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## Working Paper Taking a punt: Monetary experimentation and the Irish macroeconomic crisis of 1955-56

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Accountancy, Economics, and Finance Working Papers

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Taking a Punt: Monetary Experimentation and the Irish Macroeconomic Crisis of 1955-56

Darragh McLaughlin, Eoin McLaughlin, and Seán Kenny

February 2025

Keywords: Monetary Policy, Monetary Union, Capital, Optimum Currency Area, Trilemma

JEL: E42, E52, F45, N14, N24

# Taking a Punt: Monetary experimentation and the Irish macroeconomic crisis of 1955-56 \*

Darragh McLaughlin<sup>†</sup> Eoin McLaughlin<sup>‡</sup> Seán Kenny<sup>ℜ</sup>

11 February 2025

#### Abstract

The 1955-56 macroeconomic crisis is a central event in modern Irish history. Yet, despite this centrality, its causes are not clearly understood. In 1955-6, Ireland, which had previously followed British interest rates in lockstep as part of its fixed exchange with the latter, briefly experimented with independent monetary policy. Our contribution is twofold. First, we highlight how the Irish response was based on a misunderstanding of a run on Sterling in 1955. Second, we focus on a series of monetary shocks taking place from January 1955 to February 1956. We construct yields for Irish and UK public debt, as well as bank share indices at a daily frequency (1954-6), to test whether the shock was transmitted via financial markets. Employing an event study and testing for structural breaks, we explore the institutional framework through which the mechanisms of the crisis occurred. We find that expansionary monetary policy can only be maintained with sufficient reserves, merely postponing the inevitability of capital flight which is observed in the banking sector.

**Keywords** : Monetary Policy, Monetary Union, Optimum Currency Area, Trilemma. **JEL classification** : E42, E52, F45, N14, N24.

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### 1 Introduction

Over the hundred years since independence, Ireland experienced a reversal of fortune; from being one of the poorest countries in Western Europe to being one of the best performing (Ó Gráda and O'Rourke, 2021; Kenny and McLaughlin, 2022). This spurred a plethora of studies into the drivers of Ireland's growth miracle, with emphasis on trade openness, foreign direct investment, and EU membership. To these, FitzGerald and Honohan (2023) add macroeconomic stability as a key pre-requisite. Before the 1950s, Ireland had been relatively insular, practicing import substitution, and protectionism (O'Rourke, 2017; Barry, 2023). A central figure in the shift away from protectionism, according to modern hagiography, is the influential civil servant T. K. Whitaker and his 1958 report *Economic Development*,<sup>1</sup> widely believed to have spurred modern economic policy and the emphasis on openness.

While the role and centrality of Whitaker has been critiqued (Brownlow, 2015; Barry, 2023), our focus is on the macroeconomic backdrop of this monumental policy shift: the 1955-56 macroeconomic crisis. This crisis is widely seen as 'the defining event of post-war economic history' (Honohan and Ó Gráda, 1998). In December 1956, the *Irish Times* reported that it was 'one of the worst years which this state has experienced'.<sup>2</sup> The crisis caused a marked increase in emigration, a sharp downturn in the economy, and a severe balance of payments crisis. Memories of the crisis permanently damaged the political careers of those deemed responsible (Daly, 2016). Apart from the "Emergency" (the economic crisis that neutral Ireland experienced during World War 2), this event was the worst crisis Ireland faced between independence and 2008 (Kenny, 2024). During the crisis, GDP contracted by 3 per cent from peak (1955) to trough (1958), only recovering to the 1955 level as late as 1959 (Kenny, 2024).

The effects of the crisis in Ireland are placed in a comparative setting in Figure 1. As a result of the lost output, Ireland had the lowest growth rate of GDP per capita during the 1950s compared with other countries in Western Europe and other leading economies. Ireland did not participate in the so-called "Golden Age" of European economic growth, though neither did the UK (Crafts, 1993, 1995). However, the comparative focus on GDP per capita masks the full extent of the crisis. A major consequence of the crisis was an increase in emigration to both Britain and North America, which paradoxically increased GDP per capita in the midst of the crisis (see Figure 2). This, it appears, was a continuation of the unofficial Irish growth strategy of increasing per capita income through emigration (O'Rourke, 1995).

The pivotal policy document, *Economic Development*, was born at the nadir of crisis. The crisis was a clear influence on policymakers as the 1958 *Economic Development* report explicitly states that:'A further reason for careful mapping of future economic policy is that we have no longer the surplus resources with which to meet deficits in external payments. Our wartime accumulation of sterling reserves has been run down. Our war-time dollar borrowings have been spent. But our balance of payments remains unstable. The present state of balance is exceptional - the year 1957 being the first year since 1946 in which a deficit was not recorded - and it is insecure' (Department of Finance, 1958, Chapter 1.11). According to a recent study, the Taoiseach (Prime Minister) John A. Costello delivered 'one of the most significant

<sup>&</sup>lt;sup>1</sup>Whitaker was voted the Greatest Living Irish person in 2002 for his 'contribution to reshaping Ireland's economic policy in the 1950s' *Irish Times*, 18 November 2002

<sup>&</sup>lt;sup>2</sup>14 December 1956, cited in Garvin (2009, 2011).

economic policy speeches in the history of the state' in October 1956, when he introduced export profit tax relief which later became the foundation of Ireland's low corporation tax regime (Barry, 2023, p.136).

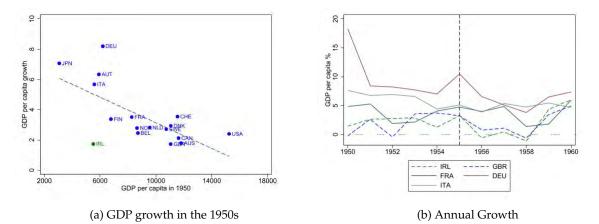


Figure 1: Golden age in Europe, Stop-Go in the UK & Ireland Source: Based on sample of countries from Crafts (1993), GDP from Bolt and van Zanden (2024)

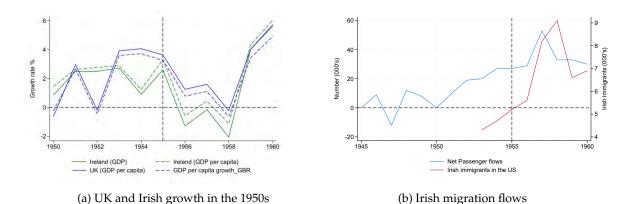


Figure 2: Irish GDP per capita grew through falling population Source: GDP from Bolt and van Zanden (2024)

However, despite the centrality of the 1955-56 crisis in modern Irish macrohistory, there are few detailed studies of the event itself. Two exceptions are Kennedy and Dowling (1975) and Honohan and Ó Gráda (1998) and they have come to alternative conclusions about the cause of the crisis. Kennedy and Dowling (1975) argue that the crisis was caused by expansionary fiscal policy, adding that the external drain was caused by 'relative stagnation in economic activity and the resulting lack of real investment opportunities'. Honohan and Ó Gráda (1998), following a careful analysis of Central Bank record's, banking sector and current account data, took the view that the crisis was caused by a monetary experiment gone awry. Ireland, which had historically been in a monetary union with Britain, did not reciprocate British rate rises in 1955 and instead experimented with 'cheap money'.

This paper builds on the seminal work of Honohan and Ó Gráda (1998) and revisits the 1955-56 episodes using novel high frequency financial data collected from daily listings on the Dublin Stock Exchange and the *Financial Times*. The effects of the policy deviation are analysed through daily Irish and UK bank returns in an event study. In addition, we employ daily prices of both Irish and UK government bonds and banking sectors and test for breaks in their differentials, to assess the potential mechanisms

of the crisis. We exploited variation in our treated variable (Irish banks) by comparing those with the right to fiduciary issues both North and South of the Border (Ireland and the UK) and those without it, in a staggered adoption design. In essence, we compare those who were affected by a composite UK monetary and Irish monetary policy shock, to those affected by UK rise in interest rates only.

Our contribution is to bring more fine grained evidence to bear on this event, by using daily data from the Dublin and London stock exchanges to track long-run interest rate and stock market responses to Ireland's financial policy experiment. We illustrate how the crisis was ultimately caused by the perceived weakness of sterling, as British policymakers responded to restore credibility to the sterling peg. Irish policymakers, however, appear to have underappreciated the international dimension of the rate rises and deemed British rate rises inappropriate for economic conditions in Ireland. Our analysis lends support to Honohan and Ó Gráda (1998) view that the crisis was the result of monetary experimentation. The painful lessons of the crisis paved the way for improved macroeconomic stability, with the exception of the occasional mishap on the fiscal side (FitzGerald and Honohan, 2023).

After political independence in 1922, Ireland subsequently introduced a new national currency, the Irish punt in 1928, which it fixed against the British pound at parity. Ireland effectively exited a century-old single currency union (GBP) and began operating a one-to-one peg of the Irish punt (IEP) with the British pound (GBP) instead. This subsequently long standing peg, without devaluations, made this a credible fixed exchange rate, which has also been classified as a Currency Board arrangement (Honohan, 1997). The Irish banking system had always moved their interest rates in lock step with the Bank of England's, but in 1955, under political pressure, it did not follow UK rate rises. Using the 1955-6 monetary experiment, this paper aims to assess how the crisis manifested itself.

At the time of our event, Ireland had free capital mobility with the UK, a fixed exchange rate with the British pound sterling, and had previously followed UK monetary policy in tandem. The Bank of England effectively set the interest rate for the entire monetary union. In January and February 1955, Irish banks did not follow British interest rate increases, based on the perception of a sound domestic economy.<sup>3</sup> By ignoring the rate increases of the base country, at the behest of the Minister of Finance, Ireland's policy shift offers a natural experiment in which to consider the mechanism through which the monetary system functioned (Jordà et al., 2020). Given the policy choices of the Irish Finance Minister and Banking System during 1955-6, international finance theory stipulates that a capital flight should have ensued.

To that end, we investigate two proxies for evidence of a capital flight. Due to the structure of the Irish banking system at the time, with its substantial London reserves (outlined in Appendix A1), the perceived risk of capital flight may lie within the banking sector. It was evident that there was a decrease in the capital account during the monetary policy experiment, with the majority coming from a decrease of net external assets in the order 40-50 million Irish punts (Moynihan, 1975; Meenan, 1970; Honohan and Ó Gráda, 1998). Over three quarters of this decrease occurred in the private banking sector (Moynihan, 1975). Therefore, if investors were to anticipate a loss of reserves from the banking sector, they would

<sup>&</sup>lt;sup>3</sup>Hugh Gerard Sweetman, the Irish Minister for Finance, reasoned that "both to give employment and to raise national living standards, means that a rise in interest rates here should, if possible, be avoided": Minister Sweetnam, 1955 Budget Speech, *Dáil Éireann debate*, 4 May 1955

expect a decrease in potential future earnings, which would be reflected in share price declines. A structural break in bank share prices would, in such a setting, represent a proxy for a capital flight. Alternatively, if investors were to suddenly anticipate an increased risk of a balance of payments crisis or government default, they would demand a premium. In that case, a structural break in sovereign bond yields would be indicative of such a risk premium. Overall, we find evidence of capital flight in our bank data through a structural break. Further, we find evidence that those banks which had note-issuing rights on both sides of the Irish border (Rep. of Ireland) and Northern Ireland (United Kingdom) suffered sharper share price declines, suggesting that their liabilities were more vulnerable to runs, causing a drain in their reserves.

The background to this event is the Bretton woods fixed exchange rate system and the Trilemma. The Mundell (1961*b*,*a*)-Fleming (1962) trilemma states that a nation can only ever have two out of the following three: free capital mobility, a fixed exchange rate, or an independent monetary policy. In motivating his seminal study on optimal currency areas, Mundell (1961b) refers to 'new experiments being made' by countries undergoing economic integration. Mundell (1961b) explicitly refers to his native Canada as representing the only such experiment which involved the use of flexible exchange rates. Here we add another contemporaneous experiment; namely, the Irish Republic's experimentation with sovereign monetary policy within a fixed exchange rate regime. While it is claimed that the idea of a trilemma can be traced to the 1950s, for example Boughton (2002) states that the idea can be gleamed through careful reading of James Meade (1951)'s work on the balance of payments, the policy implications of such experimentation were still not widely understood at that time and inadvertently precipitated a major macroeconomic crisis. A potential counterfactual would be to consider Ireland's economy operating a floating exchange rate. In such a scenario, would Ireland have been able to operate independent monetary policy? As recent work has shown, there are spillovers from monetary policy in a hegemon, even in flexible exchange rate regimes (Miranda-Agrippino and Rey, 2020). As the UK was Ireland's largest trading partner, inflation and AS and AD spillovers were likely in any currency regime (Stuart, 2019). Evidently, even under a flexible exchange rate arrangement, the most probable policy choice would have been the reciprocation of movements in the UK rate of interest.

Nonetheless, our study reveals that Ireland had been operating with lower rates than proscribed by its Currency Commission's rules (relative to the Bank of England rate) for three years prior to this event. This implies that there was limited recognition among agents that Ireland's conditions *were* different up to a point. However, when Irish rates actually fell below British rates in 1955-6, it was a step too far, and Ireland experienced a massive reserve drain and subsequent macroeconomic crisis.

The remainder of this paper is divided into six sections. In Section 2, we examine Ireland's evolving position in the sterling monetary union and the backdrop to the events of the monetary experiment of the 1950s. Our data and empirical methodology is introduced in Section 3, and we set out our results in Section 4. Finally, we conclude in Section 5.

## 2 Background to Ireland's Monetary Experiment

#### 2.1 From Complete to incomplete Monetary Union, 1826-1979

Between 1826 and 1926 (four years after Irish independence), a single British pound had operated in what had been the United Kingdom of Great Britain and Ireland (Kenny and Lennard, 2018).<sup>4,5</sup> As part of the United Kingdom (1801-1920), Ireland comprised a region within a "complete" monetary union. Capital and labour moved freely between the islands, a centralised budget operated under parliamentary control at Westminster, and a common central bank (the Bank of England) set the rate of interest for the United Kingdom (see Table 1).<sup>6</sup> In addition, the Bank of England acted as a lender of the last resort to the financial system and, if necessary, buyer of last resort of UK government debt. By the 1950s, the Bank of England had become extensively involved in the latter function (Allen, 2019).

Upon achieving political independence in 1922, the Irish Free State ruled out monetary experimentation due to concerns about potential capital flight and the dominant position of the British market in Irish trade (Barry, 2023; Kenny and McLaughlin, 2022). Though the Irish punt was introduced in 1928 as a symbol of national independence, a one-to-one currency peg with the British pound was maintained as part of a currency board system that prevailed until Ireland's departure from the sterling zone in 1979 (Honohan, 1997). Table 1 contrasts the operational change in monetary regime in the pre- and post-independence eras. In contrast to the union monetary regime (1800-1921), the newly independent state operated as a standalone region without a fiscal, political, or banking union with the United Kingdom (O'Rourke and Taylor, 2013), though free labour mobility (emigration) remained between the islands. The latter component had traditionally been the mechanism by which asymmetric regional shocks had been absorbed (Walsh, 1974).

<sup>&</sup>lt;sup>6</sup>The old Irish Exchequer was abolished in 1817 (56 Geo. 3. c. 98)

	1826-1927	1928-1979
Common Central Bank	Yes	No
Fiscal Union	Yes	No
Political Union	Yes	No
Banking Union	Yes	No
Symmetry	No	No
Labour Mobility	Yes	Yes
Separate Currency	No	Yes
Is Exit Easy	No	Yes

Table 1: The Nature of the Currency Union pre and post-Independence

Note: Ireland is incorporated into the United Kingdom in 1801. However, the old Irish pound was removed in 1826. The Irish Free State came into existence in 1922, but did not introduce the Irish punt until 1928. Table is modelled on the criteria of O'Rourke and Taylor (2013).

<sup>&</sup>lt;sup>4</sup>From 1801-1920, the Union of Great Britain and Ireland included the entire island of Ireland. The Government of Ireland Act in 1920 established Northern Ireland, which opted to remain within the United Kingdom (UK). In December 1921, the Anglo-Irish Treaty was signed between the UK and southern Irish nationalists establishing the Irish Free State in 1922. It seceded from the UK, attained Dominion Status and in September 1949, the Republic of Ireland was formally declared. Our study refers to the experiences of the Republic of Ireland and not Northern Ireland.

<sup>&</sup>lt;sup>5</sup>While the Assimilation of the Currency Act was passed in 1825 (6 Geo 4 c. 79), the recoinage process was not completed until the following year (see Kenny and Lennard (2018).

	Operations							
Name	in both jurisdictions	Founded	Fiduciary issue					
			pre-1920	Irish Free State	Northern Ireland			
Bank of Ireland	Y	1783	Y	Y	Y			
Provincial Bank	Y	1825	Y	Y	Y			
Northern Bank	Y	1824	Y	Y	Y			
Belfast Bank	Ν	1827	Y	Ν	Y			
Ulster Bank	Y	1836	Y	Y	Y			
National Bank	Y	1835	Y	Y	Y			
Royal	Ν	1836	Ν	Y	Ν			
Hibernian	Y	1824	Ν	Y	Ν			
Munster & Leinster	Y	1885	Ν	Y	Ν			

Table 2: Banks in operation in Ireland

Note: Table based on discussion in Kenny and McLaughlin (2022). The banks pre-dated the partition of the island and after partition some maintained operations in both jurisdictions. Banks formed before 1844 or that had head offices outside of 50 mile radius from Dublin could issue notes. The Hibernian and Royal were headquarted in Dublin and could not issue notes. The Munster & Leinster was formed later and issued Bank of Ireland notes initially. After partition, new monetary arrangements were introduced in the south which altered traditional fiduciary arrangements.

The Irish banking system pre-dated the creation of either a currency board and later a central bank. The joint stock banks had a century of experience and had operated dense branch-banking systems throughout the island (see McLaughlin (2009) for a map of the geographical distribution). Table 2 illustrates the operations of the banks on the island at the time of the event. Most banks had their own fiduciary issue in the era before partition. After independence, the monetary arrangements of the southern banks were altered. The creation of a consolidated currency (Irish *punt*) was accompanied by a new Currency Board (the Currency Commission) that monitored and placed limits on the volume of note issuance, though the banks maintained their fiduciary issue. While the majority of Irish banks could issue notes in both jurisdictions (North and South), three southern banks only gained the right to issue notes following independence, though they could only issue south of the border. This implied that, in the event of an "external" drain, the reserves of those Irish banks with note issuing rights in Northern Ireland (U.K.) may have been more vulnerable to interest rate differentials, due to the relative mobility of bank notes, compared with deposits (Kenny and McLaughlin, 2022).

An example of the fiduciary issue is shown in Figure 3. The Currency Commission, later the Central Bank, issued notes containing a clause explicitly stating that the note was 'payable on demand in London' - for example, see Figure 5. We return to the unique note issuing practices in our empirical specification.



(a) Bank of Ireland, 1929

(b) Bank of Ireland, 1943

Sources: Irish Paper Money

Figure 3: Bank of Ireland notes



(a) Munster & Leinster, 1929



(b) Munster & Leinster, 1939

Figure 4: Munster & Leinster notes

Sources: Irish Paper Money

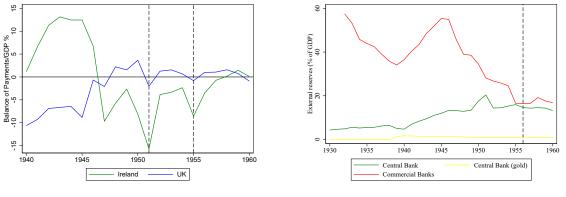


(a) Currency Commission Note, 1928



(b) Central Bank of Ireland Note, 1943

Figure 5: Currency Commission and Central Bank notes Sources: Irish Paper Money The activities of the Central Bank of Ireland (est.1943) were limited to those of a traditional currency board, where the domestic currency is backed 100% by the anchor currency (De Grauwe, 2022). As noted by Honohan (1997), at all times gold and exchange reserves of the Central Bank 'comfortably exceeded the currency issue', and only modest amounts of direct lending to government or banks occurred as late as 1965 and 1979 respectively. As a result, Ireland had accumulated sizeable external reserves, as shown in Figure 6. In essence, this was the continuation of the traditional practice of using Irish, primarily agricultural, deposits in the London Money Market.



(a) Balance of Payments, 1940-1960

(b) External Reserves, 1940-1960

Figure 6: Balance of Payments and external balances Sources: Mitchell (1988) & Moynihan (1975).

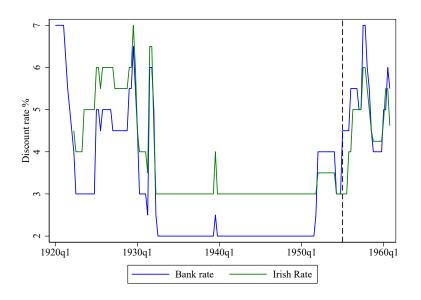


Figure 7: Bank rate, UK & Ireland 1920-1960 Sources: Bank Rate: Mitchell (1988); Irish rate: Moynihan (1975)

For the period 1826-1927, Irish banks followed the Bank (of England) rate. In the 1800s, this meant that Irish banks mirrored the actions of the Bank of Ireland, the de facto Irish central bank, due to its historical status as government banker. On the one occasion that rate rises were not reciprocated by Irish banks in 1836, a specie drain transpired, resulting in a major domestic banking crisis. Between independence (1922) and the 1950s, Irish joint stock banks continued this practice with the Bank of

England, the central bank of the sterling zone- see Figure 7. As noted elsewhere, there was a tendency for the Irish bank rate to fall slower than Bank rate and to rise faster (Meenan, 1970). While the data in figure 7 suggest a deviation in interest rates, this is merely a reflection of a change in the series; the Irish wholesale rate is replaced by the Central Bank of Ireland rediscount rate from 1952 onwards. This rate tended to lag the British rate but as Honohan and Conroy (1994) highlights, this 'must be treated with caution' as the London money market was the main source of liquidity for Irish banks and the Central Bank did not actually carry out any rediscounting until 1956. Figure 7 is presented here purely for illustration and does not include the data used in the tests below. We illustrate the likely discount rate in Figure 11 below.

#### 2.2 Sterling in crisis

Ireland opted to continue with the principle of 'British sterling as the standard of value' in the country following independence. This decision proved advantageous in the early years of the states existence as Ireland did not undergo hyperinflation, such as that experienced by other newly independent nations. It also meant that Ireland followed UK monetary policy during the Great Depression, leaving the gold standard early in 1931 (Kenny and McLaughlin, 2022).

However, in the post-war world, sterling itself was part of a fixed exchange rate regime. This effectively meant that Ireland's punt was a secondary peg (a peg within a peg). At the end of War, as part of the Bretton Woods system, sterling was pegged to the dollar with an initial peg set at \$4.09 but the pound devalued shortly after to \$2.8 in September 1949 (Cairncross and Eichengreen, 1983). The sterling devaluation is shown clearly in Figure 8.

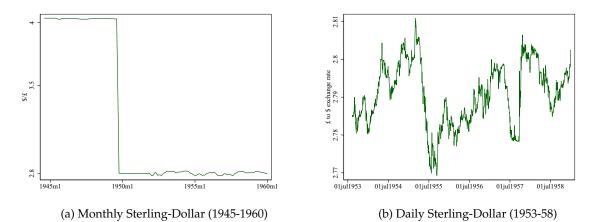


Figure 8: Sterling dollar exchange rate Source: Bank for International Settlements bilateral exchange rate database

The Sterling devaluation lent credence to the view that the UK might devalue again if conditions did not improve. Hence, although sterling operated in a fixed exchange rate system, there was some variation around the peg. While these movements may seem negligible, they mattered to contemporaries. For example, the UK Chancellor was very conscious of the exchange rate against the dollar. Noting that 'the Committee may be glad to hear [...] that the sterling dollar rate has risen from about 2.78  $\frac{1}{2}$  dollars in the third week of February to just over 2.79  $\frac{5}{8}$  dollars, and the rate for transferable sterling

from under 2.72 dollars to just over 2.77  $\frac{1}{8}$  dollars. That is a very considerable rise.<sup>77</sup> There were renewed rumours regarding the pounds convertibility in 1955 which led to a run on the pound (Dow, 1964) and further rumours of a devaluation continued to circulate into the summer of 1955 (see Figure 8b). For example, Sir Edward Boyle, Economic Secretary to the Treasury, fielded questions about the rumours of a devaluation in the House of Commons in June 1955 and announced that, 'I will say that there have been certain rumours recently about the possibility of some kind of devaluation; and I can only say quite categorically that there is no such intention'. Instead he attributed exchange rate volatility to industrial disputes (dock strikes) which directly affected UK exports.<sup>8</sup> Speculation against the pound continued until it was clear that the government did not have any intention of devaluing the pound.

This is the context in which the UK monetary authorities were forced to intervene in 1955 to support the pound. They did this through a series of rate rises but also imposed measures to curb credit growth such as lending controls on banks and hire-purchase restrictions (Dow, 1964). The Bank rate was lowered from 3.5 % on 13 May 1954 to 3% before returning to to 3.5 % on 27 January 1955. An additional 100 basis point rise the following month took the rate to 4.5 % (24 February 1955) where it remained until an equivalent raise to 5.5 % on 16 February 1956.

The market speculation against the British pound in 1955 was distinct from the subsequent sterling crisis in November 1956. The latter had its roots in the Suez Canal Crisis, when the landing of British and French precipitated a loss of foreign reserves. Britain was only able to support the exchange rate with the help of the US administration, which was ardently opposed to the Suez operation (Klug and Smith, 1999).

Sterling's travails were a uniquely British affair. As Arndt (1978) highlights, the dollar shortages of the immediate post-war era gave way to a dollar glut and, in this context, many European countries implemented policies to manage external balances. With one exception: Britain (Cairncross and Eichengreen, 1983). Instead, Britain's economic history during the immediate post-war period is characterised by so-called 'stop-go' economic policies which resulted in periodic balance of payments crises (Pollard, 1982). As Rab Butler, the UK Chancellor of the Exchquer in 1955 explained:

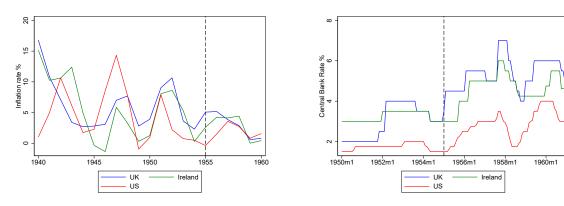
I now come to consider the balance of payments situation [...]. The past year has shown that, while it is right to run our island economy in a free and expanding mood, problems can spring from the very success which it has been our happy lot to achieve. The increase in our production, which is so important both for our export trade and for the maintenance of employment, necessitates a rising level of imports of raw materials for our factories [...] we are importing more, unfortunately—and exporting less—coal. Before the war we always had a substantial surplus of coal to export [...] overseas. But by 1954, lack of coal cost us many millions in foreign exchange for imports, and still more if we take account of lost opportunities to expand our overseas earnings. More coal, more efficiently used, would be one of the most substantial reinforcements to our balance of payments has also been affected by the

<sup>7</sup>Hansard, 19 April 1955

<sup>&</sup>lt;sup>8</sup>Hansard 30 June 1955, vol 543, cc480-1.

alteration in the terms of trade....Nevertheless, it became clear by February that we needed to take action to moderate the growth of imports and to encourage exports. And from the result, all I can say is, thank goodness that we took action in time. <sup>9</sup>

Pollard (1982) highlights how the balance of payments crises were the result of the British state continuing to act as an imperial power without the (colonial) resource base to support it resulting in negative foreign balances. These deteriorated over the period and placed additional strain on the domestic economy. This has led to a view that the interests of UK manufacturing were actively undermined by policies pursued in Westminster and advocated for by the City of London (Mishan, 1967; Dintenfass, 1992). The various sterling travails and accompanying stop-go policies led to the so-called "British Disease", a period of low investment and the relative economic decline in the post-war period (Allen, 1979; Crafts, 1993).



(a) Inflation in the UK & Ireland, 1945-1960

(b) Monthly Central Bank discount rate (1950-60)

Figure 9: Inflation and discount rates

Sources: US discount rate FRED; UK inflation: Measuring Worth, Bank Rate: Mitchell (1988); Irish rate: Moynihan (1975), Irish inflation CSO.

#### 2.3 Ireland's Monetary Experiment

I have had discussions with representatives of the Irish Banks' Standing Committee on the implications of the recent change in the bank rate in Britain. I represented to the banks that the conditions underlying the increase in Britain do not operate here at present. Recognising this, the banks have, in the national interest, decided not to make any change in their lending rates here. I should like to express my appreciation of this decision...So far as I understand, this, with the occasion last month, is the first occasion on which the Irish banks have not automatically changed their rate, following a change in the bank rate in Britain. [Minister for Finance, Mr. Sweetman]<sup>10</sup>

The 1949 devaluation of the British pound had adversely affected Ireland's savers and the declaration of an Irish Republic within the same year, contributed to growing political pressure for Ireland's authorities to exercise more policy independence. Furthermore, the persistent popular notion that Irish

<sup>9</sup>Hansard, 19 April 1955

<sup>&</sup>lt;sup>10</sup>Dail Debates, 3 March 1955

joint stock banks had been exporting Irish savings to fund British projects was used as political capital. As John A. Costello, the Irish Prime Minister (Taoiseach), wrote at the time, 'Irish banking institutions can only flourish on Irish prosperity. At any rate they cannot continue to be used to take the savings of the Irish people to bolster up an outside economy, however vital the prosperity of that economy is to our external trading.'<sup>11</sup>

It was against this political backdrop that the Irish monetary policy experiment (1955-6) transpired. The Irish Finance Minister Gerald Sweetman successfully pressured the Irish banks to maintain prevailing rates while the Bank of England engaged in the largest rate hikes in 100 years. The comment that, 'the conditions underlying the increase in Britain do not operate here at present' was valid in relation to inflation in 1955. He further justified it as such: 'The lower level of interest rates thus established is desirable for the stimulus it affords to investment and national progress. It was for that reason particularly gratifying that the Irish banks, in recognition of the national interest and in spite of the difficulties it caused for them, refrained from raising their lending rates when the Bank of England rate was raised in January and again in February.' In this context, the announcement by the Minister of Finance Gerald Sweetman that Ireland would not increase its interest rates was welcomed wholeheartedly by coalition TD's (Dáil, 1955b). It was further claimed that Irish rates were not increased due to Irish external payments standing in good stead, the need for further capital development, and a focus on the domestic economy rather than the woes of Britain (Dáil, 1955*d*). Table 3 presents and dates the four events of our study.

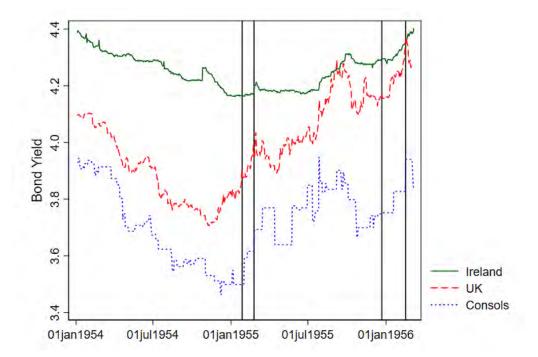
<sup>&</sup>lt;sup>11</sup>1955, Blueprint for Prosperity.

Table 3: Monetary Policy Shocks Timeline

Date	Event Number	UK Interest Rate	Irish Interest Rate
26/01/1955		3	3
27/01/1955	1	3.5	3
24/02/1955	2	4.5	3
22/12/1955	3	4.5	4
16/02/1956	4	5.5	4

In the initial phase, short term interest rates diverged when the Irish Banks did not reciprocate the rate increases of the Bank of England (Table 3) beginning in January 1955. Ceteris paribus, higher interest rates in the United Kingdom implied that its residents would spend less on consumption and investment goods. The subsequent sale of British government bonds would push their prices down (yields up) and investors could switch into other bonds, including those issued by Ireland, on which prices would rise (yields would fall). As Figure 10 indicates, up until the summer of 1955, this tendency prevailed. The decline in Irish yields (long term interest rate) amplified the divergence between the aggregate demand of the two regions and would require more extreme measures to rectify the imbalance in the aftermath of the experiment (1956-7). While a premium existed throughout the period on Irish bonds, this narrowed substantially throughout 1955, as a result of higher British government yields, rather than a decline in Irish yields (see Figure 10).

#### Figure 10: Sovereign Bond series, January 1954 to March 1956



Source: Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99 (1939-1958).

The existing Irish focused literature sees the rate rises in Britain as attempts to curb inflation and dampen British demand (Moynihan, 1975; Honohan and Ó Gráda, 1998), but as we document above there was also speculation whether Britain would devalue and these rumours were believed to have been spread by 'authoritative voices on the Continent of Europe' emanating from Basel (Dow, 1964, p. 88, footnote 3). Historically, Irish banks would follow suit, however, due to pressure from the Minister of Finance, Ireland broke ranks (Honohan and Ó Gráda, 1998).<sup>12</sup> However, as seen in Figure 9a above, inflation in 1955, while higher in the UK than in Ireland and the US, was declining from previous highs. Figure 9b shows that the sudden rate increase in the UK which was not reciprocated in the US.

Unlike the Irish political class, the banking community, were not as convinced (Moynihan, 1975) and Irish banks *did* increase their large deposit rate by 0.25% in January. Nonetheless, a significant wedge persisted between Irish and UK rates (Meenan, 1970). Rates were not increased due to Irish external payments standing in good stead, the need for further capital development, and a focus on the domestic economy rather than the woes of Britain (Dáil, 1955*a*). The intertwined complexity of the Banking system (see Appendix A1) is reflected by three alternative bank rates prevailing on the island of Ireland during the episode: London rates, Dublin rates, and Northern Irish rates (Meenan, 1970). Smaller deposits were not particularly sensitive to changes in the interest rate (Honohan and Ó Gráda, 1998). However, an alternative leakage may have arisen through the medium of bank notes, which are by design, mobile. It is possible that those Irish banks that had the right to issue notes on both sides of the border, experienced a larger decline in reserves than banks without such fiduciary privileges. Specifically, their paper may have crossed the border where holders readily deposited these bank liabilities in other northern bank accounts offering higher (U.K.) rates of interest.

Ireland operated within the wider UK monetary economy in a regime of free capital mobility whilst maintaining its fixed exchange rate (Honohan, 2019). The attempt to run independent monetary policy by the Irish banking system was, as the theory would predict, not feasible, especially as the central bank did not have full control of reserves. The wide disparity between British and Irish rates led to an erosion of reserves (Meenan, 1970). In parliament, both opposition and government backbencher questioning of sterling reserves increased (Dáil, 1955*a*,*c*). By December, net external assets of private banks were £35.6 million lower year-on-year (Moynihan, 1975). The monetary policy experiment was initially abandoned in December 1955 with the rediscount term rate increasing to 4%, and the large deposit rate increasing to 2.5% (Moynihan 1975, Honohan and Ó Gráda 1998, *The Irish Times* 1955<sup>13</sup>). However, when the Bank of England raised rates again in February 1956, with the increase not being reciprocated in Ireland, the Irish banking sector suffered heavy market losses.

Policies aimed at exploiting "cheap money" led to a scarcity of punts (Honohan and Ó Gráda, 1998; Kennedy and Dowling, 1975). Companies clearing UK loans with cheaper Irish credit, investing in Britain for higher returns, domestic imports, increased advances, and increased demand for credit, were all a stronger cause of dwindling reserves (Honohan and Ó Gráda, 1998; Bielenberg and Ryan, 2013;

<sup>&</sup>lt;sup>12</sup>In fact, the possibility of Irish sovereign monetary policy had been raised during WWII but had been explicitly ruled out before by the British war cabinet (Fanning, 1978). The possibility that Ireland (abundant in sterling reserves at the time) would peg to the dollar, would leave blocking Irish investments and reserves as Britain's only option (Fanning, 1978).

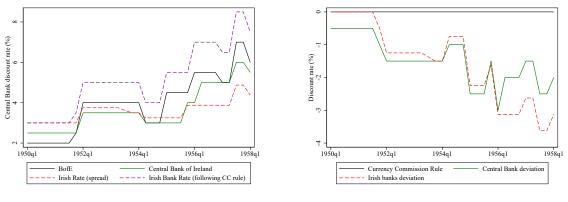
<sup>&</sup>lt;sup>13</sup>Irish Times, 21 December 1955

Meenan, 1970). As a Central Bank report noted, 'the heavy demands upon the banks' external resources, due to the worsening in external trade...involved a deficiency in net external holdings of the commercial banks which had to be relieved by the Central Bank' (CBI, 1956, pp 40-41). A contractionary budget and prolonged recession followed in the midst of the balance of payments crisis.

The behaviour of Irish interest rates over the period can be contrasted with a counterfactual. Upon establishment, the Currency Commission set a rule for Irish rate setting contingent upon British rate movements. The rule was outlined as follows:

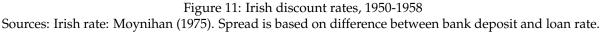
Taking the historical experience into account, the Irish Banks' Rate moves at 1 per cent above Bank of England Rate when the latter is below 5  $\frac{1}{2}$  and one-half of 1 per cent above Bank Rate when the rate is at at 5  $\frac{1}{2}$  and above. The tendency for Irish Banks' Rate to fall less fast than Bank rate for low levels of this rate, and to rise less fast as this rate moves up, finds its analogy in the view that British loan and overdraft rates do not follow Bank Rate continuously, whether in an upward or downward direction. (Banking Commission, 1938, paragraph 307)

We illustrate this rule in Figure 11, which compares the rate setting of Irish Banks and the Central Bank of Ireland with the Currency Commission's (CC) Rule on the Irish rate of interest. It is evident that Irish rates began diverging in 1952 from the CC rule, with little consequence as the deviation stabilized at -1.5 per cent between 1952 and 1954 (Figure 10b). This suggests that policy makers and other stakeholders recognized that the rigid application of the rule could lapse if Irish conditions differed materially from British economic circumstances. However, the large divergences from the CC rule over the period 1955-6 were entirely overshadowed by the fact that official Irish rates fell below British rates.



(a) Irish Rates

(b) Deviation from Currency Commission Rate



## **3** Data & Methodology

#### 3.1 Data

We now turn to discuss the data we construct for our analysis in which we will explore the role of bank stocks and sovereign bonds. These will be discussed in greater detail in section 3.2.

We gathered high frequency data using daily close of business prices from the Dublin Stock Exchange for both sovereign bonds and bank share prices,<sup>14</sup> as well as data from the London Stock Exchange.<sup>15,16</sup> The data was manually entered from the Dublin Stock Exchange records, and this was the first time such data have been collected or analysed for the period surrounding and including our event. All bank prices were denominated in pound, shillings, and pence (£.S.D), with some converted from the x/8 system. We present our results in decimalised form.

We then created a weighted average portfolio of long-term British and Irish debt using various forms of long-term debt to reflect the true extent of debt in the period (Foley-Fisher and Mclaughlin, 2016; Homer and Sylla, 2005). We calculated the total nominal amount of debt outstanding on a given day and summed across all bond types to create a total amount of debt. Then, we allocated a weight to each bond as a percentage of the total debt and used that to calculate the total yield of the portfolio. We analysed simple yields (Equation 1) for the bond portfolios for each given day. As our coupon rate did not change, the usual inverse relationship between prices and yields applied. We multiplied each bond's simple yield by its corresponding weight and summed them to create a weighted yield for the entire portfolio. Most bonds were written down either annually or bi-annually leading to different weightings. To account for this, we added back dividends to the original series. This created an inflated price series such that we could analyse pure structural breaks relating to our monetary policy episode. Simple yields were analysed due to the vast amount of bond data present, i.e.: 3 years of daily data spanning 10 different bonds types with various maturities. As we were only comparing long-term debt, yield to maturity metrics would not have yielded vastly different results.

$$Simple Yield = \frac{Coupon Rate}{Bond Price} \times 100$$
(1)

Table 4 outlines the list of bonds used for comparison. One must note the high share of low rate (3.0-3.5%) short-term Irish debt issued in the period. This was excluded from our analysis as we examined long-term debt yields. In the British case, annuities were excluded from the sample as they constituted less than 1% of the entire debt outstanding. There was insufficient price data to include Victory Bonds in the sample, although it accounted for around 7% of the total debt outstanding. We took the War Loan conversion date as its start date.

<sup>&</sup>lt;sup>14</sup>Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99 (1939-1958) held at the National Archives of Ireland <sup>15</sup>FT30 and UK bank share prices (collected from the *Financial Times*)

<sup>&</sup>lt;sup>16</sup>There was a direct phone line installed between the Dublin and London Stock Exchanges in 1897 and the Dublin exchange kept records of daily price list from the London exchange (Thomas, 1986).

Ireland Long-Term Debt Mix 1954-1956											
	Coupon	Coverage	Max outstanding								
	% Start Date End Date										
Fourth National Loan	3.50	1933	1950-1970	5,224,076							
Financial Agreement Loan	3.75	1938	1958	9,233,950							
National Security Loan	3.25	1941	1956-1961	7,392,374							
National Loan	5.00	1952	1962-1972	20,000,000							
National Loan	4.50	1953	1973-1978	25,000,000							
National Loan	4.25	1954	1975-1980	20,000,000							

Table 4: Sovereign Bonds Portfolio Compositon

UK Long-Term Debt Mix 1954-1956											
Coupon Coverage Window Max outstandin											
%	Start Date	End Date	£m								
2.50	1903	perpetuity	275,956,948								
3.50	1932	1952+	1,910,896,868								
4.00	1919	1960-1990	302,753,124								
3.50	1921	1961	739,255,478								
	Coupon % 2.50 3.50 4.00 3.50	Coupon Coverage   % Start Date   2.50 1903   3.50 1932   4.00 1919   3.50 1921	Coupon Coverage Window   % Start Date End Date   2.50 1903 perpetuity   3.50 1932 1952+   4.00 1919 1960-1990								

Note: Source *Dublin Stock Exchange Daily Stock and Share lists: DUB* 77/3/80 - *DUB* 77/3/99 (1939-1958) held at the National Archives of Ireland

For the event study, our episodes comprise those occasions where divergences and convergences occur during our period of analysis. The four vertical lines reflect the event dates. For the event study, our event episodes comprise those occasions where divergences and convergences occur during our period of analysis, see Table 3. The first event surrounds the initial increase in interest rates (27/01/1955), the second event pertains to a further divergence in the British and Irish rates (24/02/1955), while and the third captures the rejoining of interest rates.

Meenan (1970) states that banks did not revise their interest upwards until January 1956, while others (*The Irish Times*, 1955) suggest the event occurred earlier, as such, we took the 22nd of December 1955 to be the end of the initial monetary experiment. The last event captures a further increase in UK rates not mirrored in Ireland (16/02/1956). In the figures below, the final black vertical line reflects the Irish contractionary budget in March 1956 and serves as our cut off. Table 5 presents summary statistics for our bond portfolio from 1954 until March 1956.

Table 5: Sovereign Bonds Yield Summary Stats (%) 1954 - March 1956

-		Obs	mean	St.Dev	min	max	
-	Ireland	551	4.25	0.06	4.16	4.4	
	UK	551	3.99	0.16	3.71	4.37	
	Consols	551	3.72	0.13	3.46	3.95	
Source: Dublin Stock	Exchange D	aily Stoc	k and Sha	re lists: DL	IB 77/3/	80 - DUI	3 77/3/99 (1939-1958)

Next, we created a price index of Irish bank shares and UK bank shares from 1954-1956. Our data starts at the end of March 1954, to exclude the effects of the 1954 banking sector boom in the UK. Firstly,

we calculated the market capitalisation by multiplying close of business share price by amount of shares outstanding. We then calculated each bank's weight by dividing its market capitalisation by the total capitalization for each given day. Finally, we multiplied each bank's share price by its weight and summed it arrive at a banking index share price. We also added back dividends such that we would not conflate structural breaks in the series with dividend issues. Therefore, our series are inflated but consistent. Finally, we normalised our data to have a value of 100 on the 1st of January 1955. Summary statistics for both series are represented in Tables 6 & 7.

	Obs	Obs Mean St.Dev Min		Max	Average Market Cap	NI Fiduciary issue	
		£		£	£	£m	
Bank of Ireland	491	316.05	5.67	289.12	325.50	8,752,207	Yes
National Bank	491	42.81	1.22	39.83	48.00	2,140,258	Yes
Provincial Bank of Ireland A	491	45.27	1.71	41.50	48.50	314,343	Yes
Provincial Bank of Ireland B	491	45.08	2.00	41.93	47.93	300,532	Yes
Hibernian Bank	491	48.29	1.60	44.08	50.50	1,207,282	No
Munster and Leinster	491	150.43	4.11	140.33	156.73	1,611,763	No
Royal Bank of Ireland	491	30.73	1.55	27.66	32.50	307,337	No
Market Cap Weighted Price Index Ireland	491	99.61	1.84	90.69	102.81	14,700,000	

Table 6: Irish Banking Index Composition March 1954 - March 1956

Source: Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99 (1939-1958)

In order to distinguish the market's view on the UK banking system from the broader economy (FT30 index), we constructed a miniature UK bank index at daily frequency over the period January 1953 to June 1956. Specifically, we collected share price data for the "big five" British banks from the *Financial Times* historical archive and combined these into a market capitalization weighted bank index. Table 7 lists the banks and the names of the shares that were used in the construction of the index. Price highs and lows were reported and from these we calculated the daily mid-price. Where dividends or bonuses were announced, they were added back to the series to strip out artificial aberrations from the trend of the underlying series. The resulting market cap weighted index is comprised of 8,640 unique observations which combine to produce a bank index for 863 days around the event.<sup>17</sup>

In the second half of 1955, the UK bank index begins a slow and steady decline ahead of the broader stock market reversal that occurred the following year. This appears to be predominantly driven by a deflating bank stock market bubble.<sup>18</sup>

Source: FT30 and UK bank share prices

We chose a cut-off of 6 March to exclude fiscal effects from our sample in our summary statistics for both our bond yields and banking shares, and in our event study analysis. We also exclude the beginning of 1954 in our banking index to avoid compositional changes affecting our results. We had missing data points for 21 observations in our UK banking series.

<sup>&</sup>lt;sup>17</sup>The number of outstanding shares per month were kindly provided by Prof. John Turner.

<sup>&</sup>lt;sup>18</sup>The stock market had grown to such an extent that on 25 June 1955 *the Economist* wrote: "Boom is a word used much too often. It was rightly used about the markets in 1929, and it must be used about the industrial share market now...hardly a day passes without the FT industrial index notching a new high record." While the stock market boom was well discussed in the broader economy, gains in the equities of the financial sector were also noted. The *Financial Times* reported on 4 January 1955 that "the banks found 1954 more than usually prosperous" and on 8 January 1955 it noted that'one of the greatest boosts to market confidence this week has been the increase in bank dividends'. On 12 January 1955, the *Financial Times* observed that, 'all the Big Five paid shareholders more for 1954 than for 1953 and it can hardly be a coincidence that the banks which show the largest profit increases, Barclays and the Midland, paid shareholders substantially more'.

	Obs	Mean	St.Dev	Min	Max	Average Market Cap
		£		£	£	£m
Barclays A	470	51.43	3.74	44.25	60.60	20,500,000,000
Barclays D, C & O	470	44.77	2.76	38.53	50.43	692,000,000
Lloyds	470	66.43	4.46	58.43	78.45	9,180,000,000
Lloyds B	470	22.99	1.58	20.45	26.15	33,000,000
Midland A	470	10.38	0.55	8.88	11.86	29,800,000
Midland B	470	84.12	4.67	74.75	94.25	1,870,000,000
National Provincial Bank A	470	80.56	5.18	70.33	88.68	1,300,000,000
National Provincial Bank B	470	83.64	5.66	72.40	91.40	97,900,000
Westminster Bank A	470	91.35	6.58	80.90	103.20	205,000,000
Westminster Bank B	470	55.74	4.54	48.75	64.35	1,690,000,000
Market Cap Weighted Price Index UK	491	95.62	5.54	84.9	108.45	35,700,000,000

Table 7: UK Banking Index Composition March 1954 - March 1956

Figure 12 presents the daily stock price indices that we have constructed from the sources described, over the period January 1953 to June 1956. It contrasts the stock price indices of Irish banks that could issue notes in both jurisdictions (All Ireland) with those in the Republic (South). While the two cannot be said to move in perfect step together before the first and second event, those without note-issuing privileges in Northern Ireland continue to experience a rise in their share price after the initial interest rate divergence in early 1955. The "All Ireland" banks appear to fluctuate around a stationary level until the fourth event in February 1956 which sees a marked decline in their stock in contrast to the Southern issuing banks. Figure 13 adds UK banks and captures the mini-boom in bank share prices in the UK that transpired between 1953 and June 1955. Figure 14 compares the total Irish bank index to our UK bank index. Evidently, Ireland's bank share prices remained relatively flat (compared to the inverted-u shape pattern of UK bank share prices), until early 1956 when they contracted sharply.

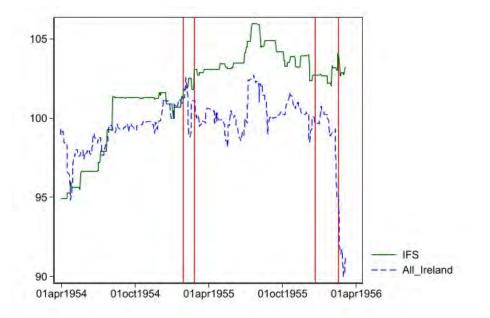


Figure 12: Note issuing Banks: North & South Source: Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99 (1939-1958)

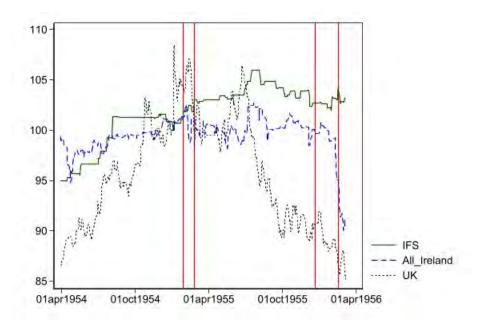


Figure 13: Ireland North & South and UK Source: *Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99* (1939-1958) and *Financial Times* for UK bank share prices

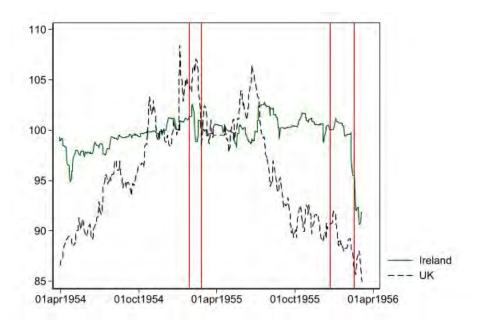


Figure 14: Total Ireland and UK Source: *Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99* (1939-1958) and *Financial Times* for UK bank share prices

#### 3.2 Methodology

#### 3.2.1 Identification Strategy

We now turn to discuss the methodologies we use to uncover the transmission channel of the 1955-6 crisis. There are two alternative avenues to consider as the main source of identification- the banking system and the government debt market. We begin with the banking system channel. We exploited variation in our treated variable (Irish banks) by examining two different sub-samples: those banks with the right to fiduciary issues in both jurisdictions (South and North) and those banks with note issuing rights only in the south (see Table 2 & 6).<sup>19</sup> Although capital flowed freely between Ireland and the UK, those that issued notes in both jurisdictions could have a higher direct exposure to changes in the UK. Those with the right to fiduciary issue south of the border only might suffer a slower drain on reserves than their all-island issuing peers. As such, we compare a treated and untreated group and do not fall victim to issues surrounding the Goodman-Bacon (2021) decomposition. We therefore rely on two identifying assumptions in our context. Firstly, at least 15 working days pass before the realisation of the treatment effect on our control group and secondly deposit withdrawals do not transition into the control group. The second assumption is likely to be largely valid as free capital mobility would allow investments to flow into the UK.

A plausible counterfactual for Ireland could also reside in the UK, given Ireland's curious case within the Bretton Woods context, as well as the partition on the island of Ireland. From a political economy perspective, both countries elected left-leaning governments in their first post-war election, electing Labour and the first Interparty government (albeit with a lag in Ireland). Both had a short-lived reign (5 years for Labour) and a collective 6 years for both Interparty governments, before a return to the pre-war status-quo. Both economies had centrally controlled economies preceeding the war and had a similar post-war boom before a return to more laissez-faire systems with similar fiscal policies.

For robustness, we examined the difference between Irish and UK banking sectors. Prior to the first event, both sectors shared the same "risk-free" rate, namely the Bank of England bank rate and provides a natural starting point. Here, we rely on the assumption that the flow of daily Irish deposits are not large enough to impact the UK banking sector, given their comparative size.

A comparison of British and Irish bond yields is also a natural starting point, given their close relationship. Prior to the event, the shared "risk-free" rate formed the base for both countries' sovereign bond interest rates. As we are comparing long-term British and Irish debt, a term premium was unlikely to be the source of divergence between the two. However, this may not provide a clean counterfactual in our case. After the Dollar Crisis, the UK did not suffer a contraction until the aftermath of the Suez Crisis while Ireland was hit with more severe bouts of balance of payments crises. In terms of debt, Britain's war loan added a huge burden to its sovereign debt while Ireland had a relatively low debt burden thanks to a generous debt write off as a quid pro quo for tacitly accepting the permanent partition of the island of Ireland (Fitzgerald and Kenny, 2020) as well as an agreement over a debt dispute in the 1930s (Foley-Fisher and Mclaughlin, 2016). Thus, the event study and the banking sector will provide the main

<sup>&</sup>lt;sup>19</sup>Two of the northern banks (Ulster & Belfast) were bought by UK banks in 1917. The London County and Westminster Bank acquired Ulster Bank in 1917. The Belfast Banking Company was acquired by the London City and Midland Bank in 1917.

source of identification.

#### 3.2.2 Empirical strategy

Our empirical strategy is as follows: firstly, we will evaluate the monetary episode by way of an event study in the banking sector. Next, we will test for structural breaks in the differential between our UK and Irish banking indices. Finally, we will test for structural breaks in our yield differential.

We first turn to our event study, which follows the process outlined by MacKinlay (1997). We posited that the monetary policy shock would be associated with abnormal returns relative to the market around our given event dates (outlined in Table 3). We defined the excess returns of our Irish stocks as the return earned on each individual stock of our index minus the UK interest rate. Next, we took our FT30 series to be a proxy for the entire UK market during the period. We also controlled for the UK banking sector, to isolate the Irish idiosyncratic effects. We used an estimation window of at least 200 observations for each event to calculate our expected returns and we allowed for a maximum event window of [-10,10] surrounding our chosen event date of 0. We tested for Cumulative Abnormal Returns (CARs) surrounding our events. We allowed for different sized event windows to account for information leakage (Brunnermeier, 2005).

$$(R_{i_t} - R_{r_f})_{IRE_{it}} = \alpha_i + \beta_t^{FT30} + \gamma (R_{i_t} - R_{r_f})_{UK_{it}} + \epsilon$$
(2)

Here, we regress the excess return of Irish banks on a UK FT30 market factor and the excess return of UK banks. The cumulative abnormal return is defined as the sum of the difference in predicted returns and their realisations across all banks (MacKinlay, 1997).

#### 3.2.3 Structural Breaks

First, we tested for the cointegration of our Irish and UK banking and bond series using the Johansen (1995) method to avoid issues of endogeneity and spurious analysis in line with (Yule 1926, Granger and Newbold 1974, Phillips 1986).

Next, we tested for structural breaks in the differentials of our indices to test our hypothesis of capital flight. One would expect to see evidence of a capital flight via reserves implied in a break in the banking share price series differential. Alternatively, one would expect that the interest rate wedge would influence the Irish capital account and would thus be reflected in the bond yields (prices) differential between Irish and UK bonds. We did not expect to find a significant shift in the trend in our sovereign bond spread as most of the horizon examined was a non-crisis period (Aguiar and Amador, 2014; Foley-Fisher and Mclaughlin, 2016).

We followed the methodology outlined by Bai and Perron (1998, 2003), which allows for partial/pure structural changes and multiple structural breaks. The model works by generating a diagonal matrix whereby each entry accounts for a different structural break and which in turn minimizes the residual sum of squares. We implement the Bai-Perron methodology using the "strucchange" package in R.

## 4 **Results**

#### 4.1 Event Study

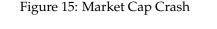
We now turn to our event study, the results of which are presented in Table 8. Our tests show that the monetary policy shock had a positive impact on banks' equity surrounding the first event. At first glance, this may seem somewhat counterintuitive. A standard interpretation of a shock would suggest a decrease in the bank's share price, which should indicate a decrease in potential future earnings. However, in the short run, banks became more profitable. As stressed by Honohan and Ó Gráda (1998), Irish banks initially experienced an increase in the demand for their loans, in some instances by companies that cleared higher interest British loans with cheaper credit now on offer in Ireland. In other cases, British banks may have borrowed from Irish banks to lend at higher rates in their domestic market. The large size of Irish banks' external assets enabled them to earn higher rates of interest in Britain during the divergent period. The second event widened the divergence between British and Irish rates, but did not produce significant effects in terms of bank share prices. It appears that the market did not price in the event, although it was associated with a somewhat negative return for the Irish banking sector closer to the event.

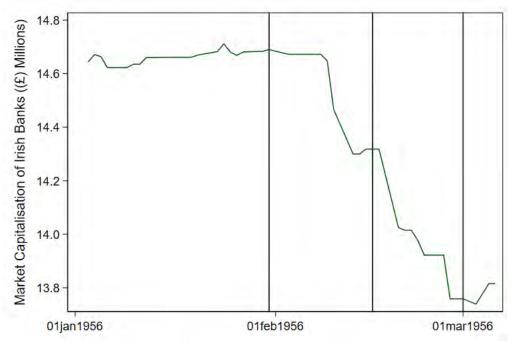
	Event 1											
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]				
CAR	0.704	1.966***	2.186***	1.591***	1.696***	1.69***	1.753***	0.676*				
Std.Err	(0.606)	(0.621)	(0.588)	(0.559)	(0.52)	(0.479)	(0.433)	(0.388)				
			Ev	rent 2								
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]				
CAR	0.577	0.564	0.251	-0.123	0.275	0.301	-0.611	-0.453				
Std.Err	(0.685)	(0.652)	(0.617)	(0.58)	(0.54)	(0.497)	(0.456)	(0.402)				
			Ev	rent 3								
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]				
CAR	-1.57***	-1.294**	-0.737	-0.499	-0.515	-0.188	0.237	0.149				
Std.Err	(0.601)	(0.573)	(0.542)	(0.509)	(0.475)	(0.437)	(0.4)	(0.353)				
			Ev	rent 4								
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]				
CAR	-2.168***	-2.733***	-2.681***	-2.297***	-2.326***	-1.798***	-1.174***	-0.952**				
Std.Err	(0.643)	(0.62)	(0.587)	(0.552)	(0.513)	(0.472)	(0.428)	(0.379)				
	Note:	*** p<0.01,	** p<0.05,	* p<0.1								

In the initial phase, it seems like the artificially low interest rate was supportive of the home economy, which still grew at an annual rate of 2.5 per cent in 1955 (Kenny, 2024), despite the difficulties that resulted in the last two quarters. The continuous decline in bank reserves had not yet counteracted the temporary stimulus afforded the economy via lower interest rates. Throughout the year reserves continued to fall, with banks investing in Britain for higher returns and increased advances causing the decrease in reserves simultaneously. Domestic credit increased by 20 million punts over the course of the year (Moynihan, 1975). The fall in reserves was further reinforced by the current account deficit increasing by 35 million punts in 1955 (Moynihan, 1975). With reserves running extremely low, the concession that the policy had failed was met with a corrective rise in the Irish interest in December 1955

(Event 3). As Table 8 reports, it met with negative abnormal returns. The newspaper coverage at the time characterised the policy uncertainty that lingered after Event 3. For example, the *Irish Press* reported that, 'Mr. Sweetman [Minister for Finance] admitted that something was wrong, even seriously wrong. But he could proceed no further... He left instead the impression that the Coalition having raised the bank interest rates can only wring its hands, give warnings and hope for the best... all he can say is that raising the bank interest rates "should help to restore a better balance between saving and spending.'<sup>20</sup> It appears however, that the concession of failure and a resumption of the status quo of following British interest rate hikes, resulted in only mild negative returns. This perhaps explains why only two event windows suggest statistically significant results.

What is most remarkable however, are the cumulative abnormal returns surrounding the final event (see Figure 15). With reserves at their nadir, the prospect of another monetary experiment resulted in a substantial negative market reaction. This second policy U-turn triggered the uncertainty that newspaper reports had emphasised: "The danger lights are on. Mr. Sweetman admits he has seen them. But he and his colleagues apparently do not know what to do. The national interest demands something more than a paralysis of indecision". <sup>21</sup> Information leakage seemed to be at play throughout, as the prospect of a further increase in the UK interest rate caused the Irish banking sector share prices to collapse. Within 10 days c. £0.5 million (3.91%) was wiped from the Irish banking sector's market capitalisation and relative to the market, the event caused a 2 per cent decrease in bank share prices.





Source: Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99 (1939-1958).

Overall, it appears that in the short-run, banks improved their profitability by earning higher interest rates on large external assets, while in the medium-term a larger interest rate differential led to a loss of

<sup>&</sup>lt;sup>20</sup>*Irish Press*, 20 January 1956, p. 6.

<sup>&</sup>lt;sup>21</sup>Irish Press, 20 January 1956, p. 6

reserves and an erosion of profit margins.

Our results might potentially suffer from bias. If one included bond prices in the above regression, we would suffer from simultaneity bias. As banks held sovereign bonds on their balance sheets to varying degree, a decrease in bond prices would imply a decrease in banks balance sheets and thus share price. Also, a decrease in bank share prices could imply risk of a balance of payments crisis in our case and thus affect bond yields. Given Ireland's curious case within Bretton woods,no instrument would plausibly satisfy both the relevance condition and the exclusion restriction. Therefore, although we do find evidence of a capital flight, we cannot evaluate the transmission mechanism in this context. We did, however, include Irish bond prices as a control variable to ascertain whether it altered our results materially for robustness (Appendix Table 8). While the exclusion of the variable may result in omitted variable bias, we are confident that the main source of negative returns came from the dwindling reserves in the banking system, as witnessed in the structural break analysis below. Finally, we carried out a similar analysis excluding the UK banking sector (Appendix Table 9). Our results were broadly consistent, albeit with wider confidence intervals (larger standard errors) indicating that our model specification was apt.

#### 4.2 Structural Breaks

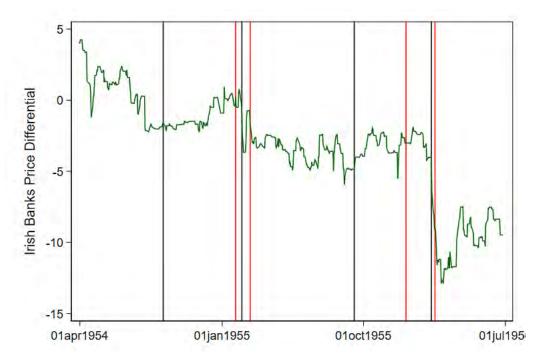
#### 4.2.1 All-Ireland versus Southern note issuing banks

When examining the differential of All Ireland and Southern note issuing banks, we did not find evidence of a structural break surrounding the first event, but rather a break between the first and second event (see Figure 16). Here, the red lines indicate the event dates, and the black lines indicate the Bai-Perron break dates. After an initial rise in the Southern series during the first event, a structural break occurred. This perhaps is evidence of the inherent risk with the policy move, with those more exposed to the policy changes, bearing the brunt of the risk. Like our event study results, we found no evidence of a break surrounding the second and third events, with the other breaks reflecting idiosyncratic trading.

What is most striking, however, is the break witnessed on the eve of our final event. Here, the structural break occurred five days prior to our final event, indicative of information leakage, with most investors becoming aware of the impending increase in interest prior to the UK rate increase. Those banks with the most exposure (those with fiduciary issue across the island) saw their share prices contract relative to Southern-only issuing banks, suggesting that their liabilities (notes) were more vulnerable to the experiment. Eventually however, Southern bank prices converged on all island prices, which supports our identification assumptions.

For robustness, we compared banks operating on both sides of the border to UK banks. We found no evidence of a structural break surrounding the first and third events in our sample, and like the all-island and Southern banks series, we found evidence of a break between the first and second event. Upon inspection, we failed the parallel trends assumption for our series during the second event. What is surprising, however, is the third structural break in the series (Figure 6 appendix). This did not coincide with any of our events, but rather a credit restriction being encouraged for the London Clearing Banks

Figure 16: Irish bank Fiduciary issue Price Differential



Source: Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99 (1939-1958).

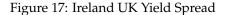
around the 5th of July (Honohan and Ó Gráda, 1998). This caused UK bank shares to decrease and Irish bank shares to increase simultaneously. It appears that the slowdown of the UK economy and a decline in deposits caused the UK banking index to decrease.

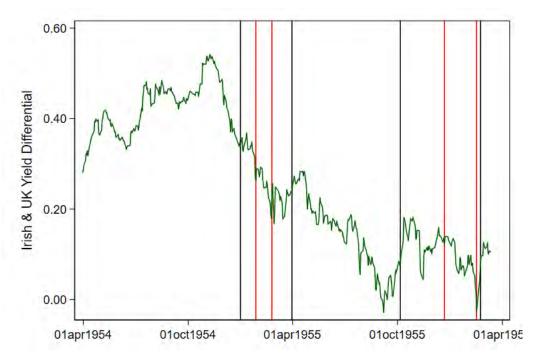
We did, however, uncover evidence of a structural break only 6 days before the final event date, as Irish bank shares contracted relative to British bank shares. This validates our assumption that the flow of Irish deposits were not large enough to impact the UK banking sector. The event offers evidence of a capital flight, but also suggests that the dynamics of the trilemma forced Irish shares down, mirroring the July drop of British banking shares.

#### 4.2.2 Bond Series

Our bond price data lead us to similar conclusions as our banking sector tests. We found no evidence of a break during our first three events, though we observe a distinct break surrounding the final event, albeit with clear anticipation effects taking place. Following the announcement of the rate hike, British yields declined while Irish yields rose steadily throughout. Though there was no sudden shift in Irish yields, the decrease in British yields led to a jump in the differential, as evidenced by the structural break on the 23rd of February 1956. This last event (4), characterised by the absense of a policy response from the Irish authorities, shows up as the most significant in both the banking and bond channels of transmission.

British yields began to rise due to efforts to curb the booming British economy, such as restrictions on credit and hire-purchases (Dow, 1964). Increased post-war pressure on public finances through pensions, the NHS, the Korean war effort impacted investor sentiment. Furthermore, the economic consequences of reactionary monetary ("stop go") policy may also have led to the increase in British yields. While not



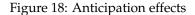


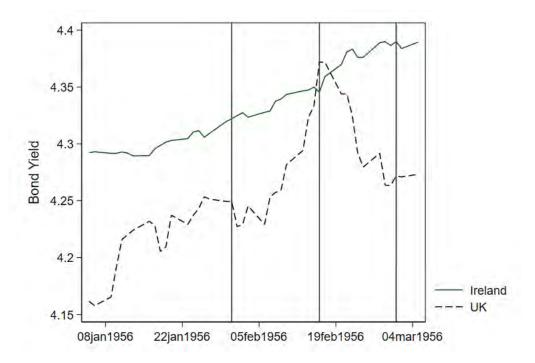
Source: Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 - DUB 77/3/99 (1939-1958).

as conclusive as our findings in the banking sector, we do find tentative evidence of capital flight via the bond market. Equilibrating forces seemed to have forced Irish yields up throughout the episode and culminated in a structural break. As Ireland kept its economy artificially stimulated, it could delay the inevitable increase in yields, for as long as reserves allowed.

While we could not test for the transmission channel of the monetary policy shock coming from either the bond series or the banking index due to simultaneity bias, the timing of the events can shed some light on the situation. Irish yields rose during the event, reducing the balance sheet of banks, but yields did not rise sharply. Simultaneously, Irish bank share prices fell rapidly. In the normal balance of payments sense, a current account deficit could only be sustained with a capital accounts surplus. If the possibility of a balance payments of crisis were evident, investors would demand a risk premium, causing yields to increase sharply as the possibility of a sudden stop might be at play. This would most certainly trigger the start of a recession. Furthermore, it would be difficult to disentangle the normal balance of payments risk premia from trilemma related market implied rick in sovereign bond yields.

Our banking results however can be interpreted causally in our context. The timing of our effects indicates that the implications of trilemma forces are valid. This is especially interesting as (to the best of our knowledge) our study is the first to examine the effects of the trilemma in a high frequency market price setting. Although, our results only point to the internal validity of our events, and should not be projected onto other scenarios.





## 5 Conclusion

The 1955-56 economic crisis was a pivotal moment in Irish macrohistory, representing the worst peacetime crisis between independence and 2008 (Kenny, 2024). The decision to experiment with monetary policy was unprecedented in the history of the new state. While some had encouraged the new state to experiment in its formative years, the European experiences of hyperinflation in the 1920s tempered any mood to do so (McLaughlin, 2015). The gradualism in policy exploration was reflected in other areas of economic policy where the state was coming to terms with its new found independence (Rumpf and Hepburn, 1977). After the new state was consolidated, it was able to fully explore the policy options and constraints that independence offered, although only with entry into the European Union was its economic potential realised (O'Rourke, 2017).

Artificially low interest rates fueled the domestic economy in the early 1950s, but could only be maintained for the duration that banks held sufficient reserves. When the experiment eventually collapsed, bank share prices plummeted. Our tests suggest that capital flight occurred, albeit with a lag, through the banking sector. Banks that issued notes north and south of the border suffered more rapid drains on their reserves, reflected in their relative stock price declines. Due to timing, these results indicate that the final shock caused the start of the 1956 recession, which aligns more Honohan and Ó Gráda (1998) interpretation than with Kennedy and Dowling (1975). Additionally, only the final event in early 1956 produced a shock in both the banking and sovereign debt markets, when external reserves were nearer to depletion. Equilibrating dynamics dictated that a small nation could not exercise independent monetary policy in the absence of capital controls, without being harmed. Overall, our results shed light on the 1955 monetary policy experiment in a more empirical and robust fashion.

We also reveal that Irish monetary authorities were already aware in 1952 of differing circumstances between Irish and British economic conditions. They operated with lower interest rates than the Currency Commission's rule, without much consequence. It was only when the official policy rate fell below the Bank of England's that markets began to react in the medium term. Our results also highlight the need for monetary prudence in the face of balance of payments headwinds.

While, as we illustrated, the 1955-56 policy experiment led to a major crisis, lessons were learned. The crisis led to an exploration of currency alternatives in light of the precariousness of the crisis-prone sterling link. In the 1920s and 1930's, arguments for breaking the sterling link were countered with evidence of sterling's longevity as a strong and stable currency. As claimed by the Minister of Finance, 'if the British currency was going to collapse like the [Reichs]mark, then we would have to make up our minds' (Kenny and McLaughlin, 2022). The experiences of the pound in the Bretton Woods era would suggest that Irish policymakers were gradually making up their minds to hedge away from sterling. This was reflected in the gradual emergence of a fully functioning central bank that broke the shackles of the traditional currency board arrangement Honohan (1997) and the diversification of reserves away from sterling (de Bromhead et al., 2023). The appropriateness of the sterling peg weakened over time, as Ireland's accession to the EEC in 1973 offered the potential for the development of new trading relationships (Barry, 2014). This, coupled with various sterling crises, encouraged policy-makers to consider an alternative currency regime, which would break historical ties with sterling (Honohan, 2019).

The economic crisis we study occurred under the second inter-governmental party government. Barry (2023) argues that electoral competition in the late 1940s and early 1950s led to the adoption of radical volte-face in economic policy. The decision to experiment with monetary policy is but one example of this. While Barry and O'Mahony (2017) argues that balance of payments crises are an inevitable reality of import substituting industrialisation once the early/easy stage has been completed, the 1955-56 crisis in Ireland was in turn paralleled with the Sterling crisis, which prompted divergent monetary responses in the UK and Ireland. It is impossible to know whether the 1955 monetary experiment would have occurred had the weakness of Sterling not been an issue.

The crisis also led to experimentation with trade policy via fiscal policy - albeit this emerged via internal competition for primacy within the government bureaucracy rather than through electoral competition (Barry, 2011). In the midst of the crisis, export profit tax relief was introduced in 1956 as an attempt to stimulate exports and to relieve the balance of payments problem. The latter was squarely on the mind of the government, as the Taoiseach (Prime Minister) John A. Costello declared in a speech that, 'the expansion of exports generally is so necessary, not merely to raise the levels of home employment and income, but also to lessen the immediate difficulties of our balance of payments, that the government has decided to stimulate such expansion by a special tax incentive' (Barry, 2011). This exports profit tax relief formed the basis of Ireland's focus on low corporation tax as an explicit economic strategy.<sup>22</sup>

<sup>&</sup>lt;sup>22</sup>Fears over the balance of payments continued to concern policymakers with James Ryan, the Fianna Fail Minister for Finance, declaring in his budget speech in 1957 that: 'We can no longer afford to incur a balance of payments deficit of any appreciable size because of the already serious depletion of our available external reserves. It is for this reason in particular that I have

Ultimately, the 1955-56 crisis represented the birth pangs of modern Irish economic policy and the punt on independent monetary policy may have subsequently paid off.

emphasised the need for stability in money incomes. An increase in money incomes not based on increased production would give rise to higher expenditure on imports and at the same time, by raising costs, make it more difficult for our exporters to find markets. The resulting dislocation of our balance of payments would necessitate the taking once more of remedial measures to curtail consumption. These measures could not but have serious repercussions on employment.' Dail Debates, 8 May 1957

## **Bibliography**

- Aguiar, M. and Amador, M. (2014), Sovereign debt, *in* G. Gopinath, E. Helpman and K. Rogoff, eds, 'Handbook of International Economics', Vol. 4 of *Handbook of International Economics*, Elsevier, pp. 647– 687.
- Allen, G. C. (1979), The British Disease, second edition, Institute of Economic Affairs, London.
- Allen, W. A. (2019), *The Bank of England and the Government Debt: Operations in the Gilt-Edged Market*, 1928–1972, Cambridge University Press, Cambridge.
- Arndt, H. W. (1976), 'Non-Traded Goods and the Balance of Payments: The Australian Contribution', *Economic Record* **52**(1), 104–107.
- Arndt, H. W. (1978), *The Rise and Fall of Economic Growth: A study in Contemporary Thought*, Longman Chesire, Melbourne.
- Bai, J. and Perron, P. (1998), 'Estimating and Testing Linear Models with Multiple Structural Changes', *Econometrica* 66(1), 47–78.
- Bai, J. and Perron, P. (2003), 'Critical values for multiple structural change tests', *The Econometrics Journal* **6**(1), 72–78.
- Banking Commission (1938), *Commission of Inquiry into Banking, Currency, and Credit, Majority Report, P* 2628, Irish Government.
- Barry, F. (2011), 'Foreign investment and the politics of export profits tax relief 1956', *Irish Economic and Social History* **38**, 54–73.
- Barry, F. (2014), 'Diversifying external linkages: the exercise of Irish economic sovereignty in long-term perspective', *Oxford Review of Economic Policy* **30**(2), 208–222.
- Barry, F. (2023), Industry & Policy in Independent Ireland, 1922-1972, Oxford University Pres, Oxford.
- Barry, F. and O'Mahony, C. (2017), 'Regime Change in 1950s Ireland', Irish Economic and Social History 44, 46–65.
- Bielenberg, A. and Ryan, R. (2013), An Economic History of Ireland Since Independence, Routledge, London.
- Bolt, J. and van Zanden, J. L. (2024), 'MPD version 2023: Maddison style estimates of the evolution of the world economy: A new 2023 update', *Journal of Economic Surveys*.
- Boughton, J. (2002), On the Origins of the Fleming-Mundell Model, Working Paper 02/107, International Monetary Fund.
- Brownlow, G. (2015), 'T. K. Whitaker: Engineering Prosperity or Preventing the Future?', *Irish Economic and Social History* **42**.

- Brunnermeier, M. K. (2005), 'Information Leakage and Market Efficiency', *Review of Financial Studies* **18**(2), 417–457.
- Cairncross, A. and Eichengreen, B. (1983), *Sterling in Decline: The Devaluations of 1931, 1949 and 1967,* Basil Blackwell, Oxford.
- Cameron, A. C. and Miller, D. L. (2015), 'A practitioner's guide to cluster-robust inference', *Journal of Human Resources* **50**(2), 317–372.
- CBI (1956), Report of the Central Bank of Ireland, ye 31 March 1956, Central Bank of Ireland.
- Clarke, D. and Schythe, K. T. (2020), 'EVENTDD: Stata module to panel event study models and generate event study plots', Boston College Department of Economics.
- Clarke, S. (2013), Insider Dealing: Law and Practice, Oxford University Press, Princeton.
- Crafts, N. (1995), 'The Golden Age of economic growth in Western Europe, 1950-1973', *Economic History Review* 48, 429–447.
- Crafts, N. F. R. (1993), *Can de-industrialisation seriously damage your wealth?*, Institute of Economic Affairs, London.
- Daly, M. E. (2016), *Sixties Ireland: Reshaping the Economy, State, and Society, 1957-1973,* Cambridge University Press, Cambridge.
- de Bromhead, A., Jordan, D., Kennedy, F. and Seddon, J. (2023), 'Sterling's farewell symphony: The end of the Sterling Area revisited', *Economic History Review* **76**, 415–444.
- De Grauwe, P. (2022), Economics of Monetary Union, 14th edn, Oxford University Press, Oxford.
- Department of Finance (1958), *Economic Development*, Vol. Pr4803, Department of Finance, Government Stationary Office.
- Dintenfass, M. (1992), The Decline of Industrial Britain, 1870-1980, Routledge, London.
- Dow, J. (1964), The Management of the British Economy 1945-1960, Cambridge University Press, London.
- Dublin Stock Exchange Daily Stock and Share lists: DUB 77/3/80 DUB 77/3/99 (1939-1958), National Archives of Ireland .
- Dáil, (1955a), Dáil Éireann Thursday 27 Oct 1955, Debate 2, Dáil Éireann.
- Dáil, (1955b), Dáil Éireann Thursday 3 Mar 1955, Debate 8, Dáil Éireann.
- Dáil, (1955c), Dáil Éireann Wednesday 1 Jun 1955, Debate 4, Dáil Éireann.
- Dáil, (1955d), Dáil Éireann Wednesday 4 May 1955, Debate 5, Dáil Éireann.
- Fanning, R. (1978), The Irish Department of Finance 1922-1958, Institute of Public Administration, Dublin.

- FitzGerald, J. and Honohan, P. (2023), *Europe and the Transformation of the Irish Economy*, Cambridge University Press, Cambridge.
- FitzGerald, J. and Kenny, S. (2018), 'Managing a Century of Debt', *Journal of the Statistical and Social Inquiry Society of Ireland* **48**(1), 1–40.
- Fitzgerald, J. and Kenny, S. (2020), ""Till debt do us part": Financial implications of the divorce of the Irish Free State from the United Kingdom, 1922–1926', *European Review of Economic History* 24.
- Fleming, J. M. (1962), 'Domestic financial policies under fixed and under floating exchange rates', *IMF Staff Papers* **9**(3), 369–380.
- Foley-Fisher, N. and Mclaughlin, E. (2016), 'Sovereign debt guarantees and default: Lessons from the UK and Ireland, 1920-1938', *European Economic Review* **87**.
- Garvin, T. (2009), *Economic Development 50 years on*, 1958-2008, Institute of Public Administration, Dublin, chapter Dublin Opinions: Dublin Newspapers and the Crisis of the 1950s.
- Garvin, T. (2011), News from a New Republic: Ireland in the 1950s, Gill and MacMillan, Dublin.
- Goodhart, C. A. (1998), 'The two concepts of money: Implications for the analysis of optimal currency areas', *European Journal of Political Economy* **14**(3), 407–432.
- Goodman-Bacon, A. (2021), 'Difference-in-differences with variation in treatment timing', *Journal of Econometrics* **225**(2), 254–277. Themed Issue: Treatment Effect 1.
- Granger, C. and Newbold, P. (1974), 'Spurious regressions in econometrics', *Journal of Econometrics* **2**(2), 111–120.
- Homer, S. and Sylla, R. (2005), A History of Interest Rates, fourth edn, Wiley, Hoboken.
- Honohan, P. (1997), 'Currency Board or Central Bank? Lessons from the Irish Pound's link with sterling, 1928-79', *Banca Nazionale del Lavoro Quarterly Review* **200**, 39–67.
- Honohan, P. (2019), *Currency, Credit and Crisis: Central Banking in Ireland and Europe*, Cambridge University Press, Cambridge.
- Honohan, P. and Conroy, C. (1994), 'Irish Interest Rate Fluctuations in The European Monetary System', *ESRI,General Research Series* **165**.
- Honohan, P. and Ó Gráda, C. (1998), 'The Irish macroeconomic crisis of 1955–56: How much was due to monetary policy?', *Irish Economic and Social History* **25**, 52–80.
- Johansen, S. (1995), Likelihood-Based Inference in Cointegrated Vector Autoregressive Models, Oxford University Press.
- Jordà, O., Schularick, M. and Taylor, A. M. (2020), 'The effects of quasi-random monetary experiments', *Journal of Monetary Economics* **112**, 22–40.

- Kennedy, K. and Dowling, B. (1975), *Economic Growth in Ireland: The Experience since* 1947, Gill and Macmillan, Dublin.
- Kenny, S. (2024), 'Irish GDP since independence', Economic History Review . URL: https://onlinelibrary.wiley.com/doi/10.1111/ehr.13373
- Kenny, S. and Lennard, J. (2018), 'Monetary aggregates for Ireland, 1840–1921', *Economic History Review* **71**(4), 1249–1269.
- Kenny, S. and McLaughlin, E. (2022), 'Political economy of secession: Lessons from the early years of the Irish Free State', *National Institute Economic Review* **261**.
- Klug, A. and Smith, G. W. (1999), 'Suez and Sterling, 1956', Explorations in Economic History 36, 181–203.
- MacKinlay, A. C. (1997), 'Event studies in economics and finance', *Journal of Economic Literature* **35**(1), 13–39.
- MacKinnon, J. G. (2019), 'How cluster-robust inference is changing applied econometrics', *Canadian Journal of Economics/Revue canadienne d'économique* **52**(3), 851–881.
- MacKinnon, J. G. and Webb, M. D. (2018), 'The wild bootstrap for few (treated) clusters', *The Econometrics Journal* **21**(2), 114–135.
- McLaughlin, E. (2009), Microfinance Institutions in Nineteenth Century Ireland, PhD thesis, National University of Ireland, Maynooth.
- McLaughlin, E. (2014), "Profligacy in the encouragement of thrift': Savings banks in Ireland, 1817–1914', *Business History* **56**(4), 569–591.
- McLaughlin, E. (2015), 'Economic Impact of the Irish revolution', University of St. Andrews Discussion papers in Environmental Economics 2015-13.
- Meade, J. E. (1951), *The Theory of International Economic Policy. Vol. I: The Balance of Payments*, Oxford University Press, London.
- Meenan, J. (1970), The Irish Economy since 1922, Liverpool University Press, Liverpool.
- Miranda-Agrippino, S. and Rey, H. (2020), 'U.S. Monetary policy and the global financial cycle', *Review of Economic Studies* **87**, 2754–2776.
- Mishan, E. J. (1967), The Costs of Economic Growth, Frederick A. Praeger, New York.
- Mitchell, B. R. (1988), British Historical Statistics, Cambridge University Press, Cambridge.
- Moynihan, M. (1975), Currency and Central Banking in Ireland 1922-1960, Gill and Macmillan, Dublin.
- Mundell, R. A. (1960), 'The Monetary Dynamics of International Adjustment under Fixed and Flexible Exchange Rates', *The Quarterly Journal of Economics* **74**(2), 227–257.

- Mundell, R. A. (1961*a*), 'Flexible Exchange Rates and Employment Policy', *The Canadian Journal of Economics and Political Science / Revue canadienne d'Economique et de Science politique* **27**(4), 509–517.
- Mundell, R. A. (1961*b*), 'A Theory of Optimum Currency Areas', *The American Economic Review* **51**(4), 657–665.
- Ó Gráda, C. (1997), A Rocky Road : The Irish economy since the 1920s, Manchester University Press, Manchester.
- O Gráda, C. and O'Rourke, K. H. (2021), 'The Irish economy during the century after partition', *Economic History Review* **75**, 336–370.
- Obstfeld, M. (2012a), 'Does the Current Account Still Matter?', American Economic Review 102(3), 1–23.
- Obstfeld, M. (2012*b*), 'Financial flows, financial crises, and global imbalances', *Journal of International Money and Finance* **31**(3), 469–480. Financial Stress in the Eurozone.
- O'Rourke, K. (1995), 'Emigration and Living Standards in Ireland since the Famine', *Journal of Population Economics* **8**, 407–421.
- O'Rourke, K. H. and Taylor, A. M. (2013), 'Cross of Euros', *The Journal of Economic Perspectives* **27**(3), 167–191.
- O'Rourke, K. H. (2017), 'Independent Ireland in Comparative Perspective', *Irish Economic and Social History* **44**(1), 19–45.
- Phillips, P. C. B. (1986), 'Understanding spurious regressions in econometrics', *Journal of Econometrics* **33**(3), 311–340.
- Pollard, S. (1982), The Wasting of the British Economy, Croom Helm, London.
- Rumpf, E. and Hepburn, A. C. (1977), *Nationalism and Socialism in twentieth century Ireland*, Liverpool University Press, Liverpool.
- Schenk, C. R. (2010), The Decline of Sterling: Managing the Retreat of an International Currency, 1945–1992, Cambridge University Press, Cambridge.
- Stuart, R. (2019), 'UK shocks and Irish business cycles, 1922-79', Economic History Review 72, 618–640.
- Swan, T. W. (1952), Simple Alegebra: External Balance, Internal Balance and Price Stability. Unpublished paper.
- Swan, T. W. (1955), Longer-Run Problems of the Balance of Payments. Unpublished paper.
- Swan, T. W. (1960), 'Economic Control in a Dependent Economy\*', Economic Record 36(73), 51-66.
- The Economist (1942), 'A Central Bank for Eire'. 14 March, p.362.
- The Irish Times (1955), 'Bank Rates Raised: Minister Satisfied Increase Warranted'. 21 December, p.1.

Thomas, W. A. (1986), The stock exchanges of Ireland, Francis Cairns, Liverpool.

- Walsh, B. M. (1974), 'Expectations, information, and human migration: specifying an econometric model of Irish migration to Britain', *Journal of Regional Science* **14**(1), 107–120.
- Yule, G. U. (1926), 'Why do we Sometimes get Nonsense-Correlations between Time-Series?–A Study in Sampling and the Nature of Time-Series', *Journal of the Royal Statistical Society* **89**(1), 1–63.

## Appendix

#### **A1: Economic Context**

#### **Economic environment**

Irish monetary policy of the 1950s was born amidst the UK's Dollar Crisis of 1947 and indeed its parallel devaluation in 1949 (Moynihan, 1975). By the end of Second World War Ireland had become a creditor to the UK, holding over 5% of sterling liabilities (Schenk, 2010). This signified that Ireland was beholden to its neighbour's default policy. Britain in turn was in a precarious position. With a war debt overhang, and desperately in need of US aid, it accepted the convertibility clause in Bretton Woods (Schenk, 2010). This put a strain on Britain's dollar reserves. With dollar reserves dwindling, the UK enquired about Irish dollar demand for the coming years, which was of course an early warning sign (Fanning, 1978). After some time had passed, Ireland accepted devaluation as an eventuality (Fanning, 1978). Marshall Aid complicated matters further, as the aid came in the form of a loan and not a grant originally (FitzGerald and Kenny, 2018). Consequently, a devaluation would naturally increase the debt burden as expressed in dollars, the new dominant currency. Furthermore, the then Minister of Finance was simultaneously enquiring about spending all available sterling balances before the impending devaluation. Eventually, the UK devalued in 1949 which caused the Irish debt burden to increase by 44% (Moynihan, 1975). It was against this backdrop that Ireland's second interparty government tinkered with the idea of an independent monetary policy.

Another pertinent point was the stop-go nature of the UK and Irish economies at the time. Ireland's economy went from a post-war consumption-led boom to a balance of payments-induced stagnation in the early 1950s (Ó Gráda, 1997). After the 1952 austerity budget, the economy performed well, only to encounter the 1955/1956 monetary shocks and subsequent balance of payments crisis (Ó Gráda and O'Rourke, 2021). This in part is reflected in the contrasting objectives of trying to achieve full employment and a favorable balance of trade, subject to a fixed exchange rate constraint. To this end, only one instrument namely fiscal policy, was available to policymakers, a concept which O'Rourke (2017) and Arndt (1976) attribute to a series of Trevor Swan's lectures and papers (Swan 1952, 1955, 1960). Even Mundell (1961b) noted that the balance of payments crises would persist where fixed-exchange rate regimes existed alongside rigid price levels. In fixed-rate regimes, if a currency is overvalued, the price level moves to reconfigure the terms of trade: in such circumstances, monetary policy is reserved for balance of payments issues. In floating-rate regimes, the exchange rate adjusts, and monetary policy is focused on internal stabilization (Mundell, 1960). Given the inherent conflict between the twin goals of internal and external stability, and in not allowing for a natural adjustment process, the stop-go environment was a sure outcome. This led to cyclical periods, whereby balance of trade problems struck, which led to corrective austerity budgets, leading to higher unemployment until a country became competitive again (Goodhart, 1998; O'Rourke, 2017). It appears that such current account issues are still relevant today (Obstfeld, 2012a,b) and the same forces can have similar outcomes.

#### The Banking Sector

The banking sector in 1955 was not materially different from that of the previous century, with private banks operating like UK savings banks: offering higher fixed interest rates, investing deposits in the London money market, buying government securities, and benefitting from a government guarantee (McLaughlin, 2014; Kenny and Lennard, 2018). Following southern Irish independence in 1922, monetary experimentation was ruled out by the Free State government due to the large volume of trade between the islands. After the passing of the Currency Act of 1927, a currency commission was established which acted as the de-facto monetary authority. This gave all eight banks within the Irish Free State the right to issue legal tender. Complicating matters was the fact that some banks (National bank, Ulster bank, etc.) had the right to issue, a place on the currency commission, but were incorporated in the UK. This hindered any future prospect of monetary autonomy but was not deemed an issue at the time (Meenan, 1970; Moynihan, 1975). As part of the Currency Act, a new currency was also established: the Saorstát punt (later transitioning to the Irish punt), which was pegged one-for-one to sterling (Meenan, 1970; Moynihan, 1975). These changes were superficial in nature, and the Irish banking sector continued to operate just as before. Although an Irish punt was introduced in 1926 to mark national independence, it was pegged to the British pound at parity, where it remained until 1979 (Kenny and McLaughlin, 2022).

Then, in 1942, the Central Bank of Ireland was established. The Central Bank Act of 1942 was merely an extension of the status quo, as the private Bank of Ireland remained the government banker (Moynihan, 1975). It must be noted however that the Central Bank of Ireland was a central bank in name but not in spirit: it did not solely set interest rates, perform open market operations to control credit, control reserves, or control inflation. A late amendment to the act allowed the bank the option to buy assets on the secondary market to provide liquidity in times of crisis, although it rarely exercised it for such purposes (Meenan, 1970). For the most part, it was an extension of the currency commission and acted more like an enhanced bank of issue than a central bank (Meenan 1970, Moynihan 1975, *The Economist*<sup>23</sup> 1942). In reality, the interest rate was set by the tripartite group of the government, private banks and the Central Bank of Ireland (Moynihan, 1975).

## A2: Statistical & Robustness tests

### **Event Study Robustness tests**

Event 1										
Event Windows	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]		
CAR	0.7	1.963***	2.184***	1.589***	1.693***	1.687***	1.751***	0.674*		
Std.Err	(0.606)	(0.621)	(0.588)	(0.559)	(0.52)	(0.479)	(0.433)	(0.388)		
			E	vent 2						
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]		
CAR	0.568	0.557	0.244	-0.128	0.271	0.298	-0.615	-0.455		
Std.Err	(0.685)	(0.652)	(0.617)	(0.58)	(0.54)	(0.497)	(0.456)	(0.402)		
			E	vent 3						
Event Windows	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]		
CAR	-1.577***	-1.3**	-0.732	-0.47	-0.511	-0.177	0.236	0.149		
Std.Err	(0.6)	(0.572)	(0.542)	(0.509)	(0.474)	(0.437)	(0.4)	(0.352)		
			E	vent 4						
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]		
CAR	-2.42***	-3.04***	-2.908***	-4.568***	-2.495***	-2.011***	-1.326***	-1.051***		
Std.Err	(0.643)	(0.619)	(0.587)	(0.551)	(0.513)	(0.472)	(0.427)	(0.379)		
		Not	e: *** p<0.0	1, ** p<0.05	,*p<0.1					

Table 9: Event Study with UK banking sector and Irish Bond Prices

## Table 10: Event Study without UK banking sector

	Event 1											
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]				
CAR	0.67	1.923***	2.157***	1.58***	1.699***	1.711***	1.774***	0.705*				
Std.Err	(0.369)	(0.622)	(0.588)	(0.559)	(0.521)	(0.479)	(0.434)	(0.388)				
			Ev	rent 2								
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]				
CAR	0.682	0.647	0.347	-0.04	0.351	0.364	-0.534	-0.406				
Std.Err	(0.686)	(0.653)	(0.618)	(0.581)	(0.541)	(0.498)	(0.208)	(0.403)				
			Ev	rent 3								
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]				
CAR	-1.587***	-1.316**	-0.754	-0.523	-0.544	-0.204	0.219	0.134				
Std.Err	(0.601)	(0.573)	(0.542)	(0.509)	(0.475)	(0.437)	(0.4)	(0.353)				
-			Ev	rent 4								
<b>Event Windows</b>	[-10,10]	[-9,9]	[-8,8]	[-7,7]	[-6,6]	[-5,5]	[-4,4]	[-3,3]				
CAR	-2.174***	-2.735***	-2.686***	-2.299***	-2.325***	-1.795***	-1.171***	-0.949**				
Std.Err	(0.644)	(0.62)	(0.587)	(0.552)	(0.514)	(0.472)	(0.428)	(0.379)				
		Note	e: *** p<0.01	, ** p<0.05,	* p<0.1							

## **Bank Cointegration**

Max Rank	Parameters	Log-Likelihood	Eigeanvalue	Trace Statistic	5% significance level	1% significance level
0	10	-1611.35		21.22	15.41	20.04
1	13	-1601.82	0.02084	2.16	3.76	6.65
Max	Parameters	Log-Likelihood	Eigeanvalue	Max Eigenvalue	5% significance	1% significance
Rank				Statistic	level	level
0	10	-1611.35		19.06	14.07	18.63
1	13	-1601.82	0.02084	2.16	3.76	6.65

## Table 11: Johansen Max Eigenvalue and Trace Tests for Cointegration Bank Series

## **Bond Cointegration**

Table 12: Johansen Max Eigenvalue and Trace Tests for Cointegration Bond Series

Max Rank	Parameters	Log-Likelihood	Eigeanvalue	Trace Statistic		5% significance level	1% significance level
0	10	5710.46		3	5.46	15.41	20.04
1	13	5725.99	0.0385		4.39	3.76	6.65

Max Rank	Parameters	Log-Likelihood	Eigeanvalue	Max Eigenvalue Statistic	5% significance level	1% significance level
0	10	5710.46		31.06	14.07	18.63
1	13	5725.99	0.0385	4.39	3.76	6.65

#### Difference-in Difference anlaysis.

For illustrative purposes, we performed a Difference-in-Difference analysis on our Irish banking series to visually inspect parallel trends, using the eventdd package of Clarke and Schythe (2020). We did not use these results for inference however, as we only had one treatment and one control group see (Cameron and Miller, 2015; MacKinnon and Webb, 2018; MacKinnon, 2019)).

Here, we chose a cutoff of ten days prior when evaluating our parallel trends as insider trading was legal in the UK until the 1980's, with the possibility of information leakage rampant (Clarke, 2013)<sup>24</sup>.

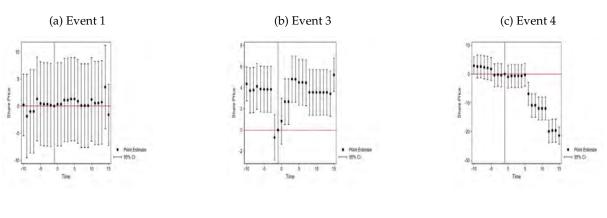
Due to our identification assumption that at least 15 working days having passed before the realisation of the treatment effect on our control group, we were unable to analyse the second event in our context.

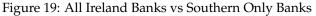
# Irish Banks with fiduciary issue in both jurisdictions vs Banks with fiduciary issue only in the south & Irish banks with all-island fiduciary issue vs UK Banks

We find no evidence of negative excess returns related to the first event evidence and the parallel trends assumption failed for the third event. What is most striking however is the final event with a drop of close to ten punts witnessed in the share price of All Ireland banks relative to the banks who could only issue in the IFS, and close to 11 punts relative to UK banks.

#### Irish Yields vs United Kingdom Yields

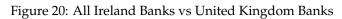
We came to similar conclusions as the Irish Banking sector differential, with the final event showing broadly negative albeit insignificant returns. As explained before however, after the announcement of the rate hike, British yields calmed down to levels seen c. five days before the event. Meanwhile, Irish yields rose steadily throughout. There was no sudden shift in Irish yields, however, the decrease in British yields coupled with the steady increase in Irish yields, lead to negative returns.





### **Structural Breaks**

<sup>&</sup>lt;sup>24</sup>insight kindly provided by Dr. Charles Read



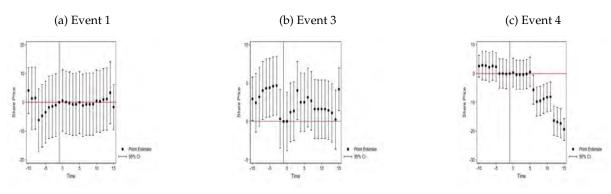
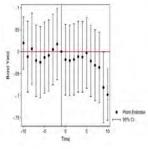


Figure 21: Irish Yields vs United Kingdom Yields





(b) Event 3

(c) Event 4

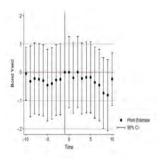


Table 13: Ireland North and South Break Dates

Break Date	95% CI		
09/09/1954	08/09/1954	10/09/1954	
08/02/1955	07/02/1955	10/02/1955	
13/09/1955	09/09/1955	03/10/1955	
09/02/1956	08/02/1956	10/02/1956	
09/07/1956	08/05/1956	11/07/1956	

Break Date	95% CI		
20/08/1954	12/08/1954	25/08/1954	
15/02/1955	14/02/1954	18/02/1955	
11/07/1955	08/07/1955	13/07/1955	
08/02/1956	07/02/1956	09/02/1956	

Table 15: Ireland & UK Bonds Break Dates

Break Date	95% CI		
31/12/1954	30/12/1954	20/01/1955	
31/03/1955	30/03/1955	05/04/1955	
06/10/1955	05/10/1955	10/10/1955	
23/02/1956	22/02/1956	24/02/1956	

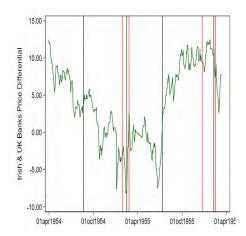
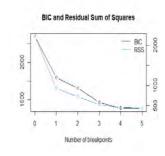
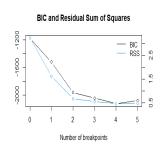


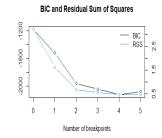
Figure 22: Ireland UK Price Differential



(a) Breakpoints Ireland North & South



(b) Breakpoints Ireland & UK Banks



(c) Breakpoints Ireland & UK Bonds