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SIRE DISCUSSION PAPER

SIRE-DP-2013-109

Irish Land Bonds: 1891-1938

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December 2013

Abstract

This paper introduces a new database on Irish land bonds listed on the Dublin Stock Exchange from 1891 to 1938: it outlines the nature of these bonds and presents data on their size, liquidity and market returns. These government-guaranteed bonds arose during a period when the possibility of Irish secession from the United Kingdom appeared ever more likely, and were used to finance the transfer of land ownership from landlords to tenants in Ireland (North & South). Movements in the prices of these bonds can help to understand how financial markets responded to events in the early economic and political history of the Irish Free State, including Irish partition, Independence, Civil War and de facto default. Understanding these issues has contemporary relevance for regions in Spain (Catalonia, Euskadi), Great Britain (Scotland) and Belgium (Flanders).

KEYWORDS: Irish economic history, land reform, land bonds, Dublin Stock Exchange.

JEL CLASSIFICATION: N23, N24, N53, N54, G15

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*We gratefully acknowledge comments from Martin Chick, Vincent Comeford, David Greasley, Aidan Kane, Cormac Ó Gráda, John Turner and seminar participants in the Economic History and Social Society of Ireland 2013 Annual Conference and in the 'Landlords, Tenants and their Estates in Ireland: 1600-2013' NUIG 2013 Conference, and excellent research assistance from Della Cummings. This research is part of a wider project 'A messy Divorce? Irish debt and default, 1891-1938' supported by the Leverhulme Trust. The views in this paper are solely the responsibility of the authors and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or of any other person associated with the Federal Reserve System.

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1 Introduction

How did financial markets react to the Irish Home Rule crises, War of Independence, Partition and Civil War? How did these markets respond to the Irish government's decision to 'default' in 1932? More generally, what were the financial implications for Ireland of declaring political and economic independence from the United Kingdom of Great Britain and Ireland (UK)? All these questions are central to understanding key developments in Irish history in the early twentieth century. To provide a platform for exploring these research questions, and filling a lacuna in the study of Irish interest rates, this paper introduces a new database of Irish land bond prices recorded daily on the Dublin Stock Exchange from 1891, when land bonds were first issued, to 1938, when the Anglo-Irish trade agreement was signed.[1] We describe the historical economic and political context in which these government-guaranteed bonds arose and present some descriptive statistics on the bonds, including their size, liquidity and market returns.

Irish land bonds arose in the nineteenth century as part of government efforts to implement land reform, a central issue in Irish politics and political economy in the late nineteenth century. Around that time, the UK government saw tenant ownership as the long-term solution to problems associated with the land ownership structure in Ireland. Successive acts of parliaments (UK and Irish Free State) enabled tenant-farmers to purchase land from landlords. From 1891 onwards these sales were financed by government-guaranteed bonds, but this technicality has generally been overlooked due to the misperception that the sales were financed directly by state money (Lyons 1971, p. 214 and Ferriter 2004, p. 368).[2]

Although Irish land bonds were not a significant fraction of British sovereign obligations, their nominal value was a huge liability for the fledgling Irish economy. Even at its peak, the ratio of the outstanding value of land bonds to the outstanding value of British consols and exchequer bonds was only about 7 percent, and the outstanding

[1] The lack of completeness in the history of Irish interest rates is evident in Homer & Sylla (2005, pp 537-538), where Irish government bond yields are not reported until 1952. Although pre-independence issues were referred to as 'stock', as noted by Homer & Sylla (2005, p.181), 'bonds were and are called stocks'.

[2] Government-guaranteed debt is not always treated as sovereign debt, but land bonds would almost certainly be considered sovereign debt by ESA95 modern accounting standards (Eurostat 2013). See Eurostat (2009) for an example of the technicalities and parameters that were used to determine that some recent Irish government-guaranteed debt was not considered sovereign debt.

value of British government guaranteed land bonds never rose above 4 percent of British GDP. However, we show later that the outstanding value of land bonds peaked at over 60 percent of estimated Irish GDP—and represented about 40 percent of Irish GDP at the time of partition—a considerable financial burden even for modern emerging economies.

Repayment of land bonds remained an obligation for Ireland throughout a turbulent period of history.[3] The newly created Free State was obligated for four principal sources of debt: Irish Republic Bond-Certificates (issued to fund the War of Independence); Land Bonds; a share of Imperial Debt; and new issuance. Although the government was released from its obligation to repay its share of Imperial Debt under the 1925 Confirmation of Agreement Act, the Free State remained obligated for land bond payments.[4] Initially, the new Irish government continued transfer 'annuities'—tenant-purchasers' repayments of land purchase loans—to the British exchequer. However, repayment became a politicised issue in the Free State (I.P.P. 1931) and in July 1932 the Irish government 'failed to honour' the repayments, resulting in a de facto default on debt obligations (I.P.P 1932).[5]

Thus, with their close ties to the Irish economy and particularly the important agricultural sector, land bond prices present several opportunities for empirical research. First, they provide a unique opportunity to assess financial market expectations about and reactions to political and economic developments during the formative years of the Irish Free State.[6] Second, the secession of southern Ireland from the United Kingdom gives an opportunity to explore the potential consequences of a break-up of a politically, fiscally and monetarily integrated polity, with contemporary relevance for regions in Spain (Catalonia, Euskadi), Great Britain (Scotland) and Belgium (Flanders). Third, although land bonds were not issued by an autonomous region, an analysis of their prices' comovement with colonial bonds would complement existing empirical analysis into the

[3] The intention of the 1920 Government of Ireland Act was for land annuities to be 'gifts' to the respective exchequers, North and South, and for land bond dividend and sinking fund payments to be made by the Imperial Government (B.P.P. 1920). However, since the act was not implemented in the South, only the North availed of this 'gift'.

[4] The Imperial Debt cancellation is widely believed to have been a concession for the acceptance of the Boundary Commission Report and permanent partition (Lee 1989, p. 145 and Ferriter 2004, p. 294).

[5] Tenant-purchasers were, however, not exonerated from repayments, but instead paid annuities (halved) to the Irish exchequer (Lee 1989, p.186). Contemporaneously in 1932, efforts were made to honour bond certificates issued in the US to fund the War of Independence (Carroll 2002, pp 84-91).

[6] Fluctuations in government bond prices (yields) are frequently used to establish financial market expectations and to illustrate commentary on state solvency and economic conditions. Over a similar historical time period as this paper, see Mauro et al. (2006) and Ferguson (2006).

presence of an 'empire effect' across colonial bonds (Ferguson & Schularick 2006). And fourth, a study of the relationship between land bond prices and commodity prices would deepen our understanding of land reform in agriculturally-dependent emerging economies.

Empirical research on Irish land bonds complements existing studies of other Irish financial markets. Given the rural nature of the Irish economy, studies of land bonds use distinctly 'Irish' traded securities, similar to recent studies of historical Irish equity markets including Hickson & Turner (2008) and Grossman et al. (2013), and especially to Ó Gráda (1994)'s study of weekly prices of Irish and British securities from 1930 to 1932, which examined the effect the post-default Anglo-Irish Economic War had on the yield of Irish government bonds.[7] More generally, land bonds are a novel historical case study of government guaranteed bonds that were traded during a period of extreme crises.[8]

The rest of our paper is structured as follows: Section 2 describes the development and details of state-sponsored land purchase schemes in Ireland. Section 3 describes our new data on land bonds and section 4 concludes.

2 State-Sponsored Land Purchase: 1870 to 1938

Government land policy evolved significantly during the late nineteenth century in an effort to address the problems associated with the land ownership structure in Ireland, at that time a central issue in politics and political economy known as the 'Irish Land Question'.[9] Firstly, innovations to state land policy aimed to redistribute agricultural income from landlords to tenants. Under the 1881 land act the state became an (arguably biased) arbitrator in landlord-tenant contracts and universally reduced rents paid by tenants. Secondly, state land policy shifted to the provision of loans to tenants to purchase their holdings and, from 1870 onwards, the state played an active role as a mortgage provider to the agricultural sector of the Irish economy. To finance these loans, the

[7] In addition, land bonds relate to studies of the effects of debt default in the 1930s (Eichengreen & Portes 1986, Obstfeld & Taylor 2004) and the Anglo-Irish Economic War (O'Rourke 1991, Ó Gráda & Neary 1991). Our dataset on land bonds is particularly helpful to understand the War, as they were central to that dispute but were not included in the data used in Ó Gráda (1994).

[8] Similar case studies include sovereign bond trading during the US Civil War (Willard et al. 1996, Brown Jr. & Burdekin 2000), World War II (Frey & Kucher 2000, Oosterlinck 2003, Frey & Waldenstrom 2004) and the Israel-Palestinian Conflict (Zussman et al. 2008).

[9] See Appendices A and B for an extended discussion of the motivations and development of land policy, including the land league, the 1870 Land Act and the 1881 Land Act.

government guaranteed land bonds that were tradeable in several markets.

In this section, we provide details on the land purchase schemes, including their size, operation and the various obligations imposed on tenant-purchasers.[10] We also set out the contemporaneous private options for land purchase available to prospective Irish tenant-farmers to aid our explanation of the demand for state-sponsored land purchase schemes. Finally, we describe the financing arrangements for these schemes, in particular the issuance of government-guaranteed land bonds.

2.1 Land purchase schemes: size and operation

A number of acts were passed between 1869 and 1934 which enabled tenants to purchase their holdings in Ireland.[11] In total, as shown in table 1, these acts led to advances worth over £127 million to purchase almost 15 million acres on 433,395 holdings in the South and North of Ireland.[12] The same table reports that the amounts advanced varied over the different schemes, but the third and fifth columns show that advances per acre and per holding generally declined over the schemes. By far the largest scheme related to the Land Act of 1903, with over twice as much advanced as the next largest scheme. More generally, pre-partition land acts accounted for 77 percent of the funds advanced on land purchase in Ireland and of the pre-1920 acts the 1903 act was the most significant with 74 percent of total funds advanced.

From 1881 onwards the state land purchase schemes were overseen by the Land Commission.[13] Initially all land purchase arrangements were negotiated freely between landlords and tenants, with state bodies providing the funds to prospective tenant-purchasers. However, the 1903 Land Act introduced an element of compulsion by giving the state the power to force tenants to purchase land.[14] Subsequent legislation introduced compulsory purchase powers for the agencies of state-funded land purchase whereby they had powers to compel landlords to sell their land: this was done for the explicit purpose of transferring land ownership. Compulsory purchase of land was introduced in 1907 under

[10] This section draws on the work of McLaughlin (2009).

[11] There were also a number of Acts which provided loans for buildings and permanent improvements on holdings: Bailey (1917), and Sheehan (1993).

[12] The island of Ireland has almost 21 million acres of land.

[13] Two other bodies also facilitated land purchase, the Congested Districts Board (CDB) established by the 1891 Land Act and the Estates Commissioners established by the 1903 Land Act.

[14] Irish land act, 1903 (3 Edw. 7.) c. 37, section 19.

Table 1: Land purchase schemes 1869–1923: advances, acreage and holdings

Legislation	Amount of advances (£)	Area (acres)	Advances per acre (£)	Number of holdings	Advances per holding (£)
Land Acts before 1891	7,717,498	737,359	10.5	17,098	451.4
Land Acts 1891–1896	10,853,501	1,311,673	8.3	41,562	261.1
Land Act 1903	68,895,595	6,929,805	9.9	195,000	353.3
Evicted Tenants Act 1907	389,046	25,370	15.3	735	529.3
Land Acts 1909–1919	11,828,257	2,271,979	5.2	61,000	193.9
CDB Cash 1891–1920	194,005	28,482	6.8	1,000	194.0
Land Act 1923-38	27,268,954	3,655,308	7.5	117,000	233.1
Total	127,146,856	14,959,976	8.5	433,395	293.4

Note: Excludes all vendor bonuses, advances made under the Labourers (Ireland) Acts, 1906-14, and the Irish Church Act, 1869. Also excludes land improvement investments made by the Land Commission and CDB.

Source: Commission of Inquiry into Banking, Currency and Credit 1938 and authors' calculations

the Labourers Act and the Evicted Tenants Act and extended to wider land purchase policy in 1909 by the Land Law Act.[15]

For the tenants, the obligations of the schemes varied considerably and are discussed in detail in the next section. In general, tenant-farmers repaid their loans with regular mortgage payment "annuities" comprising interest and principle repayments to the administrative body responsible for collection (Land Commission).[16] These annuities were collected into a sinking fund that was used to pay bi-annual dividends and retire some of the outstanding bonds at the discretion of the government.[17]

2.2 Land purchase schemes: tenant obligations

Table 2 summarizes the specific tenant obligations associated with each land act. Over the period 1870 to 1909, the state gradually increased the portion of the mortgage it was willing to lend from 66 percent to 100 percent. Initially, under the 1869 to 1881 acts, the state did not finance the entire purchase price, and it was up to the tenant to

[15] An Act to amend the Law with respect to Small Holdings and Allotments, 1907 (7 Edw. 7), c. 54, section 22; Evicted Tenants (Ireland) Act, 1907 (7 Edw. 7.), c. 56, section 1.; Irish Land Act, 1909 (9 Edw. 7.) c. 42, sections 43, 59 and 60. Compulsory purchase powers were a constant feature of land purchase legislation in post-partition Ireland (Dooley 2004).

[16] The term mortgage is not anachronistic as advances made under the schemes were secured on the land, and if a borrower defaulted the land would be foreclosed. According to a contemporaneous lecturer in land law, 'the money is secured by what is practically a first mortgage of the tenant's holding, with a provision for re-payment of the debt by instalments' (Walker 1908, p.140).

[17] The performance of the land purchase account and sinking fund were published annually in British Parliamentary Papers from 1906 until 1976: See *Irish Land Purchase Fund* (B.P.P. 1906, 1977).

Table 2: Initial land purchase contracts for tenants, 1869-1933

Land act	Share of mortgage[a] (%)	Loan term (yrs)[b]	Annuity rate (%)	Interest rate (%)	Sinking fund (%)	Stock issue	Vendors paid in stock	Limit (£)
1869	75	32[c]	4.00	-	-	No	N/A	-
1870	66	35	5.00	-	-	No	N/A	-
1881	75	35	5.00	3.5	1.5	No	N/A	-
1885	100	49	4.00	3.125	0.875	No	N/A	-
1891	100	49	4.00	2.75	1.25	Yes	Yes	-
1896	100	-[d]	4.00	2.75	1.25	Yes	Yes	-
1903	100	68.5[e]	3.25	2.75	0.50	Yes	No	1,000
1909	100	66[e]	3.5	3.00	0.50	Yes	Yes	3,000
1923	100	66[f]	4.75	4.50	0.25	Yes	Yes	3,000
1925[NI]	100	66[f]	4.75	4.50	0.25	Yes	Yes	3,000
1933	100	66[f]	4.75	4.50	0.25	Yes	Yes	3,000
1934	100	71.5[g]	4.25	4.00	0.25	Yes	Yes	3,000

[a] Refers to the percentage of the agreed purchase price which the state would advance under the act.

[b] Loan terms (annuity repayment) estimated by contemporaries based on the expected performance of sinking funds.

[c] 64 half-yearly repayments.

[d] The 1896 land act introduced the concept of decadal reductions on the repayment of annuities.

[e] Estimated by B.P.P. (1908*b*) as the time it takes a sinking fund to reach £100 stock.

[f] Estimated following the methodology outlined by B.P.P. (1908*b*) as the time it takes a 5 shilling (£0.25) sinking fund, accumulating at rate of 4.50%, to reach £100 stock.

[g] Estimated following the methodology outlined by B.P.P. (1908*b*) as the time it takes a 5 shilling (£0.25) sinking fund, accumulating at rate of 4.00%, to reach £100 stock.

Source: Various land acts, Irish Land Purchase Finance Report 1908 and authors' calculations.

raise the residual capital. Tenants could potentially use their savings, take out additional loans, or sell their assets, but it appears that only the wealthier tenants were able to take advantage of this facility. From 1885 onwards government support of land purchase was more prominent, and this can be seen in the increase in the percentage of the mortgage which the state advanced to tenants. Government bodies from 1885 onwards were issuing loans worth 100 percent of the purchase price of a given holding. This is significant as it no longer excluded tenants who had insufficient capital, and the state was made the primary mortgagee on the land.[18]

The higher coverage of the purchase price by the state was coupled with longer loan terms, even beyond the life-expectancy of the borrower. Initial mortgage loan terms were roughly half those under later land acts. The land acts from 1903 onwards did not specify a definite term for a loan but instead stated that 'the purchase annuity shall be paid until the whole of the advance, in respect of which it is payable, is ascertained in manner prescribed by the Treasury to have been repaid.'[19] In the case of the Free State acts the Minister for Finance decided 'the manner and at the times' which the loan would amortize. In all cases the amortisation of loans was based upon the performance of the sinking fund. The 1903 and 1909 acts issued loans with terms of 68.5 and 66 years. Indeed, it is very likely that the loan term would have been greater than the borrower's life expectancy.[20] Thus the average tenant-purchaser with a mortgage term of 66 or 68.5 years would have bequeathed both the land (farm) and the loan to the next generation.[21]

As the intermediary between the tenant-purchasers and financial markets, the government used its reputation to borrow capital on behalf of the tenant-purchasers on favourable terms. The government could offer competitive rates to borrowers and still earn a spread on the cost of capital (the difference between columns 4 and 5 in table 2). Between 1869 and 1896 land purchase annuities were around 4.5 percent, competitive with the best available market rates. Some evidence on private mortgages in the early twentieth century suggests that rates charged for mortgages were between

[18] Stipulations in the acts restricted the amount that other mortgagees, namely private mortgage lenders, could place on the land. Irish Land Act, 1903 (3 Edw. 7.), c. 37, section 54, sub-section 2.

[19] Irish Land Act, 1903 (3 Edw. 7.), c. 37, section 45, sub-section 2.

[20] The percentage of the Irish population that was over the age of 35 in 1901 and 1911 was 34 and 38 percent respectively. According to British life tables, 35 year old males would have been expected to live another 31 and 32 years in 1901 and 1911 respectively: ONS (Decennial Life Tables - Period expectations of life from English Life Tables: Nos. 1 to 16.

[21] For a discussion on intergenerational inheritance see Guinanne (1997, pp 146-151).

4 and 10 percent (B.P.P. 1914, paragraph 823, p. 357). Further evidence from building societies in 1872 confirmed that interest rates on mortgages ranged from 4.5 to 7 percent (McLaughlin 2013*a*). Moreover, the differential between the rates paid and prevailing long-term interest rates decreased under the various acts. As long-term interest rates increased during the war, the relatively low interest rates paid by those purchasing under the 1903 and 1909 acts became even more attractive because their fixed rates were well-below market rates.

The 1903 Land Act stated that 'every advance shall be repaid' and repayment was supposed to be in accordance with the terms outlined in table 2.[22] However, in the long run, tenant-purchasers in the Irish Free State did not have to fully meet their debt obligations, as the terms of repayment were 'fundamentally altered' (I.P.P. 1934). This is because the 1933 Land Act permanently reduced all annuity payments by in the Free State by 50 percent and also cleared arrears of defaulting purchasers under the pretext that tenant-purchasers were overburdened by their debt.[23] The effect of the halving of the annuities can be seen in table 3 where land bonds, no longer covered by annuities are classified as 'deadweight debts' (I.P.P. 1938, p. 311).

2.3 Land purchase schemes: private alternatives

Without state intervention there would have been no alternative means to purchase land on such a scale for the majority of borrowers. The lending models of contemporary financial institutions, namely Loan Fund Societies, Joint Stock Banks (JSBs) and Raiffeisen (agricultural credit) societies, were based on personal security, with only limited terms available to tenant-farmers due to the risk of death. Private individuals who typically used solicitors as intermediaries did offer mortgages, but their availability was not widespread (B.P.P. 1914, paragraph 883, p. 361). Moreover, evidence from the 1914 report on agricultural credit suggests that only the wealthier farms had access to such mortgages. Curtis (1980, p. 339-341) acknowledges that landlords with large and wealthy estates could easily obtain private mortgages in the period before 1877, as land (mortgage loans) was deemed to have been the 'soundest possible investments'.[24]

[22] Irish land act, 1903 (3 Edw. 7.) c. 37, section 45, sub-section 1.

[23] Land Act, 1933/38 [Éire], sections 12-27.

[24] Guinnane & Miller argue that the 1903 and 1909 land acts reduced the capitalisation of mortgage land for purchasers compared with the traditional 'tenant right'. However, they do not elaborate on who

Table 3: Free State Debt balance sheet, 31st March 1937

	Items (£)	Totals (£)		Items (£)	Totals (£)
I. Debts Outstanding			*I. Liquid Assets*		
(a) Land Bonds	26,796,005		(a) Exchequer Balance	2,058,051	
(b) Second National Loan	6,161,088		(b) Savings Certificate balances	2,688,395	
(c) Third National Loan	5,621,034		(c) Sinking funds etc	50,550	
(d) Fourth National Loan	5,802,578				4,796,996
(e) 4 % Conversion loan	6,939,000		*II Productive Assets*		
(f) 5% Conversion stock	5,750		(a) Telephone capital	915,556	
(g) 3 1/2 % compensation stock	21,606		(b) Shannon Electricity Fund	5,994,130	
(h) Exchequer Bills	500,000		(c) Electricity Supply Board	4,894,570	
(i) Dáil Internal loan	4,743		(d) Local Loans Fund	7,273,237	
(j) Savings Certificates	10,528,846		(e) Land Bonds	11,921,377	
(k) Annuity to British Govt.	4,769,289				30,998,870
(l) Telephone Capital	915,556				
(m) Urban Housing	3,361,751		*III Gross Deadweight Debt*		
(n) Rural Housing	1,631,311		(a) Budget Deficits	15,459,843	
		73,058,557	(b) Property Compensation paid in stock	1,570,550	
II Moneys provided for Debt Redemption			(c) Discounts on National Loans	1,302,199	
(a) Net allocation to Sinking Funds	6,586,917		(d) Dáil Internal Loan	487,399	
(b) Interest thereon etc	667,680		(e) Dáil External Loan	537,491	
(c) Unapplied Sinking fund of First National Loan	1,003,882		(f) Land Bonds	14,874,628	
		8,258,659	(g) Annuity to British Government	4,769,289	
			(h) Road Fund	1,114,055	
			(i) Unemployment fund	16,000	
			(j) Urban Housing	3,361,751,	
			(k) Rural Housing	1,631,311	
			(l) Other Items	396,894	
					45,521,350
		81,317,216			81,317,216

Source: Commission of Inquiry into Banking, Currency and Credit, 1938

As the majority of farms in Ireland were very small, they would not have been able to access private mortgage funding to purchase land, and if they were the terms would not have been as generous as those of the state.[25] The 1914 report on agricultural credit compared the situation in Ireland with that on the continent where mortgaging of smallholdings was more prevalent (B.P.P. 1914, pp 334-338). However, cooperative building societies were not found in provincial towns in Ireland, but some building societies, most notably the ICS, made loans throughout island (McLaughlin 2013*a*). Furthermore, cooperative banks did not make long-term mortgages as they did on the continent and savings banks in Ireland did not issue loans (McLaughlin 2013*b*, Colvin & McLaughlin 2013).

JSBs in Ireland were reluctant to make long-term loans on mortgage security. This was due to a number of complications, mainly the risk associated with long-term lending, illiquidity of landed assets, and the cost of determining property rights.[26] Illiquidity of loans backed by land was common at the time, since there was no ability to securitize such loans, which was a challenge to risk management given the banks' liability structure and the absence of a central bank with lender of last resort powers.[27] There was also the problem of sale of land in the event of default, and in Ireland this was a significant deterrent to the entry of the JSBs in the mortgage market. This became obvious in the 1926 banking commission as evidence was shown that the sale of foreclosed land was difficult due to social pressure on buyers (I.P.P. 1926-27, pp 21-22). Therefore, mortgage assets were practically worthless if a borrower defaulted on loan repayments.

State entry into the mortgage market was a novel approach to solving the lack of

mortgage providers were as they clearly show that Joint Stock Banks did not engage in mortgage lending (Guinnane & Miller 1997, table 3, p. 603, 605-606).

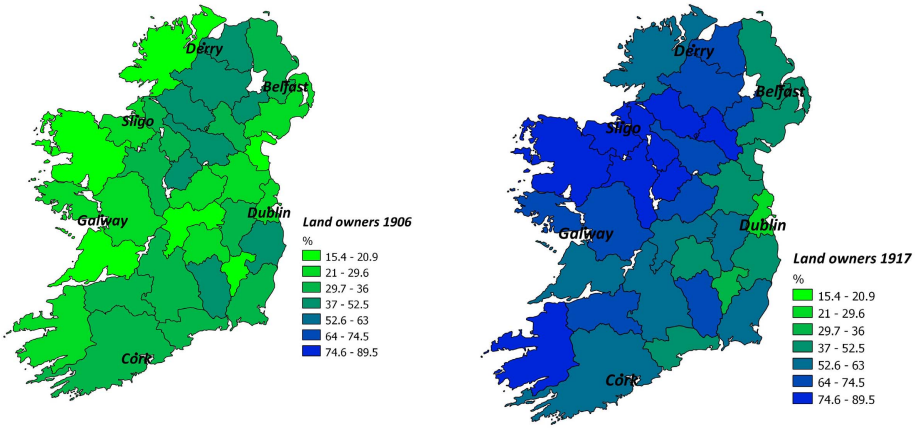
[25] A mortgage advertisement appeared in *Thom's Directory* in 1881 for ' £10,000 and upwards on fee-simple landed properties' with interest ranging between 'four to four and a half percent'. ('Advertisement of J.A. O'Suillivan, Insurance, Mortgage and Investments offices', *Thom's Directory* 1881, p. 39.) Advances were made on 'on fee-simple landed properties...Mortgages of life interests, Reversions, Leasehold, and other approved Security'. Although one advertisement is not representative of all mortgage lenders, this advertisement gives an indication of the services that mortgage providers offered.

[26] Registration of deeds and titles were not kept in an orderly fashion and it is reported that it would take days and weeks to search for specific deeds and titles, i.e. a high cost. This cost could be reflected in a high opportunity cost if the individuals performed the search themselves, or in the form of a direct cost if they hired a solicitor to do the search.

[27] The Bank of Ireland was ostensibly a central bank and could have acted as a lender of last resort, but its role in the collapse of the Munster Bank suggests that it was not a willing lender of last resort (Ó Gráda 2003, 2012).

credit available to would-be tenant-purchasers. State mortgage loans seem to have been based on a policy of social entitlement, disregarding the commercial considerations that caused private lenders to hesitate. Figure 1 illustrates the effectiveness of government intervention in the land market: In 1906 only a small share of tenant-farmers were owners of their land, but by 1917 a large share of the tenant-farmers of Ireland were owners of their land. This was especially pronounced in the west and south-west of the island.

Figure 1: Land owners as a percentage of landholdings: 1906 and 1917



Source: B.P.P. (1908a) and B.P.P. (1921)

2.4 Land purchase schemes: tenant demand

In the absence of private alternatives to the attractive terms and accessibility offered by the land purchase schemes, it is unsurprising that there was keen interest from prospective tenant-purchasers. Indeed, it appears that the appetite for the the generous terms on offer under 1903 Land Act was underestimated, with the Land Commission understaffed and unable to deal with the demand. Initially there were not enough funds available to purchase holdings, which in turn created a backlog of cases; £5,000,000 was made available per annum but the demand exceeded this amount (Cosgrove 2008, p.148).

Nevertheless, despite their apparent appeal, some contemporary opinion seems to have been hesitant about borrowing funds from 'London'. For example, Cosgrove (2008, pp 162-163) stated that there were '...doubts held by some tenants who perhaps realised that a government in Dublin or London would not be influenced as easily as the local landlord. Unlike a benevolent landlord, the government would demand that land purchase annuities be paid in full and on time, no matter how good or bad an agricultural year had been'. However, in reality democratically elected governments can be influenced, based upon the fact that the borrowers are also voters. The extent of voter power determines the influence on the elected representative bodies. The scale of influence of the Irish voters to revise their debt obligations and cancel arrears in a UK legislative assembly would not be the same as the case where the Irish electorate have their own assembly, dominated by agrarian interest groups. The same cannot be said of landlords who would have been under no direct political pressure, vis-á-vis an electoral mandate, to reduce rents, although a landlord may have been sympathetic to a tenant's plight and granted some respite. This is also a key distinction between a public and private lender; private lenders would not have any political obligations to alter loan repayments. Loans could be renegotiated in order to minimise losses, but private lenders would not be as willing as the state to completely absolve debt obligations, especially on a grand scale.

2.5 Land purchase schemes: financing

From 1891 to 1909, state purchases under the land acts were financed by the issue of government-guaranteed land bonds and were not financed out of UK exchequer funds.[28] John Edward Vernon, a governor of the Bank of Ireland, was one of the first people to suggest that the government raise money for land purchase through the issue of government-backed bonds (B.P.P 1882, Q. 4191-4193). Vernon viewed the fact that there was a large amount of money held on deposit in the JSBs as evidence 'that there is an element of wealth there which might be tapped and applied to the purposes of the Land Commission' (B.P.P 1882, Q. 4192). When he was asked what he considered would be 'the effect of bonds of that kind would be upon the general state of Ireland, if held by the

[28] This is a key distinction between the limited Highland land reforms in Scotland and those in Ireland, as Scottish Crofter Acts were imitations of the 1881 land act and did not extend land purchase schemes á la the 1891 and 1903 land acts (Cameron 1996, 37-38).

people of that country?' he replied that he thought the effect 'would be very favourable to the stability of the government, and the peace and order of the country (B.P.P 1882, Q. 4214).' Vernon also suggested that the issuance of land bonds would restore order to the countryside as the bonds would 'connect them with the primary security on which they would be charged, viz. the land itself, that is, the land sold to the occupiers' (B.P.P 1882, Q. 4215). Such a means of raising funds to finance mortgage lending was not an option to the private market in Ireland, and as such capital would have to be raised elsewhere.

The land purchase schemes began to issue bonds to fund payments in 1891. The initial bonds were issued with a coupon rate of 2¾ percent,[29] increased to 3 percent under the 1909 act[30] and further increased to 4½ percent under land acts in the Irish Free State and Northern Ireland in the 1920s and reduced to 4 percent under the 1934 land act in the Free State.[31] Under the 1891 and 1896 acts, vendors (landlords) were paid only in government-guaranteed land stock.[32] Landlords could then sell these bonds in the market or retain the bonds and receive the bi-annual dividend on the stock.[33]

This structure of financing land purchase by the issue of government-backed bonds was not sustainable. Consols traded below par after 1900, and each subsequent issue of land bonds was sold below par.[34] Evidence from the Runciman report in 1908 suggests that there was a significant divergence between the Consol price and the price for the guaranteed land stock (B.P.P. 1908*b*). This seems to have been caused by the amount of land stock issued between 1903 and 1908, and the fact that there were no new Consol issues after 1902 (B.P.P. 1908*c*, p. 11). This meant that there was a shortfall in the finances which the Runciman report estimated would be around £20 million over the 68.5

[29] Purchase of land (Ireland) Act, 1891 (54 & 55 Vict.) c. 48, section 1, and Irish land act, 1903 (3 Edw. 7.) c. 37, section 28.

[30] Irish land act, 1909 (9 Edw. 7.) c. 42, section 1.

[31] Land Act 1923, no. 43 [Éire], sections 1, 2, 9, 30; Northern Ireland Land Act 1925, (15 & 16 Geo. 5.), c. 34 [UK], sections 1, 3; Land Act 1933, no. 38 [Éire]; Land Bond Act 1934, no. 11 [Éire], section 6.

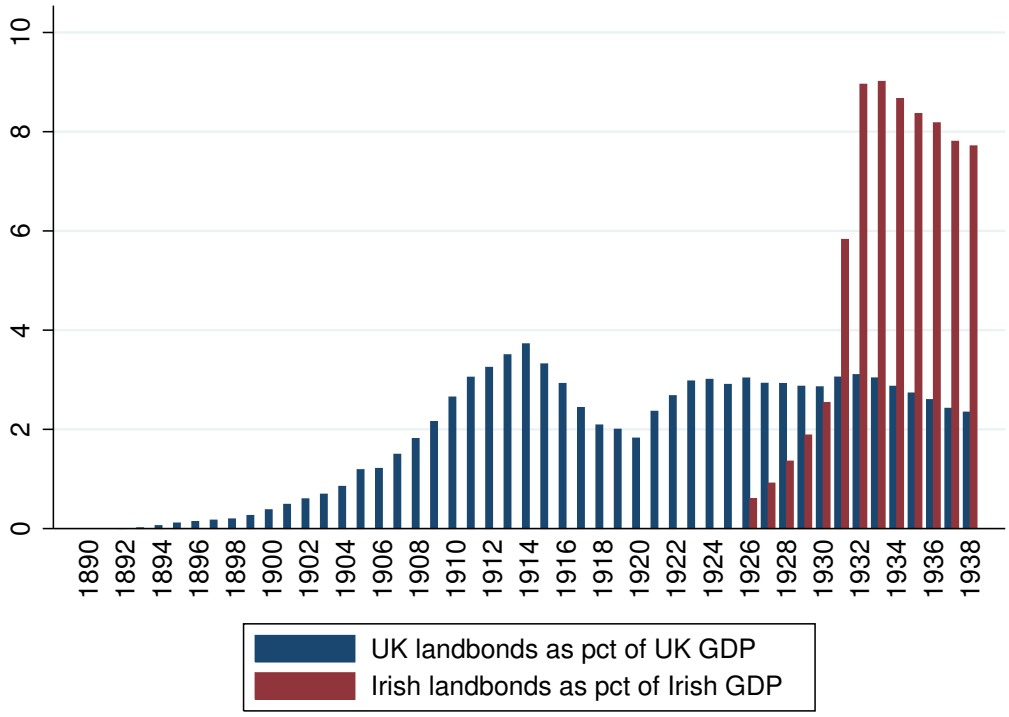
[32] Purchase of land (Ireland) Act, 1891 (54 & 55 Vict.) c. 48, section 1.

[33] The 1903 act allowed for payment in cash, raised through the sale of stock, because the market price for the bonds was typically below par after 1900. In addition, the act introduced a land purchase aid fund of £12 million to be distributed to landlords ostensibly to cover legal costs involved in sales, but widely perceived as an inducement to encourage landlords to sell.

[34] The average issue price of stock under the 1903 land act was £88.71 (B.P.P. 1908*b*). So, for example, each £100 issue would be sold for £90, which used to fund land purchase. But the tenant-farmer only received a loan for £90 and thus the expected repayment implied a deficit of 10 percent (ignoring the small interest spread) which had to be met by some external source of finance, namely taxpayers.

years of the 1903 act, on the assumption that the market prices were constant (B.P.P. 1908*c*, paragraph 38, p. 7). However, deficiencies in stock issues were to be met from the Irish development grant, probate duty grants and agricultural grants administered under the 1898 local government act.[35] The fact that the programme was financially unsustainable effectively meant that the purchasers of land under the government land purchase schemes actually received their farms under concessional terms of state-subsidy.

Figure 2: Nominal value of land bonds as a share of GDP



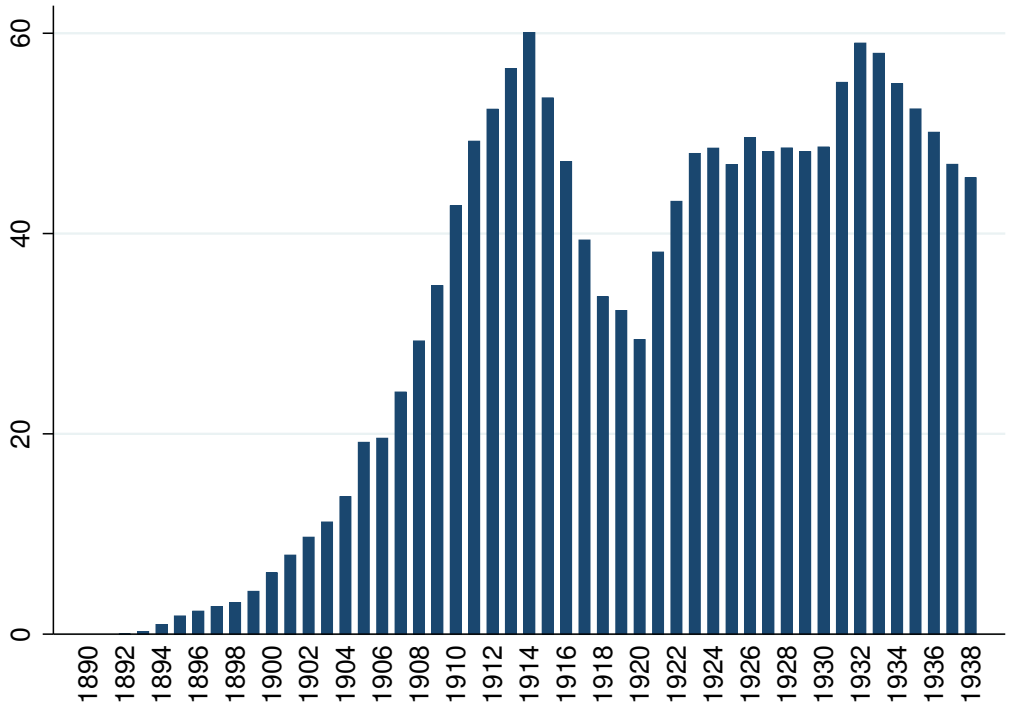
The lack of sustainability in the programme should not have been a major concern for investors, since the nominal value of the land bonds was a small fraction of the British economy. Based on records from our dataset (discussed in the next section), figure 2 shows that the outstanding nominal value of British government guaranteed land bonds never rose above 4 percent of UK GDP. By contrast, figure 3 shows that at the time that Ireland gained independence, land bonds were worth about 40 percent of estimated Irish GDP.[36] Moreover, the newly formed state continued to issue land bonds, with the

[35] Irish land act, 1903 (3 Edw. 7.) c. 37, section 38.

[36] Given that no annual Irish GDP series exists (Cullen 2007), the GDP denominator in figure 3 is estimated from Maddison (2001, 2003) data using the 1913 share of the Irish economy in the UK economy. Also, as Northern Ireland was included in the land purchase schemes it is also included in the denominator.

oustanding nominal amount peaking almost 60 percent of GDP in the early 1930s, a considerable burden for any developing economy. Thus, data on land bond prices provide an excellent opportunity to evaluate investors' perspectives on Irish land (collateral for the loans) and the early political and economic development of Ireland.

Figure 3: Nominal value of all land bonds as a share of estimated Irish GDP



3 Data description

The source for our data is the daily stock and share records of the Dublin Stock Exchange held in the National Archives of Ireland, Dublin.[37] We collected data from 1890 through to 1938, covering the first issuance of bonds under the 1891 land act through to the Anglo-Irish trade agreement. In particular, we obtained records of daily closing prices and amounts outstanding for all government-guaranteed debt traded on the Dublin Stock Exchange.[38] For each bond, we roll forward the observed last price to create a panel of

[37]Dublin Stock Exchange, BI 3/32 to BI 3/79.

[38]The Dublin Stock Exchange was formally established in 1799 when 'thirteen brokers were licensed to deal in government securities' (Thomas 1986, p.55). Regional stock exchanges formed later in the nineteenth century, first in Cork in 1886 and later in Belfast in 1897 (Thomas 1986, p. 151 & p.223).

last prices on every day the exchange was open from the first time the bond is traded until the last day that the bond is recorded in the exchange records. The exchange was open Monday-Friday (and Saturday in some years) excluding public holidays such as Easter and Christmas. The stock exchange was closed from August to December 1914, due to the War, and also briefly due to a financial crisis in 1931 (Thomas 1986, p.68).

Although London was the pre-eminent financial trading centre of the time, we use Dublin Stock Exchange data because not all land bonds were traded in London (Thomas 1986, p.170). That said, stock markets in London and Dublin were closely integrated during our period of study. The installation of a direct telegraph connection between Dublin and London in 1850 ensured information lagged at most one day, and the telephone was introduced in 1897.[39] Therefore, closing prices in Dublin should be reasonably close to those in London throughout our data.

3.1 Dublin Stock Exchange: sovereign debt records

Table 4 lists the land bonds, consols, exchequer bonds and Free State bonds recorded in our database by order of issuance date. For brevity, we do not list the colonial bonds (India, Transvaal), war stocks or unusual securities (trading in small lots, interest due next gale, instalments, etc) that are also present in our data.[40] In addition, as part of our data cleaning, we exclude bonds that were priced on the exchange for less than 250 trading days (roughly one year). There are six land bonds, six bonds that we term 'benchmark' UK sovereign debt and four Irish Free State bonds. The second column in the table reports the coupon associated with each issue, using the 'average' coupon for the consolidated stock converted in 1903 from 2.75 percent to 2.5 percent.[41]

The first four land bonds, including bonds issued by the Free State in the 1920s (B.P.P 1924,-, B.P.P. 1924-25*b*, 1929-30, 1930-31), carried British government guarantees, while the last two were issued under the Land Bond Acts of 1933 and 1934 without such a guarantee.[42] In addition, the land bonds issued under the 1933 and 1934 acts were the

[39] The telegraph connection was temporarily lost in 1914, but the telephone remained operational (Thomas 1986, p. 92).

[40] In the early part of our period, consols and exchequer bonds constituted the general debt issued by the British treasury, while colonial stocks (India and Transvaal) and war stocks were used to raise funds for specific purposes.

[41] The 1903 conversion of the consolidated stock had been planned from the National Debt (Conversion) Act of 1888.

[42] The latter two land bonds were guaranteed by the Irish government, which also inherited

Table 4: Dublin Stock Exchange: sovereign debt

	Coupon	Coverage Window		Max Issuance	Liquidity
	%	First Date	Last Date	£m	Measure
Land bonds					
Gtd. land stock, red. 1921	2.75	1892/7/27	1938/12/30	13.20	.31
Gtd. land stock from 1903 land act	2.75	1904/7/19	1938/12/30	57.26	.33
Gtd. land stock from 1903/09 land act	3	1910/12/19	1938/12/30	71.50	.33
4½ pct Land Bonds	4.5	1926/1/20	1938/12/30	24.88	.85
4½ pct New Land Bonds	4.5	1934/2/8	1938/12/30	.59	.24
4 pct Land Bonds (land bond act 1934)	4	1934/10/26	1938/12/30	2.81	.52
UK Consols and Exchequer bonds					
Consolidated stock, converted in 1903	2.57	1890/1/2	1938/12/30	592.41	.81
2.5 pct stock, red. 1905	2.5	1890/1/2	1938/9/26	33.22	.08
2.75 pct stock, red. 1905	2.75	1890/1/9	1938/9/26	4.65	.02
Exchequer bonds, red. 1905	3	1901/11/21	1905/12/6	14	.16
Exchequer bonds, red. 1909	3	1905/6/15	1909/10/13	6	.01
Exchequer bonds, red. 5 Apr 1915	3	1913/3/12	1915/7/15	21	.01
Irish Free State bonds					
National loan	5	1924/1/8	1935/11/27	10	.86
Second National loan	5	1928/1/3	1938/12/30	7	.79
Third National loan	4.5	1930/6/11	1938/12/30	6	.62
Fourth National loan	3.5	1933/12/20	1938/12/30	6	.70

Source: authors' calculations

first not to be expressed in sterling but were instead expressed in Free State currency (I.P.P. 1938, paragraph 40, p. 14).

From independence onwards, bonds issued by the Free State government (including the four National Loans listed in table 4) take precedence over imperial funds, as evidenced by the placement of Free State government funds above British funds on the daily stock exchange listings.[43]

The third and fourth columns in table 4 report the time window in our database over which the bonds were priced on the Dublin Stock Exchange. The six land bonds remain in the daily record book until the end of 1938, implying coverage of the entire period. Similarly, the large issue of consolidated stock, the 2½ percent stock, the 2¾ percent stock and the four Irish Free State bonds cover most of our sample period, making the prices of these bonds useful as benchmark comparators for land bond price movements. The fifth column of the table reports the maximum recorded amount outstanding for

responsibility for collecting annuities to repay the previous four land bonds. These government guarantees made the bonds de facto sovereign debt, even though land bonds were typically issued by the body responsible for overseeing the land purchase scheme (Land Commission).

[43]The British treasury in 1920 wanted to transfer the register of government debt held by the Bank of Ireland from Dublin to Belfast. However, an agreement was reached whereby only the holdings of northern Irish bondholders were transferred to Belfast; Dublin kept its existing stock holdings but no new UK issues featured on the Dublin market (Thomas 1986, p. 130).

each bond, illustrating the large size of the consolidated stock relative to all other bonds traded on the Dublin Stock Exchange. This column also shows how large the inherited burden of land bonds was relative to the size of new issuance for the Irish Free State.

Unfortunately, neither bond trade volumes nor bid-ask spreads are reported in the stock market records. However, since we have relatively high-frequency data, we can create a proxy liquidity measure, reported in the sixth column of the table, by calculating the fraction of days on which trading occurred when the bond was priced in the market. Although this proxy may be computed over subsamples (see table 5) it cannot be used to infer anything about the liquidity of an issue at a point in time. According to this proxy, land bond liquidity on the Dublin Stock exchange compared favourably with the majority of exchequer bonds. In particular, the liquidity of the final British-guaranteed land bond appears on a par with that of the consolidated stock, consistent with the assessment of Thomas (1986, p. 170) that the sterling guarantee combined with quotation on the London Stock Exchange made this bond "always a big attraction" in the inter-war period. As consols are the longest living and have the largest amount outstanding in our data, it is not surprising that they are found to be highly liquid in our dataset. By contrast, the $2^1/_2$ percent and $2^3/_4$ percent stocks are quite illiquid, even relative to the land bonds.

In summary, reading across our statistics on coverage, issuance volume and liquidity, we find that the best benchmarks for land bond price movements are the movements in the prices of UK consols.

3.2 Dublin Stock Exchange: sovereign bond prices

Figures 4 and 5 show on the same scale from 1890 until 1938 (i) the prices of land bonds and (ii) UK consols and exchequer bonds listed in table 4. To avoid confusion, these bond prices are shown on separate figures but aligned so that their general evolution can be compared.

The broad movements in the prices of land bonds and UK consols and exchequer bonds are similar and are consistent with the major events of the time (Homer & Sylla 2005, pp 438-450). Both series steadily decline from the middle of the final decade of the nineteenth century until the early 1920s, partly in response to the war, but mostly to developments in fiscal and social policy. Prices remained low throughout the 1920s as the government

Figure 4: Land bonds: last prices

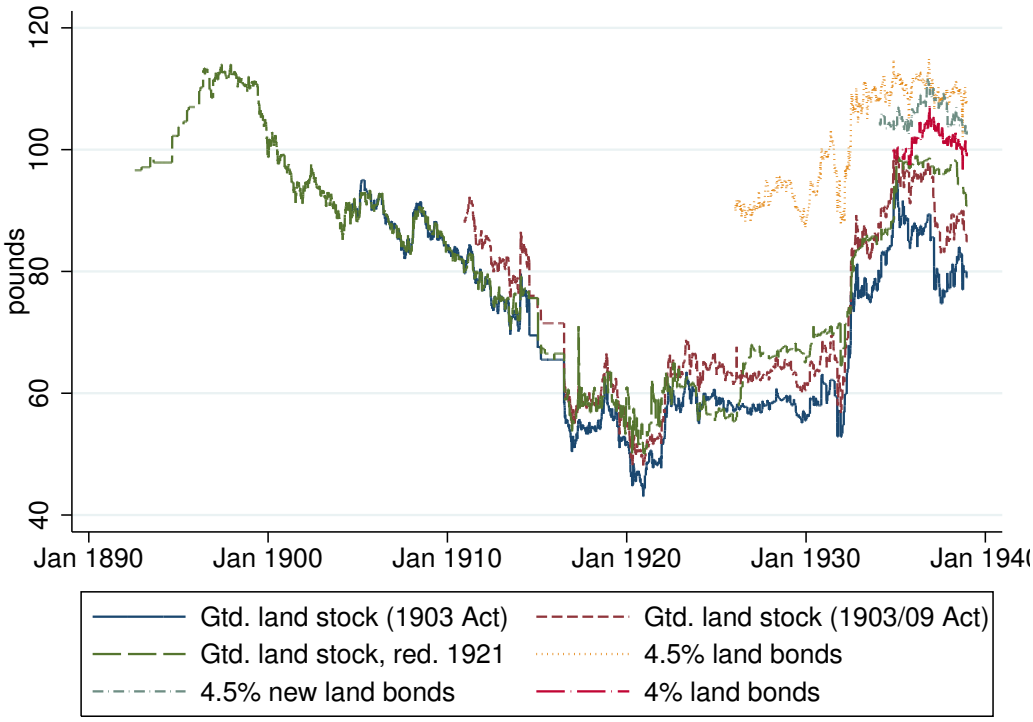
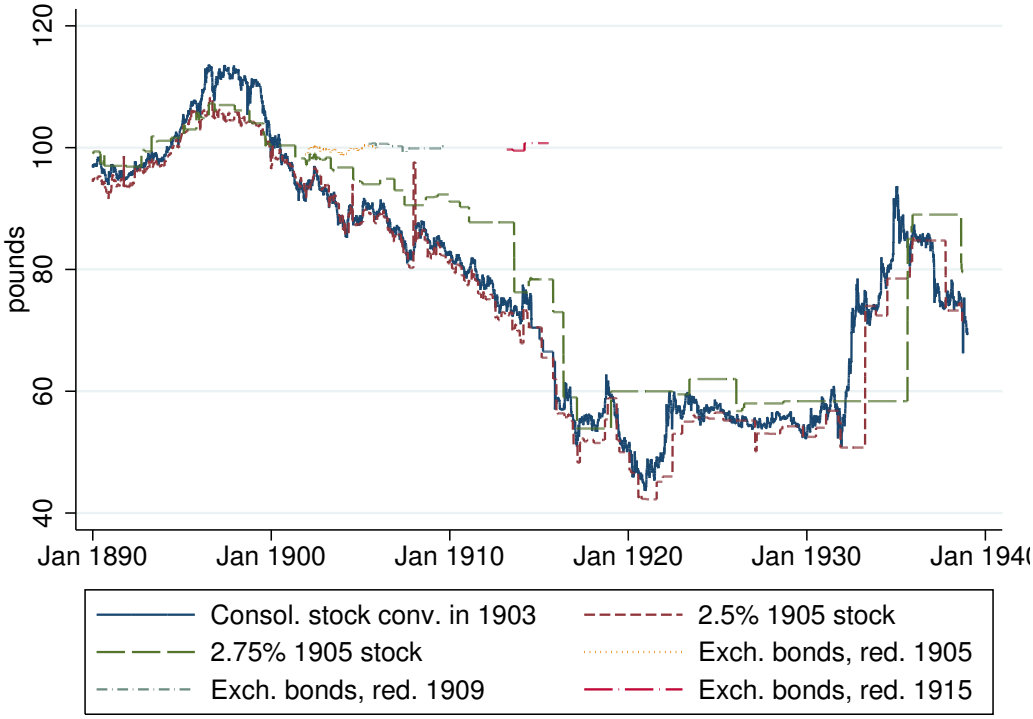


Figure 5: Consols and Exchequer bonds: last prices



strove to restore sterling's reputation as a strong currency. The sharp upward movement late in 1931 is also well-known and attributable to the UK government's decision to abandon the gold standard (Homer & Sylla 2005, p.451).

Although the broad movements in the price series are similar, some of the more detailed activity in land bond prices is different from that of UK consols and exchequer bonds. First, there is more volatility in the land bond prices than in consols and exchequer bonds around the time of Irish partition and civil war (1921-1923). Second, the movement in land bond prices appears more muted, in particular the large issues of 1903/09 land bonds and the 4.5 percent land bonds. And, thirdly, while land bonds were at times viewed as unpopular, their prices above par towards the end of our data indicate that they had become more attractive even than consols, despite the risk that the bonds might have been called for redemption (Thomas 1986, p.170).[44] Descriptive statistics of bond returns over different sub-periods can help to clarify these observations.

3.3 Dublin Stock Exchange: sovereign bond returns

Table 5 presents summary statistics for land bond returns and UK consols and exchequer bond returns over the entire period and for seven sub-samples, using the time series of last observed prices described in the previous section.[45] For each bond, in addition to the number of observations and the average returns in each sub-sample, we report the standard deviation of returns as a measure of volatility during each period and our liquidity measure (the fraction of days on which trading took place). Average returns are consistently near-zero across bonds and subsamples, as is common in studies of daily returns (Brown & Warner 1985).

During the early sub-samples, consols are by far the most liquid bond and the exchequer bonds are traded only modestly. Land bonds were traded more frequently than exchequer bonds and remained relatively liquid during World War I. Moreover, while the

[44] In a 1909 parliamentary debate, William Moore, a Unionist M.P. for Antrim North (Hourican 2009), stated that land bonds, which he termed "Bog Stock", were not popular with timid investors and were being issued at a discount to landowners, who could only sell them in the market for a further discount. *Hansard*, HC Deb 23 July 1909, vol 8 cc749-93.

[45] The seven periods correspond to an ex-ante expectation of variation in financial market behaviour towards land bonds: (1) Jan 1890—Aug 1903 : pre-Land Act of 1903; (2) Aug 1903—Jul 1914 : pre-World War I; (3) Jul 1914—Nov 1918 : World War I; (4) Nov 1918—Dec 1921 : war of independence; (5) Dec 1921—Sep 1929 : post-Irish independence; (6) Sep 1929—Dec 1931 : Great Depression; (7) Jan 1932—Dec 1938 : post-Great Depression.

Table 5: Bond returns: Summary statistics

	Total				1890 - 1903				1903 - 1914				1914 - 1918			
	N	Mean	SD	LM	N	Mean	SD	LM	N	Mean	SD	LM	N	Mean	SD	LM
Land bonds																
Gtd. land stock, red. 1921	11267	0	.005	.31	2601	0	.003	.36	2715	-.0001	.003	.54	946	-.0001	.007	.23
Gtd. land stock from 1903 land act	8435	0	.005	.33	0				2484	-.0001	.003	.51	946	-.0002	.005	.39
Gtd. land stock from 1903/09 land act	6838	0	.005	.38	0				887	-.0001	.004	.58	946	-.0001	.005	.39
4.5 pct Land Bonds	3241	.0001	.003	.83	0				0				0			
4.5 pct New Land Bonds	1231	0	.003	.24	0				0				0			
4 pct Land Bonds (land bond act 1934)	1050	0	.003	.52	0				0				0			
UK Consols and Exchequer bonds																
Consolidated stock, converted in 1903	11904	0	.004	.81	3238	0	.003	.99	2715	-.0001	.003	1	946	-.0001	.005	.68
2.5 pct stock red. 1905	11837	0	.004	.08	3238	0	.002	.18	2715	-.0001	.004	.08	946	-.0001	.005	.04
2.75 pct stock, red. 1905	11832	0	.001	.02	3233	0	.001	.03	2715	-.0001	.001	.02	946	-.0001	.002	.02
Exchequer bonds, red. 1905	1003	0	.001	.17	425	0	.001	.19	578	0	.001	.14	0			
Exchequer bonds, red. 1909	1078	0	0	.01	0				1078	0	0	.01	0			
Exchequer bonds, red. 5 Apr 1915	469	0	.001	.01	0				338	0	.001	.01	131	0	0	0

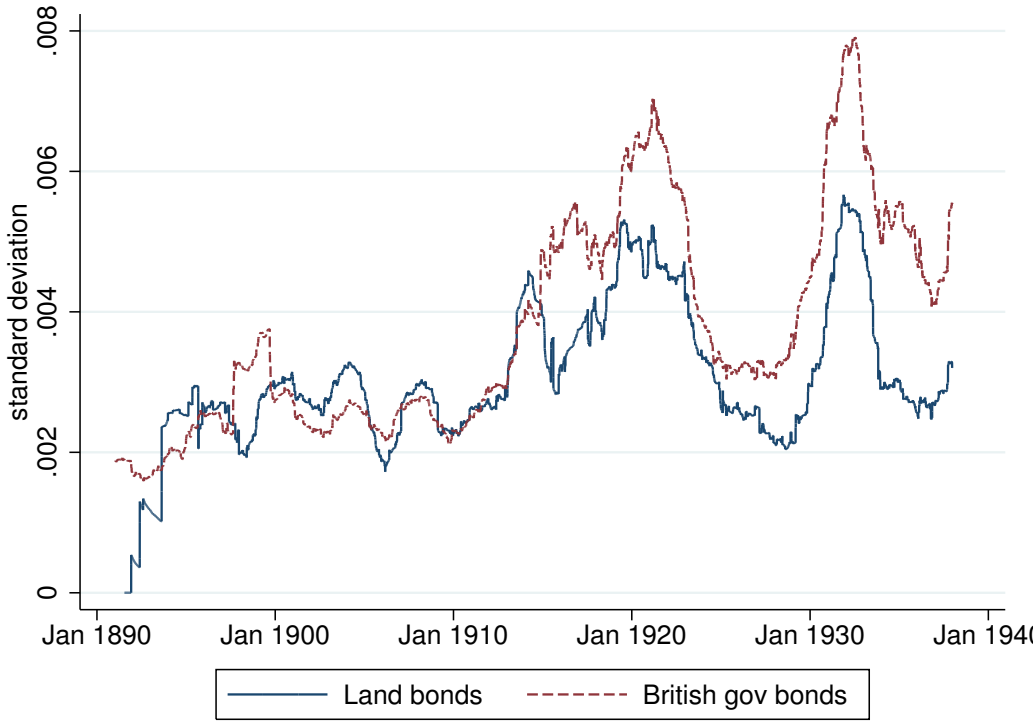
	Total				1890 - 1903				1903 - 1914				1914 - 1918			
	N	Mean	SD	LM	N	Mean	SD	LM	N	Mean	SD	LM	N	Mean	SD	LM
Land bonds																
Gtd. land stock, red. 1921	756	-.0001	.01	.22	1911	.0001	.004	.21	579	0	.003	.19	1759	.0002	.004	.13
Gtd. land stock from 1903 land act	756	-.0003	.006	.35	1911	.0001	.004	.25	579	0	.006	.12	1759	.0003	.006	.17
Gtd. land stock from 1903/09 land act	756	-.0003	.006	.44	1911	.0001	.004	.35	579	.0001	.006	.18	1759	.0002	.005	.16
4.5 pct Land Bonds	0				902	0	.003	.67	579	0	.004	.88	1760	.0001	.003	.93
4.5 pct New Land Bonds	0				0				0				1231	0	.003	.24
4 pct Land Bonds (land bond act 1934)	0				0				0				1050	0	.003	.52
UK Consols and Exchequer bonds																
Consolidated stock, converted in 1903	756	-.0003	.007	.77	1911	.0001	.004	.69	579	.0001	.007	.55	1759	.0001	.006	.51
2.5 pct stock red. 1905	756	-.0002	.004	.03	1911	.0001	.003	.02	579	-.0001	.004	.02	1692	.0001	.004	.02
2.75 pct stock, red. 1905	756	0	.001	.02	1911	0	.001	.02	579	0	0	.01	1692	0	.001	.02
Exchequer bonds, red. 1909	0				0				0				0			
Exchequer bonds, red. 1905	0				0				0				0			
Exchequer bonds, red. 5 Apr 1915	0				0				0				0			

Note : N is the number of observations, SD is the standard deviation and LM is the liquidity measure
Source : authors' calculations

liquidity of consols declined significantly after 1920, some land bonds were traded more frequently towards the end of the period. The analysis by sub-period confirms the overall finding that the 4.5 percent land bonds were particularly popular during the interwar period. However, there was a decline in liquidity for the other three British government-guaranteed land bonds. This may in part reflect a migration of trading into markets that listed a full set of British securities and were more connected to London traders (Thomas 1986).

Although land bond returns and UK consols and exchequer bond returns display similar volatility over the entire sample, there is considerable variation across sub-samples from World War I onwards. To explore this variation further, figure 6 shows the standard deviation of the weighted average of these returns computed using a rolling window of three years (750 days) around each date on the horizontal axis.[46] A similar figure is obtained when using one-year or five-year windows, or when only the days on which trading takes place are used to calculate the standard deviation.

Figure 6: Weighted average bond returns: volatility



[46] The weights are the oustanding nominal value of each bond in the category. Since consols have a large outstanding nominal value, the 'British government bond' series is de-facto that of consols.

According to figure 6, land bonds and British government bonds experienced similar broad movements in return volatility throughout the sample. However, around the time of the outbreak of World War I, British government bonds became *more* volatile than land bonds. After appearing to converge during the early 1920s, the two series again diverged during the Great Depression and land bonds remained less volatile than British government bonds for the remainder the period. In addition, the volatility of land bonds remains elevated during the Irish war of independence while the volatility of British government bonds declines. These facts suggest that land bonds were reacting to Irish specific events, perhaps including developments in the value of collateral (Irish land) and the turbulent political events surrounding indepedence.

4 Concluding remarks

Land reform, purchase and ownership are central issues to modern Irish history, with the land question playing a key role in the development of Irish national and political identity (Boyce 2005, Dooley 2004, Lyons 1971). Although the land purchase schemes described in this paper were one of the most important tools used to address the land question, the land bonds used to implement the schemes have yet to be fully explored. In particular, our database is the first systematic effort to collect land bond prices. Analysing such data permit a broader and deeper understanding of the development of Ireland at the beginning of the twentieth century.

Moreover, while the major movements in these price series are consistent with broader fundamentals,[47] we anticipate that higher frequency movements offer a measurable interpretation of key developments in early economic and political history of the Irish Free State. Using as a statistical control the price movements of other sovereign bonds traded on the Dublin Stock Exchange (discussed below), we intend to identify the historical events that had the strongest effect on Irish financial markets.[48] We have constructed

[47] Obstfeld & Taylor (2003) and Bordo et al. (1999) study the determinants of credit risk separately from exchange rate risk, but the latter is not a factor affecting price movements in our case as events were affecting Britain and Ireland identically given Sterling denomination of debts and the orthodox monetary policy adopted by the Irish Free State in the 1920s and 30s. As noted by *The Economist* (8 December 1923) the Free State did not adopt its own separate currency and 'was in no hurry to establish one'.

[48] Morck & Yeung (2011, pp. 50-52) argue that this methodology is particularly appropriate for gauging causation using historical data.

a database of events based on *New History of Ireland vol. 8* (Moody & Martin 1982).[49] The database includes the dates of key events in the history of Ireland over the period 1890 to 1938.[50]

The secession of Ireland from the UK is one of only a handful of cases in which a highly integrated sub-region has attained fiscal and political indepedence from within a sovereign state.[51] As independence movements in Scotland and Catalonia continue to develop, questions are being asked about the fiscal legacy associated with declaring secession. A detailed study of Irish land bonds provides an excellent platform to understand the legal and financial consequences of independence.

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[49] The schema listed in the "New History of Ireland" is also used by Jackson (1999) in his textbook which also includes additional events

[50] For example, in 1891 there are 26 dates listed including for the 5 August 1891 when the 'Purchase of Land (Ireland) Act, 1891 (54 & 55 Vict., c. 48) was enacted and later in the same year, on 24 December, John Redmond, Parnelite home ruler, retained his seat in Waterford city. Some examples of key dates from an Irish perspective are the 30 January 1913 when the Home rule bill defeated in House of Lords by 326 to 69 and 23 December 1920 when the government of Ireland Act was enacted. We will also focus on non-historically specific dates.

[51] Other precedents include Kosovo, some former states in the U.S.S.R. and the separation of Yugoslavia.

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A Appendix: The 1870 Land Act and the Land League

Precedents for state-funded land purchase were established by significant acts passed in 1869 and 1870. The Irish Church Act of 1869, primarily an act which disestablished the

Church of Ireland as a state-sponsored church in Ireland, contained clauses enabling tenants on church lands to purchase their holdings with the aid of state-financed mortgages.[52] The 1870 land act also included land purchase clauses, whereby the state would advance money for the purchase of a tenant's holding.[53] However, neither of these acts had a high uptake in terms of land purchase, and of the two the 1869 act saw the greater number of tenant purchases (Lyons 1971, p. 146).

The primary purpose of the 1870 land act was not to introduce land purchase schemes; this was an afterthought included in the Act.[54] The primary aim of the act was to reform the existing law governing landlord tenant contracts. The 1870 land act was influenced by a perception that agricultural investment in Ireland was impeded by an inadequate definition of property rights. The case of the prosperity of farms in the northern counties of Ulster was used as an example of the benefits of reform, as it was believed that Ulster's prosperity was caused by what was known as the 'Ulster custom'. The Ulster custom consisted of what were known as the 'three F's'. As Kennedy & Solar (2012) note:

> These extra-legal rights varied from estate to estate, but often carried the presumption that a sitting tenant could expect renewal of a lease, once it had expired; that rents would be 'fair', meaning essentially lower than the competitive or rack-rent; and that on vacating a holding he or she had the right to sell the value of the unexpired lease to the incoming tenant. The last could be valuable, amounting on some farms to ten times or more the annual rent paid to the landlord, suggesting that actual rents were well below the competitive rent level.(2012, p.174)

There was a common impression that the perceived prosperity of Ulster farming, small tillage farming, was based on the 'Ulster custom'. However, Vaughan has suggested that this prosperity in Ulster may in fact have been a flax boom, caused by market dislocations resulting from the American Civil War (the so-called 'Cotton Famine'), as flax was a cash-crop used at the time. Vaughan (1994) has suggested that perhaps contemporaries were not able to distinguish between this flax boom and the customs prevailing in Ulster (1994,

[52] Irish Church Act, 1869 (32 & 33 Vict.) c. 42, paragraphs 52-54.

[53] Landlord and tenant (Ireland) act, 1870 (33 & 34 Vict.) c. 46, part II.

[54] It is commonly known as the 'Bright clause', named after John Bright at whose behest provisions for land purchase were included in the act.

p.82). Support for Vaughan's argument comes from the general report of the 1871 census where it was stated that 'in that province [Ulster], however, throughout almost its entire extent, the cultivation of flax is connected with the one manufacture - that of linen - deserving to be called great (B.P.P. 1876, p.7).'

The 1870 Land Act attempted to formalise informal traditional customs in Ulster. One of the main assumptions of the acts was that the tenancy system in Ireland was an impediment to agricultural investment. The assumption was that tenants were unwilling to invest in agricultural improvements because of a fear that such investment would lead to an increase in rents or arbitrary eviction. Solow (1971) and Vaughan (1994) have argued that this scenario did not exist, and that tenancies were relatively secure before the 1880s. The evidence on evictions presented in McLaughlin (2009) also suggests that there was a low probability of eviction in post-famine Ireland. Solow (1971) summarised the situation by stating that:

> ...If Ireland's economic difficulties were traceable to defects in tenure arrangements, the Land Act of 1870 was soundly conceived and well drafted. It was well designed to cure the evils it assumed. It would work to deter eviction and deter landlords from raising rents on tenant improvements. But if its assumptions were wrong, it could not hope to play a major role in improving the economic condition of Ireland. Its success rested squarely on the historical facts about the frequency of evictions, the course of rents, and the nature of investment incentives. (1971, p.50)

The initial encroachment of the state in landlord-tenant relations in 1870 pre-dated two significant events. One was a very bad harvest in the late 1870s, caused by continuous heavy rainfall, and the second was the new world 'grain invasion', an increase in grain exports from granaries in the new world (Solow 1971, O'Rourke 1997). These economic shocks were felt across Europe and a number of countries responded by placing tariffs on grain imports, notably France and Germany, whilst the UK and Denmark remained as free-traders, thus increasing competition in Ireland's traditional export markets (Koning 1994, O'Rourke 1997).[55]

[55] Irish agriculture did receive some non-tariff protection in the form of exemption from the infectious disease regulations on livestock that affected foreign exporters (Turner 1996, p.157).

The combination of bad harvests in 1877 and an increase in international trade competition meant that Irish agricultural producers experienced a sustained reduction in farming income. Although it did not address the root causes of these problems, an umbrella coalition of interest groups campaigning for rent reductions called the Land League promoted social agitation against landlords.[56] The Land League was attractive to those who viewed the payment of rent as the root cause of their problems as it promised a reduction in rents and aimed to achieve owner-occupancy of farms. The goal of land ownership was one common to many in Irish society, regardless of land quality (Comerford 1985, p.247).

B Appendix: The 1881 Land Act

The government reacted to Land League agitation by introducing new land law legislation.[57] The 1881 Land Act was essentially a rent control act, with judicially-determined lower rents and a Land Commission established by the act to mediate in landlord-tenant contractual disputes. The aim of the act was to grant the tenants a 'fair rent', but the policy seems to have been to reduce rents regardless of their level.[58]

One of the most significant aspects of the 1881 act was that it brought land purchase schemes to greater prominence than it had been previously. The legislation made facilities available for tenants to buy land from landlords, with purchase prices set at a number of years rent. However, land purchase schemes failed to attract much support in their initial phases, probably due to a view that judicial rent reductions may have been less costly to implement than expanded land purchase schemes. Future land purchases saw tenants purchase their holdings with the purchase price set in terms of judicially reduced rents.

Legislation subsequent to the 1881 act was specifically designed to encourage greater transfer of ownership from landlords to their tenants, and this is immediately noticeable from the titles of the legislation which began to be called 'land purchase acts'.

[56] Irish historiography is still somewhat divided on the issue regarding landlord-tenant relations. E.g. Crotty (1966), Donnelly (1975), Solow (1971) and Vaughan (1994) versus Turner (1996) and Hoppen (1999).

[57] Land law (Ireland) Act, 1881 (44 & 45 Vict.) c. 49.

[58] Donnelly (1975, pp 297-298) shows how rent reductions took place not because rents were high but due to agitation for reductions. By 1900 aggregate rents were reduced by 22 percent in the first statutory term and 22.15 per cent in the second statutory term (*Thom's Directory* 1902).

The institution created under the 1881 land act to mediate rent disputes, the Land Commission, was transformed into an institution that supervised the sale of land.[59]

[59] In Northern Ireland, the Land Commission ceased to exist under the Northern Ireland Land Purchase (Winding Up) Act of 1935 but continued its existence in Southern Ireland, with a bill for its dissolution only passed into law in 1999.