Robin J. C. Adams , Gareth Campbell , Christopher Coyle, and John D. Turner

Business Creation and Political Turmoil: Ireland versus Scotland before 1900

What effect does political instability in the form of a potential secession from a political union have on business formation? Using newly collected data on business creation, we show that entrepreneurial activity in Ireland in the late nineteenth century was much lower than Scotland, and this divergence fluctuated over time. Several factors may have contributed to this, but we argue that political uncertainty about the prospect of a devolved government in Ireland played a role. The effects were most acute in the North of Ireland, the region that was most concerned by potential changes.

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

Much discussion in recent years has considered the prospect of secession from political unions. The United Kingdom's exit from the European Union and the prospect of Scottish independence have brought constitutional politics to the fore. That discussion has focused in part on the effect of uncertainty about the future constitutional position on the economy, and particularly on investment.¹ As entrepreneurship and investment in new firms are vital contributors to job creation, productivity, and economic growth, the deleterious effect of political uncertainty on the creation of new business is a very important issue.²

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¹ Andres Azqueta-Gavaldon, "Political Referenda and Investment: Evidence from Scotland" (ECB Working Paper Series, no. 2403, 2020).

² Ryan Decker, John Haltiwanger, Ron Jarmin, and Javier Miranda, "The Role of Entrepreneurship in US Job Creation and Economic Dynamism," *Journal of Economic Perspectives* 28, no. 3 (2014): 3–24; World Bank, *World Development Report 2013: Jobs* (Washington, DC, 2012).

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

We develop a measure of business creation by collecting data from British parliamentary reports on the registration of companies between the years 1856 and 1900. The resulting data set 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. 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 that while the number of new businesses created in Ireland and Scotland were similar in the first part of our sample, there is a clear divergence in business creation thereafter. Some, but not all, of this divergence can be explained by differences in population, GDP, business size, and sectoral specialisms.

We therefore consider the impact of political instability associated with the campaign for Irish Home Rule. We document the concerns raised by representatives of leading businesses, and their lobby groups, who were anxious about what might happen if a devolved government was set up. It was likely that any such parliament would be dominated by nationalists, and there were fears that it might give state aid to some favored sectors, paid for by raising taxes elsewhere, possibly in a discriminatory way.

To analyze how the intensity of concerns varied over time, we construct a time series of the proportion of articles mentioning Home Rule in two leading Irish newspapers. This provides a measure for the extent to which this issue was part of public discourse in Ireland. 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 but also persisted at lower levels for

several decades. We then examine the relationship between political instability and business creation, exploiting the regional variation in opposition to the Home Rule movement. In the North of Ireland, which was mostly anti–Home Rule, there is a suggestion that business creation declined around the periods when uncertainty peaked. This was less evident in other parts of Ireland, which were more pro–Home Rule.

While our focus is on business creation, we also examine whether concerns about Home Rule affected the perceived value of established companies. We analyze the stock price performance of companies based in different regions within Ireland, and in Scotland, during different phases. The results suggest large declines in stock prices, particularly in the North of Ireland, when fears about Home Rule were most intense. We also find that stock volatility, a measure of uncertainty, peaked in the North during these periods.

Our results suggest that many factors may have contributed to the lower rate of entrepreneurial activity in Ireland, relative to Scotland, in the last few decades of the nineteenth century. However, there is evidence that Home Rule may have played a role. Comments from business leaders suggested that many of them were anxious about the impact it would have. An examination of the data also suggests it had an influence. It is possible that uncertainty over Home Rule played a small, persistent role over an extended period, but its influence was most pronounced during the periods when uncertainty peaked, particularly in the North of Ireland where opposition to Home Rule was strongest.

This article contributes to the literature on the effects of political instability on entrepreneurship, business creation, and investment. In particular, it contributes to research on the regional effects of political instability by showing that effects are more severe where the population is most concerned by potential changes.³ This article also adds to literature on the development of the Irish economy. While much has been written on Ireland's agrarian economy, emigration, and economic ties with Britain, the economic effects of unrest and political instability have so far been underexplored. F. S. L. Lyons 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.⁴ Charles Hickson and John D. Turner and Richard S. Grossman et al. suggest that the political instability associated

³ Marie-Claude Beaulieu, Jean-Claude Cosset, and Naceur Essaddam, "Political Uncertainty and Stock Market Returns: Evidence from the 1995 Quebec Referendum," *Canadian Journal of Economics* 39, no. 2 (2006): 621–41; Candace E. Jens, "Political Uncertainty and Investment: Causal Evidence from U.S. Gubernatorial Elections," *Journal of Financial Economics* 124, no. 3 (2017): 563–79.

⁴F. S. L. Lyons, Ireland since the Famine (1971; London, 1985), 55.

with Home Rule had some impact on an index of Irish stock prices.⁵ Kevin H. O'Rourke suggests that political conflict before 1914 slowed the diffusion of technology and impeded cooperation in the Irish creamery sector.⁶ Frank Barry argues that the vast majority of large businesses in southern Ireland were opposed to Ireland's exit from the United Kingdom.⁷ Interestingly, he suggests that few of the fears of these business leaders in terms of broad economic policy were realized. 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 research also contributes to our understanding of why Irish industrial growth after the Famine, and up until partition, was slower than that of other countries. The divergence in business creation that we document between Scotland and Ireland suggests that political instability may have been a 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 article also contributes to our understanding of business creation in Ireland in the late nineteenth century. Using the same company registration source as us, Andy Bielenberg gives an overview of Irish business creation in the late nineteenth century. Stuart Henderson 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, finding that a negative relationship existed but with falling statistical significance over time.

In the remainder of the article, we begin by discussing the historical context, and the theoretical literature, before analyzing data on the "wee

⁵Charles Hickson and John D. Turner, "The Rise and Decline of the Irish Stock Market, 1865–1913," *European Review of Economic History* 9, no. 1 (2005): 3–33; Richard S. Grossman, Ronan C. Lyons, Kevin H. O'Rourke, and Madalina A. Ursu, "A Monthly Stock Exchange Index for Ireland, 1864–1930," *European Review of Economic History* 18, no. 3 (2014): 248–76.

⁶ Kevin H. O'Rourke, "Culture, Conflict and Cooperation: Irish Dairying before the Great War," *Economic Journal* 117, no. 523 (2007): 1357–79; O'Rourke, "Property Rights, Politics and Innovation: Creamery Diffusion in Pre-1914 Ireland," *European Review of Economic History* 11, no. 3 (2007): 395–417.

⁷ Frank Barry, "Business Establishment Opposition to Southern Ireland's Exit from the United Kingdom," *Enterprise & Society*, advance online publication 21 Mar. 2021, https://doi.org/10.1017/eso.2021.7.

⁸ Sean Kenny, Jason Lennard, and Kevin H. O'Rourke, "An Annual Index of Irish Industrial Production, 1800–1921" (Lund Papers in Economic History, no. 215, 2020).

⁹ Andy Bielenberg, "Enterprise and Investment in Ireland, 1850–1900," in *Enterprise and the Economy*, ed. Andrew E. Burke (Dublin, 1995), 21–40.

¹⁰ Stuart Henderson, "Religion and Development in Post-Famine Ireland," *Economic History Review* 72, no. 4 (2019): 1251–85.

divergence" in company registrations between Ireland and Scotland and the role that political instability may have played in this.

Historical Context

Although it existed under personal union with the English monarchy since the sixteenth century, Ireland formally joined the United Kingdom in 1801 with the Act of Union. Henceforth, Irish MPs and peers sat in Westminster. Those who supported this union with Britain, known as Unionists, tended to come from the Protestant minority and were concentrated in the North of Ireland, in the province of Ulster. In the early nineteenth century, Ireland's Catholic majority was excluded from politics, and a campaign for "Catholic emancipation" animated much of Irish society. This bound Catholic Irish identity with the cause of Irish nationalism, and once political rights for Catholics were achieved, the focus turned to repeal of the Act of Union. 12

Ireland's economy was overwhelmingly agricultural.¹³ The failure of consecutive potato crops in the 1840s caused widespread famine, and through starvation, disease, and emigration, the population fell from 8.18 million in 1841 to 6.55 million in 1851.¹⁴ As the country recovered, calls for greater political independence increased.

The term "Home Rule" first came into usage in 1870, coinciding with the establishment of the Home Government Association, which campaigned for a devolved government for Ireland. Just four years later, an unprecedented fifty-nine Irish MPs were elected to the House of Commons on a platform of Home Rule for Ireland. This pattern was repeated in successive elections, as shown in Appendix 1 (see online supplement), with pro–Home Rule Nationalist candidates being selected throughout the South, while anti–Home Rule Unionists were chosen in the North.

After 1874, the Irish economy—and its 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. ¹⁶ In this context, according to L. M. Cullen, "a sense of foreboding pervaded the Irish industrial

¹¹ R. F. Foster, Modern Ireland 1600-1972 (London, 1989), 302.

¹² Alvin Jackson, Home Rule: An Irish History, 1800–2000 (Oxford, 2003), 13, 16.

¹³ Joel Mokyr and Cormac Ó Gráda, "Poor Getting Poorer? Living Standards in Ireland before the Famine," *Economic History Review* 41, no. 2 (1988): 210.

¹⁴ Census of Ireland, 1841; Census of Ireland, 1851.

¹⁵ Alvin Jackson, Ireland, 1798-1998: War, Peace and Beyond (Oxford, 2010), 109.

¹⁶ Cormac Ó Gráda, *Ireland: A New Economic History* (Oxford, 1994), 252.

scene in the early 1880s."¹⁷ 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.¹⁸ Combined with an extension of the franchise in 1884, from 224,000 voters in Ireland to 738,000, this created an electoral coalition that would soon be felt in Westminster.¹⁹

Before 1884 the prospect of Home Rule had been, as one Irish Nationalist later recalled, no more than "a vague, shadowy kind of form on the horizon."²⁰ This changed in the final days of the general election of November and December 1885, when it became known that Gladstone was in favor of Home Rule. This revelation caused "a sort of panic in certain classes, and a fall of securities," according to the viceroy of Ireland.²¹ Gladstone won the election and Irish equity prices fell substantially that month.²² 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.

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 that this bill generated in commercial circles was evident in events such as the deputation of the Irish commercial elite to Westminster, described in the Irish nationalist *Cork Examiner* as an "Anti-Home Rule Howl."²³ Arthur Balfour, former chief secretary for Ireland, claimed 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.²⁴ Business leaders would continue to lead opposition to Home

¹⁷ L. M. Cullen, An Economic History of Ireland since 1660 (London, 1972), 148.

¹⁸ Foster, Modern Ireland, 405.

¹⁹ Jackson, Home Rule, 364.

²⁰ Irish Times, 3 Feb. 1891, 7.

²¹ Stephen Ball, *Dublin Castle and the First Home Rule Crisis: The Political Journal of Sir George Fottrell*, 1884–1887 (Cambridge, UK 2008), 64.

²² Grossman et al., "Monthly Stock Exchange Index," 264.

²³ Cork Examiner, 11 Mar. 1893, 7.

²⁴ Hickson and Turner, "Rise and Decline."

Rule, particularly in Ulster where the business and political elites overlapped considerably.25

Such objections were also made by the intelligentsia of the time. Irish essavist and historian W. E. H. Lecky 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.²⁶ He also warned of the coercive legislation that would be necessary to guell protests, and possibly civil war, in Ulster. Lecky's 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.²⁷ Nevertheless, uncertainty over Home Rule for Ireland persisted. Hickson and Turner and Grossman et al. have identified a sustained decline in equity prices on the Irish Stock Exchange from the late 1890s until the outbreak of the Great War. 28 Hickson and Turner have speculated that 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.29

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 and 100,000 joined the paramilitary Ulster Volunteers.30 Pro-Home Rule Irish Nationalists responded with the formation of the rival paramilitary Irish Volunteers, which numbered roughly 160,000.31 Against this backdrop, equities on the Irish Stock Exchange fell substantially from 1911 to 1913.<mark>32</mark>

²⁵ Graham Brownlow, "The Political Economy of the Ulster Crisis: Historiography, Social Capability and Globalisation," in The Ulster Crisis, 1885-1921, ed. D. George Boyce and Alan O'Day (Basingstoke, 2006), 43.

²⁶ W. E. H. Lecky, "Why Home Rule Is Undesirable," North American Review 412 (1891): 349–70.
²⁷ Foster, *Modern Ireland*, 434–35.

²⁸ Hickson and Turner, "Rise and Decline"; Grossman et al., "Monthly Stock Exchange

²⁹ Hickson and Turner, "Rise and Decline," 21; Tom C. Garvin, Nationalist Revolutionaries in Ireland, 1858-1928 (Oxford, 1987), 2.

³⁰ Foster, Modern Ireland, 466; Jackson, Home Rule, 120.

³¹ Foster, Modern Ireland, 473.

³² Grossman et al., "Monthly Stock Exchange Index," 265; Jackson, Home Rule, 120.

The context changed in 1914, with the beginning of World War I, 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.³³ The Sinn Féin representatives established a rebel government that declared full independence from the British Empire, precipitating the Irish War of Independence (1919–1921). A guerrilla conflict concluded with the establishment of an independent Irish Free State, while Northern Ireland remained part of the United Kingdom.

Political Uncertainty and Business Creation

Political uncertainty can be thought of as uncertainty about a government's future action or policy.³⁴ It can be of two types. The first type is uncertainty as to whether a government will change its policy stance with regard to business regulation, tax, spending, and general macroeconomy. This 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, such as potential subjugation by another country, or government overthrow by a coup (bloodless or otherwise), or the secession of a region from a country. These potential changes raise concerns around property rights and contract enforcement, among other things. In the case of Ireland, Home Rule resulted in this type of uncertainty among Irish businesses and entrepreneurs.

What are the effects of policy uncertainty on businesses? Uncertainty can make some firms cautious to an extent that they reduce their investment.³⁵ Dani Rodrik shows that even moderate amounts of policy uncertainty can lead to reduced investment.³⁶ It can also raise the cost of capital for firms by raising the risk premia associated with stocks and borrowing.³⁷

³³ Alan de Bromhead, Alan Fernihough, and Enda Hargaden, "Representation of the People: Franchise Extension and the 'Sinn Féin Election' in Ireland, 1918," *Journal of Economic History* 80, no. 3 (2020): 886–925.

³⁴ Luboš Pástor and Pietro Veronesi, "Uncertainty about Government Policy and Stock Prices," *Journal of Finance* 67, no. 4 (2012): 1219–64.

³⁵ Ben S. Bernanke, "Irreversibility, Uncertainty, and Cyclical Investment," *Quarterly Journal of Economics* 98, no. 1 (1983): 85–106; Nicholas Bloom, "Fluctuations in Uncertainty," *Journal of Economic Perspectives* 28, no. 2 (2014): 153–76; Jens, "Political Uncertainty and Investment."

³⁶ Dani Rodrik, "Policy Uncertainty and Private Investment in Developing Countries," *Journal of Development Economics* 36, no. 2 (1991): 229–42.

³⁷ Bloom, "Fluctuations in Uncertainty"; Pástor and Veronesi, "Uncertainty"; Luboš Pástor and Pietro Veronesi, "Political Uncertainty and Risk Premia," *Journal of Financial Economics* 110, no. 3 (2013): 520–45.

However, uncertainty may also stimulate investment by some firms. This can happen when firms face a limited downside of losing their investment and a potentially large upside if the investment comes off.³⁸ Given that Irish businesses in the nineteenth century were largely financed by owners' equity, 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.³⁹ However, the capital-intensive nature of most Irish firms at this 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.⁴⁰ Nevertheless, they respond to their environment.⁴¹ For example, in a cross-sectional study of ninety countries, Nabamita Dutta, Russell Sobel, and Sanjukta Roy find that the number of newly registered limited companies in any year is highly correlated with the political stability of the country.⁴²

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 labor contracts would be renegotiated in a manner detrimental to the entrepreneur. Such uncertainty may make some entrepreneurs reluctant to set up a company in the first instance. Jakob Svenson shows that political instability affects the quality of property rights and institutions, which in turn have an impact on private investment.⁴³ 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.⁴⁴ This makes it difficult for entrepreneurs to access the finance needed to establish and run

³⁸ Bloom, "Fluctuations in Uncertainty."

³⁹ Richard Hartman, "The Effects of Price and Cost Uncertainty on Investment," *Journal of Economic Theory* 5, no. 2 (1972): 258–66; Andrew B. Abel, "Optimal Investment under Uncertainty," *American Economic Review* 73, no. 1 (1983): 228–33.

⁴⁰ Martin Koudstaal, Randolph Sloof, and Mirjam C. van Praag, "Risk, Uncertainty, and Entrepreneurship: Evidence from a Lab-in-the-Field Experiment," *Management Science* 62, no. 10 (2016): 2897–915.

⁴¹ Pekka Stenholm, Zoltan J. Acs, and Robert Wuebker, "Exploring Country-Level Institutional Arrangements on the Rate and Type of Entrepreneurial Activity," *Journal of Business Venturing* 28, no. 1 (2013): 176–93.

⁴² Nabamita Dutta, Russell Sobel, and Sanjukta Roy, "Entrepreneurial and Political Risk," *Journal of Entrepreneurship and Public Policy* 2, no. 2 (2013): 130–43.

 $^{^{43}}$ Jakob Svenson, "Investment, Property Rights and Political Instability: Theory and Evidence," $\it European~Economic~Review~42,$ no. 7 (1998): 1317–41.

⁴⁴Mark J. Roe and Jordan I. Siegel, "Political Instability: Effects on Financial Development, Roots in the Severity of Economic inequality," *Journal of Comparative Economics* 39, no. 3 (2011): 279–309.

companies. Political uncertainty can dampen IPO activity, which makes it difficult for entrepreneurs and their funders to float on a stock market. Third, following the seminal work of William J. Baumol, political uncertainty may simply divert entrepreneurs away from setting up productivity-enhancing companies in favor of rent-seeking or parasitical activities. In other words, political uncertainty affects not the supply of entrepreneurs but 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 instead to use their skills to extract rents in the new political and legal milieu. In the new political and legal milieu.

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, and 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 the potential entrepreneurs who opposed Home Rule, who would have been located chiefly in the northeast of the country. Also, the paucity of companies floating in Ireland in the Home Rule era relative to the rest of the United Kingdom perhaps suggests a finance mechanism. Finally, it is also possible that political uncertainty diverted people with entrepreneurial skill sets away from establishing businesses toward rent-seeking activities.

Business Creation Data

In the 1850s and 1860s, reforms to company law in the United Kingdom 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, and these were published in the *Annual Returns of Joint Stock Companies Registered* at the Office of the Registrar of Joint Stock Companies.⁴⁸ The annual

⁴⁶ William J. Baumol, "Entrepreneurship: Productive, Unproductive and Destructive," *Journal of Political Economy* 98, no. 5, part 1 (1990): 893–921.

⁴⁸ House of Commons Papers, Return of Joint Stock Companies, having Special Acts of Parliament, registered at Office of Registrar of Joint Stock Companies.

⁴⁵ Gönül Çolak, Art Durnev, and Yiming Qian, "Political Uncertainty and IPO Activity: Evidence from U.S. Gubernatorial Elections," *Journal of Financial and Quantitative Analysis* 52, no. 6 (2017): 2523–64.

⁴⁷ Per L. Bylund and Matthew McCaffrey, "A Theory of Entrepreneurship and Institutional Uncertainty," *Journal of Business Venturing* 32, no. 5 (2017): 461–75; Russell S. Sobel, "Testing Baumol: Institutional Quality and the Productivity of Entrepreneurship," *Journal of Business Venturing* 23, no. 6 (2008): 641–55.

returns report this disaggregated data for the years from 1856 to 1900, after which only annual aggregate data is available.

We collected information on each new company that was registered and use the number of registrations as a measure of business creation. This is consistent with projects such as the World Bank Entrepreneurship Database that use incorporations (scaled by population) as a metric of entrepreneurial activity. Although incorporation may not necessarily mean the formation of an entirely new business—and will often be undertaken by existing organizations wanting to convert to limited liability, or restructure following a merger, or raise capital—it is still informative as it suggests an evolution in the company's status.⁴⁹

A difficulty in measuring or testing any potential relationship between political instability and business creation is that we can only observe businesses that were registered; that is, we cannot measure businesses that may have been formed in the absence of political instability. To address this issue, we examine business creation in Ireland using Scotland as a counterfactual.

A number of significant geographic, economic, and cultural elements link Ireland and Scotland, going back millennia. These connections were particularly strong between Scotland and, located just twelve miles away, the region of Ireland that would become Northern Ireland. 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-fertilization.⁵⁰ At the beginning of the 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.⁵¹ By the end of the century, however, the two had experienced dramatically different development. There were some who also lobbied for Home Rule to be applied to Scotland, but this was very much a minority interest, with neither popular support nor likelihood of implementation.⁵²

⁴⁹ Andy Bielenberg and Andrew E. Burke, "A Data Set on Investment and Enterprise in Ireland, 1850–1900: New Company Registrations, Timber Imports and Government Stock," in Burke, *Enterprise and the Economy*, 41.

⁵⁰ Alvin Jackson, The Two Unions: Ireland, Scotland, and the Survival of the United Kingdom, 1707–2007 (Oxford, 2011), 15.

⁵¹Thomas M. Devine, "Making the Caledonian Connection: The Development of Irish and Scottish Studies," *Radharc* 3 (2002): 3–15.

⁵² Christopher Harvie, Scotland and Nationalism: Scottish Society and Politics, 1707–1994, 2nd ed. (London, 1994), 34–36.

Indeed, on the contrary, some Unionists cited Scottish economic success as an argument against Home Rule for Ireland.⁵³

A summary of our data, including all 6,995 companies newly registered in either Ireland or Scotland between 1856 and 1900, is shown in Table 1. Of these companies, 2,332 were in Ireland and the remaining 4,663 in Scotland. The growth in registrations over time is clear, with 584 in the period between 1856 to 1869, rising to 884 in the 1870s, 1,531 in the 1880s, and 3,996 in the 1890s. A brief business description is given for each company, which we have coded into broad categories. Based on these groupings, the most common types of new companies were those involved in shipping and navigation, followed by merchants and retailers and then those involved in recreational activities such as hotels. At the other end, the smallest number of firms were those set up to operate tea, coffee, or rubber plantations overseas and those involved in financial activities such as banking, discounting, or insurance.

Wee Divergence

Incorporations in Ireland and Scotland. Panel A of Figure 1 shows the number of companies registered in Ireland and Scotland each year from 1856 to 1900. Notably, the number of businesses established in both regions were similar in the years up until 1870. Given that this was the period just after the liberalization of incorporation law, it is likely that, as Cormac Ó Gráda has suggested, many of these early registrations were established private companies desiring a public "shell."54 Nevertheless, it is notable that the numbers in Ireland were as high as those in Scotland. Assuming that the propensity of existing partnerships to incorporate was not significantly higher in Ireland, the number of businesses operating in both regions was broadly similar.

From the 1870s, there was an uplift in the annual number of Scottish companies established relative to Ireland, with a clear and persistent divergence in business creation. By 1900, almost three times as many companies were newly registered in Scotland as in Ireland.

Panel B of Figure 1 illustrates the ratio of the number of companies incorporated in Ireland relative to Scotland, using a three-year moving average to smooth out annual fluctuations. It again illustrates the shifts over time, with the ratio close to 1:1 during the early period, falling to a low level in the 1870s, rising briefly in the early 1880s, and then steadily declining during the late 1880s and 1890s.

⁵³ Jackson, Two Unions, 15.

⁵⁴ Ó Gráda, Ireland, 311.

Table 1 Number of Companies Established in Scotland and Ireland, 1856–1900

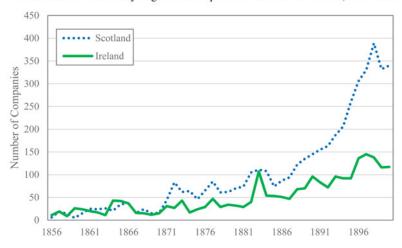
1000 1700					
	Number of companies	Total nominal capital (£m)			
Total	6,995	373.06			
Country					
Ireland	2,332	84.27			
Scotland	4,663	288.79			
Decade					
1856–1869	584	26.44			
1870–1879	884	65.41			
1880–1889	1,531	112.21			
1890–1900	3,996	169.00			
Sector					
Shipping & navigation	769	29.45			
Merchants & retailers	739	30.55			
Recreation	732	8.29			
Manufacturing (other) ^a	659	26.71			
Mining & quarrying	526	31.80			
Miscellaneous	488	12.02			
Textiles	458	41.55			
Food & breweries	358	25.51			
Iron, coal, steel, & oil	342	25.14			
Property, trusts, & investing	328	46.46			
Gas, lighting, & water	244	2.85			
Agriculture & fishing	230	6.43			
Publishing	226	4.47			
Tramways & omnibuses	216	15.71			
Construction	191	3.97			
Engineering & shipbuilding	185	10.61			
Insurance	144	17.96			
Banks, discounting, & lending	113	25.03			
Tea, coffee, & rubber	47	8.55			

Source: Calculated from individual company data collected from "Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies," House of Commons Papers.

Notes: Some companies do not have nominal capital data. Sectoral groupings are based on common themes mentioned in company descriptions.

^aThose companies that are involved in manufacturing products not mentioned elsewhere (i.e., not textiles, food, ships, etc.).

Panel A: Number of Newly Registered Companies in Ireland and Scotland, 1856-1900



Panel B: Ratio of Ireland to Scotland in Terms of Number of Newly Registered Companies



Figure 1. Newly registered companies in Ireland and Scotland. Note: Panel A shows the actual number of company registrations in both Ireland and Scotland. Panel B shows the ratio in Ireland to Scotland, expressed as a three-year moving average centred around the midpoint. (Source: Calculated from individual company data collected from "Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies," House of Commons Papers.)

Controlling for population. A possible explanation for the divergence in incorporation rates over time between Ireland and Scotland could be related to population size. If the number of people living in

each country was substantially different, or changed over time in different ways, it may not be fair to simply compare the number of companies. To analyze this, we obtained information on the population of each country from the census, held every ten years, and assumed a smooth adjustment within each decade to estimate the size of the population each year. The differences between Ireland and Scotland are stark. At the start of the sample period, the population of Ireland was more than double that of Scotland, but by the end of the period both populations were almost the same. Scotland had grown consistently, but Ireland had experienced very high levels of emigration throughout the period and its population had shrunk.

Figure 2 shows the impact of these changes on the patterns of business creation divergence. The ratio of Irish to Scottish incorporations was much lower in the early period than the unadjusted figures had suggested. The general trend remains similar but not as steep, suggesting that some of the divergence can be explained by population effects. These are also first order effects, with it being possible that emigration had a further impact by removing a large number of those most likely to start a new enterprise, namely adventurous younger people who were willing to take risks.

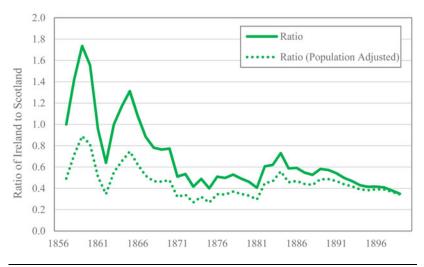


Figure 2. Ratio of number of companies newly registered in Ireland to Scotland, adjusted for relative population size. Note: Population data from census publications in parliamentary papers and smoothed between decades. The ratio of Ireland to Scotland in terms of company registrations is adjusted for the ratio in populations and expressed as a three-year moving average. (Source: Calculated from individual company data collected from "Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies," House of Commons Papers; Census of Ireland 1851, 1861, 1871, 1881, 1891, 1901; Census of Scotland 1851, 1861, 1871, 1881, 1891, 1901.)

Controlling for economic conditions. Another, related, possibility is that the economic conditions in Ireland were substantially different from those in Scotland. To compare GDP per capita, we use estimates of Frank Geary and Tom Stark for Ireland and Scotland every ten years, benchmarked to the UK level in those years. In each period Ireland had a much lower value than Scotland, and although there was modest convergence over time, a substantial gap remained. If nominal GDP (which would be affected by both per capita GDP and the population changes already discussed) was substantially different between countries, and the relative levels shifted over time, this may also put the incorporation rates into perspective.

To analyze this, we used the decennial estimates for the regional share of GDP from Geary and Stark and assumed a linear shift within each decade to estimate annual figures for the regional proportion of GDP. ⁵⁶ We then applied these to the annual nominal UK GDP figures provided in the Bank of England Millennium of Macroeconomic Data spreadsheet to obtain estimates for the nominal GDP of Ireland and Scotland each year. As Figure 3 shows, we then adjusted the incorporation rate figures for relative differences in GDP. The trend again remains similar, but Ireland's performance toward the end of the century is somewhat improved. Instead of an incorporation rate that was about 35 percent of the rate in Scotland, it was about 50 percent when differences in GDP are accounted for.

Broader economic and financial effects may also have played a role in differences in business development between the countries. For example, the sizes of their banking sectors were considerably different, with the total amount deposited in all of the Irish banks averaging just about 40 to 45 percent of the amount deposited in all Scottish banks throughout this period.⁵⁷ This may also have been reflected in lending, possibly making it more difficult for new businesses in Ireland to borrow. The interest rate on Irish bills averaged about 0.9 percentage points above the rate on UK bills during this period, making it more expensive to borrow funds.⁵⁸

Controlling for size. Another possible explanation for the pattern in the last few decades of the century could be that even though Ireland created fewer businesses, those new businesses were larger in scale. However, this is not consistent with the data on nominal capital,

 $^{^{55}}$ Frank Geary and Tom Stark, "Regional GDP in the UK, 1861–1911: New Estimates," *Economic History Review* 68, no. 1 (2014): 123–44.

⁵⁶ Geary and Stark.

⁵⁷ Calculated based on data from Forrest Capie and Alan Webber, *A Survey of Estimates of U.K. Money Supply and Components*, 1870–1982 (London, 1984).

⁵⁸ Calculated based on data from Frederick G. Hall and Shizuya Nishimura. See Hall, *History of the Bank of Ireland* (Dublin, 1949) and Nishimura, *The Decline of Inland Bills of Exchange in the London Money Market*, 1855-1913 (Cambridge, UK, 1971).

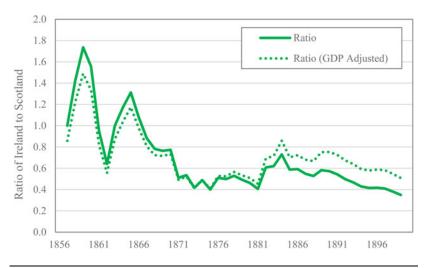


Figure 3. Ratio of number of companies newly registered in Ireland to Scotland, adjusted for relative GDP. Notes: The ratio of Ireland to Scotland in terms of company registrations is adjusted for the ratio in GDP and expressed as a three-year moving average. (Sources: Company registration calculated from individual company data collected from "Annual Returns of Joint Stock Companies," House of Commons Papers. GDP per capita data from Frank Geary and Tom Stark, "Regional GDP in the UK, 1861–1911: New Estimates," Economic History Review 68, no. 1 [2014]: 123–44. Annual nominal UK GDP obtained from the Bank of England Millennium of Macroeconomic Data spreadsheet, with estimates for Ireland and Scotland based on the GDP regional share data from Geary and Stark.)

which suggests that Scottish companies tended to be bigger. For example, nine of the ten companies with the highest nominal capital established during this era were based in Scotland, the only exception being Dublin United Tramways. A similar pattern emerges when looking at the top fifty companies: only five were based in Ireland.⁵⁹

In Appendix 2 (see online version), we break down the differences between Ireland and Scotland in terms of total nominal capital into differences in the number of companies and differences in average size. Overall, the total nominal capital of Irish companies was just 29 percent of that of Scottish companies. This was partly due to a smaller number of companies, with a 50 percent lower incorporation rate, and

 59 Calculated from individual company data collected from the "Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies." J&P Coats had registered under the 1862 Act as unlimited in 1884, and then as a new limited company in 1890, and we only include the 1884 version here. NZ & Australian Land registered in 1866, and then again in 1877 after restructuring, and we only include the 1866 version here. Arthur Guinness, Son, and Company, Limited, is notable by its absence as it registered in London in October 1886 with a nominal capital of £4.5 million.

partly due to a smaller average size, with Irish companies being on average just 58 percent the size of Scottish companies.

We further break this down by sector to show that this pattern was pervasive across different industries. In eighteen of the nineteen sectors, the nominal capital of companies in Ireland was lower than that of companies in Scotland. In sixteen of the nineteen sectors, there was a lower incorporation rate. And again, in sixteen of the nineteen sectors, there was a lower average size of firm.

Controlling for sectoral specialisms. Sectoral specialisms could also potentially explain some of the differences between countries and how they changed over time. The results in Appendix 2 (see online supplement) suggest that the only industry in which Ireland had a major specialism was tramways and omnibuses, where it had 5.55 times as many companies as Scotland. To analyze how much influence this had on the divergence over time, we plotted the ratio excluding this sector in Panel A of Appendix 3 (see online supplement), which illustrates that tramways had a major impact around 1883, when there was a promotion boom following the implementation of the Tramways and Public Companies (Ireland) Act. If these companies are not included, the temporary peak in the ratio is somewhat lower and somewhat later, in 1886.

In contrast, Scotland outperformed Ireland across a wide range of sectors. Some of the most extreme disparities were in insurance; tea, coffee, and rubber; and property, trusts, and investing. Excluding these sectors, as in Panel B of Appendix 3, raises the ratio slightly across the period but does not make a substantial difference to the trend. This suggests that Scotland's superior performance was not the result of a few isolated industries.

In Appendix 4 (see online version), we explore the changes in sector in more detail, split into two time periods: before and after the First Home Rule Bill in 1886. Overall, during the first period (1856–1885), the rate of incorporation in Ireland was 0.65 of that in Scotland. During the second period (1886–1900), that had deteriorated to 0.44. The relative change in the ratio of Irish to Scottish incorporation was therefore (0.44/0.65)=0.68.

Although the number of companies in Ireland increased between the two periods (1.55 times as many companies were registered in the second period than in the first), the increase in Scotland was much higher (2.30 times as many companies in the second period as in the first), confirming that the relative change was (1.55/2.30)=0.68 and highlighting the divergence in incorporation.

We repeat this analysis across different sectors to understand how shifts over time may be explained. The sector that grew most in

Ireland, relative to Scotland, was agriculture and fishing. There were also some relative improvements in the property, trusts, and investing sector, although it remained very small in Ireland. Construction, tramways and omnibuses, and recreation also saw relative growth. However, a large number of sectors saw Ireland contract relative to Scotland. In several sectors—including banks, discounts, and lending; tea, coffee, and rubber; mining and quarrying; and insurance—Ireland experienced a decline in actual numbers, whereas they expanded in Scotland.

The results in this section suggest that Ireland's underperformance in business creation compared with Scotland can be partially explained by differences in population, GDP, and sector-specific factors (such as the 1883 tramways promotion boom). However, even after controlling for these differences, there remains a "wee divergence" (with "wee" being a word widely used in both Scotland and Ireland to refer to something that is quite small). The incorporation rate in Ireland was persistently lower than in Scotland from the 1870s, and even lower when size is accounted for, with the relative decline being evident across a wide range of sectors. There were also short-term fluctuations around the trend. In the following sections we explore whether fears around Home Rule could explain this "wee divergence."

Did Business Fear Home Rule?

Opposition to Home Rule was mainly driven by religious and cultural considerations. For example, in a pamphlet on "the case of the Irish Protestants," the author put Unionist opposition to Home Rule down to "affection to England" and fears that a majoritarian domestic legislature might erode the Protestant minority's civil liberties. However, there were also concerns about the economic policies that an Irish parliament might pursue, with the possibility of an interventionist state imposing higher taxes, in a way that could benefit Nationalists at the expense of Unionists. Before the details of the bills were published, an initial concern was that an Irish parliament would be protectionist and raise tariffs on particular imports, like flax, that were crucial to Ulster industry. However, the example of the protection is the state of the protection of the protection is the concern was that an Irish parliament would be protectionist and raise tariffs on particular imports, like flax, that were crucial to Ulster industry.

The Home Rule bills were structured in such a way that this would not be possible, as customs and excise would still be controlled by London, but an Irish parliament could provide state aid and raise other taxes. In a Unionist pamphlet it was noted that there were no

⁶⁰ The Case of the Irish Protestants in relation to Home Rule Stated (Dublin, 1886), 1, HathiTrust, accessed 2 Nov. 2022, https://catalog.hathitrust.org/Record/100008527.
⁶¹ Morning Post, 21 Jan. 1886.

restraints "from giving bounties to any favoured branches of native industry or commerce." ⁶² There was a fear that this state aid would have to be financed by raising taxes elsewhere and could be applied in a discriminatory way. This anxiety was heightened by the agrarian ideal of some Irish Nationalists, who went so far as to dismiss industrial Belfast as "not an Irish city." ⁶³ Expecting a Home Rule Ireland to be governed in the interests of the nonindustrial majority, a report by the Belfast Chamber of Commerce predicted the relocation of capital and industry to Britain or further afield. It also questioned the competence of the putative governing class in Dublin, which it viewed as ignorant of "the science of government." ⁶⁴

Belfast took pride in the leading position of some of its companies, particularly the Harland & Wolff shipbuilders, who would go on to build the *Titanic*. The founders of the company, Edward Harland and Gustav Wolff, were both members of Parliament for the Conservative and Unionist Party, for Belfast constituencies. In Parliament, Wolff complained that the concerns of agrarian interests had crowded out those of industry in debates on Home Rule. He warned that industrial Ulster would inevitably shoulder the burden of taxation, harming the prosperity of Ireland as a whole. More starkly, Harland argued that such rebalancing of the country's political economy to the disadvantage of business would "practically produce anarchy. Similar condemnation came from Belfast's other major industry: the Belfast Linen Merchants' Association adopted a resolution warning that the city's linen industry would be "seriously, if not fatally, injured" if Home Rule were enacted.

Dublin, in the South of Ireland, was the expected home of any new devolved parliament, and a firm majority of its citizens were in favor of Home Rule. However, Protestants represented a significant minority of about 20 percent of the population and as much as half of the 1,200 members of the Dublin Chamber of Commerce.⁶⁸ A detailed study of

⁶² "New Home Rule Policy" (1893), published by the Liberal Union of Ireland.

⁶³ James Loughlin, "'Creating 'A Social and Geographical Fact': Regional Identity and the Ulster Question 1880s–1920s," *Past & Present* 195, no. 1 (2007): 159–96, 164.

⁶⁴ Government of Ireland Bill: Report presented to and unanimously adopted by an extraordinary general meeting of the Belfast Chamber of Commerce, 1893, included in the publications of the Irish Unionist Alliance, 1893.

⁶⁵ HC Deb., 13 Feb. 1893, vol 8, cc 1241–339.

⁶⁶ HC Deb., 21 Apr. 1893, vol 11, c 948.

 ⁶⁷ Resolution adopted by the Linen Merchants' Association, 20 Mar. 1893. Text published in "Ireland's declarations and addresses on behalf of the maintenance of the legislative union, 1893," included in the publications of the Irish Unionist Alliance, 1893.
 ⁶⁸ Census of Ireland, 1891; Edward Dowden, "Irish Opinion on The Home Rule Bill," Fort-

⁶⁸ Census of Ireland, 1891; Edward Dowden, "Irish Opinion on The Home Rule Bill," Fortnightly Review 53 (1893): 593; Philip Ollerenshaw, "Businessmen and the Development of Ulster Unionism, 1886–1921," Journal of Imperial and Commonwealth History 28, no. 1 (2000): 35–64, 47.

the largest employers in southern Ireland in the early 1900s has shown that the majority of them were run by Protestant Unionists.⁶⁹ This background, combined with more general economic concerns, led to an anti–Home Rule stance among many leading industrialists in the South.

The Dublin Chamber of Commerce adopted a resolution opposing the 1893 Home Rule Bill, emphasizing the effect of its finance and taxation provisions on trade with the rest of the United Kingdom as well as within Ireland. The Dublin Stock Exchange also noted the harmful effect of the prospect of Home Rule: a petition signed by sixty-three of its sixty-six members reported an "intense feeling of alarm" among shareholders, who anticipated deterioration of credit and discouragement of enterprise.

The most iconic company in Dublin was the Guinness brewery. Its chairman, Sir Edward Guinness, who would become Lord Iveagh, was firmly opposed to Home Rule. During the First Home Rule Bill in 1886, he was elected as a vice president of the Irish Loyal and Patriotic Union, and during the second in 1893, he led a delegation to Westminster of leading southern Irish businessmen opposed to Home Rule.⁷² The Guinness brewery had been operating since 1759, but it was only incorporated and listed on the London Stock Exchange in 1886. It is notable that, when incorporated, the headquarters were located in London, and the listing did not take place until October of that year, after the First Home Rule Bill had been rejected and a new Conservative and Unionist Government had been elected.⁷³

Also included in the aforementioned 1893 deputation of about fifty southern Irish businessmen were representatives from many of the largest companies in Ireland, such as the governor and two directors of the Bank of Ireland, the directors of several railway companies, directors of the City of Dublin and Cork Steam Packet companies, John J. Jameson and several other leading distillers, and other representatives from the Dublin Chamber of Commerce. Taking the stance of an apolitical advocate for the country's business community, they warned that the "political and party ferment" arising from the Home Rule Bill would "arrest business in every direction."

⁶⁹ Barry, "Business Establishment Opposition."

 $^{^{70}}$ Resolution adopted by Dublin Chamber of Commerce, 27 Feb. 1893. Text published in "Ireland's declarations and addresses on behalf of the maintenance of the legislative union, 1893," included in the publications of the Irish Unionist Alliance, 1893.

⁷¹ Petition signed by 63 out of the 66 members of the Dublin Stock Exchange, 18 Mar. 1893. Text published in "Ireland's declarations and addresses on behalf of the maintenance of the legislative union, 1893," included in the publications of the Irish Unionist Alliance, 1893.

⁷² Daily News, 9 Jan. 1886; "Irish Commercial Interests and the Home Rule Bill" (1893). Text published in a pamphlet by the Irish Unionist Alliance, Publications (1893).

⁷³ The Times, 22 Oct. 1886.

⁷⁴ "Irish Commercial Interests and the Home Rule Bill" (1893).

Although the Belfast and Dublin Chambers of Commerce had come out against Home Rule, it should be noted that in other regions the policy was supported. For example, in the Limerick Chamber of Commerce, a speaker decried the Dublin Chamber's opposition to Home Rule, arguing that it was "the only remedy for the languishing state of trade."

Were Home Rule Fears Persistent?

The Home Rule Bills that were proposed in Parliament were considered, but rejected, in 1886 and 1893 before eventually being approved in 1912, after our sample period ends. There is a query, therefore, as to whether concerns persisted throughout this long period or were focused around the relatively short periods when the bills were working their way through Parliament. This is an important issue, as it could help to establish whether fears of Home Rule, and related political uncertainty, affected business decisions over the long term or if their main effect was to delay investment around the peaks of uncertainty.

To develop a continuous measure of how prominent the Home Rule debate was in the public sphere over time, we counted the number of press articles mentioning the term. This is similar in essence to the approach of Scott R. Baker, Nicholas Bloom, and Steven J. Davis, who look at how often particular words are used in newspapers to develop a measure of economic policy uncertainty.⁷⁶

We use two leading Irish newspapers, the *Freeman's Journal* and *Belfast Newsletter*, from 1856 to 1900. These broadsheets were chosen because of the uninterrupted availability of archival material for the period under consideration, wide circulation, and the balance of political viewpoints they represent: pro—Home Rule Irish nationalist (*Freeman's Journal*) and Northern (Ulster) anti—Home Rule Unionist (*Belfast Newsletter*). Figure 4 shows the proportion of articles that mention Home Rule in these newspapers.

In total, our two newspapers mention Home Rule in 31,100 articles. These articles take the form of opinion pieces, reportage of political speeches and parliamentary debates, and, in the case of the *Freeman's Journal*, notifications of meetings organized by voluntary associations supporting Home Rule. This content indicates the divisiveness of Home Rule in the North of Ireland in particular, with the pejorative term "Home Ruin" mentioned 271 times in the *Belfast Newsletter*, compared with just 24 times in the *Freeman's Journal*.

⁷⁵ Freeman's Journal, 26 Feb. 1886.

⁷⁶Scott R. Baker, Nicholas Bloom, and Steven J. Davis, "Measuring Economic Policy Uncertainty," *Quarterly Journal of Economics* 131, no. 4 (2016): 1593–636.

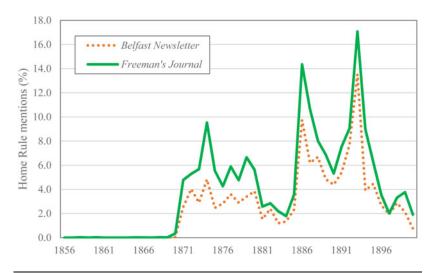


Figure 4. Proportion of articles mentioning "Home Rule," 1863–1900. Note: The actual number of articles mentioning "Home Rule" is standardized each year by the number of articles containing the generic word "the." (Sources: Calculated from the *Freeman's Journal* and *Belfast Newsletter*, 1856–1900, British Library Newspaper Archive.)

As Figure 4 shows, our measure of political uncertainty matches the historiography discussed above. While the term "Home Rule" is barely used in the 1850s and 1860s, it begins to appear consistently in the 1870s, particularly around the 1874 election. Its use declines somewhat around the start of the 1880s before rising dramatically in 1886, when the First Home Rule Bill was introduced. After the defeat of the bill, usage of the term declines substantially, but Home Rule still featured prominently as an issue, being mentioned in at least one thousand articles every year, until it peaked again in 1893 with the Second Home Rule Bill. With this bill's defeat there was a more substantial decline, with usage dropping by about 90 percent by 1900. These results suggest that Home Rule was a persistent issue for several decades but was much more pronounced during the years that the bills were discussed in Parliament.

Impact on Business Creation

We compared the ratio of business creation in Ireland to Scotland (adjusted for population and excluding the 1883 tramways promotion boom) against our measure of Home Rule intensity (Figure 5). Notably, the ratio falls considerably at the beginning of the 1870s, with the first real mentions of Home Rule, and increases during the early 1880s when the issue was not talked about as much. Then, around the

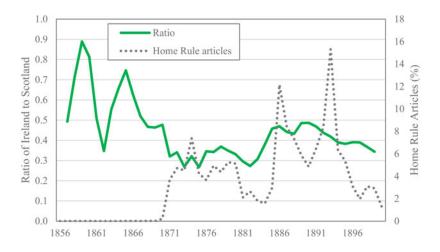


Figure 5. Ratio of number of companies registered in Ireland to those in Scotland, versus articles mentioning Home Rule. Notes: The ratio of company registrations in Ireland to Scotland is calculated. To focus on the issue of Home Rule, the data is adjusted for the different ratios in populations, tramway companies registered in the promotion boom in 1883 are excluded, and the data is expressed as a three-year moving average centered around the midpoint. The mentions of Home Rule is calculated as the proportion of articles in the *Freeman's Journal* and *Belfast Newsletter* that include this term. (Sources: Number of companies is calculated from individual company data collected from "Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies," House of Commons Papers. Number of articles mentioning Home Rule is calculated from the *Freeman's Journal* and *Belfast Newsletter*, 1856–1900, British Library Newspaper Archive. Population data from Census of Ireland 1851, 1861, 1871, 1881, 1891, 1901; Census of Scotland 1851, 1861, 1871, 1881, 1891, 1901.)

First Home Rule Bill in 1886, there seems to be a small decline in the ratio, before an increase in the late 1880s when discussion subsided for a few years. During the Second Bill in 1893 there is a notable decline in the ratio, and this persists even after discussion about Home Rule declines. This pattern suggests that Home Rule may have played at least some role in business creation decisions in Ireland.

A limitation of looking at the overall picture is that very different viewpoints existed within Ireland about the benefits and risks of Home Rule. People who were anti-Home Rule may have been less likely to begin a new enterprise, but those who were pro-Home Rule may have viewed developments positively, somewhat offsetting the impact on business creation.

To increase the precision of the analysis, we exploited regional variation in Home Rule attitudes. As shown in the election results of proand anti–Home Rule parties in Appendix 1 (see online supplement), clear differences are present between regions. The North (the six

counties of Antrim, Armagh, Down, Fermanagh, Londonderry, and Tyrone, which would later go on to form Northern Ireland) was predominantly anti—Home Rule and should therefore have been most concerned about its effects. The South (the remaining twenty-five counties, excluding Dublin) firmly supported Home Rule. We consider Dublin separately, partly because it was a major urban center that differed significantly from the rest of the South and partly because the commentary noted above suggests that many existing businessmen in the city were anti—Home Rule, while a large majority of Dublin's citizens were pro—Home Rule.

Table 2 shows a regional breakdown of companies by sector, with the anecdotal suggestions of the North specializing in textiles reflected in the data. Of 248 of these companies registered, 74 percent were in the North. There was a similar geographic concentration of shipping and navigation firms and in investment firms, such as those involved in trust companies or tea plantations. In the South, the companies were tilted toward agriculture and fishing, with 71 percent of such firms being located there. The majority of utility companies registered during this period to provide gas, lighting, and water were also in the South. The sectoral composition of companies registered in Dublin was quite broad based, representing a fairly substantial proportion of many industries but not dominating in them.

Regarding the number of companies registered each year, the North accounted for the highest number of firms in most years, but there is a notable decline in 1886, around the time of the First Home Rule Bill, before a recovery during the next few years. Another considerable decline occurred in 1893, around the time of the Second Home Rule Bill, before another substantial recovery thereafter, albeit with a dip toward the end of the century. For the South, there was a notable increase around 1883, associated with the tramways legislation, followed by a dip. There was a brief recovery and then a further decline, which hit its trough slightly earlier than in the North. It then reached a temporary peak, also slightly earlier than in the North. For Dublin, there was a similar pattern in the early 1880s, with the tramways boom visible, before a short fall and then a fairly sustained increase in company registrations until the late 1890s. Fluctuations in the South and Dublin in relation to the Home Rule Bills, particularly the Second Home Rule Bill in 1893, are therefore less clear, as expected.

Panel A of Figure 6 expresses the ratio of business creation in the North to the South. To focus in on the issue of Home Rule, it shows the period after 1870, is adjusted for population size, excludes the 1883 tramways promotion boom, and uses a three-year moving average centered around the midpoint year. The fluctuations in the

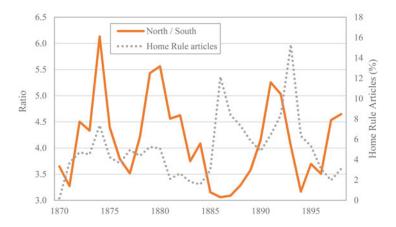
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Sector	Number of companies in Ireland	% in North (6 counties)	% in Dublin (1 county)	% in South (25 counties)	
Tea, coffee, & rubber	4	75.0	25.0	0.0	
Textiles	248	73.8	9.7	16.5	
Shipping & navigation	169	68.6	8.9	22.5	
Property, trusts, & investing	29	62.1	37.9	0.0	
Engineering & shipbuilding	35	51.4	31.4	17.1	
Banks, discounting, & lending	58	46.6	36.2	17.2	
Construction	67	43.3	31.3	25.4	
Merchants & retailers	314	40.1	35.0	24.8	
Iron, coal, steel, & oil	50	38.0	36.0	26.0	
Insurance	16	37.5	50.0	12.5	
Food & breweries	165	37.0	30.9	32.1	
Recreation	245	33.9	40.0	26.1	
Miscellaneous	154	32.5	44.8	22.7	
Manufacturing (other)	168	30.4	54.2	15.5	
Publishing	101	27.7	46.5	25.7	
Mining & quarrying	77	27.3	55.8	16.9	
Gas, lighting, & water	107	25.2	19.6	55.1	
Tramways & omnibuses	177	15.8	46.3	37.9	
Agriculture & fishing	91	11.0	17.6	71.4	

Source: Calculated from individual company data collected from "Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies," House of Commons Papers.

Notes: The numbers in each sector in Ireland is shown in the first column. The proportion of these companies based in each region is then expressed in the other columns; for example, 73.8 percent of textiles companies in Ireland were based in the North. Regions are defined as the North (the six counties that would become Northern Ireland), Dublin, and the South (the remaining twenty-five counties).

Panel A: Ratio of Companies Registered in North to South of Ireland excluding Dublin (adjusted for Population and Tramways Promotion Boom



Panel B: Ratio of Companies Registered in Dublin to the rest of the South of Ireland (adjusted for Population and Tramways Promotion Boom)

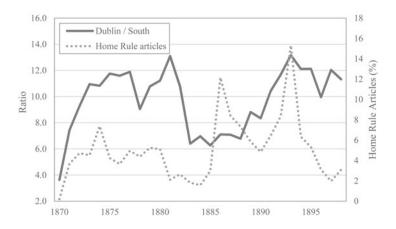


Figure 6. Companies registered in North and South of Ireland. Notes: The ratio of company registrations in the North and Dublin to the South is calculated. To focus on the issue of Home Rule, the data is adjusted for the different ratios in populations, tramway companies registered in the promotion boom in 1883 are excluded, and the data is expressed as a three-year moving average centered around the midpoint. The number of mentions of Home Rule is calculated as the proportion of articles in the *Freeman's Journal* and *Belfast Newsletter* that include this term. (Sources: Number of companies is calculated from individual company data collected from "Annual Returns of Joint Stock Companies Registered at the Office of the Registrar of Joint Stock Companies," House of Commons Papers. Population data is from Census of Ireland 1851, 1861, 1871, 1881, 1891, 1901.)

ratio seem to be connected to the intensity of discussion about Home Rule. The ratio falls to a low point around the first bill, before a recovery for a few years. This is then followed by another low point around the Second Bill and another recovery.

Panel B of Figure 6 shows the ratio of Dublin to the South but there does not seem to be as much of a relationship to Home Rule. There is a low point in the mid-1880s, around the first bill, but an increase thereafter, and the ratio actually peaks around 1893 and the Second Bill.

These results suggest that fears around Home Rule may have played a role in business creation in the anti-Home Rule North, among those who were most concerned about what impact it may have. In contrast, the impact elsewhere was more muted, consistent with the pro-Home Rule sentiment in these areas.

Comparison with Existing Businesses

The focus of our analysis has been on business creation, but, as a robustness test, to confirm whether Home Rule is a plausible explanation for the fluctuations that have been observed, we now also examine its impact on the perceived value of existing businesses. Grossman et al., in their construction of a stock market index for Ireland, mention the possibility that Home Rule may have sometimes played a role in stock price movement.77 We push this further, by developing market indices for regions within Ireland and an index for Scotland as a comparison, using data from the *Investor's Monthly Manual*.⁷⁸ The average number of companies in our index for the North is 9.5, for Dublin is 26.2, for the South is 11.1, and for Scotland is 88.7. Between 1869 and the end of November 1885, there was strong appreciation in each index, particularly in the North, with more modest increases in Dublin. Between the announcement that Gladstone was intending to pursue the First Home Rule Bill and the end of May 1886, just before the vote that rejected the bill, stock prices fell most markedly for companies based in the North (by 10.1 percent) and in Dublin (by 11.5 percent), with smaller declines in the South and in Scotland.

During the lull between bills, to the beginning of 1893, prices rebounded most strongly in the North, with gains elsewhere in Ireland also much stronger than in Scotland. With the introduction of the Second Bill, prices again fell sharply, particularly in the North with a

⁷⁷ Grossman et al., "Monthly Stock Exchange Index."

 $^{^{78}}$ Share price data obtained from the *Investor's Monthly Manual*. The location of companies was determined by their headquarters, as reported in the IMM. Each stock price index is weighted by market capitalization. The Guinness company is not included as it was headquartered in London.

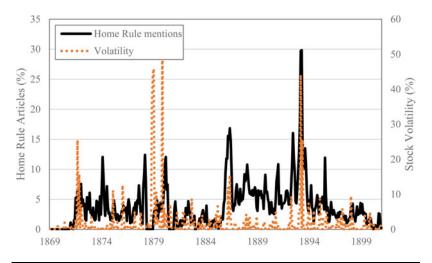


Figure 7. Number of articles mentioning "Home Rule," compared to volatility of a Northern Irish Stock Market Index, 1863–1900. Notes: The monthly capital gains on a stock market index of companies based in the North are calculated and then squared to estimate stock market volatility. The number of monthly mentions of Home Rule is calculated, focusing on the Belfast Newsletter, to also center on the North. The location of companies was determined by their headquarters, as reported in the Investors' Monthly Manual. (Sources: Number of articles mentioning Home Rule is calculated from the Freeman's Journal and Belfast Newsletter, 1856–1900, British Library Newspaper Archive. Northern Irish Stock Market index is calculated based on individual stock prices from the Investors' Monthly Manual, 1863–1900.)

decline of 9.4 percent to the end of April. This is consistent with comments from the Belfast Chamber of Commerce, which noted that "it is notorious, and is forced on the attention of every observer, that there has recently been a most marked fall in the best Irish stocks, and that local shares, which sold freely until the 13th February, are for the present almost unsaleable; and we beg to remind the Chamber that precisely the same sort of depression was created by the introduction of the Home Rule Bill of 1886."⁷⁹

During the process of the Second Bill, prices also declined in the rest of Ireland, but more modestly, and barely changed in Scotland. With the defeat of the bill in the House of Lords later in 1893, and a reduction in the concerns around Home Rule during the remainder of the decade, stock prices recovered.

This analysis is based on stock prices, but a similar pattern emerges if expressed in terms of total returns including dividends. Another

⁷⁹ Belfast Chamber of Commerce, Government of Ireland Bill: Report of the Council, Presented to and Unanimously Adopted by an Extraordinary General Meeting of the Belfast Chamber of Commerce, 1893, JSTOR, accessed 2 Nov. 2022, https://jstor.org/stable/60214523.

measure that can be considered is stock volatility, measured as the square of monthly deviations in stock price changes, which may give insights into the amount of uncertainty in the market.

Figure 7 plots the number of mentions each month of Home Rule in newspapers against the monthly volatility of the Northern Irish stock market index. The peaks in stock volatility in 1886 and 1893 clearly match up with the spikes in mentions of Home Rule. Interestingly, there had been another peak in stock volatility around 1878, which was connected to the City of Glasgow bank failure. This suggests that the uncertainty generated by the Home Rule Bills was, for the North of Ireland, of a similar order of magnitude as concerns about a potential banking crisis.

Conclusion

In this article, 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, that instability peaked with the introduction of the First and Second Home Rule Bills to the British Parliament in 1886 and 1893, respectively. We also find that the effects of this Home Rule—associated political instability were regional and had the most 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.

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. So 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 industrial decline and subsequent economic stagnation may have earlier roots than generally discussed. St

⁸⁰ Alberto Alesina, Sule Özler, Nouriel Roubini, and Phillip Swagel, "Political Instability and Economic Growth," *Journal of Economic Growth* 1, no. 2 (1996): 189–211; Richard Jong-a-Pin, "On the Measurement of Political Instability and Its Impact on Economic Growth," *European Journal of Political Economy* 25, no. 1 (2009): 15–29; Ari Aisen and Francisco Jose Veiga, "How Does Political Instability Affect Economic Growth?," *European Journal of Political Economy* 29 (2013): 151–67.

⁸¹ Esmond Birnie and David M. W. N. Hitchens, Northern Ireland Economy: Performance, Prospects and Policy (Farnham, 1999), 4.

Supplementary material

The supplementary material for this article can be found at https://doi.org/10.1017/S0007680522000885

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ROBIN J. C. ADAMS is a Leverhulme Early Career Research Fellow at Queen's University Belfast. He is the author of Shadow of a Taxman: Who Funded the Irish Revolution? (OUP, 2022).

GARETH CAMPBELL is professor of finance at Queen's University Belfast. His research focuses on historical asset pricing and corporate finance.

CHRISTOPHER COYLE is senior lecturer in finance at Queen's University Belfast. His research analyses financial market structure and development.

JOHN D. TURNER is professor of finance and financial history at Queen's University Belfast. He is the author of Banking in Crisis: The Rise and Fall of British Banking Stability, 1800 to the Present (CUP, 2014) and co-author of Boom and Bust: A Global History of Financial Bubbles (CUP 2020).