

QUCEH WORKING PAPER SERIES http://www.quceh.org.uk/working-papers

THE WEE DIVERGENCE: BUSINESS CREATION AND POLITICAL TURMOIL IN IRELAND BEFORE 1900

R. J. C. Adams (Queen's University Belfast) Gareth Campbell (Queen's University Belfast) Christopher Coyle (Queen's University Belfast) John D. Turner (Queen's University Belfast)

Working Paper 22-01

QUEEN'S UNIVERSITY CENTRE FOR ECONOMIC HISTORY

Queen's University Belfast

185 Stranmillis Road

Belfast BT9 5EE

January 2022

The Wee Divergence: Business Creation and Political Turmoil in Ireland before 1900

R. J. C. Adams¹
Gareth Campbell¹
Christopher Coyle¹
John D. Turner¹

Abstract

What effect does political instability in the form of a potential secession from a political union have on business formation? Using new measures of business creation and political instability in Ireland during the late nineteenth-century, we test whether increased political instability arising from the Home Rule movement resulted in reduced entrepreneurial activity and business investment. We find that increased political instability led to a significant divergence of business creation between Scotland and Ireland. Our findings suggest that the effects of political instability on entrepreneurship were most acute in the parts of Ireland that were most concerned by potential changes.

JEL Codes: D80, L26, N43, N93.

Keywords: Ireland, Scotland, Home Rule, entrepreneurship, political risk,

uncertainty.

_

¹ Queen's Management School and Queen's University Centre for Economic History, Queen's University of Belfast, 185 Stranmillis Rd, Belfast, BT9 5EE, Northern Ireland. Corresponding author: r.adams@qub.ac.uk.

1. Introduction

The prospect of secession from political unions has been the focus of much discussion in recent years. The United Kingdom's exit from the European Union and the prospect of Scottish independence have brought constitutional politics to the fore. Part of that discussion has focussed on the effect of uncertainty about the future constitutional position on the economy, and in particular on investment (Azqueta-Gavaldon, 2020). Because entrepreneurship and investment in new firms is a vital contributor to job creation, productivity and economic growth (Decker et al. 2014; World Bank 2012), the deleterious effect of political uncertainty on new business creation is a very important issue.

History provides some interesting examples of periods where there was a high degree of uncertainty about the future constitutional status of a part of a country. One of the most famous examples is late nineteenth century Ireland. From 1870 onwards, there was increasing political instability in Ireland due to the growth of the Home Rule movement, which sought autonomy for Ireland from the UK. This movement eventually led to the partition of Ireland in 1921 with the creation of Northern Ireland and the Irish Free State. In this paper, we test whether political instability caused by the development of the Home Rule movement affected business creation and investment in Ireland in the nineteenth century.

To measure political instability, we construct a time series of the number of articles mentioning Home Rule in three leading Irish newspapers. This provides a measure for the extent to which Home Rule was part of public discourse in Ireland. We also create a measure of business creation by aggregating data from British parliamentary reports on the registration of limited liability companies for the years 1863 to 1900. The resulting dataset contains the sectoral and geographical breakdown of all companies registered in Ireland over the period, as well as their nominal capital.

As we cannot directly observe entrepreneurs deciding not to establish businesses because of political instability, we run a counterfactual comparison with Scotland to shine a light on what may have been, absent the political instability arising from Home Rule. Despite its many deep-rooted economic, business, and cultural ties with Ireland, Scotland did not face similar calls for self-government. Consequently, it provides an appropriate counterfactual against which to test the effect of political uncertainty. Therefore, using the same archival sources, we also create an equivalent measure of business creation in Scotland.

We find, consistent with the historiography, that instability peaked with the introduction of the First and Second Home Rule bills to the British Parliament in 1886 and 1893. We also find that, while the numbers of new businesses created in Ireland and Scotland were similar in the first decade of our sample, there is a clear divergence in business creation from the mid-1880s. We show that the effects of political instability were regional, having a much more severe effect on business creation in the predominantly unionist counties that would become Northern Ireland. Our results show that increased political instability is associated with the divergence of business creation between the north of Ireland and Scotland.

This article contributes to the literature on the effects of political instability on entrepreneurship, business creation, and investment. In particular, it contributes to literature on the regional effects of political instability by showing that effects are more severe where the population is most concerned by potential changes. (Beaulieu et al., 2006; Jens, 2017).

This article also contributes to literature on the development of the Irish economy. While much has been written on the agrarian economy in Ireland, emigration, and economic ties with Britain, the economic effects of unrest and political instability have so far been underexplored. Lyons (1985 [1971], p. 55) has counted political uncertainty among the reasons for risk aversion and lack of entrepreneurship in Ireland during the Home Rule period, but provides little in the way of evidence. Hickson and Turner (2005) and Grossman et al. (2014)

suggest that the political instability associated with Home Rule was reflected in an index of Irish stock prices. O'Rourke (2007a, b) suggests that political conflict before 1914 slowed the diffusion of technology and impeded cooperation in the Irish creamery sector. Barry (2021) argues that the vast majority large businesses in southern Ireland were opposed to Ireland's exit from the UK. Interestingly, he suggests that few of the fears of these business leaders in terms of broad economic policy were realised. In contrast to this previous work, our study is the first attempt to assess the effect of the push for Home Rule on business formation and entrepreneurship.

Our paper also contributes to our understanding of why Irish industrial growth after the Famine and up until partition was slower than that of other countries (Kenny et al., 2020). The divergence in business creation that we document between Scotland and Ireland suggests that political instability was a major factor in why new businesses and industrial clusters were not created in Ireland. This may ultimately have contributed to lower industrial production and economic growth.

The paper also contributes to our understanding of business creation in Ireland in the late nineteenth century. Bielenberg (1995) uses the same company registration source as us to give an overview of Irish business creation in the late-nineteenth century. Henderson (2019) also uses company registration at quinquennial intervals as a measure of entrepreneurial supply at the county level. In his analysis, he examines the effect of Catholicism on business creation at a county level and finds no relationship between the two.

The paper proceeds as follows: Section 2 discusses the evolution of the Home Rule movement and political uncertainty in Ireland before 1920. Section 3 examines the theoretical links between political uncertainty and business creation. Section 4 discusses our data on political instability and business creation. In Section 5, we analyse the relationship between political instability and business creation. Section 6 is a brief conclusion.

2. Political uncertainty in Ireland before 1920

The source of political uncertainty we focus on in this article is Home Rule, the introduction of a form of devolution for Ireland within the United Kingdom. Between the UK general elections of 1874 and 1918, this was, according to Jackson (2003, p. 3), 'both the single most important feature of Irish political life and a major influence on British politics'. In Ireland, as can be seen from Figure 1, it galvanised nationalist opinion behind the Irish Parliamentary Party while eliciting fierce opposition in particular from the majority-protestant industrial northeast and the country's business elite. The epithets 'Home Ruin' and 'Rome Rule' entered the popular lexicon, representing the twin Unionist anxieties of economic disruption and religious persecution. In Britain, Home Rule split political parties as well as public opinion, determining the outcomes of general elections and the compositions of governments. It ultimately led to the legal division of Ireland in December 1920 with the creation of Northern Ireland, and the loss of *ca*. 20% of the United Kingdom's territory in 1922 with the creation of the Irish Free State.

The term 'Home Rule' first came into usage in 1870, coinciding with the establishment of the Home Government Association (Jackson, 2010, p. 109). It gained wider currency in 1873, when the Home Government Association was superseded by the Home Rule League. This policy came to the heart of British politics in 1874, when an unprecedented 59 Irish MPs were elected to the House of Commons on a platform of Home Rule for Ireland. The majority of these MPs represented land interests, but the new intake showed an increase in representatives from bourgeois-professional interests, in particular journalism and the law (Foster, 1989, p. 398). Although moderate when compared to more radical Irish nationalist demands for a fully independent republic, the prospect of Home Rule elicited strong opposition from Unionist politicians, some of which appealed to financial prudence. A flavour of this

opposition can be seen in the following speech from an (unsuccessful) candidate in that election, who argued that it

was promoted in insincerity, and has been maintained by self-seeking agitators who are trafficking on the feelings of a confiding and generous-hearted people. Since the promulgation of this shibboleth the trade and commerce of the country have been stagnating; an end has been put to the introduction of capital from England, and to its investment by such as possess it in this country (*Wexford People*, 31 Jan. 1874, p. 4)

After 1874, the Irish economy, and agriculture sector in particular, was buffeted by falling prices, poor harvest, and European protectionism. This agricultural crisis was a catalyst for a period of mass emigration and of agrarian unrest known as the 'Land War', which took place from 1879 to 1881 (Ó Gráda, 1994, p. 252). In this context, according to Cullen (1972, p. 148), 'a sense of foreboding pervaded the Irish industrial scene in the early 1880s'. Under the charismatic leadership of Charles Stewart Parnell, the grievances of the Land War were then fused with the cause of self-determination, transforming Home Rule into a popular movement (Foster, 1989, p. 405). Combined with an extension of the franchise from 224,000 voters in Ireland to 738,000 in 1884, this created an electoral coalition that would soon be felt in Westminster (Jackson, 2003, p. 364).

Before 1884 the prospect of Home Rule had been, as later recalled by one Irish nationalist, no more than 'a vague, shadowy kind of form on the horizon' (*Irish Times*, 3 Feb. 1891, p. 7.) This changed in the final days of the general election of November-December 1885, when Gladstone's son revealed to the press that his father, then leader of the opposition, was in favour of Home Rule. This revelation, known as the 'Hawarden Kite' caused 'a sort of panic in certain classes, and a fall of securities,' according to the Viceroy of Ireland (Ball, 2008, p. 64). Gladstone won the election and Irish equity prices fell 10.5 per cent that month (Grossman et al., 2014, p. 264). When Gladstone introduced the First Home Rule Bill to the House of Commons in April 1886, it was met with riots on the streets of majority-Unionist Belfast as well as opposition from within Gladstone's Liberal Party. The bill split the Liberal

Party and was defeated in the House of Commons in June 1886, by which time the price of Irish financial equities had fallen 20% year-on-year, while railway equities had fallen 14% (Grossman et al, 2014, p. 264).

Although blocked, Home Rule had not been banished, and it returned to the parliamentary agenda in 1893 with the introduction to the House of Commons of the Second Home Rule Bill. The disquiet generated by this bill was most vividly manifest in a deputation of the Irish commercial elite to Westminster, described by the Irish nationalist Cork Examiner (11 Mar. 1893, p. 7) as an 'Anti-Home Rule Howl'. Led by Lord Iveagh, patriarch of the Guinness brewing dynasty, the delegation met with leading British parliamentarians to voice their opposition to Home Rule. Also included in the deputation were the Governor and two directors of the Bank of Ireland, directors of the City of Dublin and Cork Steam Packet companies, John J. Jameson and several other leading distillers, representatives from the Dublin chamber of commerce and the directors of several railway companies. The deputation argued that Gladstone's Home Rule bill 'pleased nobody, and should be called the "Home Ruin Bill". Arthur Balfour, Chief Secretary for Ireland, agreed, claiming that 'the mere shadow and thought of Home Rule was enough to lower the value of securities and drive capital from the country'. The Home Rule proposals, argued Balfour, meant Irish bankruptcy. In a similar vein, Lord Randolph Churchill claimed that already he had heard of 'alarmed gentlemen preparing to clear out of Ireland and transfix their business to England'. Indeed, the Irish stock market fell markedly in reaction to the passing of Gladstone's second Home Rule bill that year (Hickson and Turner, 2005). Business leaders would continue to lead opposition to Home Rule, particularly in Ulster where the business and political elites overlapped considerably (Brownlow, 2006, p. 43).

Such objections were also made by the intelligentsia of the time. The Irish essayist and historian W.E.H. Lecky (1891) cited the loss of access to international credit and markets that

would surely follow the implementation of Home Rule, arguing that it would precipitate a flight of capital and industry. He also warned of the coercive legislation that would be necessary to quell protests, and possibly civil war, in Ulster. His lack of confidence in the competence of the would-be political elite of a Home Rule government also formed part of his critique. Anticipating later academic literature on political uncertainty, he called into question the likelihood of such a government enforcing property rights.

The Second Home Rule bill was ultimately defeated and the British government enacted a series of land reforms designed to 'kill Home Rule with kindness' by removing the core grievance on which it fed (Foster, 1989. pp. 434-5). Nevertheless, uncertainty over Home Rule for Ireland persisted. Hickson and Turner (2005) and Grossman et al. (2014) have found a sustained decline in equity prices on the Irish Stock Exchange from the late 1890s until the outbreak of the Great War. Hickson and Turner (2005, p. 21) have speculated whether this fall was associated with political uncertainty over the timing and characteristics of a third Home Rule bill, which by the late 1890s was widely viewed as inevitable (Garvin, 1987, p. 2).

The prospect of Home Rule continued into the twentieth century, as did opposition to it in Ireland's industrial northeast. When the Third Home Rule bill was introduced in 1912, almost 250,000 people in Ulster signed a 'Solemn League and Covenant' against it (Foster, 1989, p. 466) and 100,000 joined the paramilitary Ulster Volunteers (Jackson, 2003, p. 120). Pro-Home Rule Irish Nationalists responded with the formation of the rival paramilitary Irish Volunteers, which numbered *ca.* 160,000 (Foster, 1989, p. 473). Against this backdrop, equities on the Irish Stock Exchange fell by 14% from 1911 to 1913 (Grossman et al., 2014, p. 265).

Domestic political risk dissipated in 1914, when Britain declared war on Germany and soon discussion of Home Rule was superseded by the more radical nationalism of Sinn Féin, which demanded a fully independent Irish Republic. The extent of this shift became clear in 1918, when Sinn Féin won a majority of the Irish seats in Westminster (de Bromhead et al,

2018). The Sinn Féin representatives established a rebel government that declared full independence from the British Empire, precipitating the Irish War of Independence, 1919-21. A guerrilla conflict concluded with the establishment of an independent Irish Free State while Northern Ireland remained part of the United Kingdom.

3. Political uncertainty and business creation

Political uncertainty can be thought of as uncertainty about a government's future action or policy (Pástor and Veronesi, 2012). It can be of two types. The first type is that there is uncertainty with regards to whether a government will change their policy stance with regards to business regulation, tax, spending and general macroeconomy. This type of uncertainty can be generated by wider international events or anticipation that an election will result in a new political party in power. The second type of uncertainty arises from potential changes in the rules of the political game. Potential subjugation by another country or government overthrow by a coup (bloodless or otherwise) or the secession of a region from country would be examples of this type of uncertainty. These potential changes raise uncertainty around property rights and contract enforcement among other things. In the case of Ireland, Home Rule resulted in this type of uncertainty for Irish businesses and entrepreneurs.

What are the effects of policy uncertainty on businesses? Uncertainty can make some firms cautious so that they reduce their investment (Bernanke, 1983; Bloom, 2014; Jens, 2017). Rodrik (1991) shows that even moderate amounts of policy uncertainty can lead to reduced investment. It can also raise the cost of capital for firms by raising the risk premia associated with stocks and borrowing (Bloom, 2014; Pástor and Veronesi, 2012, 2013).

However, uncertainty may also stimulate investment by some firms. One way through which this can happen is when firms face a limited downside of losing their investment and a potentially large upside if the investment comes off (Bloom, 2014). Given that Irish businesses

in the nineteenth century were largely financed by owners' equity, then this condition did not apply. Another way that uncertainty can stimulate investment is that the ability of firms to expand or contract very easily may make them more risk loving, in which case they embrace political uncertainty (Hartman, 1972; Abel, 1983). However, the capital-intensive nature of most firms at his time would have made expansion and contraction very costly.

How does political uncertainty affect entrepreneurs and business creation? Entrepreneurs are less risk averse than other members of the population and are much more willing to risk losses (Koudstall et al., 2016). Nevertheless, they respond to their environment (Stenholm et al., 2017). For example, in a cross-sectional study of 90 countries, Dutta et al. (2013) find that the number of newly registered limited companies in any year is highly correlated with the political stability of the country.

Why might political uncertainty affect entrepreneurs and the decision to establish a company? First, there could be a risk that property rights would not be respected by the new regime, that contracts would not be enforced, and that labour contracts would be renegotiated in a manner detrimental to the entrepreneur. The uncertainty surrounding this may make some entrepreneurs reluctant to establish a company in the first instance. Svenson (1998) shows that political instability affects the quality of property rights and institutions, which in turn have an impact on private investment.

Second, political instability may mean that the financial sector is underdeveloped or that the cost of capital increases because investors require a higher risk premium (Roe and Siegel, 2011). This makes it very difficult for entrepreneurs to access the finance needed to establish and run companies. Political uncertainty can dampen IPO activity, which makes it difficult for entrepreneurs and their funders to float on a stock market (Çolak et al., 2017).

Third, following the seminal work of Baumol (1990), political uncertainty may simply divert entrepreneurs away from setting up productivity-enhancing companies towards rent-

seeking or parasitical activities. In other words, political uncertainty does not affect the supply of entrepreneurs, it simply affects what entrepreneurs do. Political uncertainty, as already argued, potentially means a change in the rules of the game which encourages entrepreneurs not to set up successful growth-enhancing firms, but to use their skills to extract rents in the new political and legal milieu (Bylund and McCaffrey, 2017; Sobel, 2008).

In the case of Ireland, we postulate that the political uncertainty created by the Home Rule movement in the last three decades of the nineteenth century discouraged entrepreneurs from establishing new businesses. However, we make no claims about the mechanisms – it is likely that all three mechanisms discussed above played a role. Irish entrepreneurs may have been afraid of the adjustment of property rights that a new regime would usher in. This fear may have been accentuated among potential entrepreneurs who opposed Home Rule. These would have been chiefly located in the northeast of the country. It is certainly possible that political uncertainty diverted people with entrepreneurial skillsets away from establishing businesses towards rent seeking activities. Finally, the paucity of companies floating in Ireland in the Home Rule era relative to the rest of the Britain, perhaps suggests a finance mechanism.

4. Data

4.1 Business creation

To measure the extent of business creation, we collect data on the number of businesses registered from the *Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies*, which is available from 1863.² This annual return came about because of the reform of company law in 1862 which permitted limited liability companies to form by a simple process of registration. Each company registering had to provide a variety of details on the business being incorporated. The annual returns report this

² House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies

disaggregated data for the years 1863-1900, after which only annual aggregate data is available. As a result, our analysis focuses on the years 1863-1900. Figure 2 shows the number of companies established per annum in Ireland from 1863 to 1900.

<<INSERT FIGURE 2 HERE>>

Company registrations can be viewed not only as a measure of business creation (Black et al., 1996), but also as the expansion of existing firms seeking to raise capital (Bielenberg and Burke, 1995, p. 41). Indeed, Ó Gráda (1994, p. 311) has observed that the early years of this series largely consist of established private companies desiring a public 'shell'. Thus, the relatively high quantity of registrations from 1863 to 1865 (Figure 2) can be viewed as clearing a backlog. Nevertheless, as noted by Bielenberg and Burke (1995, p. 41), the steady rise in registrations from 1867 to 1900 suggests new business creation.

Our dataset includes the registration of 2,206 companies, including *inter alia* the name of the business, the date of its registration, its address, nominal capital, and the number of signatures on its memorandum of association. The majority (1,733) of companies registered had seven signatures to their memorandum of association, the legal minimum. The highest number of signatures was 47 (Castlebar Gas Company in 1863, and Larne Fishing Company in 1871). The median nominal capital of a company was £10,000, ranging from £7 (McCleave and Sons, saddlers and harness makers in 1891) to £1.2m (Dublin United Tramways Company, in 1896). Only four other companies – the National Building and Land Investment Company of Ireland (1865), Ulster Banking Company (1867), Munster and Leinster Bank (1885), and Gallaher tobacco manufacturers (1896) – reported nominal capital of more than £1m.

Figure 3 shows total business creation divided into seven major sectors. The first thing to observe is that by 1900, there were proportionally fewer utility and financial services companies registering and there was a relative increase in commercial/industrial companies, when compared with the start of the sample. These changes had largely occurred by the start

of the Home Rule campaign in the early 1870s. The fingerprints of government legislation can be found in 1883, when the implementation of the Tramways and Public Companies (Ireland) Act resulted in the creation of a number of new railway and tram companies. Railway and tram companies constituted 7 per cent of company registrations before 1900, but 44 per cent of these were registered in 1883 alone, accounting for the peak of that year in Figure 2.

<<INSERT FIGURE 3 HERE>>

The location of registered companies over the sample period are shown in Figure 4. This shows that while new companies were increasingly widespread, the majority were based in the largest cities of Belfast and Dublin. Of the 2,206 companies registered in Ireland between 1863 and 1900, 729 were based in Dublin and 572 in Belfast. In total, 1,282 (60 per cent) companies were registered within the borders of the present-day Republic of Ireland, the remaining 870 (40 per cent) in what is now Northern Ireland. The proportion of companies registered in what is now Northern Ireland fluctuates between a high of 62 per cent in 1866 to a low of 25 per cent in 1883. The median nominal capital of companies registered in Dublin was £20,000, compared to £15,000 in Belfast. The concentration of textiles and shipbuilding in the counties that would later form Northern Ireland is reflected in the data. Approximately 11 per cent of companies registered in the period were engaged in textile production, 74 per cent of which were based in present-day Northern Ireland. Belfast alone contained 44 per cent of textile producers registered between 1863 and 1900. There were 11 shipbuilders registered over the period and seven of them were registered in what is now Northern Ireland.

<<INSERT FIGURE 4 HERE>>

4.2 Political uncertainty

As a measure of uncertainty, we count the number of press articles mentioning Home Rule to determine how prominent the Home Rule debate was in the public sphere over time. We use a basket of three leading Irish newspapers, the *Irish Times*, *Freeman's Journal*, and *Belfast*

Newsletter, from 1863 to 1900. These broadsheets were chosen due to the uninterrupted availability of archival material for the period under consideration, wide circulation and the balance of political viewpoints they represent: Southern Unionist (*Irish Times*), pro-Home Rule Irish nationalist (*Freeman's Journal*), and Northern (Ulster) Unionist (*Belfast Newsletter*).³ Figure 5 shows the number of home rule mentions in these newspapers.

<<INSERT FIGURE 5 HERE>>

Home Rule is mentioned in 37,523 articles from 1863 to 1900 in our three newspapers. These articles took the form of opinion pieces, reportage of political speeches and parliamentary debates, and, in the case of the *Freeman's Journal*, notifications of meetings organised by voluntary associations supporting Home Rule. The nationalist *Freeman's Journal* returned by far the most mentions of Home Rule, 18,728, followed by the Ulster Unionist *Belfast Newsletter*, with 12,090, while the more conservative Southern Unionist *Irish Times* only mentioned it 6,705 times over the period. We believe this reflects a broad trend as the readership of the *Freeman's Journal* and *Belfast Newsletter* were known to be more partisan than the *Irish Times* on the question of Home Rule. Indicative of the divisiveness of Home Rule in the north of Ireland in particular, 'Home Ruin', the pejorative term used emphasise the potential negative economic effects of Home Rule, was mentioned 271 times in the *Belfast Newsletter*, compared to just 44 times in the *Irish Times* and 24 times in the *Freeman's Journal*.

As shown in Figure 5, our measure of political uncertainty matches the historiography discussed above, with the most pronounced upsurges in Home Rule articles coinciding with the 1874 election and the First (1886) and Second (1893) Home Rule bills.

14

nationalist opinion in Ireland. Meanwhile, circulation of the Irish Times grew from 4,705 to 7,360 (Cullen, 1989, p. 76).

-

³ Comprehensive newspaper circulation figures are unavailable for the period under consideration, but fragmentary accounts from newsagent WH Smith, later acquired by Charles Eason and Son, point to certain trends. The *Irish Times* and the *Freeman's Journal* effectively dominated the Dublin daily newspaper market during this period, but the *Freeman's Journal* saw the most growth. In 1871, the regular circulation of the *Freeman's Journal* at WH Smith was 2,964, but by 1885 it had grown to 10,904 (Cullen, 1989, p. 76). As noted by Cullen, this was largely a reflection of the growing weight of literate

5. Analysing political instability and business creation

5.1 A counterfactual comparison

Figure 6 plots our measure of political instability against business creation. Notably, the number of new businesses created in Ireland falls slightly following the largest peaks in Home Rule uncertainty after the 1886 and 1893 Home Rule Bills. Business creation also increases towards the end of our sample when our measure of political instability falls.

<<INSERT FIGURE 6 HERE>>

However, an obvious difficulty in measuring or testing any potential relationship between political instability and business creation is that we can only observe businesses that were registered - we cannot measure businesses that may have been formed in the absence of political instability. To address this issue, we compare business creation in Ireland with that in Scotland from 1863-1900, as a counterfactual comparison.

What makes Scotland a good counterfactual comparison? There are a number of significant geographic, economic and cultural links between Ireland and Scotland, which go back millennia. Located just 12 miles apart, these links were particularly strong between Scotland and the region of Ireland that would become Northern Ireland. Early in the first millennium, Irish tribes, known as the Scoti, invaded the western Scottish Highlands and formed the Kingdom of Dál Riata, which encompassed most of the West of Scotland along with present-day County Antrim, on the northeast coast of Ireland (Devine 2002, p. 3). The name Scotland was derived from the Scoti (Duffy 1999, p.18).

In the Middle Ages the affairs of Scotland and Ireland remained closely entwined. Scotland's famous King, Robert the Bruce, asserted that the two were one nation (Duffy 1991, 1999). Connections between Ireland and Scotland continued to grow in the following centuries,

building a series of economic, cultural and military ties particularly between the western Scots and Ulster Irish (Devine 2002 p.4).

In the seventeenth century, the Plantations of Ireland by the English Crown settled thousands of Lowland Scots in Ulster, creating a distinct Ulster Protestant community and further entrenching ties between the two countries. With the 1801 Act of Union, Ireland joined Scotland as a constituent part of the United Kingdom. The two countries enjoyed close connections, including a high degree of political and intellectual cross-fertilisation (Jackson, 2011, p.15). By the early nineteenth century, Ireland and Scotland were broadly similar economies that were overwhelmingly rural but with small-scale textile industries and a minor but growing urban sector (Devine, 2002). However, by the end of the century the two had experienced dramatically different development.

5.2 Business creation: Scotland vs Ireland

In order to conduct our counterfactual comparison, we collected data on the registration of limited liability companies in Scotland from the same source as for Ireland - *Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies*. Figure 7 shows the number of companies registered in Ireland and Scotland from 1863-1900. Notably, the number of businesses established in both regions were almost identical in the years up until 1870. This period saw the foundation of key shipbuilding businesses in both countries. In 1864, for example, the famous Fairfield shipyard was founded in Glasgow, just two years after the foundation of Harland and Wolff in Belfast.

<<INSERT FIGURE 7 HERE>>

In the 1870s, there was an uplift in the annual number of Scottish companies established relative to Ireland, coinciding with the beginning of the Home Rule campaign. From this point, business creation in both countries follow a similar and relatively flat path until the mid-1880s

when there is a clear and persistent divergence in business creation. By 1900, there were almost three times as many newly registered companies in Scotland as in Ireland. This divergence remains when we control for the population in both countries (Appendix Figure 1). Indeed, the population of Scotland in the last three decades of the nineteenth century was only about 75 per cent of Ireland's. Figure 7 shows that the start of this divergence in business creation coincides with the first major increase in political instability associated with Home Rule, when Gladstone introduced the First Home Rule Bill to the House of Commons in April 1886. There were some who also lobbied for Home Rule to be applied to Scotland, however this was very much a minority interest with neither popular support nor likelihood of implementation (Harvie, 1994, pp. 34-6). Indeed, on the contrary, some Unionists cited Scottish economic success as an argument against Home Rule for Ireland. (Jackson, 2011, p. 15).

Figure 8 shows the 'wee divergence' between Scotland and southern and northern Ireland at a sectoral level, including engineering and manufacturing sectors. Several things are worthy of comment. First, the divergence is not being driven by Scotland's development of the investment trust industry and free-standing companies. In other words, the divergence is not due to compositional effects and Scotland's unique place in the investment and foreign investment industries. Second, the divergence happened across most sectors, with business creation in Irish industry (north and south) stagnating while Scotland took off in the 1880s and 1890s. Third, even in textiles, the north of Ireland's staple industry, business creation was higher in Scotland in the last two decades of the nineteenth century. Finally, our data reveal a lack of companies established in those sectors that would form the second industrial revolution, chiming with Brownlow's (2020, p. 4) observation that this largely bypassed Ulster.

<<INSERT FIGURE 8 HERE>>

In order to analyse the effect of political instability arising on the gap between Scotland's and Ireland's business creation, we regress Home Rule mentions in our basket of three papers (*HomeRule*) on the divergence of business creation between Scotland and Ireland (*DiffScotIre*). This latter variable is effectively a difference-in-differences measure of business creation in Scotland and Ireland each year. We also analyse the divergence in business creation between Scotland and what would become Northern Ireland (*DiffScotNIre*) and what would become the Republic of Ireland (*DiffScotSIre*). We do this for two reasons.

First, while there were opponents to Home Rule across Ireland, an important feature of the campaign for Home Rule was the differing intensity of opposition in the north and south. As shown in the election results of pro-and-anti-Home Rule parties in Figure 1, opposition to Home Rule was much more intense in the northeast of the island. A key reason for this opposition was the widespread belief that economic growth in this region, like that of Scotland, was founded on membership of the United Kingdom (Ollrenshaw 1985, p. 66; Jackson, 2011, p. 131). As a result, greater discussion of Home Rule in the northern press is likely to be much more representative of increased political instability than greater discussion of Home Rule in the southern press, where the majority supported the Home Rule campaign. Notably, Figure 6 shows that the establishment of new companies in northern Ireland clearly falls with the sharp increase in political instability in the mid-1880s and early-1890s. Second, parallels between Scotland and northern counties in Ireland were also much more deep-rooted and the industrial heritage of the two regions was broadly similar. Indeed, Ollrenshaw (1985, p. 62) has noted that northeast Ireland had more in common with the industrial centres of Britain, particularly west-central Scotland and northwest England, than with the rest of Ireland.

Because we are looking at political instability in northern and southern Ireland, we use different measures of political instability, one for each region, by separating the number of articles mentioning Home Rule in the *Belfast Newsletter (HomeRuleNI)* from the Dublin-based *Freeman's Journal* and *Irish Times (HomeRuleSI)*. We include a lagged value of all our

measures of political instability because political instability in year t-1 as well as in year t may have affected business creation in year t.

In our regressions we have several controls. First, we control for differences in stock-market returns between Scotland and Ireland (*RetDiff*). High returns on stock markets in a particular year may encourage entrepreneurs to register as a limited liability companies and float on the stock exchange. The returns on the Irish stock market were obtained from Grossman et al. (2014) and we calculated annual returns for the Scottish stock market using data from the *Investor's Monthly Manual*.

Second, we control for differences in interest rates between Scotland and Ireland (*IntDiff*). We do this because low costs of business finance may make it more likely for entrepreneurs to create businesses. We calculate the average interest rate on three-month bills over each year of the sample, using data from Nishimura (1971) for Scotland and data from Hall (1949) for Ireland.

Third, a year dummy variable is included for 1883, when the Tramways and Public Companies Act (Ireland) led to a large number of tramway companies establishing in Ireland as can be seen from Figures 2 and 3. A dummy variable is also included for 1882 when there was a large spike in the establishment of shipping companies in Scotland (see Figures 7 and 8). The International Fisheries Exhibition was held in Scotland in this year and, unusually, there were four Acts of Parliament related to shipping in the UK in 1882. This included the Fishery Board (Scotland) Act, which established the Scottish Fishery Board. Notably, our results do not change when these dummy variables are excluded (see Table 1 Columns 1b, 2b, 3b).

The summary statistics for the underlying variables are reported in Appendix Table 1 and the regression results are in Table 1. Our regressions run from 1870, when the term 'Home Rule' was first used, until 1900, after which disaggregated data is no longer available. As can

be seen from Table 1 Column 1, there is no relationship between *DiffScotIre* and the *HomeRule* variable, which suggests that political instability did not have a significant effect on business creation in Ireland relative to Scotland. Results in Column 2 for the south of Ireland are similar to Column 1, suggesting that political instability, as measured by the volume of Home Rule discussion in the press, has no significant relationship with the difference in the number of companies registered in southern Ireland relative to Scotland from 1870-1900. However, in Column 3, using data for what would become Northern Ireland, our political instability variable (*HomeRuleNI*), measured by the number of Home Rule articles in the *Belfast Newsletter*, is statistically significant and positively correlated with the divergence in the number of business registrations between Scotland and Northern Ireland. The magnitude of this relationship is also economically significant. The maximum number of annual Home Rule articles in the *Belfast Newsletter* was 1,660 in 1893, the year of the second Home Rule Bill. This would correspond to an increased annual divergence of 23 companies, which is just below the average of 26 companies registered each year in the region that is present-day Northern Ireland during our regression sample period (*Panel B*, Appendix Table 1).

<<INSERT TABLE 1 HERE>>

Notably, the results in all three regressions in Table 1 show that higher relative interest rates in Ireland are associated with the establishment of fewer new Irish companies relative to Scotland. The higher interest on commercial bills was ultimately a product of many factors, but it is entirely possible that there was a premium for political risk.

5.3. Capital raised by new businesses in Scotland and Ireland, 1863-1900

The divergence in the extent of business creation in this period between Scotland and Ireland may have been due to the fact that even though Ireland created fewer businesses, the new businesses were larger in scale. Figure 9 shows the average capital raised by newly registered

companies in Scotland and northern and southern Ireland during each decade of our analysis.

Two stark trends stand out from Figure 9.

First, the average capital raised by new companies in northern Ireland decreased steadily throughout the period while the average size of new Scottish companies increased rapidly. From 1863-1870, companies registered in northern Ireland raised just 14.3 per cent less capital on average than companies registered in Scotland. However, by the 1890s, new northern Irish companies raised 71.4 per cent less capital than the average new Scottish company. In other words, the 'wee divergence' was not just in terms of numbers of businesses created, but also in terms of the average size of those businesses.

<< INSERT FIGURE 9 HERE>>

Second, from 1863-1870, companies registered in northern Ireland raised 50.7 per cent *more* capital, on average, than companies registered in what would become the Republic of Ireland. However, by the 1880s, new northern Irish companies raised on average 33.5 per cent *less* capital than the average new company in southern Ireland. These trends of stagnation or decline in business creation, particularly in northern Ireland, mirror the intensification of Home-Rule-associated political instability in the northeast of Ireland in the 1880s and 1890s.

Overall, these results show that political instability may lead not only to the establishment of fewer new companies, but also a reduction in the size of new companies. These findings add to previous work suggesting that political instability results in reduced business investment (Bernanke, 1983; Bloom, 2014; Jens, 2017). These results also show that political instability and its effects can have strong regional differences within a country.

6. Conclusion

In this paper, we calculated new measures of business creation and political instability in Ireland during the late nineteenth century Home Rule movement to test whether increased political instability affected investment by entrepreneurs in new businesses. We find, consistent

with the historiography, instability peaked with the introduction of the First and Second Home Rule bills to the British Parliament in 1886 and 1893. We also find that the effects of this Home Rule-associated political instability were regional and had a much more severe effect on businesses in the counties that would become Northern Ireland after the 1921 partition of Ireland. Our results show that in northern counties, where opposition to Home Rule was greatest, business investment stagnated with increased instability, relative to its close neighbour Scotland. Data on capital raised by new companies suggests that this stagnation also occurred relative to southern Ireland, despite the disproportionate impact of the Famine on southern counties and the concentration of key industries such as linen and shipbuilding in the North (Bradley 1999).

Overall, our results show that political instability may lead to a reduction in entrepreneurial activity and business investment. This, inevitably, will have negative implications for the trajectory of a country's economy (Alesina et al. 1996; Jong-a-Pin 2009; Aisen and Veiga 2013). The stagnation of business creation and investment during the second half of the nineteenth century in the north of Ireland may mean that the full explanation for Northern Ireland's post-1918 industrial decline and subsequent economic stagnation may have earlier roots than generally discussed (Birnie and Hitchens, 1999, p.4).

References

- Abel, A. B. (1983). "Optimal Investment under Uncertainty." *American Economic Review*, 73: 228-33.
- Aisen, Ari., Francisco José Veiga, (2013). "How Does Political Instability Affect Economic Growth?", European Journal of Political Economy, 29: 151-167,
- Alesina, A., Ozler, S., Roubini, N. and Swagel, P. (1996). "Political Instability and Economic Growth." *Journal of Economic Growth*, 1: 189–211.
- Azqueta-Gavaldon, A. (2020). "Political Referenda and Investment: Evidence from Scotland." *ECB Working Paper Series*, No. 2403.
- Ball, S. (2008). Dublin Castle and the First Home Rule Crisis: The Political Journal of Sir George Fottrell, 1884-1887. Cambridge: Cambridge University Press.
- Barry, F. (2021). "Business Establishment Opposition to Southern Ireland's Exit from the United Kingdom." *Enterprise & Society*, https://doi.org/10.1017/eso.2021.7, forthcoming.
- Baumol, W. J. (1990). "Entrepreneurship: Productive, Unproductive and Destructive." *Journal of Political Economy*, 98: 893-921.
- Beaulieu, M-C., Cosset, J-C., and Essaddam, N. (2006). "Political Uncertainty and Stock Market Returns: Evidence form the 1995 Quebec Referendum." *Canadian Journal of Economics*, 39: 621-41.
- Bernanke, B. S. (1983). "Irreversibility, Uncertainty, and Cyclical Investment." *Quarterly Journal of Economics*, 98: 85–106.
- Bielenberg, A. (1995). "Enterprise and Investment in Ireland, 1850-1900." In A. E. Burke (ed.), *Enterprise and the Economy*. Dublin: Oak Tree Press, 21-40.
- Bielenberg, A. and Burke, A.E. (1995). "A Data Set on Investment and Enterprise in Ireland, 1850-1900: New Company Registrations, Timber Imports and Government Stock." In A. E. Burke (ed.), *Enterprise and the Economy*. Dublin: Oak Tree Press, 41-52.
- Birnie, E. and Hitchens, D.M (1999), Northern Ireland Economy: Performance, Prospects and Policy. Farnham: Ashgate.
- Black, J., de Meza, D., & Jeffreys, D. (1996). "House Prices, the Supply of Collateral and the Enterprise Economy." *The Economic Journal*, 106: 60-7.
- Bloom, N. (2014). "Fluctuations in Uncertainty." *Journal of Economic Perspectives*, 28:153-176.
- Bradley, J. (1999). "The History of Economic Development in Ireland, North and South, *Proceedings of the British Academy*, 98: 35-68.
- Brownlow, G. (2006). "The Political Economy of the Ulster Crisis: Historiography, Social Capability and Globalisation." In D. George Boyce and A. O'Day (eds.), *The Ulster Crisis*, 1885-1921. Basingstoke: Palgrave Macmillan.
- Brownlow, G., (2020). "Industrial Policy in Northern Ireland: Past, Present and Future." *Economic and Social Review*, 52: 407-24.
- Bylund, P. L. and McCaffrey, M. (2017). "A Theory of Entrepreneurship and Institutional Uncertainty." *Journal of Business Venturing*, 32: 461-75.

- Çolak, G., Durnev, A. and Qian, Y. (2017). "Political Uncertainty and IPO Activity: Evidence from U.S. Gubernatorial Elections." *Journal of Financial and Quantitative Analysis*, 52: 2523-64.
- Cullen, L. M. (1972). An Economic History of Ireland since 1660. London: Batsford.
- Cullen, L. M. (1989) Eason & Son: A History. Dublin: Eason & Son.
- De Bromhead, A., Fernihough, A., & Hargaden, E. (2020). Representation of the People: Franchise Extension and the "Sinn Féin Election" in Ireland, 1918. *The Journal of Economic History*, 80(3), 886-925.
- Decker, R., Haltiwanger, J., Jarmin, R. and Miranda, J. (2014) "The Role of Entrepreneurship in US Job Creation and Economic Dynamism." *Journal of Economic Perspectives*, 28: 3–24
- Devine, T. M. (2002). "Making the Caledonian Connection: The Development of Irish and Scottish Studies." *Radharc*, 3: 3-15
- Duffy, S. (1991). "The Bruce Brothers and the Irish Sea World, 1306-1329." *Cambridge Medieval Celtic Studies*, 21: 55-86
- Duffy, S. (1999). "Medieval Scotland and Ireland: Overcoming the Amnesia, *History of Ireland*, 7: 17-21
- Dutta, N., Sobel, R. S. and Roy, S. (2013). "Entrepreneurial and Political Risk." *Journal of Entrepreneurship and Public Policy*, 2:130-143.
- Foster, R.F. (1989). Modern Ireland 1600-1972. London: Penguin.
- Garvin, T.C. (1987). *Nationalist Revolutionaries in Ireland, 1858-1928*. Oxford: Clarendon Press.
- Grossman, R. S., Lyons, R. C., O'Rourke, K. H. and Ursu, M. A. (2014). "A Monthly Stock Exchange Index for Ireland, 1864–1930." *European Review of Economic History*, 18: 248–276.
- Hall, F.G. (1949). History of the Bank of Ireland. Dublin: Hodges, Figgis and Co.
- Hartman, R. (1972). "The Effects of Price and Cost Uncertainty on Investment." *Journal of Economic Theory*, 5: 258–66.
- Harvie, C. (1994). *Scotland and Nationalism: Scottish Society and Politics, 1707–1994*, 2nd edition, London: Routledge.
- Henderson, S. (2019). "Religion and Development in Post-Famine Ireland." *Economic History Review*, 72: 1251-1285.
- Jackson, A. (2003). Home Rule: An Irish History, 1800-2000. Oxford: Oxford University Press.
- Jackson, A. (2010). Ireland, 1798-1998: War, Peace and Beyond. Oxford: Wiley-Blackwell.
- Jackson, A. (2011). The Two Unions: Ireland, Scotland, and the Survival of the United Kingdom, 1707-2007. Oxford: Oxford University Press.
- Jens, C. E. (2017). "Political Uncertainty and Investment: Causal Evidence from U.S. Gubernatorial Elections." *Journal of Financial Economics*, 124: 563-79.
- Jong-a-Pin, R. (2009). "On the Measurement of Political Instability and Its Impact on Economic Growth." *European Journal of Political Economy* 25: 15–29.
- Kenny, S., Lennard, J. and O'Rourke, K. H. (2020), "An Annual Index of Irish Industrial Production, 1800-1921." *Lund Papers in Economic History*, No. 215.
- Koudstaal, M., Sloof, R. and van Praag, M. (2016). "Risk, Uncertainty, and Entrepreneurship: Evidence from a Lab-in-the-Field Experiment." Management Science, 62: 2897-915.

- Lecky, W. E. H. (1891). "Why Home Rule is Undesirable." *The North American Review*, 412: 349-70.
- Lyons, F. S. L. (1985) [1971]. *Ireland since the Famine*. London: Fontana Press.
- Nishimura, S. (1971). *The Decline of Inland Bills of Exchange in the London Money Market,* 1855-1913. Cambridge: Cambridge University Press.
- Ó Gráda, C. (1994). Ireland: A New Economic History. Oxford: Clarendon Press.
- Ollrenshaw, P. (1985). "Industry, 1820-1924." In L. Kennedy and P. Ollrenshaw (eds.), *An Economic History of Ulster, 1820-1940*. Manchester: Manchester University Press.
- O'Rourke, K. H. (2007). "Culture, Conflict and Cooperation: Irish Dairying before the Great War." *Economic Journal*, 117: 1357-1379.
- O'Rourke, K. H. (2007). "Property Rights, Politics and Innovation: Creamery Diffusion in Pre-1914 Ireland." *European Review of Economic History*, 11: 395-417.
- Pástor, L. and Veronesi, P. (2012). "Uncertainty about Government Policy and Stock Prices." *Journal of Finance*, 67: 1219–1264.
- Pástor, L. and Veronesi, P. (2013). "Political Uncertainty and Risk Premia." *Journal of Financial Economics*, 110: 520–545.
- Rodrik, D. (1991). "Policy Uncertainty and Private Investment in Developing Countries." Journal of Development Economics, 36: 229-242
- Roe, M. J. and Siegel, J. I. (2011). "Political Instability: Effects on Financial Development, Roots in the Severity of Economic inequality." *Journal of Comparative Economics*, 39: 279-309.
- Sobel, R. S. (2008). "Testing Baumol: Institutional Quality and the Productivity of Entrepreneurship." *Journal of Business Venturing*, 23: 641-655.
- Stenholm, P., Acs, Z. J. and Wuebker, R. (2013). "Exploring Country-level Institutional Arrangements on the Rate and Type of Entrepreneurial Activity." *Journal of Business Venturing*, 28: 176-193.
- Svenson, J. (1998). "Investment, Property Rights and Political Instability: Theory and Evidence." *European Economic Review*, 42: 1317-1341
- Turner, J. D. and Hickson, C. (2005). 'The Rise and Decline of the Irish Stock Market, 1865-1913.' *European Review of Economic History*, 9: 3-33.
- World Bank. (2012). World Development Report 2013: Jobs. Washington, DC: World Bank.

Figure 1. Results of general elections in Ireland, 1886, 1892, and 1910

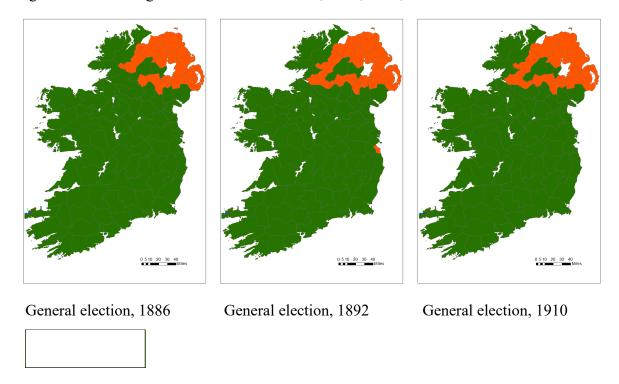
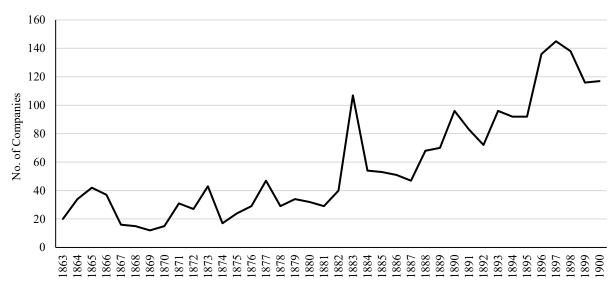
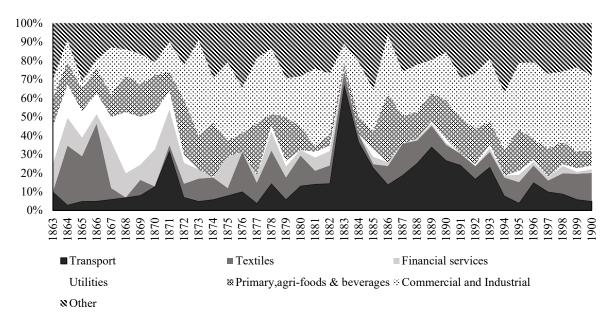


Figure 2. Companies established per year in Ireland, 1863-1900



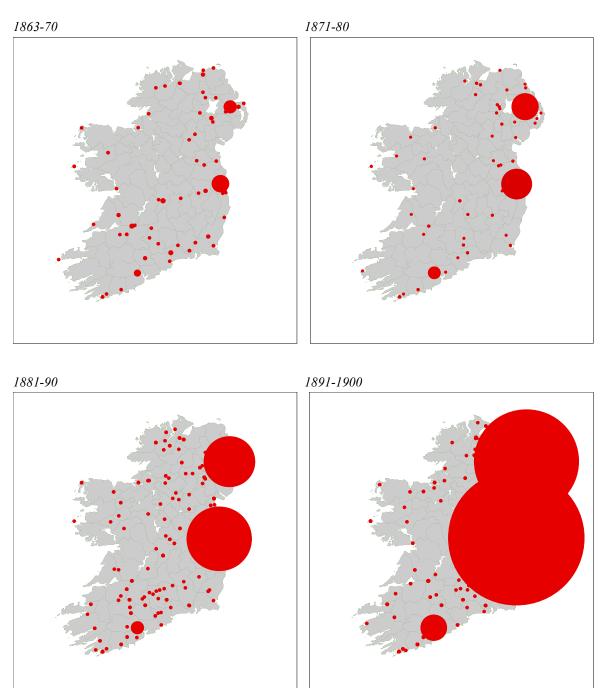
Sources: House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies (1863-1900)

Figure 3. Companies established in Ireland by sector, 1863-1900



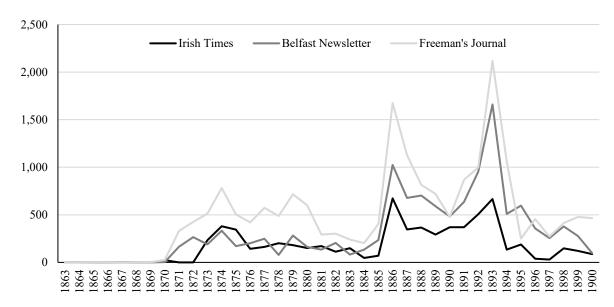
Sources: House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies (1863-1900).

Figure 4. Location of companies registered in Ireland, 1863-1900



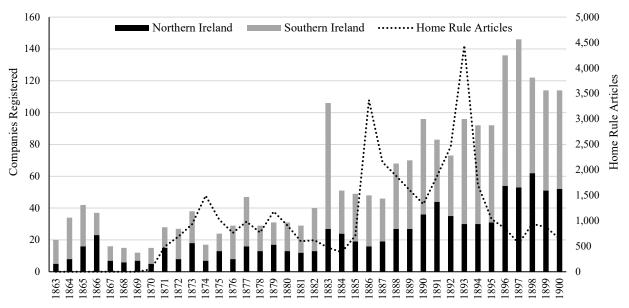
Sources: House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies (1863-1900)

Figure 5. Number of articles mentioning 'Home Rule', 1863-1900



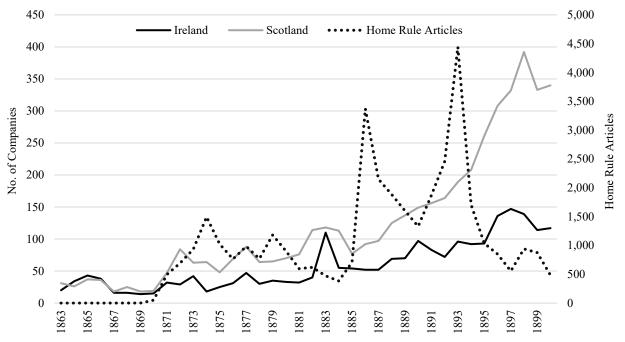
Sources: Irish Times, Freeman's Journal and Belfast Newsletter, 1863-1900

Figure 6. Companies established in Ireland per year and articles mentioning Home Rule, 1863-1900



Sources: House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies (1863-1900). Irish Times, Freeman's Journal and Belfast Newsletter, 1863-1900.

Figure 7. Number of companies established per year in Ireland and Scotland, and Home Rule articles, 1863-1900



Sources: House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies (1863-1900); Irish Times, Freeman's Journal and Belfast Newsletter (1863-1900)

Figure 8. New business creations in Scotland, northern Ireland and southern Ireland, 1870-1900 (by sector)

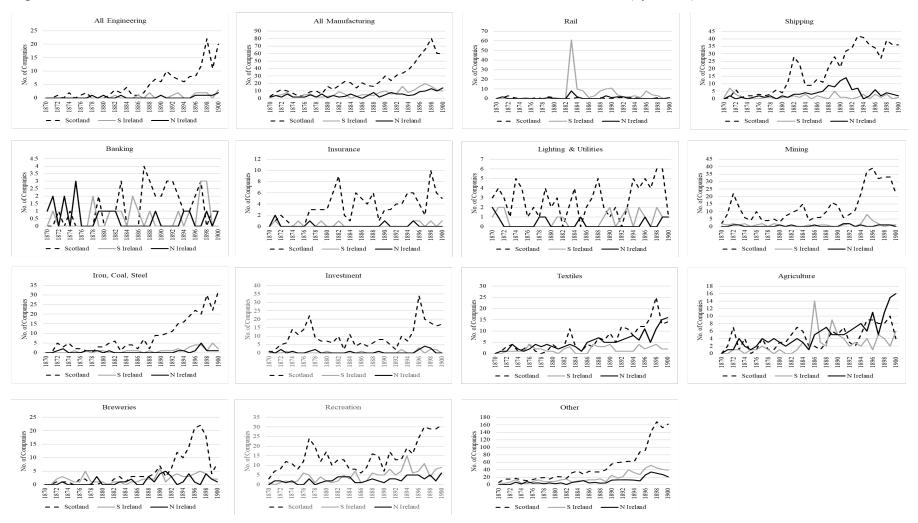
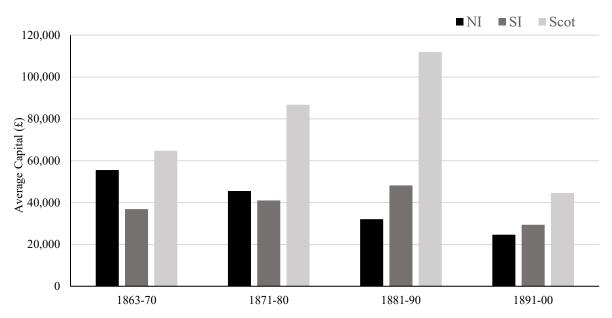


Figure 9. Average size of companies established in northern Ireland, southern Ireland, and Scotland, 1863-1900



Sources: House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies (1863-1900).

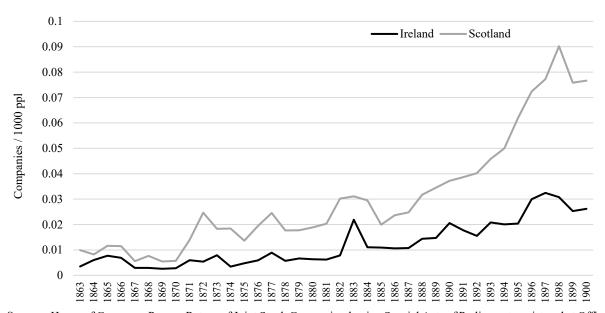
Table 1. Political instability and divergence of companies registered in Scotland and Ireland, 1870-1900

	(1a)	(1b)	(2a)	(2b)	(3a)	(3b)
	DiffScotIre	DiffScotIre	DiffScotSIre	DiffScotSIre	DiffScotNIre	DiffScotNIre
HomeRule	-0.002	-0.001				
	(0.003)	(0.004)				
L.HomeRule	-0.005	-0.005				
	(0.004)	(0.004)				
HomeRuleSI	,	. ,	-0.010	-0.008		
			(0.006)	(0.006)		
L. HomeRuleSI			-0.007	-0.006		
			(0.008)	(0.007)		
HomeRuleNI					0.014**	0.014**
					(0.006)	(0.006)
L. HomeRuleNI					-0.015	-0.018*
					(0.011)	(0.010)
RetDiff	-19.954	-3.486	-19.774	-4.276	-3.889	-12.717
	(80.256)	(79.269)	(79.247)	(76.035)	(72.681)	(70.656)
IntDiff	23.070**	23.412***	25.965**	26.289**	20.877*	22.270**
	(8.465)	(7.847)	(9.658)	(8.817)	(11.173)	(10.603)
Year1882	14.271*		9.975		25.780***	
	(7.773)		(8.460)		(5.349)	
Year1883	-75.293***		-63.132***		-12.512**	
	(6.995)	40.700	(7.449)		(4.559)	12.011
Constant	-5.861	-10.722	-3.116	-7.503	-12.906	-12.944
	(9.814)	(10.739)	(10.477)	(10.805)	(10.453)	(9.860)
Observations	31	31	31	31	31	31
R-squared	0.401	0.152	0.400	0.217	0.315	0.267

Notes: The dependent variables are the change in the difference in company registrations between Scotland and Ireland (DiffScotNre), Scotland and southern Ireland (DiffScotSre), and Scotland and northern Ireland (DiffScotNre). HomeRule is the number of home rule mentions in Irish newspapers in year t and L.HomeRule is the number of mentions in year t-1. HomeRuleSI is the number of home rule mentions in the Freeman's Journal in year t and L.HomeRuleSI is the number of mentions in year t-1. HomeRuleNI is the number of home rule mentions in the Belfast Newsletter in year t and L.HomeRuleNI is the number of mentions in year t-1. IntDiff is the difference in the average interest rate on three-month bills over each year of the sample, using data from Nishimura (1971) for Scotland and data from Hall (1949) for Ireland. RetDiff is the difference in equity market returns between Scotland and Ireland. Irish Equity price data is from Grossman et al. (2014) and Scottish equity price data is from the Investor's Monthly Manual. Annual data on business creation in Scotland and Ireland is from the Annual Returns of the Office of the Registrar of Joint Stock Companies. Robust standard errors in parentheses *** p < 0.01, ** p < 0.05, * p < 0.1

Appendix

Appendix Figure 1. Number of companies established per year in Ireland and Scotland per 1000 people, 1863-1900



Sources: House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies (1863-1900). Population data for Ireland and Scotland are from respective censuses. *Notes:* Disaggregated population data of N and S Ireland is not available.

Appendix Table 1. Summary Statistics (annual) 1863-1900

Variable	N	Mean	Std. Dev.	Min	Max
Panel A: 1863-1970	38				
Companies registered in Ireland		59	38	14	147
Companies registered in Scotland		122	103	18	392
Companies registered in north of Ireland		23	16	5	62
Companies registered in south of Ireland	38	34	24	5	90
Nominal capital (£) - Ireland	38	2,624,960	2,400,322	250,200	15,300,000
Nominal capital (£) - Scotland		8,365,016	6,663,313	474,350	33,300,000
Nominal capital (£) - north of Ireland		795,638	570,463	19,600	2,206,700
Nominal capital (£) - south of Ireland	38	1,352,230	1,290,980	21,100	7,056,250
HomeRule	38	990	953	0	4,444
HomeRuleNI		318	348	0	1,660
HomeRuleSI	38	677	622	0	2,784
Average rate on three-months bills (Scotland) %	38	3.53	1.51	0.88	7.78
Average rate on three-months bills (Ireland) %	38	4.44	1.11	3.00	7.65
Scotland equity returns		-	=	-	-
Ireland equity returns	-	-	-	-	-
Panel B: 1870-1900					
Companies registered in Ireland	31	66	38	15	147
Companies registered in Scotland	31	144	102	19	392
Companies registered in north of Ireland	31	26	16	5	62
Companies registered in south of Ireland	31	38	24	10	90
Nominal capital (£) - Ireland	31	2,768,629	2,597,711	356,600	15,300,000
Nominal capital (£) - Scotland	31	9,779,183	6,559,910	474,350	33,300,000
Nominal capital (£) - north of Ireland	31	813,241	549,684	19,600	2,206,700
Nominal capital (£) - south of Ireland	31	1,520,054	1,353,837	215,500	7,056,250
HomeRule	31	1214	917	52	4444
HomeRuleNI		390	347	3	1660
HomeRuleSI	31 31	830	589	49	2784
Homoraicoi	<i>J</i> 1	030	509	7)	2707
Average rate on three-months bills (Scotland) %	31	3.31	1.23	0.88	6.13
Average rate on three-months bills (Ireland) %		4.35	0.83	3.00	6.00
Scotland equity returns		0.01	0.07	-0.17	0.15
Ireland equity returns		0.01	0.06	-0.11	0.16

Sources: see text.