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Working Paper

**Financial inclusion with hybrid organisational forms:
Microfinance, philanthropy, and the poor law in Ireland, c.
1836-1845**

QUCHE Working Paper Series, No. 2020-08

Provided in Cooperation with:

Queen's University Centre for Economic History (QUCHE), Queen's University Belfast

Suggested Citation: McLaughlin, Eoin; Pecchenino, Rowena A. (2020) : Financial inclusion with hybrid organisational forms: Microfinance, philanthropy, and the poor law in Ireland, c. 1836-1845, QUCHE Working Paper Series, No. 2020-08, Queen's University Centre for Economic History (QUCHE), Belfast

This Version is available at:

<https://hdl.handle.net/10419/224838>

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FINANCIAL INCLUSION WITH HYBRID ORGANISATIONAL FORMS:
MICROFINANCE, PHILANTHROPY, AND THE POOR LAW
IN IRELAND, C. 1836-1845

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September 2020

Financial Inclusion with Hybrid Organisational Forms: Microfinance, Philanthropy, and the Poor Law in Ireland, c. 1836-1845*

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Abstract

The turbulent 1830s saw a sequence of great political and social reforms in the UK. One such reform was the introduction of a locally funded poor law in Ireland. The development of a nascent welfare system in 1838 coincided with a boom in the formation of microfinance institutions in Ireland. The focus of this study is the expansion of a hybrid organisational form, Loan Fund Societies (LFSs), in the ten years prior to the Great Irish Famine of 1845-49. LFSs were legally established with a conflictual structure: balancing acting as commercially viable charitable institutions that were required to provide credit to the deserving poor to enable them to be self-sufficient, while dedicating their “profits” to supporting the indigent poor. This study uses an analytical framework drawing inspiration from institutional logics to explore and better understand Irish microfinance in the early nineteenth century, a period of profound socio-economic and socio-religious change. It seeks to explain the factors that motivated the establishment and de-establishment of microfinance institutions amidst this tumult. Legislative changes in LFS business parameters in 1843 made the tensions between being charitable and commercial sustainability salient and, for some, continued existence untenable.

JEL codes: G21, H75, I38, N23, N33, N83

Keywords: microfinance, institutional logics, development, Ireland

* Our thanks to Tobias Börger and Chris Colvin for comments on a previous draft.

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1 Introduction

For three decades, financial inclusion and microfinance – the provision of small-scale financial services to meet the needs of low-income individuals – have been key pillars of development policy.¹ With the perceived success of microfinance came the challenges of economic sustainability, social outreach, and socio-economic impact. For all the attention microfinance has garnered, much about it is still unknown.² Most current research on microfinance focuses on its impact on the wellbeing of borrowers and their communities³ and the design of credit institutions,⁴ but not on sources of funding or access to capital, which remains an unopened black box.⁵ This presents a critical problem for the industry as many microfinance providers, initially funded and organizationally reliant on philanthropy, are unable to transition to independent economic viability as they cannot mobilise loanable funds.

Microfinance institutions have two distinct functions. Their primary function is to improve the lives of their borrowers. Their secondary function is to provide financial services to the poor or underserved in a commercially sustainable manner.⁶ These functions are often at odds: achieving one can undermine the other. Institutional logics, the beliefs that motivate and the practices to achieve the extra-legal, social, and economic goals that determine the behaviour of business organizations, can provide a framework to understand this tension and how it affects the decisions and ultimate success of microfinance institutions.⁷ Although the institutional logics framework has been criticised as being ‘intuitively attractive, but arguably difficult to define and even harder to apply in an analytically useful manner’,⁸ researchers have applied it effectively in both contemporary and historical contexts to the study of microfinance institutions. Using the

¹ Ledgerwood, Earne, and Nelson (eds.). *The New microfinance handbook (chapter 1)*; World Bank. *Global Financial Inclusion and Consumer Protection Survey 2017 Report* (p. 11) are examples of this trend in the economic development literature.

² Vanroose, “Which factors drive the regional expansion of microfinance institutions?”, examines the motivation for and location decisions of Peruvian MFIs.

³ Meager, “Understanding the average impact of microcredit expansions”.

⁴ Gine and Karlan, “Group versus individual liability”.

⁵ Cobb, Wry, and Zhao, “Funding Financial Inclusion”.

⁶ Armendáriz and Morduch, *The Economics of Microfinance*.

⁷ Beliefs and practices that shape how agents operate: Thornton, and Ocasio, “Institutional logics”.

⁸ Thornton, Ocasio, and Lounsbury, *The Institutional Logics perspective*, p. 2.

institutional logics paradigm, Battilana and Dorado illustrate the challenges faced by financial institutions with conflicting and competing banking (commercial) and development (charity) institutional logics. These organisations struggle to strike the very difficult balance between the banking and development logics required to be sustainable.⁹ Funders of microfinance institutions, such as government or commercial bodies, encounter similar challenges when deciding whether to provide capital for what and to whom. Cobb et al. use the institutional logics framework to assess these bodies' decision processes and their outcomes.¹⁰ In an historical context, Haveman and Rao and Haveman, et al., use the framework in a study of thrift institutions to show how organisational change and institutional logics coevolved in the early twentieth century in response to changes in thrifts' social, economic and political environments.¹¹

Institutional logics are influenced by local factors specific to both time and place. The long history of microfinance institutions provides current researchers with the ability to better understand specific influences and their effects on microfinance institutions as a means to improve the design of policies and structures that will ensure the success of microfinance institutions today. Consider, for example, the financial inclusion of the working classes via savings and credit institutions. This is as critical an issue today as it was in the nineteenth century.¹² Comparing the accessibility of microfinance in the nineteenth century across the countries in Table 1 reveals a striking peculiarity: Ireland, despite its relative poverty, had a large array of formal microfinance providers in the 1830s and early 1840s even in comparison to those of the United Kingdom, of

⁹ Battilana and Dorado, "Building sustainable hybrid organisations".

¹⁰ Cobb, Wry, and Zhao, "Funding Financial Inclusion".

¹¹ Haveman and Rao, "Structuring a theory of moral sentiments"; Haveman, Rao, and Paruchuri. "The winds of change". Although these institutions have shared motivations and beliefs, these beliefs can be influenced. How they are influenced translates into practices that are then shaped by heterogeneous local environmental factors and by uncertainty, both political and economic. Haveman and Rao use the institutional logics framework to show how organisational changes in thrift institutions coevolved in the early twentieth century. The shift from dissolving (individuals in communities coming together to help each other) to permanent (saving banks) was influenced by changing socio-economic trends, such as social and union movements, and increased migration that eroded community cohesiveness.

¹² Wadhvani, "The institutional foundations of personal finance"; Wadhvani, "Organisational form and industry emergence; Perriton and Maltby "Working-Class Households and Savings in England, 1850-1880"; Lilja and Backlund, "Savings banks and working-class saving during the Swedish industrialisation"; Garon, *Beyond our Means*. McLaughlin, "Profligacy in the encouragement of thrift"; Johnson, *Saving and spending*.

which Ireland was a constituent member. Using an institutional logics informed analytical framework, this study seeks to understand the locally specific factors that led to this anomaly and what they tell us about microfinance today.

The specific object of this study is the expansion of Loan Fund Societies (LFSs) in the decade before the Great Irish Famine (1845-49). LFSs were legally established with a conflictual structure. They were intended to be commercially viable charitable institutions that provided credit to the deserving and dedicated their “profits” to supporting the destitute. Using insights from surviving qualitative and quantitative data, the study assesses the factors (process tracing) that influenced LFS activities in Ireland.¹³ In the decade before the famine, the introduction of a new poor law, in 1838, provided keen motivation for the establishment of LFSs. Using LFS profit distribution data, the institutional logics of LFSs are revealed in terms of the implicit factors that influenced their decision-making processes. Using a discrete choice econometric model, the institutional logics intuition is corroborated. The study finds the following. While difficult local economic conditions should have provided incentives not to enter or to exit if already in business, other incentives prevailed. They included positive economic incentives, such as the potential for lower poor rates and higher return on investment, and social incentives, such as an abiding concern for the industrious and destitute poor. These incentives overwhelmed the economic incentives motivating LFS owners to enter and to expand their businesses. Legislative changes in LFS business parameters in 1843 made the operational tensions between the economic and social motivations salient. For many, especially those with narrow market focus, continued existence became untenable. These tensions and challenges are reflected in the choices contemporary microfinance institutions make today in response to changes in the regulation of their industries.

¹³ Process tracing emphasises the ‘collection of evidence to trace the unfolding of some event or process’: Skarbek, “Qualitative Research methods for institutional analysis”, p. 8; Beach, “Process-tracing methods in social science”.

2. The microfinance ecosystem in pre-famine Ireland

Although Loan Fund Societies were initially formed in the early eighteenth century,¹⁴ in the late 1700s the poorer sections of society had little access to formal financial services. They did, however, have access to high interest credit from pawnbrokers, dolly shops, local shopkeepers, merchants, and farmers. These informal borrowing services were augmented or replaced by Loan Fund Societies [LFS] and Reproductive Loan Funds [RLF]. Trustee Saving Banks [TSB] provided saving but not credit services. Together these MFIs provided formal financial services to the poor. Although need for such institutions was demonstrable both for borrowers, the so called deserving or industrious poor, and for the beneficiaries, the indigent, often disabled, and elderly, LFS remained relatively rare until the early 1840s. Rather, the informal system was seen as adequate if not ideal. Then, between 1838 and 1845, a burgeoning ecosystem with 553 loan fund societies¹⁵, funded by philanthropy or interest earning debentures, joined the 78 government subsidized Trustee Savings Banks to serve the ‘industrious poor’ and provide sustenance for the indigent - see Figure 1.

New insights into LFS behaviour can be garnered from a contemporary survey of loan funds conducted by H.J. Porter, land agent and LFS advocate.¹⁶ Porter highlights how all counties in Ireland were eventually served by loan funds, either LFS or RLF (e.g., Kerry and Sligo where only served by RLFs at the time of Porter’s survey) – see Figure 1. The accessibility and outreach of these institutions to those who had previously relied on the very expensive credit provided by

¹⁴ Jonathan Swift, Dean of St Patrick’s Cathedral, Dublin (author of *Gulliver’s Travels* and other social satires), established a fund to lend to local weavers. The *Dublin Musical Society*, following his example, established a loan fund using profits from their concerts to serve the credit needs of the deserving poor.

¹⁵ 392 Loan Funds registered with the Loan Fund Board between 1838 and 1845, and 161 separate loan funds registered with the London Relief Committee. Further initiatives traced their lineage to these loan funds or, like the Derry loan fund, developed independently.

¹⁶ Porter, “A statistical account”. Henry John Porter was a land agent and a LFS advocate and practitioner in County Armagh. In contrast, Hollis and Sweetman, “Microcredit in pre-famine Ireland”, use evidence of LFS activity from a sample of 2 LFSs. Porter provides evidence a much wider array of funds across the island.

pawnbrokers, “gombeen men” and “meal mongers” but who could not access bank credit was huge.¹⁷

More broadly, these Charitable LFSs, contemporaneously recognised as a critical component of the Irish financial system¹⁸, were ‘peculiar to Ireland’.¹⁹ While they were seen as an unwelcome form of competition by the joint stock banks, both because of the high rate of interest, set by statute, payable on debentures and their ability to lend within the Bank of Ireland monopoly zone, they were promoted by the government as a source of needed finance for an underserved and exploited segment of the economy. Comparison with the commercial banking sector helps to fully appreciate the accessibility and outreach of the LFSs. In 1836 there were 11 commercial banking companies that, combined, operated a network of 122 branches.²⁰ These branches tended to be located in major towns and cities. LFSs were, in contrast, dispersed throughout the island, often in villages and rural hamlets, easily accessible to their clientele.²¹

2.1 Reproductive Loan Funds

RLF were an accident of generosity.²² While famines in rural Ireland were a fact of life, a harsher than usual famine in the west of Ireland in 1822²³ led philanthropists in London to raise money to

¹⁷ Small deposits were not relied upon as interest was only paid on balances over £5.

¹⁸ Robert. M. Martin, *Ireland before and after the Union with Great Britain*, p. 259.

¹⁹ Dillion deemed them peculiar in comparison to the ‘Sister Kingdom’ where similar institutions had not been established: Malcolm Dillon, *The history and development of banking in Ireland*, p. 108. However, the peculiarity of loan funds is not evident from temporal and spatial comparison where other examples of microfinance are evident: Aidan Hollis and Arthur Sweetman, “Microcredit: What can we learn from the past?”,

²⁰ British Parliamentary Papers (hereafter BPP), *Return of joint stock banks in Ireland 1836*.

²¹ Only one of the commercial banks, the Agricultural and Commercial Bank, made a short-lived attempt to serve the ‘humbler classes’. It was founded in 1834 and suspended payments in November 1836: Ó Gráda, *Ireland: a new economic history 1780-1939*, p. 142. The Agricultural and Commercial bank had explicitly aimed to combine the services of a loan fund and a savings bank: However, at its peak, in October 1836, there were only 44 branches of the A&C in operation. Whereas, there were 10 times the number of LFSs in existence: Ó Gráda, *Ireland: a new economic history 1780-1939*, p. 142; ‘Rules and regulations, &c., were adopted for the guidance and government of the “Provident Deposit” and “Provident Loan” of the Agricultural and Commercial Bank of Ireland’ in Anon., *The origin and principles of the agricultural and commercial bank of Ireland* (Dublin, 1835), pp 1-11; Appendix 4 in Barrow, *The emergence of the Irish banking system 1820-1845*, p. 220 and p. 154.

²² These could be deemed as “accidental logics”, that the circumstances that RLFs were ‘chosen’ were contingent upon context and that there was limited control over this context and therefore ‘what comes first (even if it was in some sense ‘accidental’) conditions what comes later’. Tuohy, *Accidental Logics*.

²³ O’Neill, “Clare and Irish poverty”, p. 15.

relieve those suffering distress. Although the subscription was intended only for the immediate relief of the famine, the fund was oversubscribed leaving a substantial surplus.²⁴ The trustees of the fund, the London Relief Committee, decided to use the surplus to establish income generating and educational activities in the areas affected. They dedicated about half (£40,000) to fund loans to the poor specifically for the manufacture of flax and wool, as they deemed these activities to be a route out of chronic poverty. To design the RLF system, William Hyett, the founder of RLFs in Ireland on behalf of the Irish Relief Committee, visited existing, generally urban, LFSs in Dublin, Limerick and Ennis which made loans to weavers and other urban labourers.²⁵ Mirroring the existing LFS structures, RLFs, of which there were 161 reported in 1839,²⁶ working through local voluntary, unremunerated trustees,²⁷ disbursed loans to the poor in the designated areas²⁸ and reported their activities to the central authority in London. These loans were initially non-monetary, often looms or seed, with a maximum value of £10 over a twelve-month period. Repayments could also be non-monetary in nature²⁹. RLFs only operated in Connaught and Munster (excluding Waterford), the area for which the initial fund was designated.

2.2 Loan Fund Societies

Loan Fund Societies, founded before or after the 1836 Loan Societies Act, could trace their ancestry to the philanthropic lending of Dean Swift of St Patrick's Cathedral, Dublin, and the Dublin Music Society. They were strongly aligned with contemporary philanthropy.³⁰ Elites, the wealthy and generally Church of Ireland clergy, played a key role in founding LFSs. The LFS

²⁴ LRC, *Report of the committee for the relief of the distressed districts in Ireland*, p. 5, p. 19, & p. 30.

²⁵ BPP, *Report from the Select Committee on the Employment of the Poor in Ireland*, p. 18; Bailey reports that a copy of a pamphlet of the Derry charitable loan system was found in the archives of the London Relief Committee: Bailey, "Micro-credit, misappropriation and morality", p. 463.

²⁶ BPP, *Second Annual report of the Commissioners Of the Loan Fund Board of Ireland* (hereafter BPP, XX LFB report), p. 8.;

²⁷ The report stated that they received support from the local gentry: LRC, *Report of the committee for the relief of the distressed districts in Ireland*, pp 296-297.

²⁸ LRC, *Report of the committee for the relief*, p. 26.

²⁹ LRC, *Report of the committee for the relief*, p. 294.

³⁰ For example, discusses the role of religion in early nineteenth century philanthropy and the of the poor law avoidance on philanthropists: Prochaska, *The Voluntary Impulse*, chapter 1.

management was drawn from wealthy debenture holders, the members of the LFS,³¹ who volunteered to serve as Trustees, provide the working capital and hire clerks to carry out day-to-day operations.³² Unlike the mutual saving banks of continental Europe, membership was not a requirement for borrowing.³³ Rather members “joined” LFSs to provide loans to the industrious poor to enable them to become economically self-sufficient, thereby able to weather the normal economic cycle, and to provide sustenance for those, the elderly and disabled, unable to care for themselves. While their motivations were noble, they earned a healthy return on their investment. LFSs operated under a legal non-distributive constraint: net earnings could not be redistributed directly to members.³⁴ Members did, however, exercise control over the day-to-day running of the society and could, given statutory constraints, say whether net earnings were retained, added to capital or expended for particular operational or charitable purposes. The LFSs’ charitable character kept members focussed on serving the public rather than their own pecuniary interests.³⁵

In contrast to the RLFs, LFSs’ ‘capital’ was comprised of a mix of donations, retained earnings and, significantly, large deposits, generally debentures. The composition of capital is unknown pre-1845, but Porter suggests that deposits over £50 are both the ‘most numerous’ and ‘most valuable’ in terms of establishing an LFS.³⁶ When the Loan Fund Board, the regulator of LFSs, began reporting deposits, 90 percent of LFS capital was comprised of interest-bearing deposits.³⁷ While LFSs paid interest on deposits, as set and required by statute, (see Table 2), they restricted this to deposits exceeding £5.³⁸ Small depositors were not the focus of LFS charity: they

³¹ BPP, *Abstract of return relating to Castletown Dehvin and Mullingar Loan Funds*; McLaughlin, “A note on mutual savings and loans societies in nineteenth century Ireland”.

³² See also additional examples, such as Viscount Mandeville’s role as Trustee of the Tandragee Loan Fund and The Earl of Huntingdon, Lord Carew’s role as Trustee of the Gaultier Loan Fund. Their interests were served by appointed treasurers. BPP, *Fourth LFB Report*, p. 44, p. 37.

³³ Hansmann, *The ownership of enterprise*, pp 246-264.

³⁴ This is distinct from Hansmann’s definition of mutual savings banks where depositors are not members or owners and control lies with a self-perpetuating board. In LFSs, members elected the board, and borrowers had no voting rights although technically they had the ultimate claim to the residual profits.

³⁵ Steinberg, “Economic theories of non-profit organisations”.

³⁶ Porter, “A statistical account”, p. 217.

³⁷ BPP, *Eight LFB Report*.

³⁸ Porter noted that working classes were unlikely to deposit in LFSs and advocated, without effect, that lower interest be paid on amounts from £0.25 to £4 to encourage saving Porter, “A statistical account”, p.217.

were not savings banks. Instead, depositors were unlikely to be poor, but were, according to Porter, ‘comfortable farmers’³⁹ or former usurers.⁴⁰ The membership of the Cashel loan fund offer a representative example where the members held deposits ranging from £50 to £150.⁴¹

Unlike other UK charitable institutions, LFSs operated as individual units rather than as branches.⁴² This structure allowed LFS founders to determine the establishment and the location of their LFS. LFS depositors, locals of some means, were few in number within each district, usually the local Poor Law Union, and were easily coordinated to provide funding and management services. In 1842, there were 5,867 depositors in all LFSs, an average of only 19 per LFS. Ensuring borrowers did not borrow from Peter to pay Paul was more difficult. To achieve this, societies requested that the central Loan Fund Board, established in 1836, restrict new LFSs to currently unserved areas,⁴³ a position it heartily endorsed.⁴⁴

While LFS structures were confining, oversight was weak enough to allow for a variety of behaviours that contradicted the Loan Fund Act’s required philanthropic behaviours. Deviations from the act ranged from clerks embezzling funds to small grocers and pub owners setting up shop behind the counter to pseudo-banks establishing themselves under the guise of the Loan Fund Act. These various LFS forms did not deviate from the restrictions on loan size or interest chargeable, but may have differed on late fees, making the experience for the borrower in respect to the narrow credit transaction largely similar. They did, however, deviate on motive. This was done explicitly, as in the case of the shop and pub owners who sought tied sales – liquor as well as dry goods thereby expanding the nature of the transaction – and profits rather than philanthropic works, thus barring the destitute from benefiting. Or it was done deviously, as in

³⁹ Porter, “A statistical account”, p.217.

⁴⁰ Denis Henry Kelly, a magistrate and landed proprietor in Castle Kelly, Galway also believed that former usurers were depositors with the LFS: *Evidence taken before Her Majesty's Commissioners of Inquiry into the state of the law and practice in respect to the occupation of land in Ireland* (hereafter *Devon Commission*), Witness 431, Q. 29. B.P.P. 1845.

⁴¹ Rev James Ryan [a Church of Ireland minister], was the largest debenture holder (£150). Manuscript of the 1850 report to the LFB. Cashel Loan Fund archive. Private collection held by R. V. Comerford.

⁴² Prochaska, *The Voluntary Impulse*, p. 62.; Making Irish LFSs similar to unit banking operations in the US such as Savings and Loans: Mason, *From buildings and loans to bail-outs*.

⁴³ BPP, *Third LFB Report*, p.22; BPP, *Fifth LFB report*, pp. 48 and 52.

⁴⁴ BPP, *Fifth LFB report*, p.4.

the case of the fraud and theft perpetuated by the clerks, thereby reducing or negating the possibility of repeat borrowing.

The full range of possible motivations for establishing a LFS is summarized in Table 3; the authors have identified and defined four different models of institutional logics. The Loan Fund Acts allowed a number of different organizational motivations to coexist. Anecdotally there were reports of all types of funds listed, however it is difficult to precisely categorise funds active according to the macro models. Using indicators from the LFB reports it is possible to gauge the macro models adopted by LFSs in given years.⁴⁵ The majority of registered funds can be classified as either Type 1 or Type 2 LFSs (see Table 3) as reflected in the distribution of the various indicator variables in Appendix 1 and the number of LFSs above or below the means of these distributions. Types 3 and 4 were fewer in number while they may have adhered to the letter of the law, generally the spirit of the law was ignored.⁴⁶ This is also reflected in the low number of Funds ‘closed due to irregularities of management’ after inspection by the LFB.⁴⁷

2.3 RLF or LFS?

The distinction between RLFs and LFSs is empirically important, yet the sizeable legally, geographically, and operationally distinct RLF strand has been under-studied.^{48, 49} The distinction between RLFs and LFSs had real and demonstrable implications in terms of regulation and supervision by the LFB even though loan structure and interest payable were indistinguishable by the late 1830s. LFSs were required to register with the central Loan Fund Board (LFB) in Dublin,

⁴⁵ The indicators include distribution of charitable donations (Type 1), distribution of interest paid on capital (Type 2), charges on lending (Type 3), and wages per employee (Type 4) – see Appendix 1 for distribution of these variables,

⁴⁶ Early LFB reports suggested high numbers of unregistered funds before inspections by the LFB began, Piesse noted in September 1841 that ‘instead of returning 215 societies to Parliament [in 1840], perhaps 300 could have been returned’: *Fourth LFB report*, p. 42.

⁴⁷ Between 1842 and 1845 only 14 LFSs were closed by the LFB, although a caveat here is that the LFB could only close a LFS that violated its own rules and the resources available to the LFB were inadequate to inspect and audit all LFSs on a regular basis.

⁴⁸ Foster, *Letters on the condition of the people of Ireland*, p. 308.

⁴⁹ See Bailey’s study of RLFs but who does not engage with Hollis and Sweetman’s study of LFSs. Hollis and Sweetman give scant treatment to RLFs in their study. Goodspeed, “Microcredit and adjustment to environmental shock”, gives no consideration to RLFs.

submit annual returns and be subject to an annual audit. RLFs, in contrast, although governed by the same Act, were exempt from these regulations and instead submitted returns to the London Relief Committee, the provider of their funding. The empirical significance of this is trifold. First, the scale of loan fund activity is much greater than is, generally, currently acknowledged. Second, a large un/under-supervised loan fund sector operated on the fringes of the supervised sector creating the possibility of positive or negative spill-overs on LFS formation and lending decisions. Third, the specific initial motivations for the establishment of RLFs, the extreme suffering caused by the 1822 famine in the west of Ireland and the perceived need for economic development to lessen if not eradicate local poverty, were distinct from the much more general motivations, to make the industrious poor self-sufficient and provide for the indigent, of LFSs founded over a decade later.⁵⁰

3 The 1838 Poor Law and the Rise of Microfinance

The 1830s was a period of great political turbulence that generated a sequence of significant political and social reforms.⁵¹ The explosion of LFSs in Ireland coincides with the development of a nascent welfare system financed by a new land tax, the poor rate, in 1838. The introduction of the poor rate was an important and unwelcome fiscal shock to Irish property owners who were already subject to other land based taxes: county cess to pay for local infrastructure, as well as a new tax to replace the tithes supporting Church of Ireland [Protestant] clergy in predominantly Catholic rural Ireland.⁵²

⁵⁰ RLFs were beset by quarrels amongst their philanthropic funders as to how the problems of poverty in Ireland could be cured. Initially the ideas were that peasants could be improved by the discipline of repaying a loan was universal, something which was in line with later discussion on loan funds such as Piesse. However, evangelicals argued that the only way to solve Irish poverty was to get rid of Catholicism. This coincides with greater proselytising activities of evangelicals in the 1830s. The disagreement within the charitable society led to accusations of misappropriation by RLF trustees from the late 1820s.

⁵¹ There were 5 general elections (1830, 1831, 1832, 1835, 1837) and 6 governments formed. By comparison, in the 1820s and 1840s there were only two general elections. Akenson places Church of Ireland institutional reform within the context of wider reforms such as the Great Reform Act of 1832. Akenson, *The Church of Ireland*.

⁵² Crossman, *Local government in nineteenth century Ireland*; Akenson, *The church of Ireland*.

Parliamentary inquiries in the early 1830s investigated the scale of poverty in Ireland and advised that some measure of poor relief was required although, specifically, not along workhouse lines. The wide-ranging developmental recommendations of the 1833-36 Whately Commission were, however, never fully implemented. Instead the government opted to introduce a poor law based on the ‘new’ (1834 variant) English poor law.⁵³ The introduction of the poor rates – a tax on owners (landlords) and holders (farmers/owners of industrial sites in urban locations) of landed property, payable by ‘every occupier of rateable hereditaments [property that could be inherited]’⁵⁴ – constituted a massive fiscal shock to property owners. Ignoring vigorous local (ratepayers) and national (unionist and nationalist politicians alike⁵⁵) opposition, in 1838 the poor law system was introduced.⁵⁶ Given that poverty and the majority of the Irish population was rural, the poor law was, for all intents and purposes, a tax on rural property. This system did not provide a consistent level of relief for the destitute poor. Rather, it was characterised by unequal provision linked to the distribution of wealth in the individual, newly created poor law unions. The boundaries of these unions were designated taking the market town where the poorhouse was to be located as given and then assigning the surrounding landed estates, ideally, to a single union.⁵⁷

The poor law was intended to provide a safety net for the truly destitute, those unable to care for themselves out of their own resources. Since contemporaries feared the moral hazard associated with the ‘comfort’ of outdoor relief (i.e., free food rations), the system was designed to discourage (ab)use by requiring entry into a poorhouse, one per Poor Law Union (PLU), to receive assistance. The stigma associated with this feature made it unpopular with those it was designed to help. Moreover, those applying for relief could be turned away if the poorhouse was full. Unlike England, there was no statutory right to relief in Ireland.⁵⁸ Even with these draconian features

⁵³ Crossman, V. (1994). *Local government in nineteenth century Ireland*.

⁵⁴ (1 & 2 Vict.), c. 56, section lxi.

⁵⁵ O’Connor, *The workhouses of Ireland*, pp 64-66.

⁵⁶ Reforms of the Church of Ireland earlier in the 1830s undermined the parish as a civil unit in Ireland: Akenson, *The church of Ireland*, p. 172. The Irish poor law was instead based on townlands.

⁵⁷ O’Brien, “The establishment of poor-law unions in Ireland, 1838-43”.

⁵⁸ Crossman, *Local government in nineteenth century Ireland*, p. 46.

opposition and resentment of the poor law by ratepayers remained,⁵⁹ leading to attempts to limit their tax liabilities.⁶⁰ They had two tools to achieve this goal: civil disobedience (refusal to pay their poor rates) and establishing LFSs (to reduce the target population of destitute poor). They used both.⁶¹

The 1833-36 Poor Inquiry Commission's report and recommendations proposed that 'there shall be a loan fund established in each district [Poor Law Union], and that it be administered according to such regulations as the Commissioners shall approve'^{62, 63} specifically to reduce the need for poor relief by bettering the economic resiliency of the industrious poor. The 1836 Loan Society Act post-dated the release of the 1833-36 report,⁶⁴ and the subsequent LFS legislation in 1836 and 1838 actively encouraged the formation of LFSs to this end. The 1836 legislation purposely aimed to 'to afford encouragement to the formation of other institutions of a like kind' by allowing LFSs to charge high interest rates on loans and pay high rates on deposits, the first act to explicitly permit holding of deposits. So successful were these inducements to form LFSs, in 1843 these incentives were significantly lessened by reducing allowable rates – see Table 2.⁶⁵

The 1836 act also aimed to 'give protection to the funds of such institution' by establishing a governing body, the Loan Fund Board (LFB), for 'the general control and superintendence of all loan fund societies established in Ireland under the authority of this act'.⁶⁶ The LFB had, potentially, quite vast supervisory powers 'to inspect the books, accounts, and papers of or

⁵⁹ O'Connor, *The workhouses of Ireland: the fate of Ireland's poor* (Dublin, 1995); Gray, *The making of the Irish poor law, 1815-43*.

⁶⁰ Poor law and the growth of 'self-help' were related in England. Falling poor relief expenditure led to increase in self-help activity and contemporaries attributed 'much of the growth in friendly society membership and working-class saving to the reform of the Poor Law'. Local ratepayers also attempted to reduce rates by encouraging various forms of self-help including savings banks and friendly societies: Boyer, *Winding road to the welfare state*, pp 19-20, 42-46, 84.

⁶¹ In 1843 alone 21 Unions violently resisted the collection of rates requiring the deployment of both military and police to enforce the payment: BPP, *Appendices A to C to the tenth annual report of the Poor Law Commissioners* (1844), pp 322-326.

⁶² BPP, *Third report of the commissioners for inquiring into the condition of the poorer classes in Ireland*, section xxv, p. 27.

⁶³ This aspect is also noted in Nicholls' summary of the 1836 report: Nicholls, *A history of the Irish poor law*, p. 142.

⁶⁴ The LFS bill was published in June 1836 and enacted in August 1836, this post-dated the release of the report which was leaked in April and published in June: Gray, *The making of the Irish poor law*, p. 188.

⁶⁵ Loan funds established pre-1836 operated under a body of legislation enacted to support the work of the *Dublin Musical Society* and the RLFs.

⁶⁶ (6 & 7 Will. 4), c. 55, section ii.

belonging to such societies.⁶⁷ LFSs were required to register with and submit a copy of their rules to the LFB. A failure to register or violation of rules caused the LFS to be excluded from the benefits of the acts, such as suing for any loan payments outstanding. LFSs (not RLFs as they had a special derogation) were required to submit an annual report to the LFB, which in turn produced an annual report on the LFS system for parliament; this is the main source of data on LFS activity.⁶⁸

Resentment against the poor law can be seen in the works of contemporary pamphleteers who argued that LFS formation would decrease poor law expenditure thereby decreasing the pressure on rate payers.⁶⁹ P. B. Ryan⁷⁰ opposed the poor law on the grounds that it ‘impos[ed] burdens on the more meritorious classes, in order to support the less worthy’. Instead Ryan proposed that the profits of a private LFS system which lent to the industrious poor could be used to fully finance a workhouse system for the destitute poor and the old.⁷¹ Matthew Barrington, another influential pamphleteer, referencing the poor law as a motivation, argued that a public poor relief system could be financed from the profits of microfinance. Barrington suggested that these funds would support medical charities as well as ‘go far in preventing the necessity of Poor Laws, by supporting the aged and infirm, and affording employment to a large portion of the labouring population of the country’.^{72,73} The Barrington model, profits from lending to the poor supporting the poor, was attractive compared to the idea of supporting the poor by taxing the upper and middle strata of society.

⁶⁷ (6 & 7 Will. 4), c. 55, section iii; (6 & 7 Vict.), c.92, section xxix.

⁶⁸ Towns with loan funds are reported in the *Parliamentary Gazetteer of Ireland, 1844-45*.

⁶⁹ Testing whether the presence of LFSs reduced poor law expenditure is complicated by the Great Irish Famine which occurred shortly after the implementation of the poor law.

⁷⁰ Manager of the Thurles branch of the Agricultural and Commercial Bank,

⁷¹ Ryan, *Provision for the poor of Ireland*. For other examples see: Caldwell, *A short treatise on political economy*; Connery, *An essay on charitable economy*.

⁷² Barrington, *An address to the inhabitants of Limerick*, p. 24.

⁷³ His attempt to do this in his home city of Limerick received a positive reception. The *Dublin University Magazine* stated that, although it was a local venture, ‘we observe in it the beginning of a complete and noble revolution in the system whereby our charitable establishments are now supported, and we regard the success of the sagacious experiment with an interest proportioned to the grandeur of the results which are likely to flow from it’.

Other pamphleteers saw microfinance as a complement to the poor law rather than as an outright substitute. Shuldham⁷⁴ argued that as “the half-employed labouring classes” would be the potential users of poor relief; that surely any plan which holds out a rational prospect of diminishing the numbers requiring such aid, must deserve at least inquiry.⁷⁵ He was more nuanced in his prognosis and warned against his ‘zealous friends’ who saw LFSs as a substitute for poor relief. Instead he advocated LFSs as complementary to a poor law system.⁷⁶ This view was seconded by the LFB and its secretary, C. A. J. Piesse,⁷⁷ who stressed the ‘duty’ of the upper and middle classes supporting LFSs because ‘if they do not contribute this aid in enabling the poorer classes to support themselves and their families out of the Poor-House, they must support them in [the Poor-House]’.⁷⁸ Ideally a LFS would be the sole provider of credit in an area within a Poor Law Union, so tax relief could be captured through lower locally assessed poor rates, highlighting the interconnectedness of microfinance, philanthropy and the poor law. In this light, LFSs were seen as complementary agents of contemporary social policy.

At the local level, LFS managerial reports made explicit reference to the poor law. The manager of the Carrick-on-Shannon LFS wrote that ‘several industrious tradesmen and poor dealers are most materially benefited ... [They] are not ashamed to say that “if the loan fund was closed, they should take refuge in the poor-house”’.⁷⁹ The manager of the Duleek LFS asserted ‘that in very few instances have persons within the sphere of its operations been driven to the necessity of having recourse to the workhouse of the union’.⁸⁰ The manager of the Tobercurry LFS argued

⁷⁴ Shuldham was a land agent in Cork who operated a LFS in Dunmanway, his views were held in high esteem by the LFB: BPP, *Fourth LFB report*, p 40; BPP, *Reports relative to the valuations for poor rates*, p 226.

⁷⁵ Shuldham, *Remarks on the small loan-fund system*, p. 11; The pamphlet was dedicated to the Duke of Wellington, who Shuldham (p. 1) understood ‘is inclined to look favourably on the small Loan-Fund system as a means of benefiting the working classes of the community,’

⁷⁶ Shuldham, *Remarks*, p. 13.

⁷⁷ Piesse, secretary to the LFB and inspector of LFSs, published a letter written by Hon Rev T. P. Kennedy who advocated agricultural educational societies be established in each poor law union and that these be funded through the profits of LFSs. Further he advocated that ‘one or more Loan Fund Societies, existing in each Poor Law Union might afford the means required’: Piesse, *Sketch of the loan fund system in Ireland*, p. 33.

⁷⁸ Piesse, *Sketch of the loan fund system in Ireland*, p. vi.

⁷⁹ BPP, *Fifth LFB report*, p. 52.

⁸⁰ BPP, *Fifth LFB report*, p. 52.

that the LFS ‘has been instrumental in checking mendicancy and has saved many families from the Poor-House’.⁸¹

Disentangling the exact mechanisms influencing LFS formation is complicated by the interrelation of key motivations: was the poor law itself a direct influence on the formation of LFSs (or anticipation of the poor law given that bills for the law poor were published in February, May and December of 1837)?⁸² Or was the poor law indirectly influential via pamphleteers writing in response to the Poor Law Act by arguing for LFSs as a means to reduce the burden of or replace the poor law (the pamphlets cited explicitly referring to loan funds were published between 1837 and 1841)? Or perhaps the significant returns promised on debentures issued by LFSs as set out in the Loan Societies Act as a complementary proposal to aid poor relief were the key motivators for LFS formation in Poor Law Unions?

The crux of the argument is that the timing of the implementation of the poor law was a predominant influence on LFS formation. The various motivating factors influencing LFS formation can be gauged from the timing of LFS formation in a quasi-observational study – see Figure 2 for a timeline of events and Figure 3 for the number of LFSs on the registrar and the timing of new formations and closures. There was a significant increase in the number of LFSs registered with the LFB (itself established in 1836) between 1838 (when there were 50) and 1842 (when there were 300). This increase in LFSs is somewhat surprising as the formation of the Loan Fund Board made market entry more difficult and expensive than it had been. The nascent LFS now had to register with the LFB, to develop and promulgate rules consistent with the Loan Fund Act, and to follow the recommendations of various LFB circulars concerning, among other things, proper bookkeeping, formal bonding of clerks and other employees of the funds, as well as carrying out due diligence on all loan applications including into the ability of the sureties to make good on a loan should the borrower default. Moreover, the LFB audited the accounts of the LFSs.

⁸¹ BPP, *Fifth LFB report*, p. 52.

⁸² A bill for the more effectual relief of the destitute poor in Ireland, 14 February 1837 (38), 2 May 1837. (264), 1 December 1837 (15).

They were no longer strictly private affairs. In the sense of a quasi-observational event study, the timing of the increase in LFSs suggests a direct correlation with the introduction of the poor law which promoted LFS formation. Further evidence of this comes from Porter's survey of LFSs where he asked the year of formation;⁸³ of the 215 surveyed 163 provided this information and 61 percent of these societies were formed *after* 1838. Porter's findings are corroborated by inferring the year of formation from the LFB reports. These suggest that, on average, the 300 LFSs in 1842 had only been operating for approximately 4 years.⁸⁴ The exceptions to this were the older societies, most notably the Dublin Musical Society which had operated since the 1700s, although in 1842 it was barely active.

4 Revealing preferences

4.1 Profitable non-profits

The founders of LFSs – local elites – were strongly influenced by the introduction of the contemporary poor law. Yet LFSs could only be of benefit to the poor, and thus to the elites, if they were accessible and provided a beneficial service. This they did. LFSs provided small loans (under £10) over short periods (20 weeks/5 months) at low cost (6d/, reduced later to 4d/£). Because of these legislated parameters (see Table 2), there was no, or very limited, price competition between loan funds. Although high,⁸⁵ LFS lending rates were relatively cheap given that the rates charged by contemporary pawnbrokers were as high as 50 APR for loans under £1 and 25 APR for loans between £1 and £10,⁸⁶ or private moneylenders whose rates varied from 25 to 100 per cent APR.⁸⁷

⁸³ Porter, "A statistical account of loan funds in Ireland, for the year 1840".

⁸⁴ McLaughlin and Pecchenino find a correlation between wealth inequality in a PLU and the formation of a LFS. McLaughlin and Pecchenino, "Ireland's peculiar microfinance revolution, c. 1836-1845".

⁸⁵ Loan rate were high and made still higher by fines charged for late repayment and the need to compensate sureties, costs borrowers internalized, but were low in comparison to available alternatives. BPP, *Devon Commission II* [616] (1845), Witness 601, Q. 18.

⁸⁶ (28 Geo. 3) c. 49 [I], section 19.

⁸⁷ BPP, *Devon Commission II*, W297(Q.18), W. 431 (Q. 28), W. 494 (Q.5); BPP, *Devon Commission III* [657] (1845), W.857 (Qs19-20)).

While the £10 cap on loan fund loans coincided with a similar loan ceiling imposed on private pawnbroking,⁸⁸ the average loan sizes in LFSs were in the region of £3 to £4 in the 1830s and 1840s – Table 4. The average loan in the RLFs was £2 to £3. These loans, generally made to small traders and agriculturalists,⁸⁹ were significant given contemporary average weekly wages were approximately four shillings six pence (£0.23) in the 1840s; still less was earned by the ‘poor’, around two shillings.⁹⁰ The loans were also significant relative to the price of livestock such as pigs (£1.50) and sheep (£2.18).⁹¹

However, there was considerable regional variation in loan use. According to Porter’s account of the activity of 80 LFSs in 1840, the majority of loans were for investment: an average of 40 per cent for agricultural investment, such as livestock or purchase of seed, 17 per cent for manufacturing, such as looms and other manufacturing inputs, 15 per cent for dealing – see Table 4.⁹² A significant share of loans, 28 per cent on average, was for consumption, such as payment of rent, clearing debts and purchasing food, indicating that there were LFS borrowers who required credit for capital investment and borrowers who required credit for day-to-day survival (income smoothing), where the same borrower could at different times be both.

Porter concluded that the group that benefited most from access to loan funds were the “working classes”.⁹³ In his summary of evidence, it was ‘small farmers’ who benefitted most by not having to rely on the much more expensive credit provided by pawnbrokers or private (unregulated) moneylenders. According to the Devon Commission borrowers from LFSs were predominantly small farmers and labourers.⁹⁴ RLFs had similar borrowers, generally small traders and agriculturalists.⁹⁵ The broad range of users and uses of funds suggests the credit provided by

⁸⁸ (26 Geo. II), c. 43. [Ire].

⁸⁹ BPP, *Select Committee on Loan Fund Societies (Ireland)*. [259] (1854-55) (Q 716), p. 44; *Devon Commission 1845*, W. 483 (Q. 4).

⁹⁰ Bowley, “Agricultural Wages”.

⁹¹ Average export prices of cattle, horses, sheep and swine in 1835 were, £7.18, £15.29, £1.50 and £2.18 *Second report of the Railways commissioners*, 1837-38b [145], Appendix B 9.

⁹² Porter, “A statistical account”

⁹³ Porter, “A statistical account”, p. 222.

⁹⁴ BPP, *Devon Commission Digest*, p. 194.

⁹⁵ BPP, *Select Committee on Loan Fund Societies (Ireland)*, Q 716, p. 44; BPP, *Devon Commission II*, W. 483 (Q.4)

LFSs was relatively affordable and critical to efficient rural production.⁹⁶ From a borrowers perspective, Type 1 or Type 2 funds (as outlined in Table 3) were more beneficial in terms of lower costs of borrowing, but Type 3 and Type 4, although more expensive, may also have been beneficial in terms of accessing credit.⁹⁷

The LFSs' realised profits were applied to charitable purposes or retained. They were seen by Porter as 'the property of the poor, though in the hands of trustees for their benefit.'⁹⁸ LFSs were profitable due to the high turnover of capital, frequency of repayment, and the immediate discounting of interest. For example, the Abbeyleix LFS made loans averaging £30,000 per annum and used its profits⁹⁹ to build 20 cottages for rent to labourers where the rental income was used to fund other charitable ventures including a fever hospital.¹⁰⁰ While initially profits were to fund charitable works, substitutes for provisions of the poor law, regulation evolved stating that profits be retained as security against losses or to augment capital thereby providing more funds to help the poor help themselves.

4.2 Distributing profits

LFSs were non-profits that operated under legislative constraints on business parameters, including caps on interest payable on assets and chargeable on liabilities, they also operated under a non-distribution of "profits" constraint. However, they had some autonomy in how net earnings were used: retained and added to capital or expended for a particular charitable purpose. Legally,

⁹⁶ LFS and RLF loans are very much like payday loans today by providing credit to the severely credit constrained. While they are expensive, they are cheaper than the alternatives available to the borrowers, are generally used sparingly, and are easy and fast to procure: Elliehausen and Lawrence, *Payday advance credit in America*; Elliehausen, *An analysis of consumers' use of payday loans*; Stegman, "Payday lending".

⁹⁷ Loan funds had traditionally been overlooked by historians of Ireland. One exception is Mokyr who dismisses LFSs in his discussion of sources of credit and cites the following conclusion from the Devon Commission when summarising them: "As loan funds are usually constituted, the highest praise which can truth be allowed to them is, that they are less ruinous than private usurers": Mokyr, *Why Ireland starved*, p. 186. However, the evidence presented here suggests a more nuanced interpretation of LFS activity is required.

⁹⁸ Porter, "On the increasing operation of loan funds in Ireland", p. 283.

⁹⁹ Using 1843 as an example, the Abbeyleix LFS made £27,567 loans, the gross income from this lending (discount and fines) was £1,210, expenses of management were £302 (salaries £243) and interest on deposits were £330.

¹⁰⁰ BPP, *Devon Commission Part III*. [657] (1845), Appendix B. 154.

funds were not permitted to distribute net profits to members. One way to circumvent this was to increase expenses on activities of indirect benefit to funders or to tie loans to purchases at the shop or pub where the LFS was (illegally) located, thereby reducing net profits or increasing associated returns. How LFSs distribute profits reveals what factors influenced socio-economic motivations, the institutional logics, and how these changed when the law governing interest chargeable and payable changed in 1843 and altered the restrictions on the distribution of profits. The ‘amount expended for charitable purposes’ was a choice that each LFS made independently and this attribute of the LFS paradigm influenced many promoters to advocate for the foundation of LFSs as it enabled LFSs to provide cheap loans and use “profits” to provide additional charitable benefits. On the other hand, retention of profits created a buffer that protected depositors, made LFS sustainable and enabled funds to sustainably provide charity in the form of continued concessional loans to the poor.

Section 24 of the 1836 Loan Society Act stated that profits shall be supplied to charitable purposes such as ‘in support of the hospital or infirmary of the county’ or ‘for such other local charitable Purpose as they shall think fit; the Residue, or the Whole of such net Profits if no Part shall be so appropriated, being employed as Part of the Funds of the Society until the Trustees shall otherwise determine’.¹⁰¹ Alongside reducing interest on deposits and loans, section 44 of the 1843 loan fund act changed the decision-making matrix regarding the net profits.¹⁰² It required funds be set aside to create a reserve fund for the protection of debentures, to augment the society’s capital with retained earnings, or expend profits on charitable purposes ‘with the Approbation of the said Loan Fund Board’. Thus, there was a clear distinction between the operational constraints before and after 1843.

LFSs were very concerned about the effect of the 1843 Act’s reduction in interest rates on their general sustainability and the general air of ‘uncertainty to which effect the Act may have’ on

¹⁰¹ An Act to amend the Laws relating to **Loan Societies in Ireland** , 1836, (6 & 7 Will. 4), c. 55.

¹⁰² Charitable loan societies (Ireland) act. 1843 (6 & 7 Vict.), c. 91.

LFSs influenced their activity.¹⁰³ Here we model the choice to spend profits on charitable purposes in 1842 and 1843, immediately before and after the introduction of the 1843 Act. The effect of this change was immediately noticeable. The amount expended on charity dropped by 25 per cent from £18,967 in 1842 to £14,149 in 1843, the mean amount expended on charity across all funds in 1842 was £45 compared to £37 in 1843. Modelling the choice to spend profits on charitable purposes therefore reveals the institutional logics of LFSs before the change in the legislation and how institutional logics themselves changed after the legislation. We decided to analyse the choice to spend any profits on charitable purposes rather than the amount spent since many LFSs did not spend anything on charity. Even a small amount expended on charity reveals their underlying institutional logic; we distil this choice down simply to binary choice: “give” or “not give”. The charitable functions of LFSs in the years 1842 and 1843 are analysed using the following discrete (binary) choice logistic model:

$$\text{Loge} \frac{\pi_i(\text{Charitable expenditure})}{1 - \pi_i(\text{Charitable expenditure})} = \beta X_i + \epsilon_i \quad (1)$$

where charitable expenditure is defined as a binomial that takes the value 1 if a LFS expends money for charitable purposes and 0 otherwise. Effectively, the dependent variable is the probability of giving to charity over not giving to charity. The aim of the exercise is to determine whether LFSs characteristics are correlated with the propensity to give to charity and the model thus tests for characteristics that might shift this probability up or down.

The independent variables were collected from LFB reports, poor law administration reports, and the 1841 census – see table 5 for a definition of all variables and [table A2.1](#) for summary statistics. The data from LFB reports gives information on size of LFSs (capital) and income generation (gross income as a percentage of capital), number of depositors, interest paid on capital, and the name of the corresponding officer which is coded as 1 if it is a religious minister. The number of RLFs and the number of TSBs are included as explanatory variables. Additional

¹⁰³ BPP, *Sixth LFB Report*, p. 3.

controls are included for population density, poor law valuation per acre (a proxy for wealth), ratings before 1842, the location of major cities, and the industrial province of Ulster with its established banking system.¹⁰⁴ It is important to note that logistic models are sensitive to misspecification and will be inconsistent if explanatory variable are omitted. In this regard, one of the most important steps is to assess what function of the dependent variable yields a linear function of the independent variables (the link).¹⁰⁵ Link tests and other diagnostic tests of the model are reported with the results.¹⁰⁶ The proportion of the Area Under the Curve (AUC),¹⁰⁷ where values range between 0.5 and 1,¹⁰⁸ is used to test the predictive ability of the underlying logistic model.

The hypothesis is that fund structure influenced the charitable expenditure of LFSs. First, that older LFSs would have a greater motivation to expend on charitable purposes (or accumulated greater reserves to be expended), but that this would matter less with the change in operational constraints. Second, that the inclusion of religious members on the board of management of funds may influence charitable decision making. Lastly, that the practical implementation of the poor law system would influence decision making pre-rule change, but not afterward.

Table 6 and Figure 4 shows the result of this choice of whether LFSs expended profits on charity for the years 1842 and 1843.¹⁰⁹ Results are presented as marginal effects, which are the effect on the conditional mean of y (the choice to make charitable expenditure) of a change in one

¹⁰⁴ Ollerenshaw, *Banking in nineteenth century Ireland*.

¹⁰⁵ Hosmer, Lemeshow, and Sturdivant, *Applied Logistic Regression*, pp 49-50.

¹⁰⁶ Link tests use predictions of the dependent variable (\hat{y}) and (\hat{y}^2) from the regressions to test if the model is correctly specified. For the link to be correctly specified, \hat{y} should be statistically significant and \hat{y}^2 should be statistically insignificant: Pregibon, "Logistic regression diagnostics". If there is evidence of an incorrect link function, this can be remedied by including omitted covariates such as interactions: Hosmer, Lemeshow, and Sturdivant, *Applied Logistic Regression*, p. 203. Further tests of the suitability are derived from Hosmer-Lemeshow goodness-of-fit score which groups predictions deciles based on values of the estimated probabilities: Hosmer, Lemeshow, and Sturdivant, *Applied Logistic Regression*, p.157.

¹⁰⁷ This value compares the sensitivity and specificity of the model.

¹⁰⁸ For values at 0.5, these are poor fits and the model may be random. Values between 0.5<0.7 are poor, values between 0.7<0.8 are acceptable, 0.8<0.9 are excellent, and >0.9 are outstanding: Hosmer, Lemeshow and Sturdivant, *Applied Logistic Regression*, p. 177.

¹⁰⁹ The outcome can also be modelled by OLS looking at charity relative to capital, the results are similar. However, given that half the societies choose not to expend money on charity it was decided to focus on the choice to expend money on charity and not the amount which is in part a reflection of the size and profitability of a fund.

of the regressors, at the sample mean of the regressors.¹¹⁰ The key finding is that prior to legislative change the significant positive predictors of expenditure on charity were the age of a fund, whether a fund had a religious minister on the board of trustees, and the size of a fund (proxied by capital). On the other hand, the implementation of the poor law was a counter-balancing force: once the poor law was in operation there was less impetus to expend on charitable services already provided for by ratepayers. Notably, when the legal parameters changed in 1843 there were noticeable effects on behaviour. The influences which had led to charitable giving in the past were less influential (e.g. the role of religious ministers is sizeably reduced, the age of a fund, and poor house admission are no longer significant). Instead, interest paid on capital (indicator of deposits) was negative predictor of charitable expenditure. The greater income generation, after the fall in discount rates, was a positive predictor as was the number of employees. Lastly there were contrasting influences of the substitutable and complementary microfinance institutions; RLFs in proximity were negative predictors of charitable expenditure whereas TSBs were positive predictors of charitable expenditure.

The timing of this observational study could be influenced by the wider business cycle¹¹¹ and budgetary changes that affected agricultural incomes, especially in 1842, and therefore may have influenced LFSs to choose to have more charitable expenditure than they might otherwise have done.¹¹² Although difficult to disentangle, an alternative approach to identify the logics of LFSs is to analyse the choices of funds that were continuously active before and after reform. An issue here is the easy entry and exit of LFSs, therefore the analysis is restricted to funds that were

¹¹⁰ Cameron and Trividi, *Microeconometrics with Stata*, pp 333-334.

¹¹¹ Particularly as the peak (1836) and trough (1842) may influence behaviour: Dimsdale and Hotson, “Financial Crises and Economic Activity in the UK since 1825”, Table 3.1. The largest declines came in 1841 (-2.8%) followed by further decline in 1842 (-0.8%); Hill, Thomas, and Dimsdale, “The UK Recession in context – what do three centuries of data tell us?”. Kenny, Lennard, and Turner identify 1841 as a particularly bad financial crisis throughout the UK: Kenny, Lennard, and Turner, “The macroeconomic effects of banking crises”.

¹¹² Read “The Repeal Year in Ireland”. Agricultural price data from Kennedy and Solar show a significant fall in pasture and tillage price indices in 1842, there is a recovery in 1843 for tillage but not pastoral prices: L. Kennedy and P. Solar. *Irish Agriculture*, Table A18.

continuously active over three consecutive years (1841, 1842 and 1843), excluding funds with a fleeting existence. This exercise yields 228 continuously active funds.

Clear distinctions can be seen across the mean of variables associated with the different decisions of LFSs: to never make charitable expenditure, to always make charitable expenditure, to stop, to start, or to repeatedly stop and start - see Table 7. A higher proportion of the LFSs that always choose charitable expenditure (93%) and those that had given to charity but decided to stop (91%) were formed before 1841. In terms of the poor law influence, a high share of the funds that always decided on charitable expenditure (97%) were in unions that were not rated before 1841 and they had a lower poor law valuation (£0.72 per acre) than the LFS average (£0.85). This contrasts with LFSs that decided to start charitable expenditure where 88% of these funds were in Unions not rated before 1841, and they also had a significantly higher valuation on average (£1.10 per acre). LFSs that decided to always gave to charity were also in unions where there were fewer poor house admissions (average 0.21% of the population), this was half the average of LFSs that decided never to give to charity (0.48% of the population), or LFSs that decided to start to give to charity (average 0.40% of the population). This suggests possible mechanisms for how the poor law influenced decision making: the funds that always decided to make charitable expenditure were also located in poorer districts where the poor law was in its infancy. In terms of charitable logics, religious ministers were a higher share of managers in funds that always gave to charity (51%) and those that started giving to charity (50%), while the proportion of religious ministers was lowest in funds that never gave to charity (34%). In terms of commercial variables, LFSs that chose to make charitable expenditure had higher values of capital and interest on capital than the LFSs that never gave to charity. The influence of RLFs and LFSs are also notable; more RLFs were found in unions where LFSs never made charitable expenditure (1.43) compared with LFSs that always

made charitable expenditure (0.36) and on average TSBs were found in equal number in unions where LFSs never and always gave to charity (0.74 and 0.75 respectively).¹¹³

Following reform of the LFS system in 1843 there was an increase in market exits (as seen in Figure 3). Of the 300 LFSs on the LFB's register in 1842, 92 had exited the market by 1845 (27 of which had exited by 1843) and of the 298 funds that were on the LFB register in 1843, 73 had exited the market by 1845:¹¹⁴ on the eve of the famine a significant number of LFSs had already ceased to operate. Applying the logistic regression framework from equation 1 above it is possible to tentatively explore the determinants of market exit - shown in Figure 5 (full results in Table A2.3) – where inactivity (exit) in 1845 is coded as 1 and activity (continuation) is coded as 0. The results highlight the conflictual structure of the LFSs. Variables positively associated with exit are those associated with a charitable logic (the total sum of charitable lending, religious ministers on the board of management) and associated institutions with similar logics that could fill the void after exit (RLFs and TSBs). Variables associated with market logics were negatively associated with exit (Δ capital, age, number of depositors, and existence of joint stock banks).¹¹⁵ The key changes in business parameters following the 1843 act are also revealing. The interest rates paid on capital are positively associated with exit, implying funds paying higher rates of interest found it difficult to operate sustainably after rule changes reduced margins. Whereas gross income was a negative

¹¹³ As these are unordered decisions and there are more than two choices (i.e. no longer binary), the decision can be analysed using a multinomial logistic regression – see Table A2.2 and Figure A2.2. Multinomial regressions are generalised extensions of logistic regressions. The main distinction between a multinomial and logistic regression is that decisions are modelled relative to a base category, here the chosen base category is the decision never to make charitable donations: See Hosmer, Lemeshow, and Sturdivant, *Applied Logistic Regression*, chapter 8; Multinomial regressions are popular approaches to analyse strategic decisions, albeit results can be difficult to interpret: Wulff, “Multinomial logit model”. Results are shown as marginal effects at the mean in Table A2.2, similar to the discussion of the mean of these choices the analysis shows that the main distinction is between those that Always give to charity and those that were fluid in their decision making. Influences that positively predict always giving to charity tended to be offset in the other decisions.

¹¹⁴ Here exit means either no longer on the register or marked as have ‘ceased operations’ or having been ‘gazetted’ for irregular activity.

¹¹⁵ Joint stock banks are included here as one of the major financial changes between 1843 and 1844 is the removal of the Bank of Ireland's geographic monopoly on note issue.

predictor of exit, here the reduction in discount rates was compensated by the use of fines and ancillary fees and enabled funds to cushion the blow of the loss of income.¹¹⁶

To summarise, when regulation was tightened and interest rates reduced, firms that operated on purely market logics or that had struggled to fulfil their charitable goals, exited the market. What is apparent here is that while the philanthropic purpose of the LFSs had not changed, the mechanism for distributing that philanthropy had. Now, instead of direct provision, the provision was indirect via lending. Thus, the more able LFSs concentrated on their fundamental philanthropic institutional logic: to help the poor help themselves. The poor law provided when that help was not enough.

5 Conclusion

Ireland experienced a revolutionary boom in the provision of microfinance to the poor in the pre-Famine decade 1836-1845. Already staggering under the weight of other taxes, property owners were incensed by the introduction of the Poor Law in 1838. LFSs were seen as a pragmatic private sector means of lessening this fiscal shock, by providing the poor with the credit required to escape chronic poverty and the need to avail of relief. We examine whether LFSs achieved their desired end. Although descendants of Loan Fund Societies are not a feature of the modern Irish financial landscape, these were emerging industries of the time and much can be learnt from their failure as from their success.¹¹⁷

LFSs, registered and regulated by the LFB,¹¹⁸ were found in the east of the island. RLFs were the second strand of microfinance highlighted, these were most predominant in the west and south of the island. The major source of capital for RLFs were funds raised by the London Relief Committee in 1822, clearly independent of the introduction of the Poor Law in 1838. LFSs were

¹¹⁶ For example, the average rate of fines to capital were similar in both 1842 (3.41 percent) and 1842 (3.53 percent); there was also a one percentage point increase in average income per capital between 1842 and 1843.

¹¹⁷ Forbes and Kirsch, "The study of emerging industries".

¹¹⁸ Hollis and Sweetman, "Microcredit in prefamine Ireland"; Goodspeed, "Microcredit and adjustment to environmental shock"

unlikely to enter markets where RLFs were already found since the credit needs of the poor were already being met. They were, however, established throughout the island. They operated in all Poor Law Unions, providing credit to the credit starved, their target clientele - the 'industrious poor' - essentially small farmers and hucksters. Both LFSs and RLFs improved the lot of the 'industrious poor', making them better able to help themselves, at least in normal times.

LFS and RLF are very much like payday lenders and credit unions today by providing credit to the severely credit constrained. While payday loans are expensive, they are, like the LFS and RLF loans, cheaper than the alternatives available to the borrowers, generally used sparingly, and easy and fast to procure.¹¹⁹ The initial regulation of LFSs under the 1838 Loan Societies Act gave flexibility to societies to match their institutional logics. Firms with dual charity and credit provision logics, like today's credit unions, used profits for charitable purposes. Firms with solely market logics, those similar to today's payday lenders, did not. When LFS regulation was tightened in 1843 by the Charitable Loan Societies (Ireland) Act reducing interest rates payable on debentures and chargeable on loans, LFSs that operated on purely market logics found the new parameters inconsistent with their logics and exited the market. Of the 300 LFSs registered with the LFB in 1842 only 208 were still active in 1845 at the eve of the Irish Famine. Contrary to Cobb et al., who argue that in the face of uncertainty, commercial microfinance lenders do not consider exiting because they have dedicated time to building expertise, developing networks, and investing in physical offices,¹²⁰ many Irish LFSs found exiting to be the only viable option. Their behaviour is reflected in that of today's market logic driven payday lenders in the UK, such as Wonga, QuikQuid and The Money Shop. These lenders have all exited the market because the tighter consumer protection regulations and interest rate caps promulgated by the Financial Conduct Authority were inconsistent with their business models and undermined their profitability. Other LFSs adapted their logics to the new regulatory reality by continuing to provide loans while

¹¹⁹ Elliehausen and Lawrence, *Payday advance credit in America*; Elliehausen, *An analysis of consumers' use of payday loans*; Stegman, "Payday lending".

¹²⁰ Cobb et al., "Funding Financial Inclusion", p. 2111.

sustaining themselves by ploughing their profits back into their businesses. This allowed them to fulfil their primary charitable logic of helping the industrious poor help themselves. Funds founded in this period were still active 100 years later.¹²¹ Their behaviour echoes Battilana and Dorado's argument that balancing and adapting logics is crucial to sustainability of hybrid organisational forms.¹²² The behaviour of these LFSs is reflected today in credit union lending practices.¹²³ Credit unions, financial institutions concerned with the social and economic success of their communities, facing restrictions on the interest rate they can charge, provide small loans while working with borrowers individually to improve their financial resilience. The long-term benefit to the credit union is higher net returns on lending, improving their own and their community's sustainability. The long-term benefit to the credit union customer is economic independence, precisely the LFS goal for the industrious poor.

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¹²¹ There were 25 LFSs active in the Irish Free State in 1945. Examples of funds founded a century earlier are the Limerick Industrial and Limerick Pery and Jubilee who, by 1945, were run solely on accumulated reserves (97% and 100% for the respective funds): 'Statement of accounts of loan funds working in 1945', *Annual report of the Minister for Agriculture 1945*, pp 60-63.

¹²² Battilana and Dorado, "Building sustainable hybrid organisations", p. 1435.

¹²³ Stegman, "Payday lending".

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Table 1: Number of savings banks in selected countries

	1	2	3	4	5	6	7	8
	Ireland (LFSs)	Ireland (TSBs)	Germany	UK [#]	US	France	Italy	Spain
First founded								
	1742*	1817 [^]	1778	1801	1816	1818	1822	1838
Number of institutions								
1820	10-20 ^Δ	27	-	317	10	-	-	-
1830	141	68	-	469	36	11	-	-
1840	461	74	280	535	61	290	25	1
1850	132	52	-	581	108	365	60	12
1860	110	54	612	623	278	444	91	-
1870	88	43	1141	496	517	514	-	-
1880	78	32	2108	442	629	530	183	33
Per 100,000 capita								
1820	141	380	-	1493	100	-	-	-
1830	1801	869	-	1943	272	33	-	-
1840	5522	886	900	2000	350	831	109	7
1850	1919	756	-	2138	458	1004	245	81
1860	1890	928	1698	2157	873	1190	349	-
1870	1624	794	2908	1580	1285	1337	-	-
1880	1499	615	4846	1277	1247	1357	620	196

* Refers to the Dublin Musical Society, the fund operated by Dean Swift was some time in the 1720s.

[^] the formal date of savings banks varies, with institutional histories dating banks to 1815 for Belfast but formal documents refer to 1817.

^Δ is an approximation based on evidence from contemporary reports

[#] From 1801 to 1920 Ireland is a constituent member of the United Kingdom of Great Britain and Ireland, therefore figures from column 2 are included in column 4.

Col 1: 1820: inferred from BPP, *Report from the Select Committee on the Employment of the Poor in Ireland*, [561] (1823), p. 18; 1830: BPP, Return from Clerks of Peace in Ireland of Transcripts of Rules and Regulations of Loan Funds [230] (1836), 1840-1880: LFB reports

Col 2: 1820-1840: Pratt, J. T. (1830). *The history of savings banks in England, Wales, and Ireland* (London, 1830). J. T.

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Cols 3-8: Wadhwani. "The institutional foundations of Personal Finance", Table 1.

Table 2 Business Parameters of Loan Fund Societies

	<i>Acts</i>			
	1823	1836	1838	1843
<i>Loan term</i>	Not stated	20 weeks	20 weeks	20 weeks
<i>Limit</i>	£ 10.00	£ 10.00	£ 10.00	£ 10.00
<i>Renewals</i>	Illegal	Illegal	Illegal	Illegal
<i>Discount 20 weeks</i>	Legal interest	6d in the £ (2.5%)	6d in the £ (2.5%)	4d in the £ (1.67%)
<i>Discount (APR)</i>		6.5%	6.5%	4.3%
<i>Contemporary annual discount calculations</i>		12 %	12%	8.25%
<i>Interest on savings</i>	Not stated	6%	6%	5%
<i>Fines</i>	Not stated	No Limit	No Limit	No Limit
<i>Liability of treasurers and clerks</i>	Bonds	Bonds	Bonds	Bonds
<i>Liability of management</i>	Not stated	Limited	Limited	Limited
<i>Allocation of Profits</i>	Retain	Retain & Charitable expenditure	Retain & Charitable expenditure	Retain, Reserve Fund & Charitable expenditure
<i>Regulator</i>	None	Loan Fund Board	Loan Fund Board	Loan Fund Board
<i>Exemptions</i>	From stamp duty	From stamp duty/ RLFs exempted from Loan Fund Board	From stamp duty/ RLFs exempted from Loan Fund Board	From stamp duty/ RLFs exempted from Loan Fund Board

Table 3 Institutional Logics of RLFs and LFSs

Macro Model	Locus & Type of Control, Source of Funds	Meso Model	Organizational Attributes
RLF	London Committee, completely external, limited local oversight, operated under LF Act	Charity	Non-profit, community-based, Managed by local elites, specific goals relating to local industries, sustainability not a consideration, fund charitable works (looms, etc.)
LFS – Type 1	LFB – regulator and supervisor, operated under LF Act, local elites (often absentee) provided funds by grant	Charity	Non-profit, community-based, virtually managed by representatives of local elites and occasionally elites but actually by paid employees sometimes with strong ties to the elites, help the poor (often tenants) help themselves, ensure rents paid, sustainability not a consideration – fund charitable works (fever hospitals, oatmeal, seed stock)
LFS – Type 2	LFB – regulator and supervisor, operated under LF Act, local upper middle classes provided funds by investing in LFS debentures, some smaller depositors	Charity/Microfinance institution (market)	Non-profit but concerned with being able to pay debenture holders and other depositors, community-based and reliant on non-overlapping lending areas, managed by large debenture holders (all or part), help the poor help themselves, sustainability a consideration, put “profits” back into the MFI to provide reserves and increase loanable funds – charity provided via lending rather than works
LFS – Type 3	Unregistered, usually small business person, partially constrained by LF Act parameters	Moneylender (market)	For profit, often operated in a region with existing charitable LFS, provided loans loosely per LF Act requirements but often requiring tied purchases in shop or bar, owner operated
LFS – Type 4	Pseudo banks set up under LF Act, not registered, bank notes of local banks	Microfinance institution (market)	Ponzi schemes

Table 4 Loan distribution by activity and average loan sizes, 1840

	All loans	Agriculture	Manufacturing	Dealing	Consumption
	Total number of loans	%	Share of number of loans %	%	%
Ireland	130,044	39.84	17.03	15.39	27.74
Ulster	72,659	36.05	19.08	17.78	27.09
Leinster	37,423	45.19	13.91	10.33	30.57
Munster	15,712	30.78	20.21	25.86	23.14
Connaught	4,250	48.31	17.05	8.96	25.68
	Total amount £ of loans	%	Share of loan amounts (£) %	%	%
Ireland	473,538	42.17	16.46	16.54	24.84
Ulster	282,749	40.56	16.43	17.48	25.53
Leinster	141,837	47.97	14.28	11.39	26.35
Munster	39,124	31.33	19.41	28.50	20.76
Connaught	98,28	41.94	26.68	11.61	19.77
	Average loan sizes (loan amounts/ number of loans)				
	£	£	£	£	£
Ireland	3.38	3.80	3.36	3.53	3.09
Ulster	3.84	4.51	3.42	3.63	3.66
Leinster	3.32	3.75	3.72	3.70	3.08
Munster	3.23	2.56	2.46	3.12	1.88
Connaught	3.47	2.93	2.73	2.56	3.07

Source: Porter, ““A statistical account”

Table 5 Definition of all variables used in regression analysis

Variable	Definition
Formed before 1842	The age of a LFS is inferred by when a LFS appeared on the LFB registers (starting in 1838). These are manually classified based on whether a fund appears on a loan fund register.
Poor House Admissions (%population)	The number of workhouse admissions per capita.
Religious minister on board of trustees (=1)	This is a dummy variable for whether a religious minister is listed as the corresponding officer
Capital (£000s)	Total assets of a Loan Fund Society
Interest paid (% capital)	Interest paid on deposits as a percent of capital
Number of depositors	Number of depositors in the LFS
Number of paid employees	Number of employees
Gross Income (% capital)	Gross income (discount, fines and application fees) as a percent of capital
Reproductive Loan Funds	Number of Reproductive Loan Funds in the poor law union of the LFS
Trustee Savings Banks	Number of TSBs in the poor law union of the LFS
Population density	Population density in the Poor Law Union
Valuation per acre	Poor law valuation per acre in the poor law union
Ratings before 1842	Dummy variable for whether poor law ratings occurred before 1842
City dummy	Dummy variable if major town or city located in the district (1= city),
Ulster dummy	Dummy for the industrial province of Ulster (1=Ulster).
Δ Amount of capital (£000s)	First difference of LFS capital ($t - t_1$)
Inactive 1845	1 = LFS on LFB register in 1843 but not on register in 1845, or on register but gazetted (in bold font) or ceased working (in italic font).
Total charity expenditure (% total lending)	This is the accumulated sum of all charitable expenditure as a percent of the accumulated sum of all lending. These variables were reported in 1841 & 1842 LFB reports and are updated for 1843 by adding the 1843 figures to the 1842 sum.

Sources: LFS data from Loan Fund Board reports: BPP, *Fifth LFB report* [470] (1843), BPP, *Sixth LFB Report* [445] (1844); BPP, *Eight LFB Report* [218], (1846). RLF locations: BPP, *Second LFB report* [260] (1840); TSB locations: Pratt, *A summary of the savings banks in England, Scotland, Wales, and Ireland*. Poor Law Data: Date of first admission of paupers, valuation per acre, rates 1839-1844, number admitted to workhouse: BPP, Appendices A to C to the tenth annual report of the Poor Law Commissioners. (1844), appendix b tables 12-15

Table 6 Logistic Regressions of Charitable expenditure

	(1)	(2)
	1842	1843
	Marginal Effect (at mean)	
Formed before 1842	0.195** (2.054)	0.116 (1.485)
Poor House Admissions (%population)	-0.236*** (-2.917)	0.054 (1.211)
Religious minister on board of trustees (Yes=1, No = 0)	0.141*** (2.579)	0.096* (1.723)
Capital (£000s)	0.063* (1.787)	-0.010 (-0.330)
Interest paid (% capital)	-0.012 (-1.159)	-0.021* (-1.950)
Number of depositors	-0.000 (-0.208)	0.004 (1.181)
Number of paid employees	0.018 (0.705)	0.051** (2.157)
Gross Income (% capital)	0.004 (0.788)	0.009** (2.140)
Reproductive Loan Funds	-0.030 (-1.543)	-0.044** (-2.378)
Trustee Savings Banks	0.066 (1.462)	0.085* (1.803)
Observations	298	296
Model chi-square	48.03	41.08
Loglikelihood	-175	-179
Pseudo R2	0.1483	0.1238
AUC	0.749	0.737

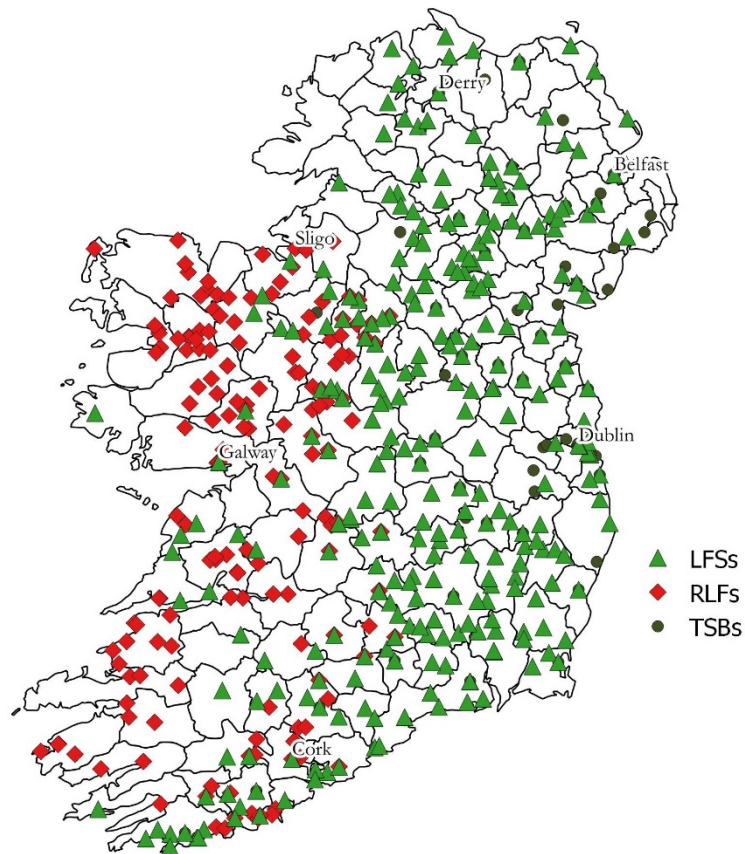
Notes: Robust z-statistics in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; Additional controls Population density, valuation per acre, population density * valuation per acre, dummy for ratings in 1839, 1840, 1841, City dummy (1=city), Ulster dummy (1=Ulster). Specification tests: Link test for specification: 1842 z-statistic for $\hat{\gamma} = 6.76$ and $\hat{\gamma}^2 = -0.01$; 1843 z-statistic for $\hat{\gamma} = 6.21$ and $\hat{\gamma}^2 = -0.42$. Goodness of fit tests, Hosmer-Lemeshow test statistic is not statistically significant in either year (1842=2.58, 1843=6.36) .

Table 7 Mean of variables by classification of loan funds

	Never charity	Always charity	Stops giving to charity	Starts giving to charity	Repeated switch	All
Number of LFSs	53	81	32	42	20	228
Formed before 1841	0.755	0.926	0.906	0.524	0.800	0.798
	[0.434]	[0.264]	[0.296]	[0.505]	[0.410]	[0.402]
Poor House Admissions (%population)	0.479	0.210	0.247	0.403	0.487	0.337
	[0.711]	[0.498]	[0.482]	[0.630]	[0.724]	[0.604]
Religious minister on board of trustees (Yes=1, No = 0)	0.340	0.506	0.438	0.500	0.350	0.443
	[0.478]	[0.503]	[0.504]	[0.506]	[0.489]	[0.498]
Capital (£000s)	1.025	2.052	2.170	1.199	1.592	1.632
	[0.953]	[1.822]	[2.394]	[0.924]	[1.786]	[1.675]
Interest paid (% capital)	3.763	5.089	5.114	4.271	4.349	4.569
	[2.322]	[1.254]	[1.019]	[1.622]	[1.584]	[1.711]
Number of depositors	19	27	27	19	16	22.623
	[39]	[27]	[36]	[18]	[15]	[29.279]
Number of paid employees	2	3	3	2	2	2.618
	[1]	[2]	[2]	[1]	[1]	[1.475]
Gross Income (% capital)	12.652	16.256	12.240	14.687	14.183	14.384
	[3.819]	[3.658]	[2.652]	[3.606]	[6.568]	[4.195]
Reproductive Loan Funds	1.434	0.358	0.406	0.810	0.550	0.715
	[2.197]	[1.110]	[1.292]	[1.418]	[1.234]	[1.563]
Trustee Savings Banks	0.736	0.753	0.500	0.690	0.350	0.667
	[0.738]	[0.643]	[0.718]	[0.950]	[0.489]	[0.735]
Population density	0.487	0.453	0.525	0.550	0.443	0.488
	[0.169]	[0.165]	[0.311]	[0.495]	[0.128]	[0.277]
Valuation per acre	0.848	0.715	0.919	1.102	0.750	0.849
	[0.632]	[0.318]	[0.865]	[1.591]	[0.247]	[0.844]
Rating before 1841	0.057	0.025	0.063	0.119	0.000	0.053
	[0.233]	[0.156]	[0.246]	[0.328]	[0.000]	[0.224]
City/Town	0.094	0.037	0.063	0.119	0.050	0.070
	[0.295]	[0.190]	[0.246]	[0.328]	[0.224]	[0.256]
Ulster	0.226	0.395	0.500	0.167	0.350	0.325
	[0.423]	[0.492]	[0.508]	[0.377]	[0.489]	[0.469]

Note: Standard deviation in brackets

Figure 1 Microfinance institutions by Poor Law Union, c. 1842

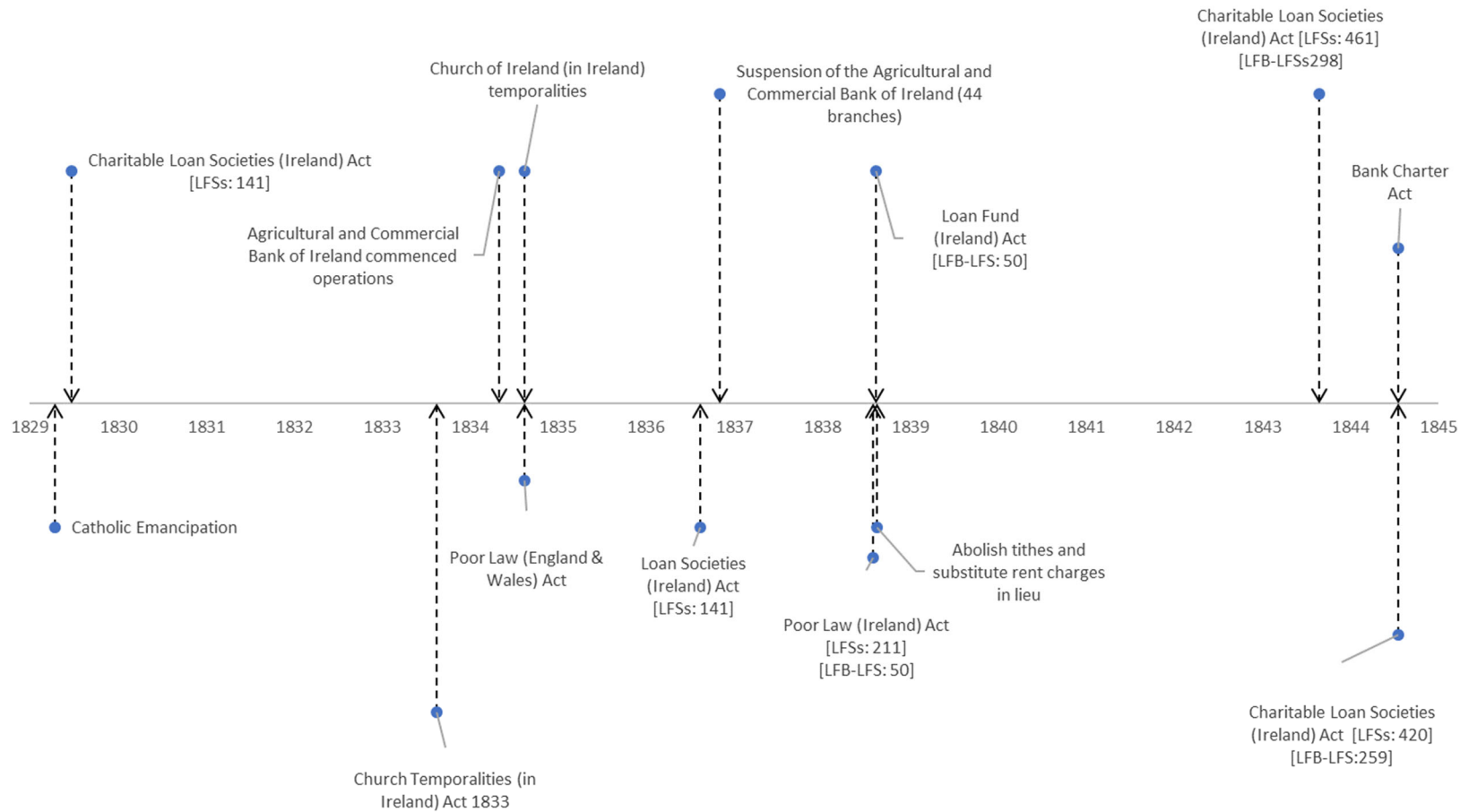


Notes: LFSs 1842, RLFs c. 1839, TSBs 1844.

There were 130 Poor Law Unions from 1838 to 1846.

Shape file of poor law boundaries: Gregory, I., Ell, P. (2004). Irish Poor Law Union and Barony Boundaries, 1841-1871. [data collection]. UK Data Service. SN: 4999, <http://doi.org/10.5255/UKDA-SN-4999-1>

Figure 2 Timeline, April 1829 to July 1845



Note: LFSs figures include both LFSs & RLFs, LFB-LFSs refer to LFSs registered with the LFB.

Figure 3 Number of Loan Fund societies registered with the Loan Fund Board, 1838-1845

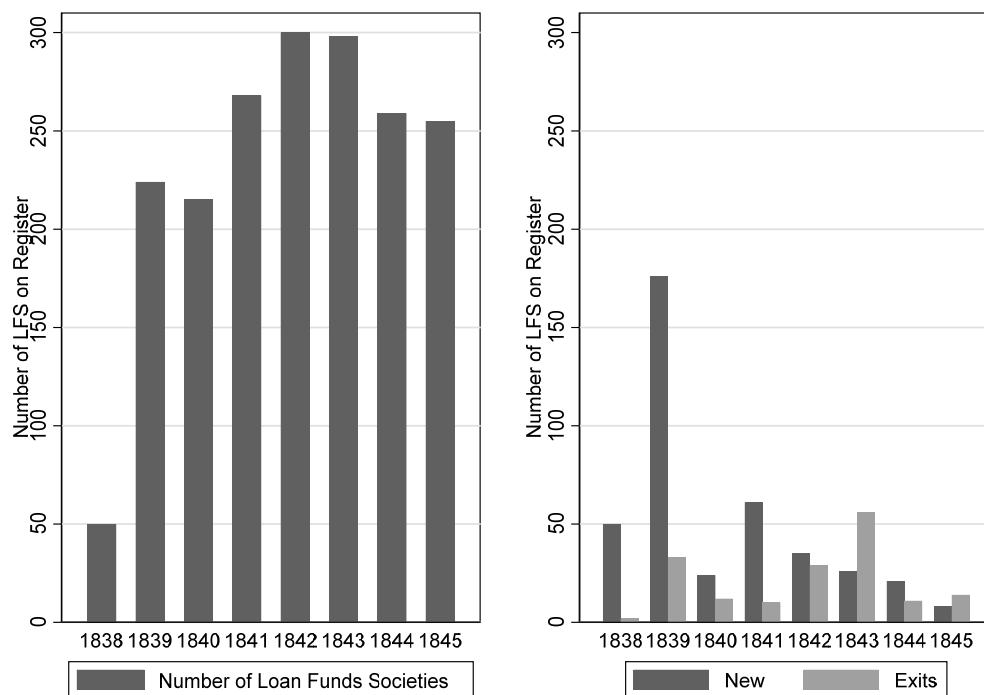


Figure 4 Marginal effects at means 1842 & 1843

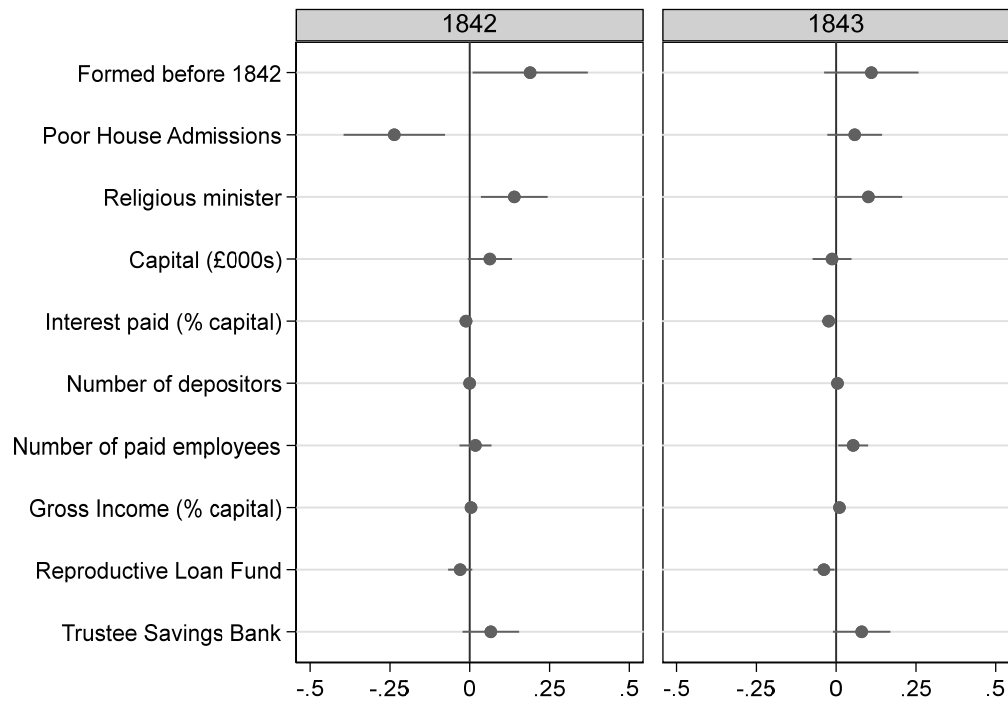
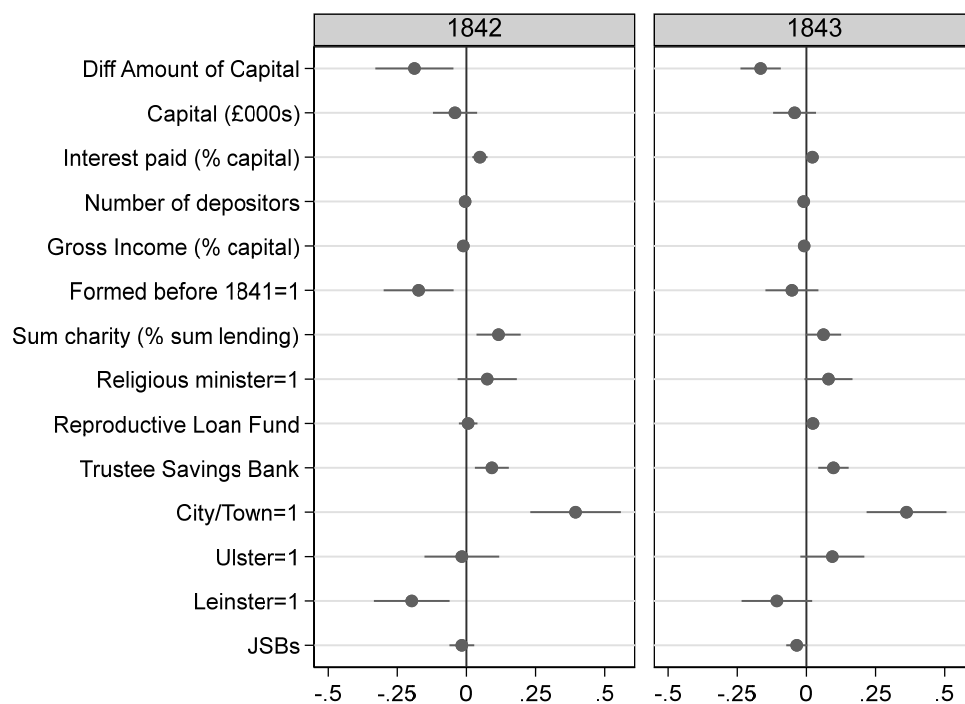


Figure 5 Logistic regressions of 1842 and 1843 that ceased operations in 1845, marginal effects at mean



See Table A2.4 for complete results

Appendices

Appendix 1: Different types of Loan funds based on fund characteristics

This is an attempt to classify the funds in operation (table 3) based on attributes from annual reports of the Loan Fund Board. If no accounts were submitted by funds on the register (i.e. blanks) they are excluded from this analysis, for example there are 300 LFSs on the 1842 register but only 298 submitted complete accounts. There are 4 types of funds classified – shown in

Table A1.1

Macro model	Meso Model	Indicator variable
Type 1	Charity	Distribution of charitable funding
Type 2	Charity/microfinance institution (market)	Distribution of interest paid for capital
Type 3	Moneylender market	Distribution of charges on lending
Type 4	Pseudo bank – microfinance market	Distribution of Wages per employee

Type 1 funds

Figure A1.1 Distribution of charitable expenditure as a share of gross income

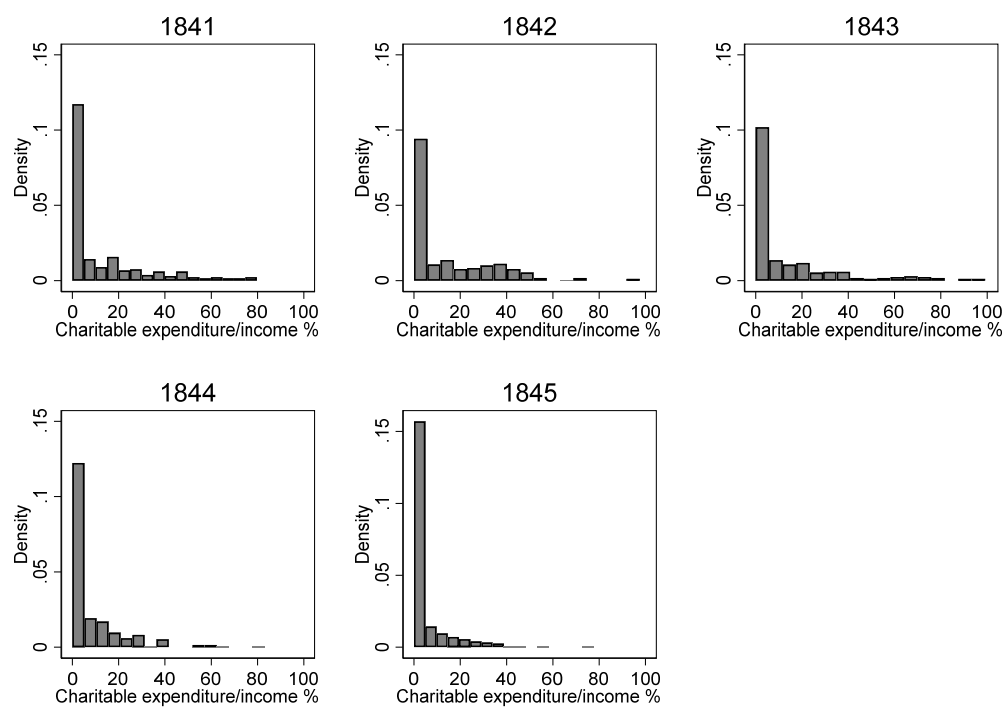


Table A1.2 Summary statistics of distribution of charitable expenditure/income % :

All funds							
Year	Observations	Mean	Standard Deviation	Minimum	Maximum	Societies above mean	Societies below mean
1841	268	20.63	144.97	0.00	2365.91	59	209
1842	298	15.32	22.57	0.00	151.97	106	192
1843	298	14.95	26.63	0.00	210.23	89	209
1844	261	7.68	13.15	0.00	83.21	85	176
1845	261	5.14	11.88	0.00	101.69	62	199
Excluding outliers (charitable expenditure/income over 100%)							
1841	267	11.85	18.44	0.00	79.75	92	175
1842	294	13.85	18.67	0.00	97.57	108	186
1843	291	12.96	21.07	0.00	99.19	90	201
1844	261	7.68	13.15	0.00	83.21	85	176
1845	260	4.77	10.28	0.00	77.59	62	198

Type 2 funds

Figure A1.2 distribution of profits going to debenture holders

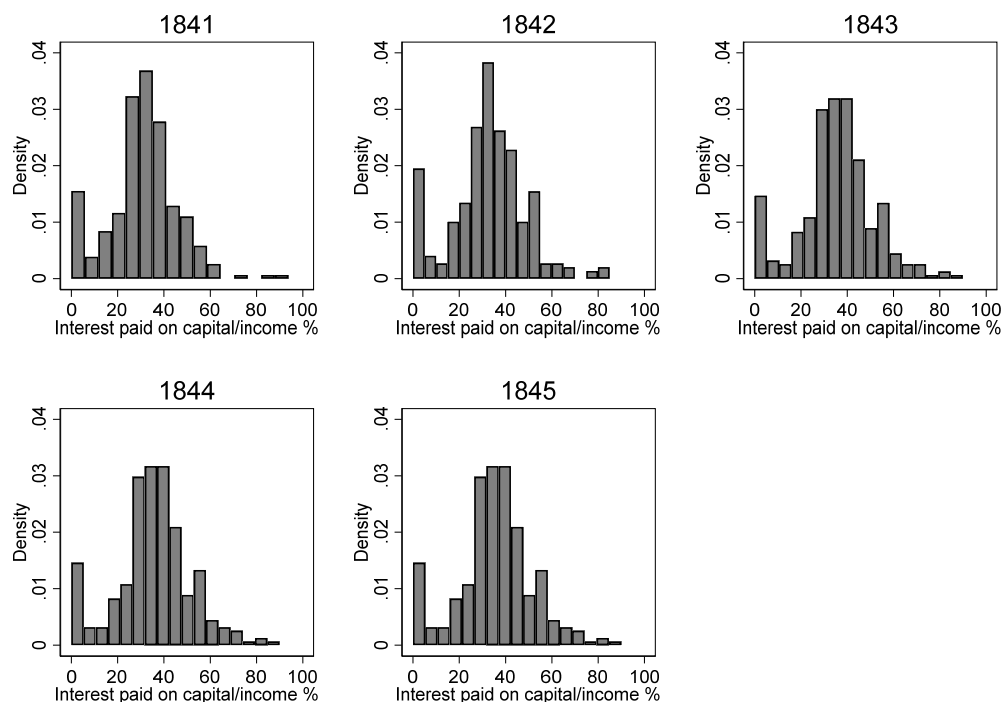


Table A1.3 Summary statistics of distribution of interest paid on capital /income % :

All funds							
Year	Observations	Mean	Standard Deviation	Minimum	Maximum	Societies above mean	Societies below mean
1841	268	33.68	31.94	0.00	436.36	117	151
1842	298	32.37	16.29	0.00	84.89	154	144
1843	296	35.36	16.40	0.00	89.92	149	147
1844	261	36.73	15.33	0.00	94.02	157	104
1845	261	37.85	21.10	0.00	251.40	149	112
Excluding outliers (interest paid on capital/income greater than 100%)							
1841	264	30.79	15.28	0.00	93.78	137	127
1842	298	32.37	16.29	0.00	84.89	154	144
1843	296	35.36	16.40	0.00	89.92	149	147
1844	261	36.73	15.33	0.00	94.02	157	104
1845	260	37.03	16.44	0.00	98.87	160	100

Type 3 funds

Figure A1.3 All charges over loans (%)

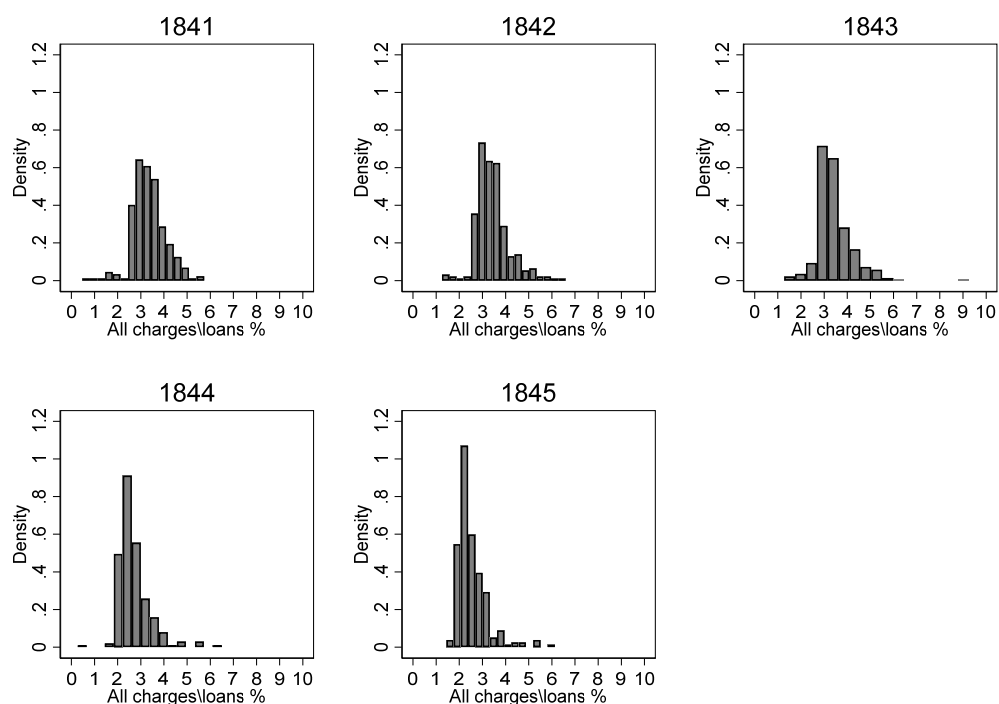


Table A1.4 Summary statistics of all charges over loans% :

All funds							
	Observations	Mean	Standard Deviation	Minimum	Maximum	Societies above mean	Societies below mean
1841	266	3.56	2.73	0.47	41.32	96	170
1842	298	3.64	2.48	1.25	38.48	90	208
1843	295	3.54	2.30	1.27	40.47	96	199
1844	259	2.70	0.70	0.27	6.51	104	155
1845	252	2.57	0.86	1.44	11.38	89	163
Excluding outliers (all charges on loans over loans greater than 10%)							
1841	264	3.34	0.72	0.47	5.74	121	143
1842	295	3.45	0.72	1.25	6.59	127	168
1843	294	3.41	0.79	1.27	9.26	117	177
1844	259	2.70	0.70	0.27	6.51	104	155
1845	251	2.54	0.65	1.44	6.13	91	160

Type 4 funds

Figure A1.4 Wages per employee

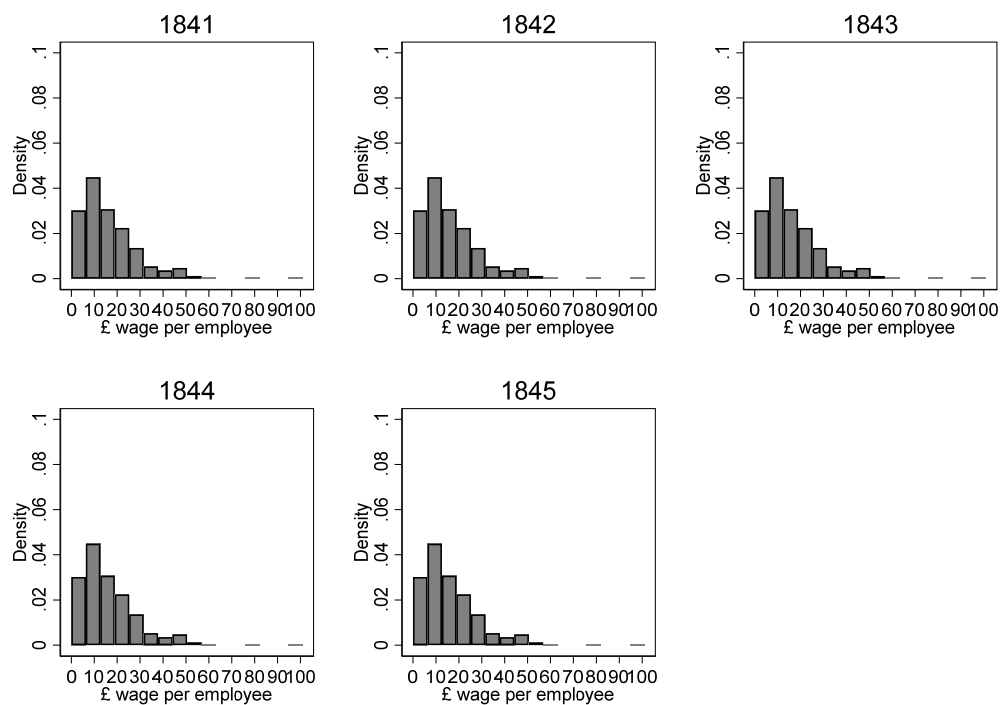


Table A1.5 Wages per employee % :

All funds							
	Observations	Mean	Standard Deviation	Minimum	Maximum	Societies above mean	Societies below mean
1841	268	16.26	13.43	0.00	101.00	108	160
1842	298	16.68	13.04	0.00	102.25	115	183
1843	296	16.42	11.92	0.00	75.00	115	181
1844	261	17.50	12.58	0.00	75.33	104	157
1845	261	17.06	11.71	0.00	67.53	109	152
Excluding outliers (wages =0)							
1841	252	17.29	13.19	0.08	101.00	100	152
1842	290	17.14	12.92	.9	102.25	112	178
1843	287	16.94	11.74	1.0625	75	111	176
1844	253	18.05	12.38	0.70	75.33	98	155
1845	248	17.96	11.32	0.18	67.53	101	147

Appendix 2: Summary statistics and additional regressions

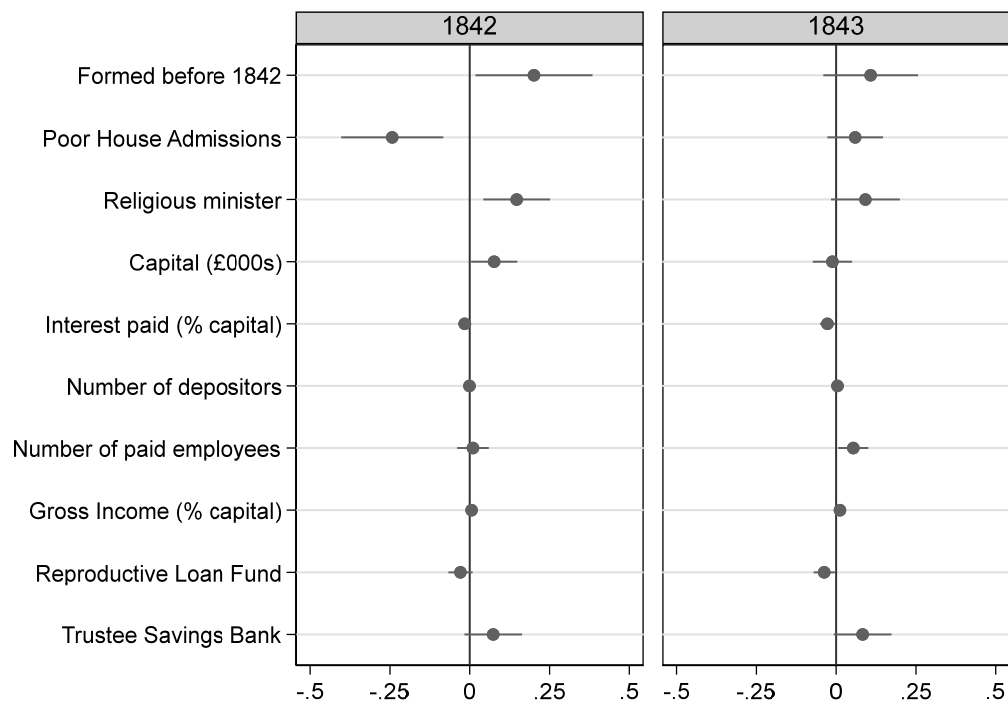
Table A2.1: Summary statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
1842					
Charity 1=Yes, 0=No	298	0.53	0.50	0	1
Inactive 1845 1=Yes, 0=No	298	0.302	0.460	0	1
Charity expenditure	298	45.10	123.88	0	1488
Charity expenditure / capital * 100	298	2.44	3.86	0	25.952
\sum total charity / \sum total lending * 100	298	0.450	0.614	0	6.33
Amount of capital (000's)	298	1.41	1.56	0.034	13.392
Difference amount of capital (000)'s	263	0.111	0.480	-3.02	1.915
Formed before 1842 (1= Yes, 0 = No)	298	0.88	0.32	0	1
Interest paid (% capital)	298	4.86	5.35	0	72.84
Number of depositors	298	19.34	26.66	0	274
Number of paid employees	298	2.45	1.41	0	10
Religious Minister	298	0.43	0.50	0	1
Gross Income (% capital)	298	14.83	11.29	0	118.95
Reproductive Loan Funds	298	0.97	1.80	0	8
Trustee Savings Banks	298	0.71	0.80	0	5
Poor House Admissions (%population)	298	0.33	0.58	0	3.52
Pop density	298	0.52	0.39	0.169	4.019
Valuation per acre	298	0.93	1.26	0.109	12.681
Rating before 1842	298	0.37	0.48	0	1
City	298	0.07	0.26	0	1
Ulster	298	0.28	0.45	0	1
Leinster	298	0.376	0.485	0	1
Joint Stock Banks	298	1.30	1.26	0	5

Table A2.1: Summary statistics continued

Variable	Obs	Mean	Std. Dev.	Min	Max
1843					
Charity 1=Yes, 0=No	296	0.51	0.50	0	1
Inactive 1845 1=Yes, 0=No	296	0.243	0.430	0	1
Charity expenditure	296	37.45	100.74	0	954.4
Charity expenditure / capital * 100	296	2.87	6.24	0	50.302
\sum total charity / \sum total lending * 100	296	0.736	0.903	0	7.287
Amount of capital (000's)	296	1.36	1.72	0.018	19.473
Difference amount of capital (000)'s	270	-0.06	0.684	-3.973	6.08
Formed before 1842 (1= Yes, 0 = No)	296	0.81	0.39	0	1
Interest paid (% capital)	296	5.37	4.59	0	55.32
Number of depositors	296	17.48	22.29	0	263
Number of paid employees	296	2.47	1.38	0	9
Religious Minister	296	0.45	0.50	0	1
Gross Income (% capital)	296	15.89	12.34	0	141.169
Reproductive Loan Funds	296	1.03	1.92	0	9
Trustee Savings Banks	296	0.70	0.76	0	5
Poor House Admissions (%population)	296	0.99	0.72	0	4.36
Pop density	296	0.51	0.36	0.169	4.019
Valuation per acre	296	0.90	1.16	0.109	12.681
Rating before 1842	296	0.39	0.49	0	1
City	296	0.08	0.27	0	1
Ulster	296	0.28	0.45	0	1
Leinster	296	0.358	0.480	0	1
Joint Stock Banks	296	1.37	1.27	0	5

Figure A2.1: Marginal effect at mean excluding outlier funds



Note: Outliers defined as charity/income <100, interest paid for capital/ gross income <100, interest lending / amount circulated < 5 and gross income / amount circulated < 10. N=292 in 1842 and N= 289 in 1843.

Table A2.2 Multinomial model of decision to give to charity

	(1)	(2)	(3)	(4)	Wald test	Likelihood ratio test
	Always charity	Stops giving to charity (41; 42 & 43)	Starts giving to charity (42 & 43)	Repeated switch		
	Base category: Never gives to charity					
Formed before 1841	0.235***	0.079*	-0.296***	0.010	21.04***	25.8***
	(3.526)	(1.680)	(-3.762)	(0.232)	(0.000)	(0.000)
Poor House Admissions (%population)	0.003	-0.090*	-0.048	0.063*	7.59	7.39
	(0.053)	(-1.735)	(-0.733)	(1.948)	(0.108)	(0.117)
Religious minister on board of trustees (Yes=1, No = 0)	0.088*	-0.003	0.051	-0.037	6.35	6.16
	(1.710)	(-0.062)	(1.056)	(-0.985)	(0.174)	(0.187)
Capital (£000s)	0.071**	0.013	-0.060*	0.056**	12.04**	14.78***
	(2.384)	(0.677)	(-1.751)	(2.575)	(0.017)	(0.005)
Interest paid (% capital)	0.013	0.041**	-0.015	-0.011	6.78	9.45*
	(0.637)	(2.005)	(-1.058)	(-1.143)	(0.148)	(0.051)
Number of depositors	0.001	-0.002	0.001	-0.003	6.36	7.08
	(0.738)	(-1.142)	(1.423)	(-1.605)	(0.174)	(0.132)
Number of paid employees	-0.000	0.048***	0.010	-0.035	9.21*	9.37*
	(-0.015)	(3.283)	(0.383)	(-1.335)	(0.056)	(0.052)
Gross Income (% capital)	0.038***	-0.036***	0.007	0.005	23.96***	39.96***
	(4.750)	(-4.286)	(1.171)	(0.749)	(0.000)	(0.000)
Reproductive Loan Funds	-0.051*	-0.005	0.007	0.005	4.82	9.36*
	(-1.657)	(-0.267)	(0.441)	(0.397)	(0.307)	(0.053)
Trustee Savings Banks	0.120***	-0.071**	-0.013	-0.074**	12.92**	12.55**
	(3.006)	(-2.080)	(-0.360)	(-1.966)	(0.012)	(0.014)

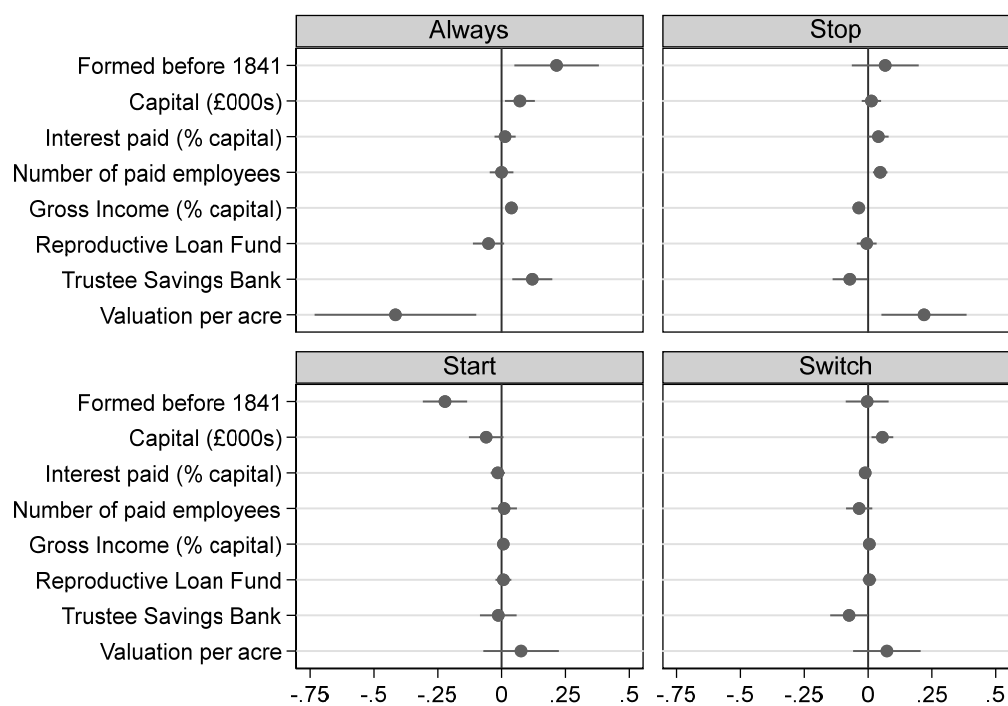
Table A2.2 Multinomial model of decision to give to charity (continued)

	(1)	(2)	(3)	(4)		
	Always charity	Stops giving to charity (41; 42 & 43)	Starts to giving to charity (42 & 43)	Repeated switch		
	Base category: Never gives to charity					
Population density	0.577*	-0.291	0.011	-0.179	5	4.34
	(1.870)	(-1.502)	(0.053)	(-1.070)	(0.287)	(0.362)
Valuation per acre	-0.416***	0.219***	0.076	0.074	8.59*	10.65**
	(-2.576)	(2.577)	(1.006)	(1.094)	(0.072)	(0.031)
Rating before 1841	-0.242**	-0.063	0.481**	-0.108***	39.92***	10.25**
	(-2.476)	(-0.838)	(2.559)	(-5.408)	(0.000)	(0.036)
Model chi-square	547	547	547	547		
Loglikelihood	-248	-248	-248	-248		
Pseudo R2	0.28	0.28	0.28	0.28		
Observations	228	228	228	228		

Robust z-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1; Additional controls, City dummy (1= city), Ulster dummy (1=Ulster).

Goodness of fit measured using Fagerland and Hosmer test, result (22.198) indicates a good measure of fit. Fagerland and Hosmer, “A generalised Hosmer-Lemeshow goodness-of-fit for multinomial regression models’

Figure A2.2: Marginal effects at mean multinomial regression of loan funds in 1842



Base category: Never gives to charity