, this was a period of two rather distinct halves, defined by both the onset of the Great Depression, and the transfer of power from Cumann na nGaedheal to Fianna Fáil in March 1932. The pursuit of comparative advantage gave way to protection, more generous social welfare, significant investments in social housing, and a trade dispute with the United Kingdom that lasted until 1938. The collapse in the prices of agricultural produce during the depression was worsened by these measures, which led to a reduction in the share of output exported from 49 per cent in 1929/30 to 33 per cent in 1934/5. Although protection boosted industrial output, the impact of the Economic War on farming implied countervailing economic losses. But this was not a time for "accept(ing) the facts of geography and history instead of attempting to charm them away".

Fianna Fáil's case for import-substituting industrialization (ISI) rested on the convictions that farming could never provide the employment needed to sustain a vibrant, growing community, and that free trade could not produce the industries

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concerns. According to the Department of Industry and Commerce employment in protected firms rose by 5,300 between 1926 and 1929, while employment in exposed firms fell. By 1929 there were 59 tariffs — but by 1936 there would be 1,900 (Bielenberg and Ryan, *Economic History*, pp. 9, 73, 75).

[26] Barry, 'Leading manufacturing firms'.

[27] Grimes, 'Starting Ireland on the Road to Industry', vol. 2, pp. 115-6, 141, 180.

needed to increase employment. Its proponents ignored the fundamental truth that the Irish domestic market was simply too small for ISI to prove a panacea in the long run. Keynes, who was far from hostile to the government's quest for greater self-sufficiency, raised the issue in a famous lecture delivered in Dublin in 1933, asking whether Ireland, and "above all…the Free State", was "a large enough unit geographically, with sufficiently diversified natural resources, for more than a very modest measure of national self-sufficiency to be feasible without a disastrous reduction in a standard of life which is already none too high".[28] The Fianna Fáil strategy was also predicated, implicitly, on the hope that Irish workers would work for less at home than what they might obtain in neighbouring Britain. As de Valera quipped, using the analogy of a servant leaving his master, "If he goes into the cottage, he has to make up his mind to put up with the frugal fare of that cottage".[29]

Still, although the inspiration for tariffs was largely home-grown, a rise in protectionism after 1932 was inevitable regardless of who was in power, because the 1930s were years of trade destruction everywhere, even in such traditionally free-trading nations as the Netherlands and the United Kingdom. With the gold standard constraining monetary policy and a universal prejudice against expansionary fiscal policy, for many tariffs seemed the only option.[30] Ireland was one of the last countries in Europe to tilt towards protectionism, and it would have been extraordinary if it had bucked the trend altogether. And to a point protection worked. In the 1930s on average, higher tariffs were associated with better economic performance, and there are reasons to suspect that protection was beneficial in interwar Ireland just as it was elsewhere. The deadweight efficiency losses were not that large, and may have been smaller than the gains associated with defaulting on the land annuities owed to the UK; Britain and other export markets were moving to protection anyway, lowering the opportunity costs of Irish protection; and new jobs in protected industries were

[28] Keynes, 'National self-sufficiency', p. 189. Keynes concluded that it would be 'an act of high wisdom on the part of the Irish to enter into an economic arrangement with England which would, within appropriate limits, retain for Ireland her traditional British markets against mutual advantages for British producers within the wide field which for long to come will not interfere with Ireland's own developments'.
[29] As cited in Grimes, 'Starting Ireland', vol. 2, p. 172.
[30] Eichengreen and Irwin, 'Slide to protectionism'.

welcome at a time of mass unemployment around the world. [31] Manufacturing employment rose by almost half (from 111,000 to 166,00) between 1931 and 1938.[32]

Nor was Ireland unusually protectionist during the 1930s; Irish average tariffs were towards the higher end of the spectrum in the sample of European countries for which we have data, but they were similar to those in Germany, Italy, Portugal, Spain, and the United Kingdom. And focusing on tariffs alone is misleading, since these were not the real problem during the 1930s. Rather, countries during this period adopted a wide variety of quantitative restrictions on trade, up to and including exchange controls which in some cases effectively nationalised the international trading activities of particular countries. Ireland didn't do anything nearly as drastic; it was towards the more liberal end of the spectrum when it came to the adoption of quotas as well. Nor were Ireland's restrictions on foreign investment exceptional in the 1930s. And the upshot was that Irish economic performance was also unexceptional.[33]

In the long run Fianna Fáil's policies would prove a *cul de sac*, but from the contemporary comparative perspective of the 1930s they were not so misguided. For a time ISI seemed to work: industrial employment expanded considerably for a while under protection, a welcome development in the context of the Depression and in a polity still trying to find its democratic feet (Table 2). The increase between 1926 and 1936 would have been larger but for the transfer of a portion of Arthur Guinness's activities to London and the contraction of employment at Henry Ford in Cork. However, the inability of the strategy to generate sustained output growth was soon evident in the trend of industrial production: official data imply a tapering off in output and employment by the late 1930s, by which time the home market had been saturated by protected firms.[34] The Second World War intervened before the message could sink in, and the costs of protection would come to outweigh the benefits in the years that followed.

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[31] Clemens and Williamson, 'Tariff-growth correlation'; Neary and Ó Gráda, 'Protection'; O'Rourke, 'Burn everything British'.
[32] Daly, *Industrial Development*, p. 76.
[33] O'Rourke, 'Independent Ireland', pp. 28-9. For data on quotas and other non-tariff restrictions, see League of Nations, *Quantitative Trade Controls*; Whittlesey, 'Import Quotas in the United States'.
[34] Compare the data for employment and output in individual sectors in *Statistical Abstract 1934*, pp. 68-70; *Statistical Abstract 1940*, pp. 81-83.

	1926		1936		1946	
	Total	*% Male*	*Total*	*% Male*	*Total*	*% Male*
FDT	32,369	77.7	34,370	76.1	37,180	74.7
Textiles	7,767	36.5	10,842	36.1	10,165	50.3
Apparel	28,021	47.3	34,847	42.4	36,201	40.1
Leather	1,848	95.1	2,061	84.9	3,389	78.9
Wood, furniture	14,059	96.4	14,440	94.8	13,717	95.2
Metal & machinery	12,242	96.4	13,185	93.4	14,637	89.4
Vehicles & parts	10,238	97.7	9,274	97.8	7,727	98.1
Chemicals, fertilizers	2,432	78.9	3,916	68.7	4,237	65.7
Paper & printing	7,217	66.4	9,435	64.5	10,684	64.0
Bricks, glass, etc.	706	94.5	1,947	84.3	3,658	85.6
Misc.	1,320	69.3	3,882	71.5	6,111	64.4
Total	118,219	73.4	138,199	68.7	147,706	68.0

Table 2. Numbers Employed in Industry, 1926-1946

Source: *Statistical Abstract 1936*, p. 23; *Statistical Abstract 1942*, p. 32; *Statistical Abstract 1951*, p. 40. FDT = Food, Drink, Tobacco.

4. The Emergency

One of the first acts of the Irish government following the outbreak of war in September 1939 was to pass an Emergency Powers Act. Hence the term ‘Emergency’ as a depiction of the war years in Ireland: and this, indeed, was a real emergency. First of all, it was a political emergency, with much intimidation from local representatives of three of the warring parties. Had the country been seriously divided on the issue of neutrality the situation would have been much more critical.

Fears of mass unemployment were very real. A hastily-prepared confidential ‘Report of Inter-Departmental Committee on the Probable Effect on Employment of the Complete Isolation of Eire’ predicted that a complete end to international trade (including cross-border trade) from July 1st 1940 would increase unemployment by between 60,000 and 76,000 immediately, and that an additional ten thousand would lose their jobs in the following two months. This calculation was made on the basis that available stocks of materials and fuel were sufficient for only three months of normal activity. Obviously, the situation was bound to deteriorate rapidly thereafter, as stocks of materials and fuel ran out. Were autarky to last longer and the economy forced to rely entirely on native resources, the committee estimated that “the additional unemployment which might be expected at this point would be approximately 161,000 persons”. The report excluded the impact on employment in agriculture and fisheries, on the liberal professions, and on the self-employed.[35]

The strategy of ISI pursued since 1932 had not prepared the economy for the degree of self-reliance dictated by the war, because – as was often the case for countries pursuing such strategies – the country still depended on imports, in the Irish case from Britain, for fuel, raw materials, and producer goods. Ireland was now faced with a neighbour with considerable monopsony and monopoly power. By the summer of 1940 British coal exporters were demanding payment prior to delivery. Ireland’s representative in London failed to convince the colliery owners that “if they want to maintain their monopoly in future, (not) to take advantage of the present position in the manner proposed”. Still, the British realised that their supplies of Irish cattle and beef were dependent on the quality of the coal they supplied.[36]

The Emergency was associated with the rationing of foodstuffs (particularly sugar, tea, and butter)[37] and a policy of compulsory tillage that was far more drastic than that imposed during the First World War.[38] Not only did compulsory tillage result in higher acreages under the plough than in 1917-18; it also affected agriculture for a much longer period. And surprisingly, perhaps, the impact of compulsory tillage was more drastic in the South than in Northern Ireland, as had been the case during World War I. Fianna Fáil’s tillage inspectors proved much tougher on farmers than Lloyd George’s, and resentment against compulsory tillage—reliant on horses rather than tractors--was considerable. This helps explain the success of a new farmer’s party, Clann na Talmhan, in the general election of 1943. It is also likely that the large sustained rise in cultivation inflicted far more damage on agricultural productivity in

[35] National Archives of Ireland, INDC/EMR/19/8.
[36] Rigney, *Trains and Coal and Turf*, p. 90.
[37] Evans, *Ireland During the Second World War*, pp. 44-68; Crotty, *Irish Agricultural Production*, pp. 158-160; Bryan, *Rationing in Emergency Ireland*.
[38] Evans, ‘Coercion in the Countryside’; Evans, *Ireland During the Second World War*, pp. 134-52.

the wake of the war than it had during the campaign of 1916-1918: certainly, soil exhaustion was a factor in poor grass yields in the late 1940s.

The Emergency saw a rise in the importance of previously marginal economic activities. Exports of rabbit meat and furs peaked at 11,400 tons of meat and nearly 0.7 million skins in 1941. In value terms, rabbits represented about 3 per cent of all exports in that year! The industry was eventually destroyed by the spread of myxomatosis, a virus surreptitiously introduced into wild rabbits in Ireland by a group of well-heeled farmers in 1954.[39] The war years also saw more harvesting of wild fruit. The four hundred tons of bilberries (worth £64,292) exported in 1941 would have entailed over sixty thousand days' labour.[40]

The impact of the crisis can also be seen in the temporary halt to the declining use of horses off the farm; in the sharp decline of travel within the country; and in the substitution of peat turf for coal and gas. The use of peat in post-independence Ireland peaked during the Emergency. It was at this time that the official Scientific Research Bureau briefly revived the nineteenth-century dream of finding non-fuel uses for turf: Peter Rigney has likened the country to "a gigantic outdoor fuel laboratory" with the railway network acting as the national grid for turf.[41] As imports of household coal plummeted from 1.6 million tons in 1941 to 2,169 tons in 1944[42], Emergency Ireland's bogs became a lifeline. In a final flourish in 1957 the policy document *Economic Development* envisaged turf being used as a raw material for 'peat wax', 'peat coke', and 'activated carbon'. The document also mentioned the 'possibility of producing town gas from milled peat' and a soil fertiliser developed by state-owned *Bord na Móna* (the Irish Turf Board).[43] None of these proved viable; *Bord na Móna* scored modest but more enduring successes with peat moss and peat briquettes.

While high food prices in Britain had boosted incomes in a largely agricultural economy during the First World War, the Emergency had a dramatic negative impact on living standards. Of the European neutrals, Ireland alone suffered a reduction in

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[39] Conry, *Rabbit Industry*, pp. 16-52.
[40] Conry, *Picking Billberries*; *id.*, *Rabbit Industry*, pp. 134-35.
[41] Rigney, *Trains and Coal and Turf*, p. 222.
[42] Bryan, *Rationing in Emergency Ireland*, p. 74.
[43] *Economic Development*, pp. 176-7; *Irish Press*, 'Popular fertiliser based on turf', 28 May 1957. A soil conditioner branded as 'Humona' faded from the scene after a few years.

both GDP and GDP per capita during the conflict, although both recovered in 1945.[44] On the eve of the war the ratio of Irish to UK GDP per capita had fallen to less than half; by 1943 it was down to 43 per cent.[45] The fall in personal consumption probably entailed some intra-household redistribution; spending on fuel and light and on clothing fell dramatically, while that on alcohol and tobacco held its own. The lack of domestic heating hurt the poor most. Campaigning paediatrician Robert Colles described how, in the wake of a cold spell in early March 1941, he used a sub-normal thermometer to take the temperature of a dying infant in Dublin's Rotunda Hospital. It registered 85ºF. The infant's young mother revealed that "for the last ten days they had no fire in the room".[46] In Ireland the war led to temporary rises in infant mortality rates and in deaths from tuberculosis. The rise in the former was particularly marked in the cities; the latter was dramatic relative to trends in the UK. And while the crude death rate did not rise during the war, it is its failure to fall as it did in Northern Ireland and Britain that is significant. If trends in Northern Ireland are any guide (Figure 5), excess deaths south of the border in 1942-1945 may have reached the low thousands.

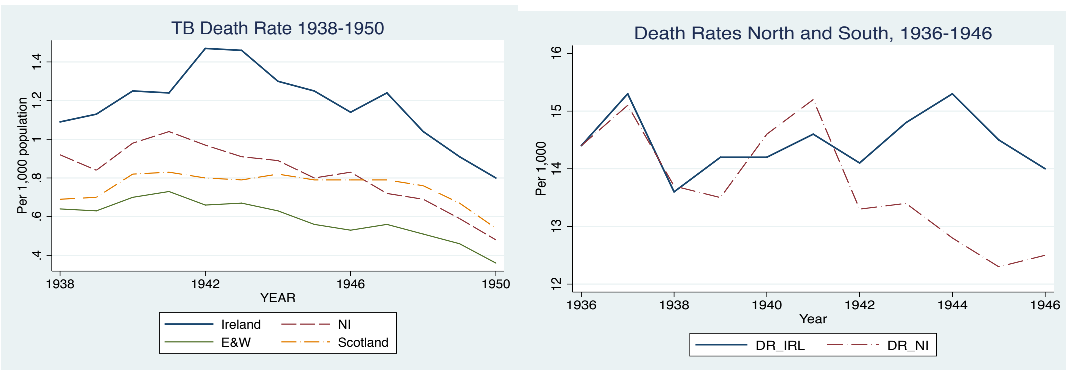

Figure 5. Death rates from TB and from all causes 1936-1945

Source: *Annual Report of the Registrar-General of Marriages, Births, and Deaths in Ireland, 1950*, pp. xix, xxix.

The Emergency forced a certain amount of institutional innovation, notably the creation of the Irish Central Bank. Until the Emergency, Ireland's lack of a central

[44] Gerlach and Stuart, 'Money'.
[45] Maddison Project Database, version 2020. Bolt et al., 'Maddison style estimates'.
[46] *Irish Times*, 9 March 1941.

bank had not previously worried its joint-stock banks; on the contrary, they did not relish the idea. For over a century the Bank of Ireland had played the role of quasi-central bank, while looking on the Bank of England as its friend in need. Just a few days before the outbreak of war a delegation from the Bank of Ireland travelled to London for reassurance about the availability of foreign exchange and the free repatriation of Irish bank assets held in London. They were told in blunt language that given Ireland's Dominion status, it was time for its banks to appreciate the need for an Irish central bank. The Central Bank Act followed in 1942. The Emergency also led to the creation of the Irish Shipping Company in 1941 and the purchase or leasing of fifteen second-hand vessels to service Irish trade. Before the war Ireland had relied on foreign shipping for its merchandise trade, but now no British vessels were available to service Irish bulk cargoes from abroad. Irish Shipping lent Irish trade a lifeline, but at considerable cost in lost ships and lost lives.[47]

5. 1945-58

The immediate post-war years saw rapid recovery in all countries at war except Germany and more modest growth in ex-neutrals, Spain excepted. There was a consumer-led boom in Ireland, the result of a wartime lack of consumer goods that had led to a doubling in real terms of personal savings between 1938 and 1945. These savings were spent between 1945 and 1948, investment almost trebled in real terms over the same period, and there was a huge surge in imports, particularly of manufactured goods. The Irish performance during the late 1940s was relatively poor however, and the fact that it relied so heavily on both consumption and imports was a portent of problems to come. The contrast between 1931-36, when net industrial output rose by 31 per cent, and 1936-38, when it rose by 6 per cent, is matched by that between 1945-53 and 1953-58, when industrial production rose by 87 and 7 per cent, respectively. By the early 1950s government officials realized full well that "many forms of production are now at the limits of existing market needs".[48]

[47] Ó Gráda, *Ireland*, pp. 373-5; *Rocky Road*, pp. 8-9.
[48] National Archives (NA), DT/S13101 c/1.

ISI had simply not worked. Instead of generating an expanding, self-sustaining economy, less reliant on the land, it had resulted in an inefficient, highly protected manufacturing sector that produced a narrow range of products in small plants with short production runs, widely spread throughout the country. The data in Table 3, which were collected in connection with de Valera's pre-election tour of January-February 1948, confirm this impression. Almost three in four employees worked in a firm employing fewer than twenty workers: such a structure was unlikely to produce either internal or external returns to scale. Many firms simply produced or assembled foreign goods under license, without giving a thought to exports. Virtually none of the hundreds of firms set up under ISI survived trade liberalisation in the 1960s.

Region	*All Firms*		*Firms Employing >20*	
	Firms	*Employees per Firm*	*Firms*	*Employees per Firm*
Dublin	516	35	111	54
Rest of Leinster	191	46	63	113
Munster	219	41	69	108
Connacht/Ulster	146	27	47	70
Total	1,072	37	294	82

Table 3. Firms and Employment in Protected Industries, 1947

Source: National Archives of Ireland, S.11987B

Policy shifted only cautiously away from ISI. But a return to the policies of the 1920s was not very palatable either. The promotion of export-oriented subsidiaries of multinationals was politically attractive, since it did not threaten existing indigenous firms directly, at least in the short run. It was even more attractive if the firms in question were American: US investment was not seen as threatening national sovereignty, in the same way as might an over-reliance on British companies.[49] The decision to allow in foreign capital preceded that to liberalize commodity trade by

[49] Barry and O'Mahony, 'Regime change'.

several years. The focus at the outset was indeed largely on American investment, which also promised U.S. dollars at a time when these were scarce across Europe. By 1955 Irish delegations were busily seeking foreign investment in Germany, the U.S., and elsewhere, and in 1956 the inter-party government (not involving Fianna Fáil) enacted a 50 per cent tax remission for a fixed period on export-derived profits.

The blame for the economy's poor performance in the post-war era was widely shared. Fianna Fáil failed to avail of the opportunity to liberalize after 1945, but the inter-party coalitions of 1948-51 and 1954-57 proved little better. Seán Lemass, Minister for Industry and Commerce (1932-1959) and subsequently Taoiseach (1959-66), is remembered not only as ISI's demolisher but as its architect. Although already disillusioned by rent-seeking manufacturers in the 1940s, his disappointments were not then sufficient to prompt him to scupper tariff protection, and his successor almost immediately reassured manufacturers that "so far as he was concerned personally, no Irish industrialist need have the slightest qualms or fears"[50] Indeed, one of the main functions of the Industrial Development Authority as originally constituted in 1949 was to review requests for protection.

By the late 1950s *Economic Development* (November 1958) was stating the obvious when it declared that "the coming of freer trade in Europe in one form or another must be faced in due course". Thereafter Lemass would repeatedly claim that protection had made industry complacent and inefficient: one of the attractions of the various trade liberalization options being discussed was that they would force it to be competitive and reduce its capacity to profiteer.[51]

A second policy failure concerned short-run macroeconomic management. This has been largely forgotten now, but it loomed large in economic discussions of the time.[52] In retrospect, it is striking how heavily—one might say obsessively—economic commentary and policy focused on the balance of trade. Thus, according to the *New York Times* (which in those days contained surprisingly frequent reports of Irish

[50] IBEC Archive, Box 15 (Meetings with Morrissey, 8 March 1948 and 4 August 1948).
[51] E.g. IBEC Archives, Box 14 (FII council meeting, 26 November 1937); NA/ICTU/4002 (Meeting with Taoiseach 1959).
[52] Ó Gráda, *Rocky Road*, pp. 30-33, 67-73.

economic conditions), 'Ireland betters position in trade' (January 6 1953); 'the balance of payments has reached so dangerous a state of disequilibrium that we are within sight of national bankruptcy' (July 29 1956, citing an *Irish Times* editorial); and 'Irish austerity balances trade: Dublin cuts imports' (January 7 1958). The focus on the gap between imports and exports led to a succession of stop-go measures that stifled the growth potential of the economy. The post-war boom ended as a result of a balance of payments crisis that emerged in 1950 and worsened in 1951. This ultimately led to the disastrous recessionary budget of 1952, the work of Fianna Fáil's Seán McEntee. By 1955 the economy was recovering, but so were consumption and imports; in response Fine Gael's Gerard Sweetman ushered through *two* deflationary budgets in 1956, the second of which—among other measures—increased levies on a wide range of 'luxuries' to a preferential rate of 40 per cent on imports from the United Kingdom, and 60 per cent on imports from most other countries. The ensuing decline in consumption was drastic enough to restore the balance of payments, but at the cost of yet another long-lasting recession. Both McEntee and Sweetman, following the conventional economic wisdom of the day, underestimated the ability of the macroeconomy and the balance of payments to self-correct.[53]

It is important to emphasize, however, that Irish policymakers were not uniquely incompetent in this regard: far from it. This was an era of fixed exchange rates and limited capital mobility, in which trade deficits were more of a problem than they would subsequently become. The classic 'stop-go' sequence of loosening fiscal policy, rising imports, and balance of payments crises, leading in turn to tighter fiscal policy, recession, falling consumption and imports, and improvements in the balance of payments, was a familiar feature of the economic landscape in the 1950s and 1960s, with the UK and former colonies such as Australia and New Zealand being particularly badly affected. As Trevor Swan pointed out at the time such problems were predictable in countries with overvalued fixed exchange rates.[54] And it is striking how closely correlated Irish and UK business cycles were during the period.[55]

[53] Honohan and Ó Gráda, 'Irish macroeconomic crisis.'
[54] Feinstein, *Managed Economy*; Swan, 'Longer run problems'.
[55] The correlation between business cycles in the two countries from 1950 to 1972 inclusive is 0.74, where the business cycle series are simply calculated as deviations from log trend. O'Rourke, 'Independent Ireland'.

In the 'lost decade' of the 1950s Ireland fared worst of *all* the economies listed in Table 4. Granted, the UK's growth rate was only slightly higher, but this comparison flatters the Irish one in several respects. First, the familiar convergence logic highlighted earlier stresses that since the UK was a rich country it should have grown significantly more slowly than Ireland. Second, the UK was an underperformer during this period, even when its initial starting position is taken into account.[56] And third, Ireland's population was, uniquely, declining during this period. This was a much commented-upon metric of failure in its own right, but it also meant that Ireland's relative economic performance was even worse when measured in terms of aggregate GDP growth, rather than per capita growth.

	1922-1938	1938-1950	1950-1960	1960-1973	1973-1990	1990-2000	2000-2018
Belgium	0.6	1.0	2.4	4.4	2.1	2.1	0.9
Denmark	2.1	1.6	2.4	3.6	1.7	2.9	1.0
Germany	2.6	-2.1	7.1	3.4	1.7	2.8	1.8
Finland	3.5	1.4	3.9	4.5	2.5	2.0	1.0
France	1.3	1.3	3.6	4.3	1.9	1.7	0.8
Greece	2.0	-2.8	5.1	7.1	1.6	2.8	0.6
Ireland	**1.0**	**1.0**	**2.2**	**3.7**	**3.3**	**7.5**	**2.9**
Ireland (GNI*)		**1.1**	**2.2**	**3.9**	**1.8**	**5.2**	**0.7**
Italy	1.5	1.0	5.4	4.6	2.6	2.3	0.3
Netherlands	0.8	1.1	3.3	3.6	1.6	3.3	1.3
Norway	2.5	2.0	2.9	3.5	2.9	6.3	2.5
Portugal	1.3	1.5	3.6	6.9	2.5	3.1	0.8
Spain	-1.6	2.3	3.8	6.7	3.0	3.5	0.9
Sweden	3.0	2.7	2.6	3.4	1.6	2.0	1.6
Switzerland	1.8	1.5	3.6	3.6	1.6	2.4	2.0
United Kingdom	1.9	0.9	2.2	2.6	1.9	2.0	1.0

Table 4. Per capita GDP growth in successive periods

Source: Maddison Project Database, version 2020. Bolt et al., 'Maddison style estimates'. The CSO GNI* data for Ireland were kindly provided by John FitzGerald. Note: Figures in parentheses indicate negative growth rates.

[56] Crafts, *Forging Ahead*.

Pessimism and despair were the order of the day. Asked to comment on the situation by *Studies*, then a widely read and influential quarterly, an eminent Belfast-based economist lamented how “(t)he statistical evidence, as far as it can be interpreted, confirms general observation, that the Republic is falling further behind; and it is falling behind, not only in income, but in the technical progress which creates the promise of further income”. The enormous emigration and the huge fall in the ratio of Irish to British share prices between 1950 and 1958 also captures the dominant mood of economic pessimism.[57]

The economy’s dismal performance in the 1950s was mainly, though not entirely, the product of poor economic policies. The lack of attractive foreign outlets for agricultural produce hurt, both during World War II and later. But Irish insularity and exceptionalism can be overdone. Wartime neutrality and partition complicated Irish engagement with international organizations such as the UN and NATO, but nonetheless Ireland was a founder member of the OEEC and European Payments Union, the two key organizations promoting European trade liberalization during the early 1950s. When it came to quotas, Ireland was the second least protectionist economy in the OEEC in 1950, behind only Switzerland.[58] Ireland started trying to attract foreign direct investment relatively early: the Industrial Development Authority was established in 1949, while the Irish Export Board, soon rechristened Córas Tráchtála, was established in 1950. Tax relief on export profits was as we have seen introduced in 1956. Irish tariffs were however slow to fall, mirroring what was happening elsewhere along the European periphery, and they remained relatively high in the 1960s.[59]

6. 1958-85

In the late 1950s Ireland finally entered a period of economic growth that would last for several years. Motor vehicle registrations, one plausible proxy for consumer confidence, suggest widespread gloom between early 1956 and mid-1957; car sales then began to rise, being two-fifths higher in 1960 than in 1959, and annual sales would

[57] Carter, ‘Irish economy’, p. 137; Ó Gráda, *Rocky Road*, p. 27.
[58] Eichengreen, ‘Institutions’, p. 59.
[59] O’Rourke, ‘Independent Ireland’.

continue to rise for several years thereafter. Comparing the percentage change in ordinary share values in Ireland and the UK indicates that Irish investors began to show clear signs of 'bullishness' from early 1960 on. Net emigration, a sensitive marker of economic performance, would be lower between 1961 and 1966 than during any inter-census period since independence.

There is still no consensus as to why growth rates increased. Many Irish accounts have claimed that T.K. Whitaker's *Economic Development* was crucial and Whitaker himself held that "objective students of our past philosophy and performance" would find it hard to dismiss the "psychological stimulus" of planning between 1958 and 1962.[60] Although accorded an important role in Irish accounts it notable that the foreign press made little or nothing of *Economic Development* or the subsequent *Programme for Economic Expansion*.

In retrospect, the focus on agriculture and tourism in those documents seems excessive, but their insistence on the need for, and possibility of, even modest economic growth was significant. Other factors posited include the election as Taoiseach of Seán Lemass in June 1959; investments made in social overhead capital during the 1950s beginning to bear fruit; the rapid growth of Ireland's trading partners, in particular the UK; and a commitment to trade liberalization giving a fillip to growth at home. Perhaps all of these changes helped.

GDP growth averaged 3.7 per cent per annum between 1960 and 1973 (Table 4), a miracle by Irish standards but feeble compared with the growth rates experienced elsewhere around the European periphery. The literature has not focused much on Irish underperformance during the 1960s, perhaps because the decade was so much better than the one immediately preceding it. [61] In a convergence perspective Ireland however was still a notable underachiever during the 1960s, falling further behind even a rich core economy such as France. Irish trade liberalization during this period was understandably focussed on the UK, with a free trade agreement being signed in 1965. It is tempting to speculate that continuing dependence on the sluggish UK economy hurt Irish growth during this period.[62]

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[60] Fanning, '*Economic Development*'; Chubb and Lynch, *Economic Development and Planning*, p. 300.
[61] An exception is Girvin, 'Before the Celtic Tiger'.
[62] O'Rourke, Independent Ireland'.

Ireland followed Britain into the EEC in 1973. Once it became clear that this was going to happen the IDA was able to promote Ireland as an export platform into the wider European economy. The impact on Ireland's relative economic performance was immediate: Ireland was no longer an under-performer in a convergence perspective. But it would not be an over-performer either until the late 1980s. More importantly, the 1970s and early 1980s were a dismal period economically everywhere, and in Ireland they were made even more dismal by disastrous economic policy choices in the late 1970s and early 1980s.

Irish government debt had historically been low. This was initially due to a debt write-down in 1925, equivalent to 80 per cent of GNP, agreed with the British government in the context of discussions about the border with Northern Ireland.[63] Before the 1960s Irish fiscal policy had been cautious, arguably sometimes over-cautious. It seemed "to have borne no relation to the source of disturbance in the economy, with deflation routinely following any fall in the foreign exchange reserves".[64] (This reliance on what would later become known as 'internal devaluation' was of course one of the consequences of overvalued fixed exchange rates identified by Swan.) The Irish economist Patrick Lynch had once memorably quipped that "Keynes had come to Kinnegad"[65] to describe the decision of the first Irish interparty government of 1948-51 to break the budget into current and capital components. That early concession to Keynesian economics made perfect sense, but a 'vulgar' version of Keynesianism brought disaster in the 1970s. The oil crisis of 1973 prompted heavy borrowing abroad to support domestic demand, but the focus was on public current expenditure rather than capital spending. From the mid-1970s on successive administrations sought to counter the impact of high oil prices and global recession by unsustainable deficit spending. A surging national debt generated by tax reductions and big increases in public expenditure –- promises delivered by Fianna Fáil in the wake of their historical electoral landslide in June 1977 -- failed to generate the economic growth that would sustain it and, to make matters worse, soaring real interest rates risked sinking the economy. There were warnings aplenty from

[63] Fitzgerald and Kenny, 'Till debt do us part'.
[64] Bruton, 'Irish public debt', p. 36.
[65] Lynch, 'The Irish economy since the war', p. 187. Kinnegad is a village in the Irish midlands.

economists, but political instability and the sluggish growth of the real economy constrained fiscal adjustment.[66] In the late 1970s and early 1980s, many Irish economists dearly wished that Keynes had stayed in Kinnegad. So serious had the situation become by the mid-1980s that maverick economist Raymond Crotty[67] counselled repudiation of the national debt, on the grounds that this would prevent future irresponsible governments from borrowing abroad.

Figure 6 plots the ratio of net national debt and the associated interest burden, relative to Gross National Income. The surge in the debt ratio of the late 1970s and early 1980s may have been less dramatic than the one experienced after 2007, but the impact on the public finances was much more severe as a result of high interest rates. The inevitable consequence was government austerity and a prolonged recession that cast a dark shadow over the 1980s.

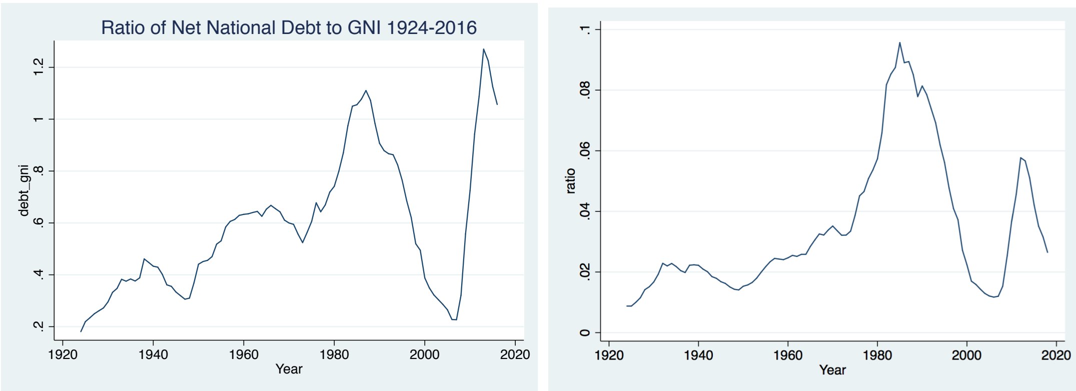

Figure 6. National Debt, Interest Payments, and GNI
Source: FitzGerald and Kenny, 'Managing'.

Between 1979 and 1986 private consumption barely rose and unemployment increased from 6.8 per cent to 17.1 per cent, its highest level in the history of the state. Due to renewed net outward migration, which did not peak until 1989, population declined in the late 1980s—the first such set-back in a generation. The verdicts of two authoritative assessments of the progress of the Southern economy at this juncture

[66] See for example McCarthy and Walsh, 'The coming crisis in the public finances'. *Irish Times*, 29-30 September 1980.
[67] Crotty, *Ireland in Crisis*, pp. 130-135.

struck rather bleak notes, though not as bleak as those that had been sounded in the 1950s. Kennedy, Giblin, and McHugh judged the economy's performance, when set in a broader European context, as 'mediocre', with per capita GDP growth less than every country in Europe except the UK; by the 1980s Ireland had become 'one of the poorer countries in Europe'. Lee's verdict went even further: 'Irish economic performance has been the least impressive in western Europe, perhaps in all Europe, in the twentieth century'.[68]

7. 1985-2000

The crisis ended in a series of severely contractionary budgets, and the first taste of the economic growth that would shape the Celtic Tiger. Spurred on by currency devaluations, a booming European economy, a successful tax amnesty, and the beginnings of social partnership between capital, labour, and government, in the following decade the Irish would grow by more than five per cent annually.[69] In these years of the 'Irish hare' or Celtic Tiger, the Irish economy was transformed into one of the fastest-growing in the world. The change had not been predicted: as late as mid-1987 the EC's annual economic review painted the following bleak picture of Irish prospects:[70]

> Only limited progress has been made in halting the accumulation of large Exchequer Deficits; the resulting high levels of taxation, crowding-out pressures and crushing debt interest bill (nearly half in respect to foreign debt) have created a difficult environment for investment and growth. Employment has only recently begun to stabilize after a prolonged fall. Unemployment has climbed to the unacceptably high average of 18.75 per cent, well above the Community average, but the figure would be much higher had not emigration moved to new high levels recently, thereby offsetting the strong underlying growth in the labour supply.

[68] Kennedy *et al.*, *Irish Economic Growth*, pp. 252-3; Lee, *Ireland*, p. 521.
[69] This discussion follows Ó Gráda, 'Five Crises'.
[70] As cited in Dornbusch, 'Credibility, debt, and unemployment', p. 194.

Why, after more than a half-century of under-performance, did the Irish economy finally find its feet in the late 1980s? One authoritative study suggested five factors, without attempting to rank them: shifting demographic structure, increasing human capital, infrastructural investment, a benign macroeconomic environment, and the opening up of the economy to imports and foreign capital.[71] One of the era's most distinguished Irish economists also claimed that several factors played a role, and that "we cannot establish the relative importance of each"[72]. That is probably true, but it is hardly surprising that a joint work by an ex-politician and an ex-head of the Industrial Development Authority would give pride of place to politicians "who took a long-term strategic view on a number of specific issues", and the "rifle-shot, rather than the scatter-gun, approach" to seeking out multinationals adopted by the IDA since the 1980s—or that a study by a leading economic advisor to the trade union movement would highlight the role of social partnership.[73] Other factors often highlighted in the literature include fiscal restraint; generous tax incentives to multinationals; European Union largesse; plentiful human capital; a pliable and underemployed labour force, and a stock of emigrants willing to return, given better job prospects; ample energy supplies; an underutilised transport network; and a competent and honest public service.[74]

Stepping back, is it possible to say something more systematic? First, the spectacular growth of the 1990s was sufficient to bring cumulative Irish performance over the 20th century back to where it should have been, given its initial income levels (Figure 2). To that extent, the Celtic Tiger was just a delayed version of the earlier economic miracles in Western Europe and East Asia that were based on convergence towards the technological frontier.[75] But it differed from those earlier experiences in interesting ways. Growth in Ireland averaged 6.4 per cent per annum between 1990 and 2003, faster than the growth achieved during the French, German or Italian

[71] Bradley *et al.* 'Interpreting the recent Irish growth Experience,' p. 64.
[72] Walsh, 'The role of tax policy', 671.
[73] McSharry and White, *The Making of the Celtic Tiger*, 363-4, 368, and *passim*; Sweeney, *Celtic Tiger.*
[74] Barrett et al., 'Earnings inequality', suggest that skilled immigration may have helped reduce earnings inequality in the 1990s.
[75] Ó Gráda and O'Rourke, 'Living standards'; Honohan and Walsh, 'Catching up'; Crafts, 'The Celtic Tiger'. Barry, 'The Celtic Tiger era', argues against the convergence perspective and in favour of an alternative, regional economy approach.

miracles of the 1960s, but substantially slower than growth in Korea, Singapore and Taiwan from 1960 onwards. TFP growth was faster in Europe (2-3.7%) than in East Asia (1.3-2.2%), since capital accumulation and the growth in labour inputs (employment plus education) were slower. Irish TFP growth, at 2.2 per cent, was more European than Asian, but largely reflected ICT (information and communication technology) production, itself a reflection of American investment. Irish research and development expenditure was relatively low, at around 1.4% of GDP, consistent with the country's dependence on foreign technology. Irish capital accumulation, at just 1.7%, was unusually slow in the context of these economic miracles, while the country experienced rapidly rising employment that contributed substantially to overall growth. This reflected falling unemployment, return migration, and rising female labour force participation rates.[76]

In such a convergence perspective, what are the most likely explanations for the timing of Ireland's economic miracle? Education was a necessary condition, but was neglected for several decades following independence. An OECD report in the mid-1960s initiated a series of reforms, beginning with the introduction of free secondary education in 1967. While those born in the early 1950s were poorly educated relative to their European peers, those born 30 years later were among the most highly educated. By the late 1980s beneficiaries of the 1967 reform were attaining senior positions in Irish business.[77] Irish tax policy was another necessary condition, but since it had been geared towards attracting inward investment for many decades it seems an unlikely candidate. On the other hand, the fact that FDI played such an important role in the Irish economic miracle points to the role of the European Single Market as an important turning point for the country: inward investment was overwhelmingly geared to servicing what was now the largest integrated market in the world. And that investment was facilitated by the wage moderation of the period, which may have been made politically possible by the depth of the crisis that preceded the boom.[78]

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[76] Crafts and O'Rourke, 'Twentieth century growth', pp. 292-5.
[77] FitzGerald, 'Investment in education'.
[78] Ó Gráda and O'Rourke, 'Living standards'; Honohan and Walsh, 'Catching up'; Barry *et al.*, 'The Single Market'.

A favourable monetary policy environment may also have helped. We have already noted the costly stop-go policies of the 1950s associated with Ireland's indirect membership of the Bretton-Woods fixed exchange rate system. The breakdown of that system in the late 1960s and early 1970s posed the question of what should succeed it: EC politicians were increasingly of the view that a new, intra-European fixed exchange rate system was required. In the UK, however, domestic monetary policy experimentation precluded participation in such an experiment. In March 1979 Ireland joined the European Monetary System and its associated exchange rate mechanism (ERM), implying a break with sterling after over a century and a half. The break spared the Irish economy some of the pain that might otherwise have been caused by the sharp appreciation of the British pound in the early 1980s, but the uncertainties caused by the ERM imposed their own costs in terms of higher interest rates.

Being a member of a fixed, but adjustable exchange rate system was not the same as being linked one for one with sterling. A well-executed devaluation of the Irish pound within the ERM in March 1986 created some monetary breathing space at a crucial juncture. Following the ERM crisis of 1992-3 Ireland pursued, for the only time in its history, a reasonably independent monetary policy. While remaining within the ERM, the Irish pound was now allowed to fluctuate within 15 per cent bands, allowing a margin of policy flexibility. This was used to maintain competitiveness vis à vis the German and British currencies. In conjunction with the nominal wage restraint of the period, and elastic labour supplies, this helped the economy to remain competitive despite very rapid growth.[79]

One of the enduring achievements of the Celtic Tiger was to convert Ireland from a land of emigration to a land of immigration. In 1991 the number of Irish residents born outside the state was 228,725, or 6 per cent of the population, of whom only 54,874 or 1.6 per cent had been born outside the United Kingdom. Two decades later the foreign-born numbered 766,770, of whom nearly 0.5 million had been born outside the UK. The big rise in the number of residents of east European origin is often highlighted, but between 2002 and 2011 the number African-born residents doubled and that of Asian-born residents almost trebled, making for a combined total

[79] Honohan, *Currency, Credit, and Crisis*, pp. 23-48; Thom, 'Irish exchange rate policy'.

of over 120,000. The absorption of what was, in relative terms, the biggest influx of immigrants in any European economy in recent decades was not painless; unskilled Irish-born labour was adversely hit in the 2000s and immigrant labour suffered disproportionately in the 2010s.[80] Research commissioned by the Irish government in the wake of a referendum in 2008 rejecting ratification of the Lisbon Treaty indicated that anti-immigrant sentiment was one factor explaining the vote.[81] Still, there was less open xenophobia than elsewhere in Europe. How Irish civil society reacted highlights the distinction between public opinion (which in Ireland has been unexceptional) and salience, i.e. how much the issue of immigration was a priority for voters. Ireland in 2021 remained virtually the only country in western Europe without a sizeable anti-immigrant party.[82]

8. 2000-2021

Economic miracles inevitably end since convergence is by definition a self-limiting process. Once countries have converged to the technological frontier their technology can only advance at the rate of the frontier itself. Once they have transferred workers from agricultural to industry and services, that source of growth also vanishes. Institutions facilitating convergence to the technological frontier may not be appropriate to generating growth once there. And, in the context of the Irish economic miracle, once the stock of unemployed workers was depleted, and female labour force participation had increased, there could be no further growth from those sources either. The present authors pointed this out in 2000, but unfortunately the country did not converge on a new, slower growth path as we had expected.[83] Instead it embarked on one of the greatest credit-fuelled booms and busts in recent economic history.

In a convergence perspective, slower economic growth in the early 2000s should have been nothing to be concerned about: reaching a new steady state of lower growth

[80] Barrett *et al*., 'Estimating the impact'; Kelly *et al*. 'How did immigrants fare?'.
[81] Sinnott *et al*., 'Attitudes and behaviour'.
[82] Ó Gráda, 'Irish immigration then and now'; compare Arango, 'Exceptional in Europe?'
[83] Temin, 'Golden age'; Eichengreen, *European Economy*; Ó Gráda and O'Rourke, 'Living standards'; Ó Gráda, 'Celtic Tiger'. It is true that Ireland may not be as rich as GDP statistics suggest, implying that there may be more scope for further convergence than sometimes thought. But it would be hard to deny that the scope has declined dramatically since 1990.

at an income level rivalling all but the richest economies in the world should have been deemed a huge achievement. Press and political commentary evoked a sense of disappointment, however, and public policy, with its focus on the need for more imported capital and, in the new millennium, more imported labour was hell-bent on the pursuit of continued rapid growth. For a time, Ireland ranked globally very close to the top in terms of GDP per capita. Book titles such as *Luck and the Irish* (2007), *The Best Is Yet to Come* (2007), and *Ireland's Economic Success* (2008) reflected the prevailing sense that the economy was on a steady state growth rollercoaster.

However, the reality was less rosy—for those who bothered to look.[84] In 1997, Neary and Thom had speculated that "in contrast to the core economies Ireland is currently experiencing falling unemployment and rapid economic growth. In these circumstances lower interest rates are likely to raise demand and lead to further increases in the prices of non-tradables such as housing. Joining EMU could then worsen competitiveness … initially reinforcing but ultimately choking off the current Irish boom."[85] Irish membership of European Monetary Union two years later indeed resulted in a sharp reduction in interest rates, but the impact was even greater than Neary and Thom had predicted. In combination with excessive bank lending and fiscal incentives, the rate cuts fuelled a speculative property boom that was showing signs of going sour from the early 2000s on. More importantly, the banks that had financed the boom were in several cases borrowing excessively and becoming insolvent. National income fell for five consecutive years from 2007: by 2012 the cumulative decline amounted to 18.4%. It was ten years before the 2007 level was attained once more.[86] When measured by GNI* rather than GDP, cumulative Irish growth in the first two decades of the 21st century was just 0.7 per cent. Of the countries in Table 4, only Greece and Italy fared worse.

[84] Kelly, 'The likely fall'; Casey, *Policy Failures*; Honohan and Leddin, 'Ireland in EMU'; Honohan, 'To what extent'.
[85] Neary and Thom, 'Punts, pounds and euros', p. 223. Barry, 'Irish single currency debate', provides a useful overview of the 1990s EMU debate in Ireland.
[86] Based on modified gross national income at constant market prices, available at https://data.cso.ie (N1925).

The calamity reflected a series of unforced domestic policy errors involving *inter alia* fiscal policy, the property market, and banking regulation.[87] Once again, however, there was an international dimension to the problem. Not only Ireland, but virtually the entire Eurozone periphery, suffered from an inflow of cheap capital from the Eurozone core that eventually reversed, leaving higher asset prices, uncompetitive economies, and fragile banking systems in its wake.[88] The Greek crisis was ultimately far worse than its Irish counterpart. But the speed and scale of the Irish downturn, and the humiliation of being bailed out by a multinational Troika, were traumatizing nonetheless. This has been a feature of Irish economic history since 1973: as the economy became more globalized it mirrored the ebbs and flows of the world economy more generally – the recession of the early 1980s, as inflation and debt were squeezed out of Western economies; the Clinton/Greenspan IT boom of the 1990s; the credit and housing bubbles of the Great Moderation; the economic collapse of 2008 and the subsequent recovery. The Irish experience was however particularly volatile. One potential cause is generally pro-cyclical fiscal policy; another is the regional nature of the Irish economy, with complementary labour and capital flows into and out of the country occurring over the course of the cycle .[89]

9. Northern Ireland

> Notwithstanding its political independence, and, therefore separate fiscal system and economic policy, Eire, for example, stands in somewhat the same economic relation to Great Britain as does Northern Ireland.
>
> K. S. Isles and Norman Cuthbert (1957)

The contrast between the heavily industrial northeast and the mainly agricultural south and west was one of the reasons for the partition of Ireland. When RMS Olympic and RMS Titanic were launched in Belfast in May 1911 and April 1912,

[87] Honohan, *Currency, Credit and Crisis*, 99-176; Donovan and Murphy, *Fall of the Celtic Tiger*, pp. 59-167.
[88] Obstfeld, 'Finance'.
[89] Lane, 'On the cyclicality'; Kearney *et al*., 'Assessing'; Lane, 'The Irish Crisis'; Donovan and Murphy, *Fall*, pp. 107-110; Barry and Bergin, 'Export structure'; Krugman, 'Good news'.

respectively, they were the greatest passenger ships ever built. The York Street linen mill, which employed four thousand workers, was the biggest of its kind anywhere, with William Ewart's mill on the Crumlin Road not far behind. On the eve of the Great War Ulster's linen industry provided employment for some 76,000 people; wartime demand would increase that figure briefly to 90,000.[90] 70 per cent of Belfast female workers, and 36 per cent of male workers, were employed in manufacturing; in Dublin, by comparison, the percentages were 32 and 20 per cent. And in 1911 the population of Belfast was significantly larger than that of Dublin. In contrast with Northern Ireland, the IFS was born virtually without major factories; its first census of industrial production in 1926 revealed that brewing (i.e. mainly Arthur Guinness) accounted for nearly 30 per cent of net industrial output.[91] Hardly surprisingly, northern industrialists and their employees were enthusiasts for the Union.

Yet even at the outset not all was well with industry in the new Northern Ireland. In the 1920s and 1930s, as its staple industries suffered from severe spare capacity, unemployment hovered between a fifth and a quarter of the labour force and industrial employment stagnated. No ships were launched in Belfast between December 1931 and May 1934 and Workman Clark, the city's second shipbuilder, was forced to close in 1935. Belfast held on to its share of UK ship production, but the UK's share of world output fell from three-fifths before the Great War to 38 per cent on the eve of World War 2, the main problem being competition from Japan and Scandinavia. For linen producers, there was increasing competition from eastern Europe and China. And the industry, by and large, failed to innovate in an era when the vagaries of fashion trumped durability. The *Report of the Committee on the Principal Causes of the Depression in the Irish Linen Industry* (1928) lamented that by 1927 exports had fallen to less than half their pre-war volume and that the American market was being lost.[92] Linen and shipbuilding gained a temporary reprieve with re-armament and war. Unemployment fell and productivity rose; between 1938 and 1950 both output and productivity growth in Northern Ireland were faster than in the UK as a whole or in

[90] David Johnson, 'The Northern Ireland Economy', p. 184.
[91] Barry, 'Leading manufacturing firms'.
[92] Ó Gráda, *Ireland*, pp. 402-3; *Ulster Yearbook 1950* (Belfast 1950), pp. xxxvii-ix; Catherine O'Hara, 'The Secret Life', chs. 1-2 (citation on pp. 35-6).

the South.[93] By the 1950s, however, the handicaps faced by industry there—"climate, lack of fuel and other raw materials, and the remoteness of the chief British markets"[94]— resembled those invoked to explain southern de-industrialization in an earlier era. Manufacturing employment fell from 169,000 in 1970 to 101,000 in 2000 and 85,000 in 2019. The collapse of linen and shipbuilding are reflected in the drop in employment in textiles and clothing from 58,300 in 1970 to 3,600 in 2019, and in 'transport equipment' other than motor vehicles from 14,300 to 7,400. De-industrialisation was a UK-wide phenomenon, but the Troubles meant that the inward investment required to generate alternative employment was not forthcoming in NI.

Not all the challenges to NI's economy were external. From the beginning its political leaders assisted its ailing traditional industries with loan guarantees and grants instead of seeking out new industries to replace them. Productivity growth and efficiency were thereby sacrificed. In the 1950s this form of rent-seeking prompted scepticism about the viability of devolution. A commissioned survey of the Northern Irish economy which the authorities sought to suppress found that labour productivity across a range of activities was only two-thirds of that in Great Britain in the 1930s and 1940s, and blamed the outcome in part on 'an attitude of restriction'. Elsewhere its authors found it "hard to resist the conclusion... that Northern Ireland is worse off economically than it would be if... the semblance of self-government were removed." Curiously at the same time some observers in the Republic were questioning the future of the southern economy, and the southern authorities delayed the publication of the report of the Commission on Emigration.[95]

By the 1950s Stormont was already hesitantly shifting towards reliance on foreign capital through the Northern Ireland Development Council (NIDC). Seeking to compensate for employment losses from the decline of traditional industries and to diversify the Northern Ireland economy, NIDC offered aspiring investors grants and loans for premises, plant, and machinery. In the quest for direct foreign investment Stormont stole a march on the South in the early post-war period. By late 1957 130 new

[93] FitzGerald and Morgenroth, 'Northern Ireland economy'.
[94] Isles and Cuthbert, 'Ulster's economic structure', p. 114.
[95] Isles and Cuthbert, *Economic Survey*, 349; 'Economic Policy', p. 166; Campbell, 'The Economy of Northern Ireland'; Brownlow, 'Causes and consequences'.

industrial establishments, mostly British, had been established in Northern Ireland. At that time the authorities in the South cannot but have been aware of the North's relative success in attracting inward investment and of the relative buoyancy of the Northern economy. But Northern Ireland would prove consistently unlucky in the type of inward investment it attracted: products that were coming to the end of their product cycle. Or, in one famous case, a product whose product cycle never really began.

In the 1920s the fledgling Irish Free State lured one US motor car manufacturer to Cork; in the late 1970s Stormont lured another to Belfast. As discussed earlier, for a short time in the late 1920s Henry Ford & Sons was the biggest manufacturing employer in the Irish Free State. That experiment was stymied by the rise of protectionism in Europe in the 1930s. Half a century later John De Lorean's eponymous motor company fleetingly employed 2,500 workers in Northern Ireland. The project was intended to relieve an unemployment blackspot at the height of the Troubles by making stainless steel gull-winged DMC-12 sports cars, mainly for the United States market. But the demand for DeLorean's cars proved so limited that his plant ceased production after less than two years. By the end at most nine thousand DMC-12s had been produced, but the number getting into garage forecourts was much smaller: the consensus is that some six thousand remain on the road today, about the same number as were sold during the lifetime of DMC.[96] While Ford's plant in Cork cost the Irish exchequer nothing, DeLorean's plant in west Belfast cost H.M. Treasury £80 million. The sum that lured DeLorean to Northern Ireland was the biggest ever awarded to a foreign investor in Ireland, north or south, equivalent to £13,000 per vehicle produced. Long afterward, in 1997, DeLorean's auditors, Arthur Andersen, paid the UK government $35 million after admitting liability for negligence.[97]

Manufacturing's share of total employment dropped from 35 per cent in 1970 to 16 per cent in 2000 and 11 per cent in 2019. Employment in firms producing pharmaceuticals and computer and allied products, the mainstays of FDI-based

[96] Brownlow, 'Back to the failure'; 'Soft budget constraints'; email 10 June 2020.
[97] *Irish Times*, 'Carmaker and hustler who drove a dodgy bargain', 26 March 2005.

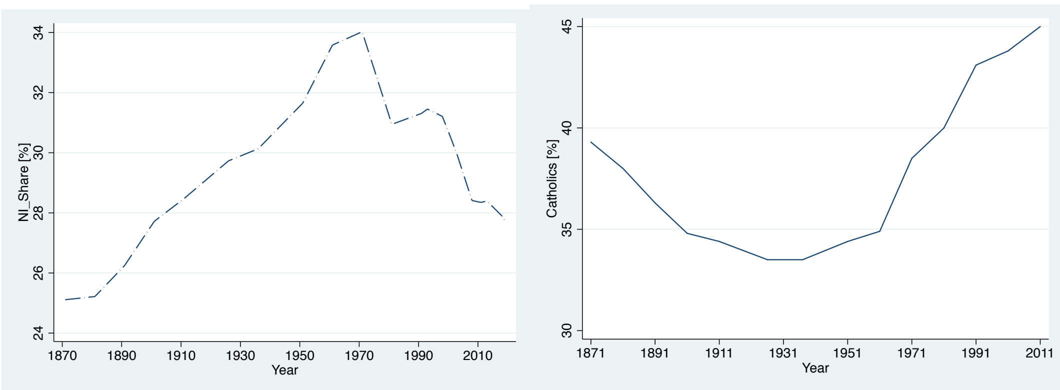
expansion in the South, fell from 13,000 in 1970 to 7,600 in 2019.[98] In another reversal of fortune, manufacturing today provides a higher share of employment in the Republic than in Northern Ireland. By the 1980s northern industry was less technically sophisticated and less productive than southern.[99] Civil conflict had put paid to further FDI; according to one estimate it prevented the creation of 46,000 jobs.[100]

Any account of Northern Irish economic history over the past century has to engage with the impact of the Troubles. It is tempting to ascribe the North's relative economic decline, particularly *vis à vis* the South, to the violence that claimed over 3,000 lives, and some authors have done precisely this. In a pioneering comparison of national incomes Garret Fitzgerald showed that output per head in NI was one-quarter higher than in the south in 1953.[101] By 1972 that lead had been reduced to one-fifth, but transfers from London meant that living standards in NI were still one-quarter higher. The national income gap had declined to 8 per cent by 1983, but increased fiscal transfers from the mainland maintained the gap of one-quarter in living standards. By the time the Troubles ended, NI was left with no productivity advantage over the Republic. Thereafter, thanks mainly to the Celtic Tiger but also to the continuing negative impact of the conflict on potential foreign investors, the productivity gap was reversed although continuing transfers kept the gap in living standards small. For FitzGerald the comparison, above else, was a measure of the damage wrought by the Northern conflict, which deflected virtually all high-tech and financial FDI to the South.[102] But Northern Ireland is hardly the only 'old' industrial region to have experienced relative economic decline, and blaming its decline relative to the South exclusively on the Troubles also ignores the South's pro-active and unusually successful pro-investment policies. Hitchens and Birnie's more formal analysis, which included an allowance for the value of lives lost, put 'the total cost of

[98] Besley and Mueller, 'Estimating the peace dividend', reckon that the end to violence in the mid-1990s led to a 6–16 per cent rise in housing prices.
[99] Brownlow. 'Causes and Consequences'; David Jordan, 'The economics of devolution', ch. 2; Farley, 'A comparative analysis'; Hitchens, Birnie and Wagner, 'Economic performance in Northern Ireland', p. 22; Brownlow 'Soft budget constraints'.
[100] Canning, Moore and Rhodes, 'Economic growth in Northern Ireland'.
[101] FitzGerald, 'The Irish economy north and south'.
[102] FitzGerald, 'The IRA cost NI its economic advantage', *Irish Times*, 23 February 2008.

the Troubles' at £14 billion. An alternative measure by Dorsett compares Northern Ireland to an artificial region composed of the weighted average of other regions in the UK in order to produce an estimate of a no-Troubles counterfactual GDP. The result suggests a penalty of up to 10 per cent, or 15-20 per cent if the increased grants linked to the conflict are included.[103]

This reversal of fortune over the century is reflected in population sizes (Figure 7a). Between the 1920s and the 1960s the North's share of the island's population continued to rise as it had before partition, peaking at 34 per cent in 1970, but since then it has declined to below 28 per cent today. Differential migration patterns are mainly responsible for this, particularly the huge inflow of east European labour into the South since the 1990s. By 2016 17.3 per cent of those living in the South had not been born there, while 11.4 per cent had been born outside Ireland and the UK. In Northern Ireland in 2011, the most recent date for which data are available, the percentages were much lower: 11.2 per cent and 4.5 per cent, respectively.



a. NI Share of All-Ireland Population   b. Catholic Share of NI Population

Figure 7. North-South Demography 1870-2010

Source: NI Statistics and Research Agency; Central Statistics Office

[103] Hitchens and Birnie, *Northern Ireland Economy*; Dorsett, 'The effect of the Troubles'; Brownlow *et al.*, *Review of the Economic Costs*. Fielding. 'Investment', found that consumption was less affected by violence than investment and the net effect on public spending of civil unrest was to increase it.

The shift in the religious composition of NI's population in recent decades has also been dramatic (Figure 7b). In the early decades of the northern state higher emigration matched higher fertility to keep the Catholic share from rising, but since 1961 the share of Catholics in the population has risen from a little over one-third to nearly one-half today. That change has been accompanied by a marked improvement in the relative status of the Catholic population in terms of occupations, employment, education, and housing. The respective age compositions of both communities suggests that the Catholic share will continue to rise.

Indicator	NI	GB	Scotland
Personal consumption	92	120	111
Government consumption	145	128	149
All consumption	104	121	119
GDP	58	75	70
GNI	74	95	88

Table 5. Relative aggregate living standards, 2016 (Ireland = 100)
Source: FitzGerald and Morgenroth, 'Northern Ireland economy'.

Table 5 compares aggregate living standards in the two Irelands in 2016. Figures for Scotland, and Great Britain as a whole, are also provided. As can be seen, GDP in Northern Ireland was only 58 per cent of the Southern figure, but as already noted Irish GDP is not a good indicator of living standards. When GNI is used instead the gap shrinks to 26 per cent, but even this figure grossly exaggerates relative Southern performance. The gap in personal consumption was only 8 per cent. Furthermore, thanks to large transfers from Britain – currently equivalent to over one-third of Northern Irish public expenditure and about a quarter of its Gross Value Added – government consumption in Northern Ireland exceeded that in the Republic by an enormous 45 per cent. Total consumption was thus 4 per cent higher in the North than in the South, and while the Northern lead had diminished since 2012 (when it stood at 14 per cent) it is striking how transfers have, on what is arguably the most relevant measure of living standards, kept the North ahead of the South The real difference is no longer North versus South: the poorest counties straddle both sides of the border.[104]

10. The future

The economic history of Ireland over the past century is one of persistent failure followed by a spectacular recovery. That recovery mostly reflected the country's success in attracting direct foreign investment, a policy that had been pursued for decades but which yielded the greatest dividends following Ireland's entry to the EEC, and, especially, the Single Market of the European Union.[105] Initial experimentation with export-subsidizing industrialisation involved a combination of capital grants and low tax rates. The zero rate of tax on income from export sales of manufacturing goods was not compatible with EEC rules, but on accession in 1973 it was agreed that Ireland would introduce a 10 per cent tax rate on all manufacturing activity in 1980, to be followed by the same rate on financial services in 1987. Ireland got away with this because of first mover advantage and its small size. The resulting opportunities for transfer pricing began to be noticed in the 1970s, and by the early 1980s its distorting impact on Irish national accounts was noted.[106]

When the EU objected to these sectoral incentives as discriminatory in 1996, they were phased out in favour of a 12.5 per cent tax on all trading income. At the outset this tax regime lured direct foreign investment, but it was the possibilities of using Ireland as a platform for transfer pricing that interested some multinationals most. Tørsløv *et al*. not only called Ireland a tax haven but identified it as the most tax shifting destination in the world. They reckoned that in 2016 multinationals shifted $117 billion out of Ireland and that Ireland's effective corporation profits tax rate was 4 per cent, not 12.5 per cent.[107]

Ireland's reputation is as a home for brass plate enterprises producing little or nothing in Ireland but booking huge profits there. If that were the case, the prospect of international tax reform would hold few fears for the country at large. In fact,

[104] FitzGerald and Morgenroth, 'Northern Ireland economy'.
[105] Barry, Foreign Investment'; Barry and Daly, 'Mr. Whitaker and industry'; Barry and O'Mahony, 'Regime Change'.
[106] *Irish Times*, 'Figures for GNP may be exaggerated by 5%', 19 October 1984.
[107] Tørsløv et al., 'Missing profits', Appendix Table 2.

multinationals are major employers in Ireland, and their profits – whether generated in Ireland or abroad – are a major source of revenue for the government. International tax reform is one predictable shock that the country will in all likelihood have to adjust to in the coming years. Brexit is another. The country will presumably reorient to some extent away from Britain and towards Continental Europe, but the impact on Northern Ireland and North-South relations is less predictable. Although the volume of merchandise trade between the two Irelands is higher than a standard gravity model would predict, Irish trade flows have always tended to be oriented toward Britain rather than north-south. In that sense Northern Irish industry did not complement southern Irish agriculture; both relied heavily on the British market. Movements of people between the north and the south have also been smaller than might be expected and there is some evidence that partition reduced it even further. Yet the upsurge in north-south migration during the 'Celtic Tiger' boom shows that economic growth matters greatly for migration too.[108] Will Northern Ireland's new hybrid status straddling the EU and UK markets, with border checks being introduced on imports from Great Britain, promote North-South economic integration? Or will Northern Ireland become more distinct, befitting its unique and even more complex status? Only time will tell.

[108] Ó Gráda and Walsh, 'Did (and Does) the Irish Border Matter'; Lawless *et al*. 'South-North Trade'.

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