

Seventy Years of Irish Fiscal Policy: 1954-2024

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Summary

This paper analyses Irish fiscal policy over the last 70 years, considering how appropriate the fiscal stance was each year, given the state of the economic cycle. It finds that fiscal policy was generally pro-cyclical, aggravating rather than dampening fluctuations in economic activity. This was damaging to the long-term interests of the population.

In two periods, the 1980s and 2009-2014, governments had little room to operate countercyclical fiscal policy. Instead, prolonged periods of austerity were needed to restore order to the public finances. The lesson from these two episodes was that inappropriate fiscal policy, as well as other policy failures, can be very costly for the economy. Also, when serious fiscal action is required to ensure government solvency, painful fiscal adjustment is better implemented speedily, rather than dragged out over many years.

1. Introduction¹

For most of the 70 years covered in this paper, the EU rules on fiscal policy had yet to be developed, and Irish fiscal policy was entirely the responsibility of Irish governments and the Oireachtas.

Initially, within the EU, the choices individual governments made on fiscal policy were unconstrained by EU law. However, in anticipation of the start of Economic and Monetary Union (EMU), in 1997 the EU agreed the Stability and Growth Pact (SGP). It was designed to strengthen the monitoring and coordination of national fiscal and economic policies to enforce the deficit and debt limits established by the Maastricht Treaty. In designing the SGP the key focus was on preventing any member of the EMU from becoming insolvent, which could endanger other member states. It was not designed to ensure individual countries adopted fiscal policies appropriate for their domestic economic circumstances.

Even with EU fiscal rules, the primary responsibility for fiscal policy remains with national governments. In practise, the EU rules have not prevented Irish governments from making unwise choices on fiscal policy in the past, nor have they constrained Irish governments from pursuing fiscal policies that they have felt appropriate.

In particular, the EU fiscal rules do not deal with the important role of fiscal policy, envisaged by Keynes in the 1930s, in managing cyclical fluctuations in the economy. Instead of encouraging countries to use fiscal policy to stimulate activity when output is below trend, and to moderate activity when an economy is at full employment and growing above trend, the intention of the SGP and its successor remains to protect countries, and the EMU, from long-term insolvency.

While managing an economy to maintain solvency is essential, it is the minimal requirement for fiscal policy. It is, therefore, appropriate for national governments, including the Irish

¹ The author would like to thank Thomas Conefrey, Alan de Bromhead, Eddie Casey and staff in IFAC for very helpful comments on an earlier draft of the paper. However, the author alone remains responsible for the contents of this paper.

government, to choose their own fiscal rules, consistent with the overarching EU rules. In Ireland's case the government introduced a rule in 2021 to cap increases of combined current and capital spending at 5% a year. However, the Irish rule has not been observed in recent years, and it is also poorly aligned with the role of encouraging counter-cyclical fiscal policy

This paper concentrates on the last 70 years of fiscal policy in Ireland and considers the extent to which domestic fiscal policy has actually been used to moderate shocks and fluctuations in economic activity, and the extent to which fiscal policy has aggravated such fluctuations. Account is taken of the fact that over two sustained periods, the 1980s and 2008-2015, the issue of national solvency, of necessity, dominated policy-makers' considerations.

This paper uses a version of a methodology implemented by Kearney et al., 2000, and Kearney, 2012, to analyse budgetary policy between 1976 and 2012. It looks at fiscal policy in Ireland over the much longer period from 1954 to 2023, considering whether it was appropriate to the needs of the economy each year, given the state of the economic cycle. Obviously there is a degree of hindsight involved, as the information necessary for targeting budgetary policy each year was, of necessity, more limited than it is many years after the event. Nonetheless, in many cases, even with the limited information available to policy makers at the time, the actual stance of budgetary policy was inappropriate for the then needs of the economy. In some cases budgetary policy exerted a deflationary impulse that was inappropriate, and in others there was a degree of profligacy, pumping money into an economy already operating at capacity.

The approach taken in this paper is to compare the actual budgetary outcome each year, in terms of revenue and expenditure, with a "neutral" baseline where tax and expenditure policy are held unchanged. To the extent that the budget deficit was greater than the "neutral" deficit, fiscal policy was adding to demand, and where the deficit was lower (or the surplus higher) the effect of budgetary policy was to cool the economy.

The procyclical fiscal policy, resulting in the economy departing from a steady growth path, may well have had significant negative distributional effects. However, this paper does not consider such distributional results.

One might expect that if budgetary policy, averaged over time, were broadly neutral, there would not be a major change in the debt to national income ratio. However, a range of other factors can affect the debt stock, such as the need for a bank bail-out in 2010 and 2011. Nonetheless, the sum of the fiscal interventions over the seventy years is small, with stimulatory budgets averaging only slightly less than deflationary budgets. As a result, the debt burden relative to national income in 2024 was not very much higher than it was seventy years earlier in 1954.

Section 2 of this paper describes the development of the public finances over the period 1954-2023. The methodology used to analyse the fiscal stance each year is set out in more detail in Section 3. The data used in the analysis are briefly discussed in Section 4. The results of the analysis are set out in Section 5 and Section 6 concludes.

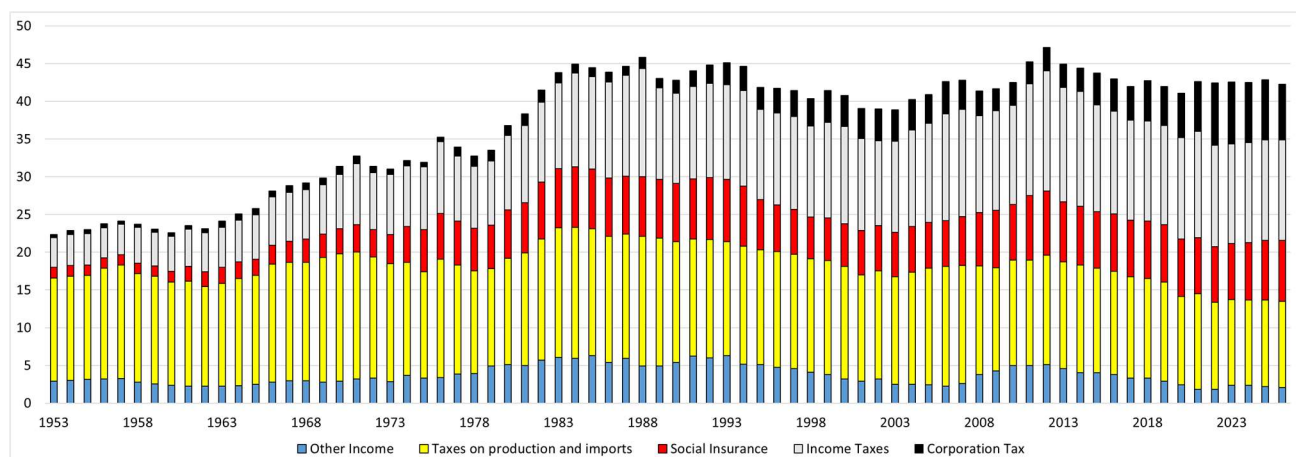
2. Public Finances

Public Expenditure and Revenue

Over the last seventy years the role of the public sector in the Irish economy and wider society has greatly expanded. This is illustrated in Figures 1 and 2. Until the early 1960s government

revenue was under 25% of national income², with the bulk of the revenue coming from indirect taxes. Direct taxation, including income tax, accounted for under 5% of national income. From the early 1960s through to the early 1970s revenue grew to account for a third of national income, with most of the increased revenue coming from direct taxation – income tax and social insurance.

Figure 1: Government revenue as a share of National Income (GNI*), %



Source: CSO National Accounts

With persistent economic difficulties, from 1980 to 1987 revenue was rapidly increased as a share of national income to try and eliminate the huge budgetary deficit, reaching a peak of 45% of national income in 1988. The Celtic Tiger years of the 1990s saw revenue's share of national income fall to just under 40% by the early 2000s, but the financial crisis again saw it rise again to 45%. Today, it is around 43% of national income.

Corporation tax revenue, which is largely paid by foreign firms operating in Ireland, accounted for over 8% of national income in 2023. If this tax is excluded, the share of national income paid by domestic residents in taxes and charges in 2023 was around 34%. This is back to the level experienced for a few years in the early 2000s and before that in the late 1970s. This contrasts with the situation today across the EU where government revenue is around 46% of national income. In only two countries, Malta and Romania, is it close to the Irish level (excluding corporation tax) of 34%.

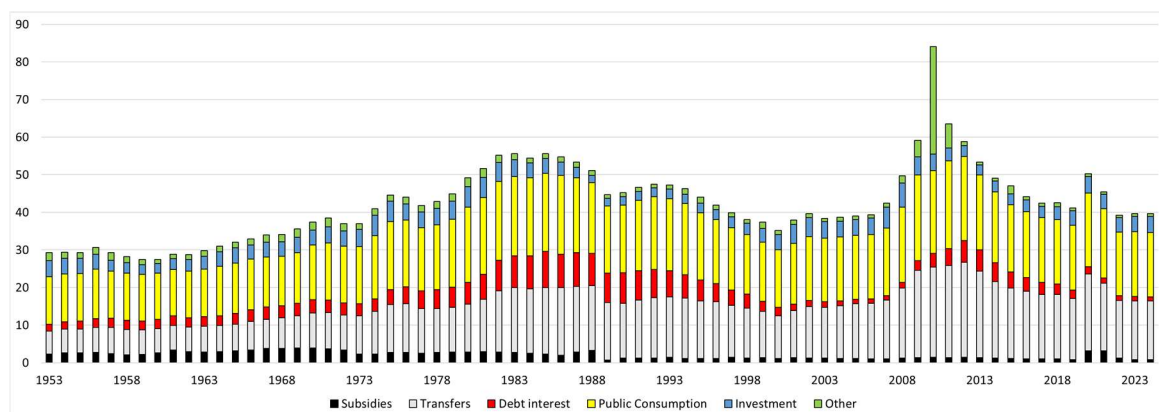
The Irish government sector was borrowing over 5% of national income to fund services in the 1950s, compared to a General Government Surplus today of almost 3%. Thus public expenditure in the early 1950s accounted for around 30% of national income, with revenue only accounting for 25%. As a result, the debt to national income ratio rose from around 45% in 1953 to over 60% by 1959. Over the 70 years since 1953 public expenditure has risen to account for around 40% of national income today. However, along the way there were wide fluctuations in this share, especially in times of economic difficulty.

From the mid-1960s to the early 1970s there was a substantial expansion in the role of the state in the economy. This was the period when the Irish administration was adjusting to EU membership. There were also significant policy changes, resulting in a substantial increase in

² The phrase "national income" is used throughout this paper to indicate GNI*, or before 1995, GNP linked to GNI*.

expenditure on education and health, all affecting public consumption. Public expenditure rose from around 30% of national income to around 40%. Transfers, which had been around 7% of national income in 1965, rose to 9% in 1972 and 13% in 1975. The rapid increase in transfers between 1972 and 1975 reflected a significant change in policy by the then coalition government.

Figure 2: Government Expenditure as a share of National Income (GNI*), %



Source: CSO National Accounts

In 1977 public expenditure accounted for around 40% of national income. Over the subsequent 5 years it rose to 55% in 1982. This increased share reflected a further increase in transfers, and also a substantial increase in public consumption as a share of national income. However, the increased share of expenditure in national income was not mirrored by a similar increase in revenue. As a result the national debt climbed rapidly, causing debt interest as a share of national income to rise by around 3 percentage points, despite the negative real rate of interest for much of the period.

In the mid-1980s, a time of very slow growth in the wider economy, public expenditure peaked at around 55% of national income. Debt interest payments reached 9.6% of national income in 1985 as a result of the rapidly rising debt and high real interest rates. However, tough fiscal action spread over the decade, saw public expenditure fall back to around 45% in 1990. As a result of measures to tackle the fiscal crisis of the time, public consumption was reduced from 21% in 1985 to 18% of national income in 1989. Today it is around 17%, a rather similar share of national income to that in other EU countries.

Between 1990 and 2000 the share of public expenditure in national income fell from 45% to 35%. Over half of the reduction in the share was due to a very large reduction in debt interest payments, consequent on a period when borrowing was brought under control, while the economy was growing rapidly. After 2000 public expenditure began to creep back up to 43% in 2007, with much of the increase due to a rise in transfers.

The financial crisis years of 2008-2013 again saw public expenditure average over 60% of national income, when the bank bailout is included. While public expenditure fell rapidly as a share of national income after 2013, the pandemic saw it peaking again at 50%. Today it is back just below 40%. This is slightly lower than the average for the EU of around 43%.

Figure 2 shows the share of government revenue accounted for by different forms of taxation. In 1953 government revenue accounted for only 22% of national income, with well over half of that coming from indirect taxation. Direct taxation then accounted for a quarter of government

revenue. By the early 1960s government revenue still accounted for under a quarter of national income and the structure of the tax system had changed little since 1953.

By the time Ireland joined the EU in 1973 government revenue amounted to 30% of national income, with the bulk of that revenue still coming from indirect taxation. However, by 1980 the share of national income accounted for by total revenue had risen to 36%, and over half of the revenue came from direct taxation, with indirect taxation declining in importance,

The negative impact of the unwise fiscal policies of the 1977-1981 period saw the economy facing a major fiscal crisis in the early 1980s. The high debt level of the 1980s was combined with high real rates of interest from 1983 onwards. This saw very large debt interest payments requiring a very large primary surplus to begin restoring balance to the public finances.

Initially the response to the public finance crisis was to try and close the gap between expenditure and revenue by raising taxation – to a peak of 46% of national income in 1988. While some of the increased revenue was met by raising indirect tax rates, the bulk of additional revenue came from increased direct taxation, including the introduction of very high marginal rates of taxation on higher incomes. As discussed earlier, from 1987 the focus of fiscal adjustment was more on reducing expenditure.

With the rapid growth in the 1990s, order was restored to the public finances and revenue's share of national income fell back to around 40% by 2000. An ever increasing proportion of revenue came from direct taxation, including corporation tax. Reflecting the deadweight loss involved in the very high marginal rates of income tax in the late 1980s (Honohan and Irvine, 1987), the marginal rates were greatly reduced in subsequent years, still leaving income tax as a key source of government revenue.

The financial crisis saw government revenue peak again as a share of national income at 47% in 2012. Today it is back down to 43% - around the average for our EU neighbours. However, if corporation tax is excluded, most of which is paid by foreign owned companies, government revenue today only accounts for around 35% of national income, lower than in most other EU countries. In 2023 around two thirds of government revenue came from direct taxation, including corporation tax. While the taxes paid by those living in Ireland (excluding corporation tax) are lower than in other EU countries, the expenditure on public goods and services is much closer to the EU norm.

Fiscal Balance and Debt

Government borrowing in the mid-1950s averaged over 5% of national income, with a primary deficit of over 3% (Figure 3). The national debt in 1953 had been quite low, at 45% of national income, but it rose rapidly to be just under 60% of national income by 1959, reflecting the continuing primary deficit in the intervening years. In the 1950s the deteriorating public finance situation was reflected in a significant risk premium paid on Irish government borrowing compared to the UK (Figure 5).³ It peaked at 1% in 1956, reflecting the economic problems faced by the economy that year. Between 1953 and 1959 real interest rates averaged 2.7% a year based on the GNP/GNI* deflator.

³ With a fixed exchange rate from 1922 to 1978, the risk premium is calculated as the difference between the yield on Irish government borrowing based on bonds with a maturity of 10-15 years compared to UK borrowing at similar maturity (FitzGerald and Kenny, 2018).

While government borrowing averaged 4.5% of national income over the period 1960 to 1972 (Figure 3), the primary deficit was quite low over much of the period, due to the growth in nominal national income and relatively low real interest rates (averaging close to zero). This meant that the debt to national income ratio in 1973 was back under 50% of national income (Figure 4). The risk premium on borrowing over the 1960s relative to the UK was effectively zero,

The economic difficulties of the 1970s, triggered by the first oil price crisis at the end of 1973, saw surging inflation as well as a dramatic rise in government borrowing. In turn, this saw the debt to national income ratio return to 60% by 1977. Despite the economic difficulties in the mid-1970s, the Irish government, for a period, was actually borrowing at slightly lower rates than the UK government, reflecting the even greater economic challenges that the UK then faced.⁴ However, from 1977 onwards, the risk premium increased reflecting both the profligate economic programme of the new government elected in 1977 and, also, the growing prospect of a break in the fixed parity with sterling.

Figure 3: General Government Surplus as percentage of National Income, %

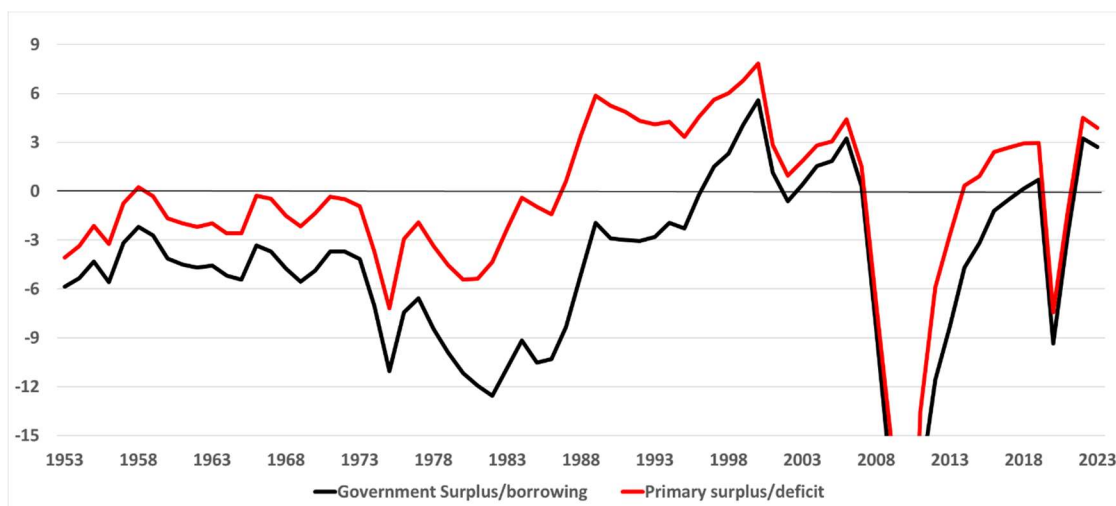
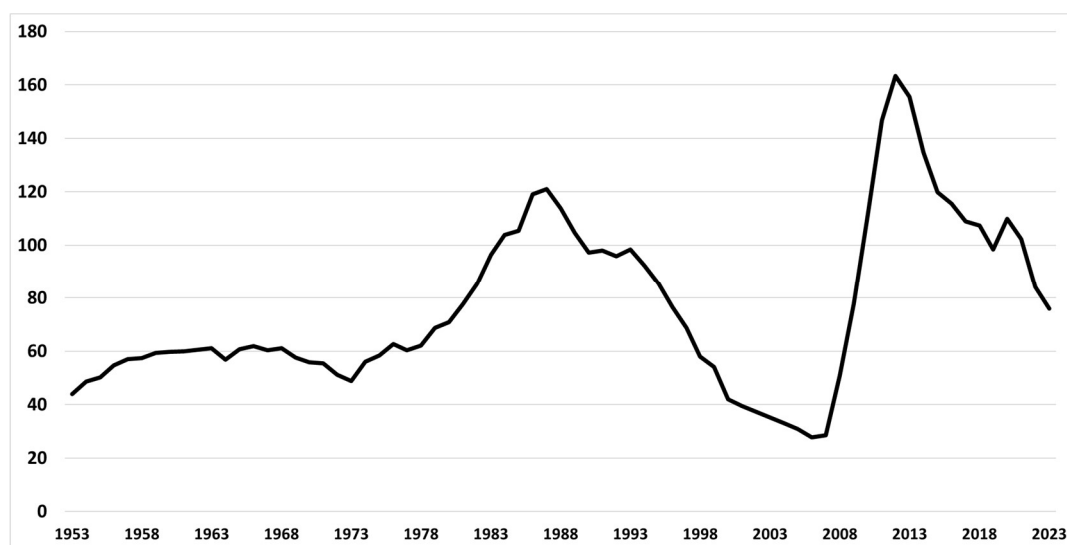


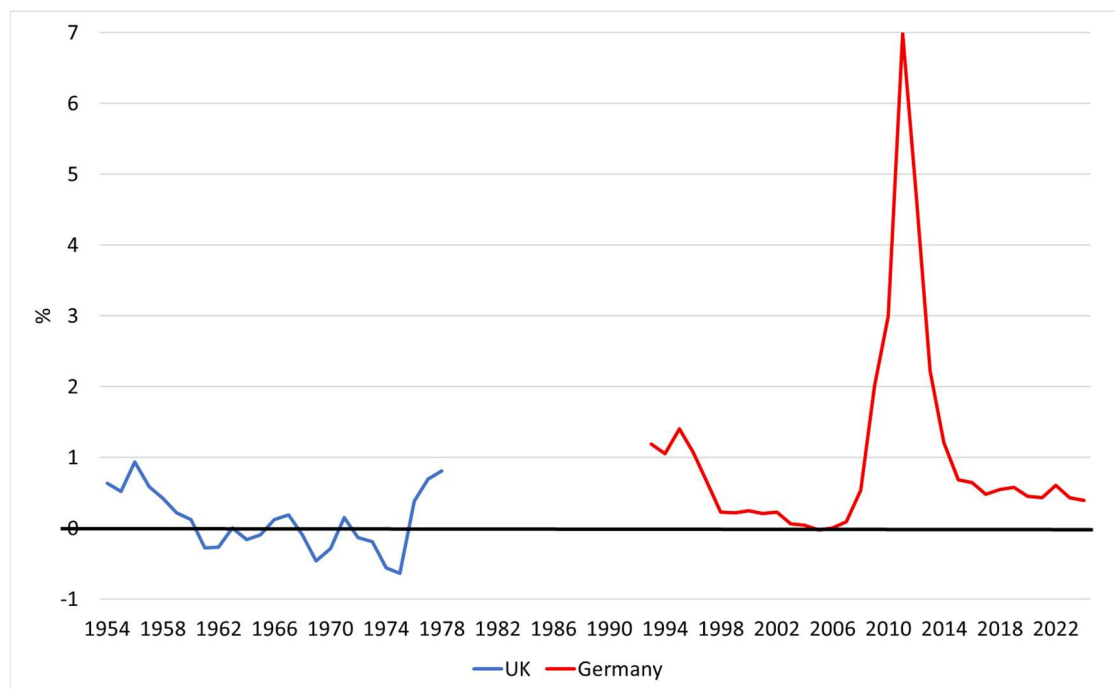
Figure 4: National Debt, % of National Income (GNI*)



CSO National Accounts and Kenny and FitzGerald, 2018

⁴ In the autumn of 1976 the UK government had to seek IMF support.

Figure 5: Risk premium on Irish government borrowing relative to UK and Germany



Source: FitzGerald and Kenny, 2018

By 1980 the debt to national income ratio had reached 71% and the government deficit amounted to 12% of national income. It remained above 10% until 1987. This meant that the debt ratio was rising rapidly, peaking at 120% of national income in 1987. A significant factor in the continuing high borrowing was the very high real interest rate. While real interest rates had been negative for the 1970s, they averaged +5.8% between 1981 and 1990. In turn, this meant that the government primary balance showed a small surplus in 1987. Strong Fiscal action brought government borrowing down rapidly to under 3% by 1989, reversing the upward trend in the debt burden.

Honohan and Conroy, 1994, provide detailed analysis of the rise in the risk premium on Irish bonds denominated in Irish pounds in the 1980s. They indicate that perceived exchange risk was an important factor in this change. However, they also show that the realised change in the exchange rate was less than expected so that there were significant excess returns from investing in Irish bonds relative to German bonds.

FitzGerald and Kenny, 2018, show that the difference between the interest rate on Irish government and German government borrowing in DMs between 1981 and 1987 averaged significantly less than 1%. This seems surprising given the very significant problems in the public finances and the exchange risk that attached to Irish borrowing in DMs. With the benefit of hindsight, by undertaking most of its financing in Irish pounds, the government was paying a high price, possibly with wider economic consequences.

Between 1988 and 2007 government borrowing never exceeded 3% of national income and surpluses were recorded most years between 1997 and 2007. At the same time, between 1994 and 2007 the economy saw an exceptional period of growth. As a consequence, the debt

burden fell from 96% of national income in 1992 to 29% in 2007. Also the premium on Irish government borrowing compared to Germany averaged around 0,4% over that period (Figure 5).⁵

With the consequences of the financial collapse, beginning in 2008, government borrowing rose to unprecedented levels. Between 2009 and 2011 the cost of bailing out the banking system saw government borrowing peak at a truly exceptional 42% of national income in 2010. The crisis levels of borrowing saw financial markets lose confidence in the Irish government's ability to repay its mounting debts. The risk premium on Irish government debt peaked at around 7% in 2011 and the government had to rely on support from the EU and the IMF in 2011- referred to as the "bail-out".

Really tough fiscal tightening and an economic recovery saw borrowing fall back to 3% in 2015 with a small surplus by 2018. Also, the ballooning debt during the crisis had a much more limited long-term impact on the economy than in the 1980s because of the exceptionally low interest rates experienced in subsequent years. While the pandemic temporarily derailed things, with borrowing in 2020 of 9% of national income, the public finances were back in surplus by 2022. Throughout the period from 2015 the exceptional growth in corporation tax revenue played a crucial role in turning the government's deficit into a surplus.

The financial crisis saw the national debt reach a new peak in 2012 of 166% of national income. However, as a result of the prolonged economic recovery since 2013, and the recent bout of inflation, the debt burden has fallen back to just over 76% in 2023. When government liquid financial assets are taken into account, the net debt at the end of 2023 was 62% of national income.

3. Methodology

A number of methods have been proposed to define a neutral fiscal policy, where the government is neither adding or subtracting from demand in the economy. Such a neutral benchmark can then be used to measure the extent to which fiscal policy in an individual year is pro or counter cyclical.

Blanchard, 1990, suggested a methodology that avoided the need to define potential output by relating the budget balance to the level of unemployment in the economy. However, such an approach would not have been very useful in Ireland over the last 70 years, given the very open nature of the labour market, and how it has evolved over time.

Instead this paper adopts the basic methodology used in Kearney *et al.*, 2000 and Kearney 2012. This aims to define the fiscal policy stance each year that would have had a neutral impact on demand in the economy. In the case of taxation it is assumed that the average rates of taxes on personal income and indirect taxation (relative to their bases) remain unchanged from the previous year.

In the case of Kearney *et al.*, 2000, they used a model of the economy to estimate the full economic effects of what they defined as discretionary fiscal policy changes. Using the HERMES macroeconomic model, roughly a third of the cost to the government sector of a discretionary fiscal policy injection was offset by increased tax revenue or reduced expenditure

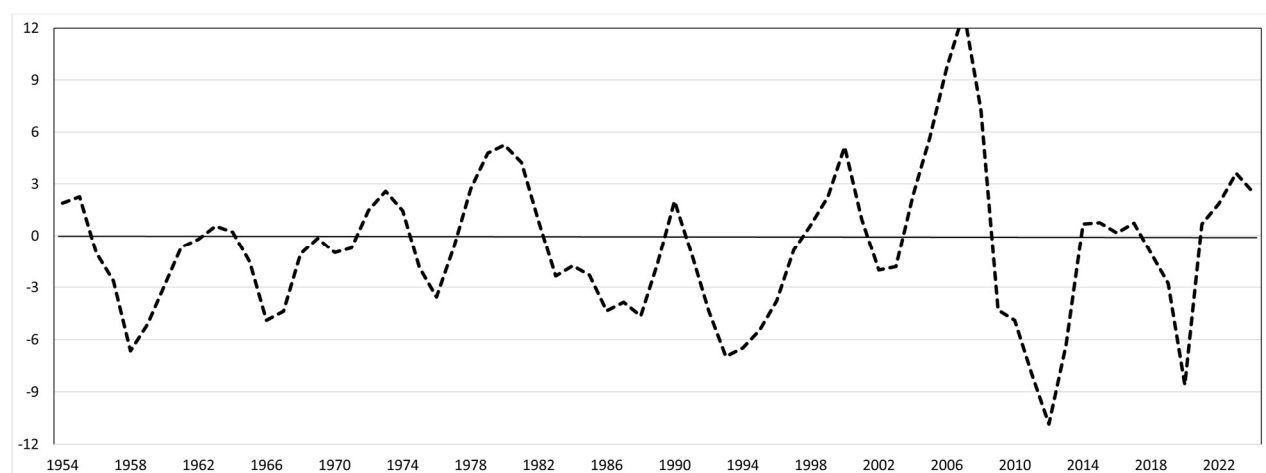
⁵ Between 1991 and 1998 there was exchange risk pertaining to Irish government borrowing in Irish pounds when compared to German DMs. In fact there was a realignment between the Ir£ and the DM in 1993. However, as the start of EMU approached the possibility of a further realignment became more and more unlikely, reflected in a fall in the differential in long interest rates.

as a result of the induced higher level of economic activity. However, this varied depending on the nature of the fiscal instruments used.⁶ In using a model of the economy they were also able to measure the extent to which fiscal policy actually kept output closer to its potential.

Table 1: Indexation rules defining a neutral budget

Taxes	Rule
Personal income taxes	Average tax rate relative to base held unchanged every year ⁷
PRSI	Average tax rate relative to base held unchanged every year
Indirect taxes	Average tax rate relative to base held unchanged every year ⁸
Corporation tax	Treated as exogenous
Expenditure	
Transfers	Increased in line with CPI and numbers eligible
Pensions	Population aged 65+
Child-related payments	Population aged 15 and under
Unemployment	
Subsidies	Indexed to value of personal consumption
Public consumption	Wage rates and average long-run GNI* growth
Public investment	Aggregate investment deflator ⁹

Figure 6: Deviation of output and output growth from trend



⁶ However, there are wide standard errors around such numbers.

⁷ This does not mean that tax bands are held unchanged. With inflation, to keep the average rate unchanged tax bands need to be increased and / or changes made to the actual tax rates.

⁸ In the case of indirect taxation the base is taken to be personal consumption and investment in housing. Purchases of new dwellings pay VAT and such sales constituted a significant share of indirect tax revenue in the period 2002-2007. Prior to 1975 customs duties are also included in indirect taxes. Because much of the revenue from these duties came from imports of oil and tobacco, they were similar to excise duties in terms of their incidence.

⁹ It probably would be more appropriate to assume a volume increase in public investment, possibly in line with real national income. However, even this might not keep the stock of public infrastructure relative to national income unchanged. Another possible approach would be to index the volume of public investment to population.

No adjustment is made for fluctuations in corporation tax. Over the last 15 years it has grown dramatically in importance as a source of revenue.

This paper does not use such a macro-economic model. Instead it considers whether the fiscal stance was pro or counter-cyclical, estimating the size of the direct fiscal impulse each year relative to national income. Thus this paper does not capture the feedback effects from activist fiscal policy interventions.

Table 1 sets out the guidelines used to define policy neutrality each year. These rules are applied to the outturn for the previous year and the outturn for the public finances for the current year is then compared to this neutral benchmark.

Ideally potential output would be modelled independently as a function of capital and labour inputs, including human capital, and then the level of actual output compared to potential. However, measuring potential output poses significant challenges in the Irish case (Murphy et al., 2018 and Casey, 2019).

Instead, the potential output of the economy is proxied by an eleven year moving average of real GNI* centred on the current year.¹⁰ Figure 5 shows the ratio of actual national income to this definition of potential output. When actual output or national income is above potential (positive in Figure 6) it would be appropriate to implement a deflationary fiscal policy – taking money out of the economy. When national income is below potential the opposite is the case – a stimulatory fiscal policy would be appropriate. It is against this benchmark that the fiscal policy each year is judged.

4. Data

The data used in this paper come from the National Accounts rather than the government's traditional Exchequer accounts. The National Accounts concentrate on transactions between government and the rest of the economy whereas the Exchequer accounts involve many cases where money is transferred within the government sector from one institution to another, making interpretation of what is happening difficult.¹¹

The National Accounts data for the public finances, using the current definitions, are available in detail back to 2000, and in more summary form back to 1995. Before that the CSO Historical National Accounts data are used back to 1970. These data use slightly different definitions than are used today. The individual series are linked at 1995 to give continuous series back to 1970. Similarly, earlier vintages of the national accounts from 1953 to 1970 are linked to the series from 1970 to give continuous series for the individual items of government revenue and expenditure from 1953 to 2023.¹²

The figure for government borrowing is also linked back to 1953, rather than being derived as the difference between revenue and expenditure in the linked series.¹³ This is because of some

¹⁰ Using this filter, the periods when the economy was either well below potential or above potential are identified in line with standard works on the economic history of the period.

¹¹ The Exchequer accounts also leave out major areas of expenditure, such as from the social insurance fund.

¹² The CSO's first set of national accounts data for the government sector are for 1953.

¹³ Even in the 1950s and early 1960s, there is not a very big differences between the linked series for borrowing and borrowing derived by subtracting linked government expenditure from linked government revenue from linked government expenditure.

mismatches in individual linked series, which see some divergence between the linked revenue and expenditure series before 1995. This divergence arises because of some definitional differences between the latest data and those before 1995.

Throughout the paper, the series used for national income is the adjusted national income figure shown in the national accounts (GNI*) from 1995 to 2023, for simplicity referred to as national income in this paper. This is linked to the GNI series from the historical national accounts back to 1970. In turn this series is linked to the CSO's data for GNP back to 1953, from successive issues of their annual publication, *National Income and Expenditure*. This allows comparisons to be made with the tax and revenue figures in other EU members where GDP is used as the denominator. While the use of Net National Income for comparison purposes across countries would avoid the need for this special national income series for Ireland, as yet NNI is not used widely in other EU countries, which would still make comparisons difficult.

5. Fiscal stance 1954-2024

The methodology set out above is applied to the data from 1954 to 2023 to derive the fiscal stance in each individual year over that period.¹⁴ Using the rules set out earlier, the indexed numbers for revenue and expenditure, based on the outturn for the previous year, are then compared to the actual outturn each year. The difference between the government surplus / borrowing from these two sets of numbers is then taken to represent the fiscal impulse for that year. If fiscal policy is taking money out of the economy the measure of fiscal stance is negative.

The primary focus of this paper is to estimate the fiscal stance each year and consider whether it was pro-cyclical or counter-cyclical in nature, given the state of the economy. However, in considering how appropriate the fiscal stance was to the needs of the economy in an individual year, account must also be taken of the long-term sustainability of the public finances in that year. On its own, the measure of fiscal stance developed in this paper takes no account of this latter concern for policy-makers.

As discussed earlier, for a period in the 1980s, and again between 2009-2013 there was very serious concern about the ability of the government to borrow to cover its very large deficit. This was reflected in the very high real interest rates that the government faced which added to the financial pressures (Table 1). As a result, emergency measures had to be taken, which involved tightening fiscal policy at a time when the economy was already underperforming, with output well below potential. The necessity for such severe fiscal tightening arose from failures of fiscal and regulatory policy in the run up to the crises.

In the case of the 1980s crisis, successive governments had allowed borrowing to continue on an unsustainable path for a prolonged period (Honohan, 1992). In the case of the financial crisis from 2008-2013, serious errors in regulation of banking combined with imprudent fiscal policy to produce a public finance crisis where the government could not finance on open markets its huge borrowing requirement, much of it needed to bail out the banking system. This required a period of austerity, despite output in the economy being well below its potential.

¹⁴ Because the neutral fiscal stance is defined relative to the revenue and expenditure in the previous year the first year of the data are used to define the fiscal stance in 1954. This means that the fiscal stance for 1953 cannot be deduced, in the absence of linked data for earlier years.

Summary Results

On average, the fiscal stance adopted by governments over the period 1954-72 was procyclical, as shown in Figure 7. The years when output was below potential and fiscal policy was stimulatory appear in the upper left quadrant of Figure 7 while the years when fiscal policy was deflationary and output was above trend appear in the lower right quadrant. As can be seen from the trend line, more often than not fiscal policy was procyclical. Breaking the period of 70 years into three different periods does not change this conclusion nor does omitting the years of fiscal crisis 1981-89 and 2009-14.

However, averaging over the full period from 1954 to 2023, fiscal policy was mildly contractionary (Table 2). This was implemented primarily by discretionary increases in taxation. The national debt rose from 44% of national income in 1953 to around 60% of national income in 1960, it remained at that level for much of the 1960s. Thus there would have been some scope for fiscal policy to have been less deflationary in the 1960s, which would have helped maintain output closer to the long-run trend.

Figure 7: Fiscal stance v Deviation of Actual from Potential output

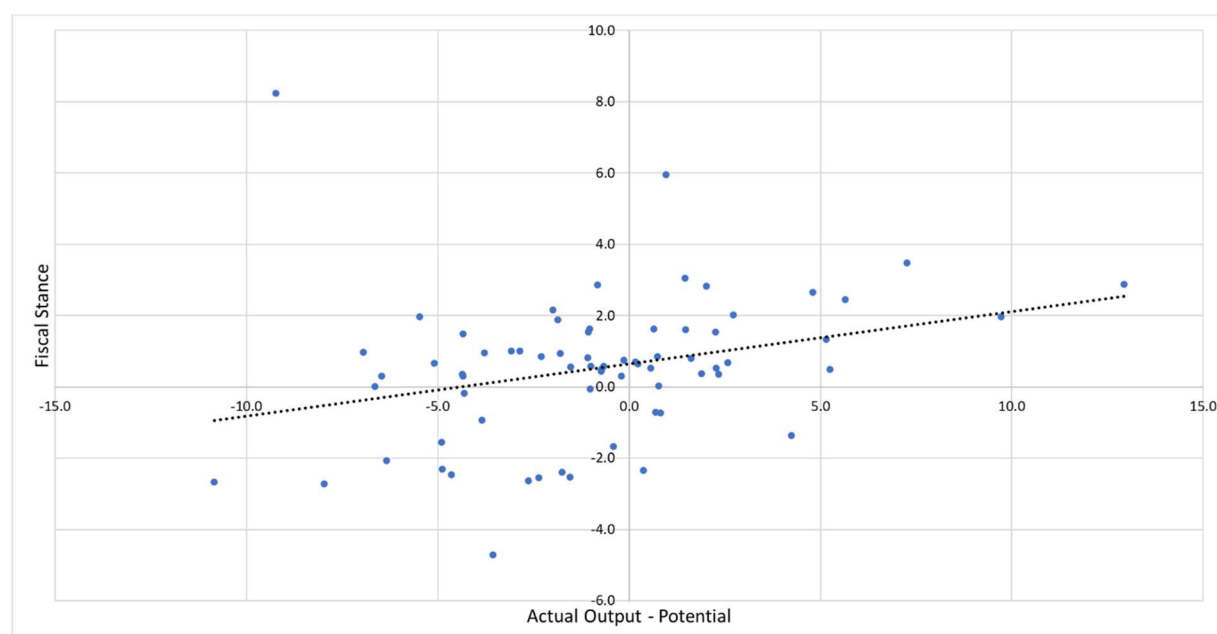


Table 2: Average size of fiscal intervention, % of GNI*

	1954-72	1973-80	1981-91	1992-02	2003-08	2009-15	2016-23	1954-23
Overall	-0.4	-0.1	-1.2	0.8	1.4	-1.7	0.4	-0.2
Revenue	-0.4	-0.3	-0.5	0.1	0.2	-0.5	0.1	-0.2
Expenditure	0.0	0.2	-0.7	0.7	1.1	-1.2	0.3	0.0
Real interest rate ¹⁵	2.2	-1.2	4.8	3.0	1.6	5.1	-1.9	2.1

Policy was broadly neutral between 1973 and 1980, but the 1980s was a decade of on-off austerity tackling a rising debt burden. After the severe tightening of fiscal policy in the 1980s, the Celtic Tiger years from 1992 to 2002 saw an expansionary fiscal policy, with the debt burden falling because of the rapid growth in the underlying economy. 2003 to 2008 were the bubble

¹⁵ Yield on government bonds with 10 year maturity less rate of inflation in the consumption deflator.

years when the economy was growing well beyond its long-term capacity, partly fuelled by a very stimulatory fiscal policy. This contributed to the financial crisis, beginning in 2008.

The period from 2009 to 2015 was one of serious austerity due to the massive rise in the debt resulting from the financial crisis. In turn, real interest rates reached levels last seen in the crisis years of the 1980s. The recovery period from 2016 to 2023 saw fiscal policy that was, on average, mildly stimulatory, accompanied by much lower real interest rates.

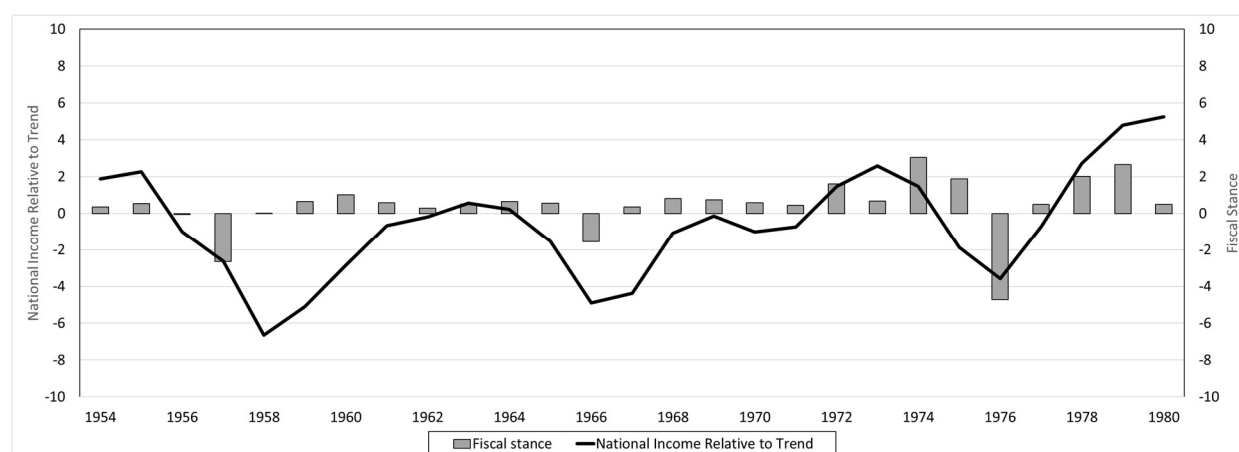
Given that the debt burden at the end of the 70 years was not very much greater than at the beginning of the period it¹⁶, it is not surprising that the average fiscal impetus over the full period of 70 years was neither strongly positive or strongly negative.

Detailed Consideration of Fiscal Policy

This consideration of the fiscal stance over broad periods shown in Table 2 masks very different behaviour in individual years. To fully understand the role of fiscal policy it is appropriate to consider its stance relative to the needs of the economy at an annual level.

Figure 8 shows the fiscal stance each year from 1954 to 1978 (a period when the Irish pound was linked directly to the UK£). It also shows the deviation of actual real national income from potential.

Figure 8: Fiscal stance (% of GNI*) and economic growth relative to trend, %, 1954-78



1954-1971

The Irish economy performed very poorly between 1956 and the early 1960s, with real national income falling to 6% below potential in 1958. This underperformance was also accompanied by very high emigration, which peaked in 1958 at 2% of the population. The reasons for the major economic difficulties have been discussed in Honohan and O'Gráda, 1998, Daly, 2006 and Ó,Gráda and O'Rourke, 2022 . In particular, Honohan and O'Gráda show how what was perceived as a balance of payments crisis in 1955-1956, was largely due to the mistaken government policy of trying to keep interest rates well below UK rates, an impossible task with a fixed exchange rate.

As the reasons for the crisis were not understood by the government of the time, a severe tightening in fiscal policy was implemented in 1957 to try and reduce the balance of payments

¹⁶ In 1953 it was 44% of national income. After accounting for government liquid assets it was 62% in 2023.

deficit. The Budget for 1957 stands out as the most contractionary of the 20 years to the mid-1970s. It involved severe cuts in expenditure and increases in indirect taxation aimed at reducing demand, and hence imports. This happened when the economy was already seriously underperforming, and when a counter-cyclical fiscal policy would have been appropriate. 1957 was also an election year, and the outgoing government was punished for this unwise fiscal tightening by losing the election (and subsequent three elections).

Over the subsequent years to 1965, fiscal policy was mildly stimulatory, as was appropriate, given the large excess capacity in the economy at the time. In 1966 the government implemented a deflationary budget, with a big increase in indirect taxation through the introduction of a turnover tax – a precursor of VAT. (An election had taken place the previous year.) The deflationary fiscal policy was implemented in a year when output was below potential. As the debt level was stable at around 60% and the primary deficit was almost zero, a neutral fiscal policy that year would have been more appropriate.

However, the real interest rate on long-term government borrowing surged over 3% that year, which complicated the situation for the government. This increase in real rates did not reflect an increase in the risk premium on Irish government borrowing as Irish bond rates tracked UK rates very closely. It may, instead, have reflected concerns about UK economic policy, which ended in a devaluation in sterling in 1967.

In the 1970s a number of mistakes were made in fiscal policy which saw debt levels rising and growing concerns about the sustainability of the public finances.¹⁷ In 1972, when the economy was already growing vigorously, the government introduced a stimulatory budget. The stimulus amounted to around 1.5% of GNI*, which was strongly procyclical. This policy choice was probably guided by the impending election in 1973. It presaged a series of policy mistakes over subsequent years.

1973-1980

When the oil crisis hit in 1973, in many countries policy-makers reacted as if this was a temporary shock. However, it represented a permanent supply-side shock, affecting potential output. Initially, in 1974 the government introduced a very substantial stimulus, trying to protect households from the effects of the major rise in prices prompted by the very large jump in oil prices. Given the permanent effects of the shock, it was not sustainable for the government to use fiscal policy to permanently offset the costs for the population. One of the policy instruments used was very ineffective – consumer subsidies. Once introduced they proved difficult to eliminate and their impact was not targeted at those worst affected by the supply-side shock.

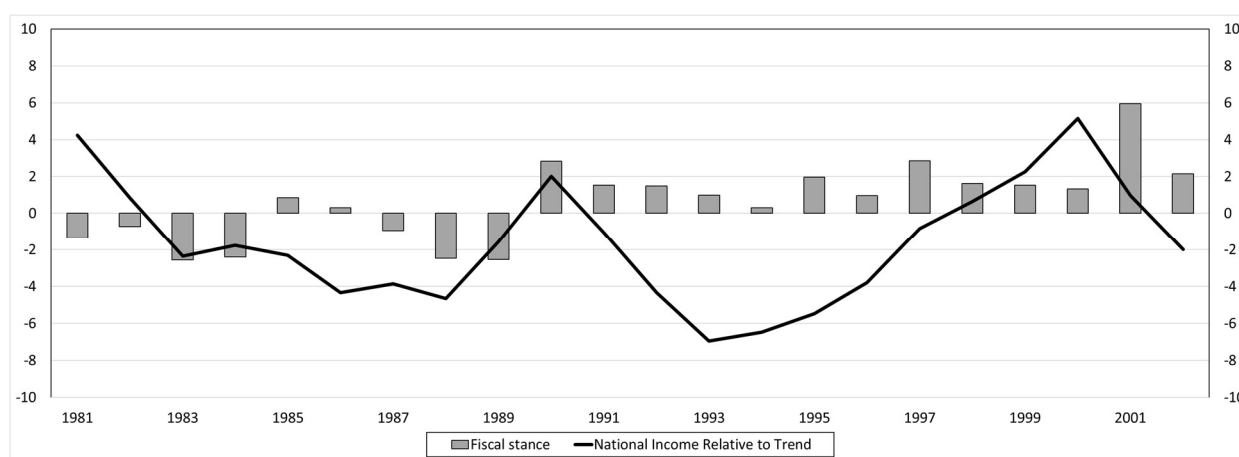
In 1975 there was a further significant stimulus provided in the Budget. However, while the debt to national income ratio was still just under 60%, it had risen 10 percentage points over the previous two years, and this provoked a major change in policy in 1976. The 1976 Budget was the toughest of the last 70 years, taking almost 5% of national income out of the economy. The deflationary Budget was implemented through significant discretionary increases in direct and indirect taxation, and cuts in expenditure. Government capital investment was cut by almost a quarter. This was a strongly pro-cyclical, budget, which resulted in the economy continuing to perform well below capacity that year. Absent these cutbacks the economy might have grown

¹⁷ The negative real rate of interest over much of the decade provided some relief.

closer to 4% or 5%. Instead it grew by 2%. Not surprisingly, the government lost the election in the summer of 1977.

After the severe cuts of 1976, the economy bounced back and grew by an average of 5% a year over the period 1977-79. This took actual output above what might be considered potential output in 1978 and 1979.¹⁸ However, fiscal policy was again strongly pro-cyclical in 1978 and 1979, consistent with commitments made by the government in the 1977 election (Figure 6). As a result of this stimulatory fiscal policy, government borrowing, which had been just under 8% of national income in 1977 rose to 13% by 1981, with a primary deficit (excluding debt interest) of almost 7%. This deficit was clearly not sustainable. It had only proved possible to continue borrowing to fund public services because real interest rates were negative up to 1982.

Figure 9: Fiscal stance (% of GNI*) and economic growth relative to trend, %, 1981-02



1981-1991

While the Budgets of 1981 and 1982 began to tackle the public finance crisis, they were nowhere near adequate to stabilise the budgetary situation. The wider public found it hard to accept the need for drastic measures and there were three elections over the course of 1981-2. The governments elected in the election in 1981 and in the first 1982 election did not have a secure majority that would have facilitated them in taking the necessary remedial action, even if they had chosen to do so.

After the ineffective budgets of 1981 and 1982, and after a fresh election late in 1982, finally tough action was taken in 1983 and 1984 to address the crisis, with the Budgets for the two years taking over 2% of national income out of the economy each year, mainly by raising taxation (Figure 9). Despite the fact that output was well below potential, this was necessary to slow the rapid rise in the debt. However, even after this tough action, in 1984 government borrowing was still 9.5% of national income, though the primary deficit had been reduced to under 1%. The difference between the actual and the primary deficit, national debt interest, reflected high real interest rates and highlighted the challenge for the government.

The 1985 and 1986 Budgets did nothing to further redress the situation, though there was further limited action to reduce borrowing in 1987. It was only in 1988 and 1989 that major further action was taken to cut borrowing, primarily by reducing expenditure, taking over 2% of

¹⁸ The Government's exceptionally optimistic view was that potential output would grow at 7% a year, falling to 5% over the coming decade. There was no economic evidence from research for such an assumption.

national income out of the economy in each of these two years. The result was that government borrowing had fallen to under 2% of national income in 1989, though the debt to national income ratio in 1990 was still only just under 100%.

It took most of the decade of the 1980s to deal with the fiscal crisis, which had already been apparent at the beginning of the decade. It was very painful, involving many Budgets which were, of necessity, strongly pro-cyclical – increasing taxation and cutting expenditure when national income was well below its potential. Over the 1980s, the cumulative tightening of fiscal policy, needed to return the public finances to a sustainable path amounted to over 16% of national income. In turn, the deflationary impact of these cuts resulted in a decade of low growth. This represented a high price paid for fiscal profligacy in the late 1970s. One other lesson from this experience was that it would have been better to have implemented the tough fiscal policy measures more rapidly. Doing it in two bursts – 1983-4 and 1987-89 prolonged the painful damage to the economy.

External factors helped the economy turnaround in 1989, despite the continuing negative impact of fiscal policy in that year. Growth in the economy in 1989 and 1990 averaged 6% a year, recovering some of the lost ground of the 1980s.

However, German unification saw a huge fiscal stimulus in Germany in 1990-1992, with resulting inflation in that country. The Bundesbank, to counter this burst of inflation, raised interest rates, and kept them elevated till the mid-1990s to bring domestic inflation back under control. In turn, through the European Monetary System, the high German interest rates were transmitted to Ireland, seriously affecting the economic recovery: the Irish economy, and the public sector in particular, was still highly indebted, Bradley *et al.*, 1991. As Barrell, *et al.*, 1996 show, there was a similar negative impact on growth in the early 1990s for the rest of EU, arising from the inflationary shock of German unification, the Bundesbank's response and the link between exchange rates through the EMS.

1992-02

From the early 1990s till the onset of the financial crisis in 2008, the issue of debt sustainability no longer determined the stance of fiscal policy. The economy was still operating far below potential in 1992. It was only in 1994 that the economy began a very rapid recovery. Over the period 1994 to 2000 growth in national income averaged 7.8% a year, a remarkable performance, referred to as the Celtic Tiger years.

It took nearly a decade of this very rapid growth to close the gap between actual output and the economy's potential output. Given the wide gap between actual and potential output, as was appropriate, between 1992 and 2002 budgets were mildly stimulatory (Figure 7). The 1997 budget was particularly stimulatory, probably reflecting the fact that it was an election year.

Over the course of the 1990s government borrowing averaged under 1% of national income. When combined with the very rapid growth in the economy this saw the debt to national income ratio fall from just under 100% in 1990 to around 55% in 1999.

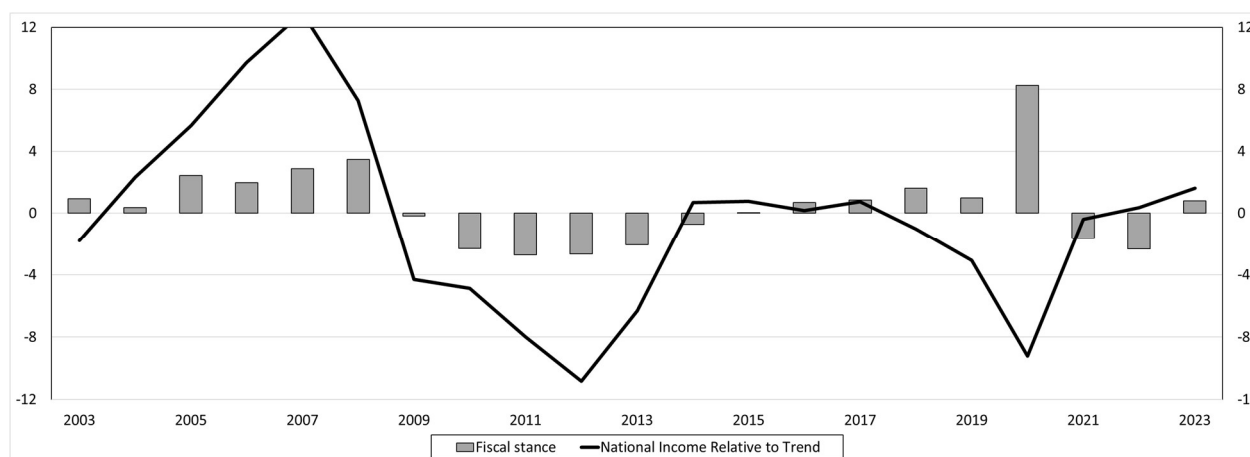
As a result of external developments affecting the high tech. sector in Ireland in 2001 and 2002, output growth fell below potential. To counter this a very large fiscal stimulus was applied in 2001, split between tax cuts and increases in expenditure. As was appropriate for an economy that had been growing rapidly over the previous decade, the increase in public investment in

2001 was particularly notable. This expansionary Budget also occurred in the year before the 2002 election.

2003-2008

From 2003 onwards there was a growing gap between actual output and potential output, with the economy operating above capacity (Figure 10). By 2007, the positive gap between actual and potential output reached an exceptional level reflecting a financial bubble in the economy. Despite this, fiscal policy in 2005-2008 was very stimulatory. It would have been much better to have implemented a significant tightening of fiscal policy in those years, which would have reduced the risks to the economy from the unsustainable boom, a boom that was particularly affecting housing and the wider property market.

Figure 10: Fiscal stance (% of GNI*) and economic growth relative to trend, %, 2003-23



The dangers of this procyclical policy had been identified in a range of papers in the run up to the crisis (FitzGerald *et al.*, 2005, Barrett, Kearney and Murphy, 2007 and Kelly, 2007). However, 2007 was an election year and, instead of operating a countercyclical fiscal policy to take the heat out of the economy, especially the property market, the 2007 Budget added a further stimulus. This was repeated again in the very stimulatory Budget for 2008. This sustained inappropriate stimulus made a major contribution to the future financial crisis. It also frittered away the resources of the government sector which should, instead, have been saved to deal with the inevitable eventual slowdown.

Finland and Sweden, which had suffered from a financial crisis in 1989-1990, had learned from the experience. As a result, in the boom years 2006-2007 they ran large government surpluses, slowing growth in the economy, and conserving government resources to deal with a likely future slowdown. In 2007 Finland ran a government surplus of over 5% of GDP and Sweden ran a surplus of 3.4% of GDP. Unfortunately Ireland had not learned from the experience of these countries and their earlier financial crises.

While inappropriate fiscal policy played an important part in the build up to the subsequent financial crisis from 2009-2015, the failure of banking regulation was even more serious (Honohan, 2019). The domestic financial system had extended huge amounts of credit to the household sector to buy dwellings. In turn this fuelled a boom in the construction sector and a dramatic rise in house prices. With a big tax take from the construction boom, in turn this flattered the public finances.

2008-2015

The financial crisis, which began in 2008, engulfed the economy, and the massive financing needed to bail out the banking system saw the government having to seek EU and IMF assistance in late 2010. As a result, a period of austerity, with major cuts in expenditure and increases in taxation, was inevitable. This was a repetition of the experience of the 1980s when the dominant task of fiscal policy was to return the public finances to a sustainable path.

While the government sought to tackle the large hole in the public finances in the 2009 Budget, its overall impact proved much less deflationary than anticipated (or necessary) because of an unexpected fall in inflation. This meant that there was a substantial increase in real transfer payments, which had been calibrated for a much higher inflation rate. The major cut in expenditure was through a 40% reduction in the previously high level of government investment.

While the 2009 budget was less contractionary than anticipated or appropriate, the 2010-2013 budgets cumulatively took over 9% out of the economy, one third of it through increases in taxation and two thirds through expenditure cuts.

The experience of tackling the fiscal crisis in the 1980s informed the approach to the financial crisis between 2008 and 2014. Instead of spreading the necessary tough fiscal measures over many years, they were concentrated in the four Budgets covering 2010-2013.

2016-23

By 2015 the economy was growing rapidly, making up some of the ground lost during the crisis years. As was appropriate, fiscal policy was mildly stimulatory from 2016 onwards as output was close to or below its potential level. By the end of 2019 the government had a small surplus and the debt to national income ratio was below 100%. When liquid assets were taken into account, the net debt was closer to 80% of national income.

As with all other developed economies, the pandemic necessitated an exceptional fiscal injection into the economy in 2020. Government action to insulate the economy from the negative large output shock in that year was not hampered by concerns about the sustainability of the public finances. The fiscal injection in 2020 was the largest ever undertaken over the 70 years examined in this paper, and it helped insulate the economy and society as a whole from the full effects of the collapse in economic activity. As the economy recovered in 2021 and 2022 fiscal policy turned contractionary, as there was a withdrawal of some of the special supports for businesses and households.

Finally fiscal policy in 2023 was broadly neutral. However, given that the economy was already operating at capacity or above it, a tightening of fiscal policy would have been more appropriate for 2023 and 2024 (IFAC, 2024).

Since 2015, what are considered to be large windfall gains of corporation tax revenue have greatly eased the debt burden and helped return the public finances very rapidly to sustainability. As the economy is already operating at or above capacity, some of these windfall gains are being saved, reducing the net debt ratio even more rapidly. This sees the government running a surplus of around 3% of national income.

The special “windfall gains” from corporation also affects the interpretation of the public finances. With a substantial surplus in 2023 and 2024, there have been some advocates for a

more relaxed fiscal stance. However, with the economy operating above capacity, as reflected by significant inflation in the property market, fiscal tightening is appropriate.

Macroeconomic Implications

In this paper the fiscal stance has been measured in terms of the headline fiscal numbers. However, when the government applies a fiscal stimulus, as intended, it affects the wider economy. Employment, output and consumption are all stimulated. In turn, tax revenue is enhanced and expenditure on unemployment transfers falls. Thus the net cost of a stimulus is significantly less than the headline numbers. Similarly when the Budget implements deflationary measures, there are knock-on effects on the fiscal numbers. The increase in tax revenue is less than the headline numbers, and expenditure reductions are partly offset by higher unemployment related transfers. Every year the Budget publication includes an estimate of this net impact of the Budget on the public finances, as well as the gross changes.

While this paper has assessed the suitability of fiscal policy for the needs of the economy over the last 70 years, in the absence of a full macro-economic model it is not possible to estimate the full effects of that fiscal policy. Evidence from Bergin et al., 2013 and Bergin et al. 2017 suggests that in the 2000s the multiplier effects on national income of changes in fiscal instruments ranged from 0.7 (changes in direct taxation) to 1.3 (public consumption).¹⁹ Given the varied composition of individual budgets over the years, a rough estimate is that for a headline stimulus of around 1% of national income the ultimate impact on real national income would also be around 1%. However, depending on the fiscal measures, the full economic effects may take a number of years to come through.

Where fiscal policy involves major public investment, depending on the nature of that investment, it may expand the potential output of the economy in the medium term. Assessing these supply side effects is even more complicated than for the demand side measures, and requires a model that is able to take account of the supply side of the economy (FitzGerald and Morgenroth, 2006). As cutbacks in public investment were an important instrument for tightening fiscal policy, for example in 1976, the 1980s and, most recently, between 2009 and 2014, failure to take account of the long-term damage such cutbacks may cause must be seen as another aspect of unwise fiscal policy.

6. Conclusions

The analysis in this paper suggests that over the last seventy years budgetary policy has more often than not operated in a procyclical fashion, increasing economic instability.

In the broad periods 1954-79 and 1990-2007, when governments had the scope to implement a counter-cyclical fiscal policy, they only did so in around half of the Budgets. However, since 2014 fiscal policy has operated in a more appropriate counter-cyclical manner around 70% of the time. The 2023 Budget is a notable exception.

There were two periods when the desirability of implementing a counter-cyclical fiscal policy was dominated by the necessity of restoring stability to the public finances.

In the period 1980-1990 successive governments were faced with the essential task of controlling borrowing which had reached an unsustainable level, with a consequential rapid rise in indebtedness. Again between 2010 and 2014 draconian fiscal measures were essential to

¹⁹ The standard errors round these numbers are very high.

deal with the financial crisis. In both cases the fiscal tightening needed to ensure debt sustainability happened when output was below potential and the fiscal tightening further increased the gap between actual and potential output.

When the two crises periods, 1980-1989 and 2008-2014, are compared, it is clear that, when tough fiscal action was needed to restore stability to the public finances, it was best done rapidly. In the 1980s tough action was taken in 1983 and 1984, but that was not sufficient to solve the problems. Further major cuts were needed in 1988 and 1989 to complete the task. The result of this stop-go approach to policy was a decade of lost growth.

By contrast, the financial crisis period saw four consecutive years of major fiscal tightening (2010-2014), which restored order to the public finances, allowing the economy to recover vigorously from 2015.

The action to tackle the pandemic-induced economic collapse in 2020 was a textbook case of counter-cyclical fiscal policy. A major stimulus was implemented when it was needed in 2020, and in 2021 and 2022 fiscal policy was tightened to restore the public finances to their sustainable long-term trajectory.

In 1956-7 and again in the years 1973-76 inappropriate fiscal policy responses were implemented because of a poor understanding of the underlying economic problems. In 1956-7 the government clearly did not understand that it was inappropriate monetary policy that was the major factor causing a major balance of payments problem. In the 1973-75 period the government did not realise that the oil crisis had long-term effects on potential output, and applied too strong a stimulus. They then overreacted in 1976, with an excessively deflationary budget.

Two cases where unwise fiscal policies were implemented, ignoring external advice of the potential dangers, were the stimulatory policy adopted in 1978 and 1979 and again in the 2003-2007 period. In both cases it was apparent to independent observers that the policies being implemented posed dangers for the economy. In the 1977-78 period the government relied on a manifesto commitment, that potential output in the economy would grow very rapidly despite all the evidence to the contrary.²⁰ This greatly aggravated the fiscal crisis of the early 1980s, necessitating a decade of tough fiscal policy.

Of course the most serious policy mistake in the 2003-2007 period was the failure to regulate the banking system, to prevent it taking on excessive risk. However, the stimulatory fiscal policy adopted over that period added greatly to property price inflation. As discussed earlier, there was extensive criticism of the dangers that this policy posed for the economy, but this advice was ignored. An appropriate deflationary fiscal policy over that period might have avoided some of the consequences of the recession that ensued from 2009-14.

As discussed earlier, over the seventy years from 1953 to 2023 there was a major shift from reliance on indirect taxation to fund government services to direct taxation. In 1976, and again over the period 1983-1987, when implementing a tightening of fiscal policy there were substantial discretionary increases in taxes on income. More recent research showed that, because labour supply is very elastic in Ireland, much of the incidence of these taxes fell on

²⁰ Serious criticism of the Government's fiscal policy was offered by Paddy Geary in *Magill* in April 1978 and, again, in a paper to a Dublin Economics Workshop symposium in 1980.

employers. Employees have had the possibility of migrating to seek better after tax returns elsewhere, an option that was often exercised over the past 70 years (Curtis and FitzGerald, 1996, Duffy *et al.*, 2005, Bergin and Kearney, 2007 and Bergin *et al.*, 2013). The result, was that major increases in taxes on incomes had a deleterious effect on competitiveness, and hence on potential output.

This was recognised in a change in policy in 1989 when taxes on income were cut, while simultaneously there were major cuts in expenditure as part of the tough fiscal policy implemented that year. This also informed the decision in the subsequent period of major fiscal adjustment in 2010-2014, to rely more on cuts in expenditure than increases in direct taxation.

While evidence from elsewhere shows that using fiscal policy to ameliorate wide fluctuations in economic activity is beneficial, it would require a sophisticated model to quantify the effects of the generally procyclical fiscal policies adopted in Ireland over the last seventy years. However, the experience of the fiscal crises of the 1980s and, again of the 2009-2013 period, shows how inappropriate fiscal policies can have major adverse effects on economic welfare.

References

- Bergin, Adele and Íde Kearney, 2007, "Human capital accumulation in an open labour market: Ireland in the 1990s", *Economic Modelling*, 24 (2007) 839–858
- Bergin, A. J. FitzGerald and I. Kearney, 2013, "The HERMES-13 macroeconomic model of the Irish economy" ESRI Working Paper No. 460.
- Barrett, Alan, Íde Kearney and Yvonne Murphy, 2007, *Quarterly Economic Commentary*, Spring 2007
- Blanchard, Olivier, 1990. "Suggestions for a New Set of Fiscal Indicators", OECD Working Paper, No.79.
- Bradley, J., J. Fitz Gerald and D. McCoy, Medium Term Review: 1991-96, The Economic and Social Research Institute, Dublin
- Carnot, 2014. "Evaluating Fiscal Policy: A Rule of Thumb", *European Economy Economic Papers* 526, August. European Commission.
- Casey, Eddie, 2019, "Inside the "Upside Down": Estimating Ireland's Output Gap", *The Economic and Social Review*, Vol. 50 No. 1, Spring.
- Curtis J. and J. FitzGerald, 1996. "Real Wage Convergence in an Open Labour Market", *Economic and Social Review*, Vo. 24, No. 4 pp. 321-340.
- Daly, Mary E. 2006, *The slow failure : population decline and independent Ireland, 1922-1973*, The University of Wisconsin Press
- Duffy D., J. Fitz Gerald, and I. Kearney, 2005, "Rising House Prices in an Open Labour Market", *The Economic and Social Review* Vol. 36, No. 3, Winter.
- FitzGerald, J., Bergin, A., Kearney, Í., Barrett, A., Duffy, D., Garrett, S. and McCarthy, Y. 2005. *Medium-Term Review: 2005–2012*, Economic and Social Research Institute, Dublin.

FitzGerald J., and E. Morgenroth eds., 2006, *.Ex Ante Evaluation of the Investment Priorities for the National Development Plan 2007-2013*, Policy Research Series No. 59, Dublin: The Economic and Social Research Institute.

FitzGerald, J., and Seán Kenny, 2018, “Managing a Century of debt”, Dublin: Journal of the Statistical and Social Inquiry Society of Ireland, 2018/2019, Vol XLVIII, pp. 1-40.

Geary, Paddy, 1978, “How Fianna Fáil’s Economic Policies cannot get this Country Moving Again”, Dublin: Macgill magazine, April.

Geary, Paddy, 1980, “Economic Background to the Budget”, Dublin: Dublin Economics Workshop Symposium.

Honohan, Patrick, 1992, “Fiscal Adjustment in Ireland in the 1980s”, *The Economic and Social Review*, Vol. 23 No. 23, April pp. 285-314.

Honohan, Patrick, 2019, *Currency, Credit and Crisis: Central Banking in Ireland and Europe*, Cambridge University Press.

Honohan, Patrick And Ian J. Irvine, 1987 “The Marginal Social Cost of Taxation in Ireland”, *The Economic and Social Review*, Vol. 19, No. 1, pp.15-41.

Honohan, P. and C. Conroy (1994), *Irish Interest Rate Fluctuations: in the European Monetary System*, Dublin: The Economic and Social Research Institute, General research series no. 165.

Honohan, Patrick and C. Ó Gráda, 1998, “The Irish macroeconomic crisis of 1955–56: How much was due to monetary policy?”. *Irish Economic and Social History*

Kearney, Íde, Danny McCoy, David Duffy, Michael McMahon, and Diarmaid Smyth, 2000. “Assessing the Stance of Irish Fiscal Policy”, The Economic and Social Research Institute, *Budget Perspectives*.

Kearney, Íde, 2012, “*Measuring Fiscal Stance*”, The Economic and Social Research Institute, *Quarterly Economic Commentary*, Autumn 2012, pp. 67-88

Kelly, M. 2007. “On the likely extent of falls in Irish house prices”. *Quarterly Economic Commentary*, Summer. Economic and Social Research Institute, Dublin

Murphy, Gavin, Martina Nacheva and Luke Daly, 2018, “Estimating Ireland’s output gap; an analysis using selected statistical filters”, Department of Finance Working Paper.

Ó Gráda Cormac and Kevin Hjortshøj O’Rourke, 2022. “The Irish economy during the century after partition.” *The Economic History Review*, 2002 ;75:336–370