

Microcredit In Pre-Famine Ireland

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Hundreds of independent, local, quasi-charitable microcredit societies, or “loan funds,” were lending to as many as 20% of Irish households in the mid-nineteenth century. Monitored by a central regulatory authority, funds in the system were successful in mitigating informational, moral hazard and enforcement problems, and thus operated at a surplus in a market where intermediation by the banks seems not to have been possible. Created under special legislation, their goal was to relieve poverty by providing credit to the “industrious poor” on a large scale, at competitive interest rates, without public funding. Evidence from the loan funds offers new insights into capital formation in the Irish economy of the nineteenth century and suggests that traditional notions regarding the economic activities of the Irish poor may need to be rethought; it is also relevant for development economists studying current microcredit initiatives.

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In the mid-nineteenth century hundreds of “loan funds” were taking deposits and making small loans to the Irish poor. At their peak, these funds were making around 500,000 loans annually to impoverished laborers, smallholders and traders to finance productive assets. Loan funds were an innovative, indigenous response to the failure of market institutions (banks) to meet the demand for credit, and were surprisingly successful in transferring investment capital. They show there was greater demand for small-scale credit, and that the Irish poor were more financially active, than previously recognized. In addition to making a contribution to understanding the Irish nineteenth-century economy, our study will enrich the historical context of current work on microcredit-providing institutions, which have recently experienced a surge of popularity in developing countries.¹ Economic analysis of microcredit has focussed on problems of asymmetric information, moral hazard and enforcement that can cause credit markets for the poor to fail: we show how the loan funds operated to minimize these problems.² The Irish experience is particularly relevant since the loan funds were active for over 100 years without significant government subsidies.

In contrast to the loan funds, which recycled all their deposits within Ireland, the banks were notably absent from the market for small loans, and have been criticized more generally for their failure to lend domestically. As we show below, the banks had several advantages over loan funds — large networks, lower cost of funds, and better management — but seem not to have been competitive in lending to the poor. While some historians have claimed that the lack of bank loans to the poor was the fault of an unenterprising population, we demonstrate that lack of supply, rather than lack of demand by the poor, was to blame for what appears to be a large-scale market failure. This suggests that traditional notions of the rural Irish as financially unsophisticated and unwilling to invest should be viewed with caution, and corresponds with

recent research showing vibrant non-bank rural credit systems in other parts of Europe.³

Current microcredit institutions are most commonly found in countries with less developed financial service industries and are believed to lend to over 10 million families globally. Following the success of the Grameen Bank in Bangladesh (Wahid 1993), and the BKK in Indonesia (Patten and Rosengarden 1991) many development organizations, including the World Bank, are sponsoring similar schemes. Recent evaluations by Dale Adams and J.D. von Pischke (1992), A. Srinivasan (1994) and others have cast doubt on the effectiveness of external initiatives, which tend to collapse within a few years. Avishay Braverman and J. Luis Guasch (1993) suggest that poorly designed incentive systems, which often take inadequate account of social and cultural factors, are at the root of many failures of government interventions into rural credit markets. Microcredit organizations, however, frequently arise endogenously to serve needs in local communities and some succeed for long periods of time; for evidence on this we can turn to historical institutions whose evolution can be traced, such as the Irish loan funds. Two other recent studies have provided some evidence from historical institutions. Abhijit Banerjee, Timothy Besley and Timothy Guinnane's (1994) analysis of nineteenth-century German credit cooperatives observes that each of the many independent cooperatives could optimally evolve to suit its idiosyncratic environment and argues that peer monitoring was an essential element in their success. Guinnane (1994) examines the Irish credit cooperative system of the early twentieth century — a system based on the German model and unrelated to the much larger loan funds — and concludes that poor management, stiff competition for deposits from a well-entrenched savings banking system and social problems that reduced the value of local monitoring were responsible for its lack of success. Both studies, in contrast to ours, lack data on the institution's financial operations.

1 Banks and the poor

A striking feature of the credit market in mid-nineteenth century Ireland was that banks did not lend to at least two-thirds of the Irish population. The main Irish commercial joint-stock banks were established in the 1820s following a reform of the banking legislation. These new banks spread quickly, and by 1845 all towns in Ireland with a population over 5000 were served by one or more bank branches; the countryside and smaller towns, however, remained almost entirely unbanked. Even where the joint-stock banks were geographically accessible, they “relied almost exclusively on an upper- and middle-class clientele” (Ó Gráda, 1994, p. 141) and did not, by and large, make small loans or deal with the poor until the 1860s.⁴ A farmer in Sligo, testifying before the Devon Commission on the Occupation of the Land in 1845 explained that “There is a total want of capital. The only capital [farmers] have is what they obtain from loan funds and usurers” (Kennedy, 1847, p. 202). There was also a system of savings banks which collected deposits and invested their assets in U.K. government stock. Although many historians condemn the banks for their role in stripping Ireland of capital, Ó Gráda argues that the banks functioned properly since they “performed the useful function of converting deposits, largely from rural areas, to loans in the towns and cities” (1994, p. 141). While the usefulness of this action remains an open question, all observers agree that the banks acted as a one-way conduit for savings from the impoverished, low-capital, rural parts of Ireland to the wealthier cities or indeed out of Ireland altogether. Since this transfer of capital out of agriculture contributed directly to the excessive dependence on the potato and the high mortality of the Famine — and since many developing countries appear to have a similar lack of capital formation in agriculture today — it is crucial to understand why banks did not support rural investment in Ireland.⁵

Two attempts to enter the market for small-scale loans were made by banks in the 1830s. The Agricultural and Commercial Bank had a broader base of equity holders than the other banks and claimed to be “the poor man’s bank” (Barrow, 1975, p. 118) since it offered loans under £10. It opened its first branch in 1834, spread rapidly, and was insolvent within two years. Undiscouraged, its founder set up the Provident Bank in 1837 in Dublin and, in the second half of 1837 it had a circulation of £6000, much of which seems to have been circulated through four loan funds, although it also made some “loans of under £10 to tradesmen, farmers and others” (Barrow, 1975 p. 149).⁶ However, by 1839 this venture had also collapsed. These two failures have been judged to have been the result of poor management, too speedy expansion, and insufficient capitalization, rather than of the banks’ lending policies, although data on loan recovery rates are not available (Ó Gráda, 1994, p. 143). In any case, other banks seem to have had little interest in following in the Agricultural Bank’s footsteps.

The absence of the banks from a large segment of their potential market demands an explanation, and historians have suggested various possibilities. The most common theme is that the poor had very low productivity of capital and therefore had no desire or ability to borrow. Another possibility is that savings were so low that the banks had insufficient funds to lend to anyone, or had to ration their loans. A third possibility is that the poor were “not ready” (in some ill-defined sense) for banking. A fourth hypothesis is that the banks themselves were ill-equipped to use local information to assess borrower creditworthiness and enforce repayment.

We evaluate these in turn:

1. Inadequate savings

Some historians, observing the lack of capital in production in Ireland, especially in agricultural production, conclude that there was simply inadequate savings to finance the needed

investments. In contrast, Cullen (1972) and others, argue that there was “an abundance” (p. 72) of capital in Ireland. More moderately, Mokyr (1983, p.171) suggests the availability of capital is overstated, but that there were nonetheless contemporary groups that saved substantial amounts and the key issues, which are also of interest here, involve the operation, or non-operation, of credit markets for the poor. Banks held ample savings to have financed ten times more rural lending than the loan funds, but appear to have chosen to invest that in U.K. government stock rather than making riskier loans in Ireland.

2. Low productivity of capital in the hands of the poor

One hypothesis is that the marginal product of capital in the hands of the poor was too low for them to borrow profitably from the banks at “reasonable” rates.⁷ For example, Barrow claims that “It was the tragedy of nineteenth-century Ireland that opportunity did not beckon there with enough vigour or conviction either to retain the savings of her own people or to attract those of others” (p.197). Cullen suggests that “sufficient possibilities of making advances did not present themselves” (p.129) to the banks, and Macdonagh argues that native entrepreneurs were not “a clamorous category of would-be borrowers” (p.231). Mokyr, puzzling over the lack of small loans by banks, offers the explanation that “In peasant economies capital formation is impeded by indivisibilities” (1983, pp. 160, 188). His argument is that incremental investment was unprofitable because of non-convexities in the rate of return on capital in agriculture. These claims are all based on the observation that banks were not lending locally, and generate the impression that borrowers in Ireland were few simply because their investments were not sufficiently productive.

Concluding that the demand for loans was small because of a low marginal product of capital does not appear warranted, however, given the activity of pawnbrokers and moneylenders,

who were ubiquitous.⁸ It is difficult to get a sense of the interest rates charged by moneylenders; it varied across time, district and individual, but seems to have ranged between 25% and 100% (Kennedy, 1847; Ó Gráda, 1994, pp. 268ff; Gulliver and Silverman, 1995, pp. 104-5). That poor people commonly borrowed from moneylenders at these rates suggests that the marginal product of capital for *most* of the borrowers was even higher.⁹ One explanation for such a high marginal product of capital could be that labor, skills and land often went unused without the accompanying capital input.¹⁰

A second piece of evidence suggesting there was a substantial demand for loans at a high interest rate is Mokyr's (1983, pp.166-7) estimate that the rate of return on livestock was over 30% and perhaps much higher. This is relevant because the purchase of livestock was a project within the reach of many of the poor, provided they owned or had access to a small amount of land. Indeed, the Devon Commissioners observed of laborers and cottiers that "in nearly all [districts], their pig and manure heap constitute their only property" (Devon Commission Vol. I, p. 35 (PP 1845, XIX)).

A third piece of evidence, to be discussed below, is the great success of the loan funds in making millions of small loans. That almost all these loans were repaid suggests they were productive; it would take strong evidence to argue persuasively that Irish farmers, laborers, artisans and dealers were borrowing from the loan funds to finance unproductive investments. (The claim, that poor people would *only* want to borrow for consumption loans, is patronizing and groundless given evidence from the loan funds showing millions of loans being used for investment purposes. Further, some loans that might be classified as being for consumption — for example, financing the purchase of food in bulk — may have had a substantial private return.)

3. The poor “not ready” for banking

A particularly puzzling explanation offered for the inactivity of the banks in lending to the poor is suggested by Ó Gráda. Discussing the failure of the Agricultural Bank, he comments that “perhaps failure indicated, in part at least, that [the lower middle classes] were not ready for [banking]” (142). Such a conclusion is odd, given his characterization of the bank’s management as “incompetent.” Ó Gráda doesn’t specify in what sense the poor were not ready for banking — whether it was their inability to make calculations about the value of money, or to use borrowed money wisely, or to discipline themselves to make repayments — so it is difficult to know how to interpret his hypothesis. However, evidence from the loan funds shows that the poor were financially active and able to use financial intermediation. Relatedly, it could be argued that the pre-Famine economy was not sufficiently monetized to support credit markets (see e.g. Mokyr 1985, p. 20), but the funds’ activity is antidote to that possibility.

4. The banks’ lending technology inappropriate for lending to the poor

An alternative reason for the banks’ absence from the market for small loans is that informational asymmetries, moral hazard and enforcement problems made this market unprofitable for banks given their lending technology. Collateral, especially real estate, is the standard mechanism used by banks to solve these problems. The lack of collateralizable assets, and in particular the insecurity of land tenure, which was a constant theme in nineteenth-century Ireland, effectively removed this instrument from the banks’ toolbox. As Black (1960) notes, “The main outlet for lending was agriculture, and many farmers could have used loans to advantage, but so long as they possessed no security of tenure, bankers could not treat them as a good credit risk” (p. 152). Guinnane (1994) argues that even at the end of the century, in a much richer Ireland with reformed land tenure laws, there remained an excess demand for credit among the rural poor

because banks could not obtain and use information on potential borrowers. In effect there was a market failure, owing to informational asymmetries, moral hazard and enforcement problems.

We argue in the following sections that the success of the loan funds in this market was due to their comparative advantages in mitigating these problems.

2 The loan funds

Since the loan funds served as an intermediary in the market for small loans to the poor, while the banks did not, the characteristics distinguishing the two institutions are of interest. We therefore provide a brief overview of the funds' operations in this section, and then examine the ways in which they differed from the banks in the next. In much of the numerical and econometric analysis we use data on fund activity in 1843 and county level demographics from the 1841 census as described in the data appendix. Data are drawn from the reports of the board that contain a summary of each local fund. The year 1843 is selected because it is the earliest for which we are confident in the fund data, and it is close to the census year. Funds were required by law to register with the central regulatory board and it seems reasonable they would want to do so since they could not otherwise qualify for certain advantages described below. While individual funds sometimes failed to submit their annual report, we have confidence that the data we are using are reliable: the board's reports at least note which funds failed to submit a report by the deadline. Non-reporting funds were likely less well managed than average, however, of the 300 funds listed in 1843 in the Board's summary, only one failed to submit its report on time, suggesting the reporting bias is not a large concern.

Overview

In the 1820s and 1830s Parliament enacted legislation to support the isolated and very limited lending societies that had existed in Ireland since at least 1720 as part of an effort, associated

with the 1838 Irish Poor Law, to stimulate privately funded poverty relief. Considerable growth ensued and the number of funds reached its peak in the 1840s. About 300 loan funds were established by local committees interested in making credit available to the poor. The system was supervised and regulated by the Central Loan Fund Board but each fund was completely independent. With a relatively slender capital base, funds took deposits (paying 5 - 6%) and made loans at interest rates around 12%. Loans were required by law to be under £10, and this rule, along with social inhibition, restricted borrowing to the poor. By the mid-1840s the system was issuing as many as 500,000 loans a year. Assuming that one third of all loans issued in a year were renewals, that the average family size was five and that there was only one borrower per family, the loan funds were lending to around 20% of Irish families. On the same basis, in some counties, 30% to 40% of households were receiving loans. Geographic patterns of loan fund activity are illustrated in Figure 1 which shows fund incidence and the number of loans per hundred inhabitants by county. Funds were found virtually throughout the country, although they were less prevalent in the most developed areas, such as Dublin, where the banks were well represented, and the least developed areas, such as the West coast. Loans outstanding at the end of 1843 were about £0.05 per capita, which is significant when compared to assets in the banking system. Deposits held by the joint-stock banks at the end of 1843 totaled around £0.84 per capita, but bank deposits were much larger than domestic loans because of the banks' propensity to purchase British government bonds. If the banks lent half of their deposits in Ireland, then the funds would have been responsible for around 10% of the total "formal sector" credit in pre-Famine Ireland, and would have made almost all the "formal sector" loans between £1 and £10.

Many funds closed in the late 1840s in the wake of the devastation caused by the Great Famine, yet even its reduced size was substantial and it remained stable until about 1860 when it

began to gradually decline. In the 50 years following the Famine, the economy also changed in ways that allowed the banks to begin to provide more small loans. In particular, the population shrank and grew richer. Nevertheless, many loan funds continued to operate, with some dying and new ones being established most years and, in 1892, there remained 104 funds providing over 230,000 loans. All operations ceased in the mid-twentieth century. We focus on fund activity in the period before the Famine because we wish to address the question of why the funds were successful financial intermediaries in a difficult market from which banks were absent. For more details on the evolution of the loan fund system over time, see Hollis and Sweetman (1997). We next provide a brief financial summary of loan fund operations and then explain some critical aspects of their operations.

Table 1 shows the “average” balance sheet, income statement, and summary statistics for the 299 independent loan funds reporting in 1843. The “typical” fund had “capital” of £136, consisting of donations, retained profits and interest-free deposits. It had 19 deposits totaling £1241, on which it paid interest at the rate of 5.7%. It used these monies to make 1649 loans averaging £3.34. Borrowers paid an annualized interest rate of 11.3%, but those who were overdue faced stiff fines, which added 3.4% to the average effective interest rate. Recorded bad debts were not distinguished in the accounts from other expenses but must have been less than 1% of loans outstanding. Although managed *gratis* by a local priest or landowner, day to day operations were typically run by two paid clerks. Average net profits were £51 (or 37.5% on equity) of which £37 was given to other local charitable activities such as schools and hospitals, and £14 was retained and added to capital. Considerable diversity existed across funds, and the “amount circulated” or face value of loans varied from £30 to £65,768, as shown by a histogram in Figure 2a, with a large proportion of the funds being rather small.

“Capital”

Loan funds were initiated by donations, or interest-free loans, that served as a sort of risk capital allowing lending in a market where the risks were not well known and potentially high. Charitable organizations were one source of donations. For example, the Letterkenny loan fund was the beneficiary of a £57 grant from the Letterkenny Ladies Association and a £300 interest-free loan from the Society for Bettering the Condition of the Poor of Ireland (Second Annual Report of the Letterkenny Loan Fund Society, 1939. NLI). Seed money was sometimes provided by landlords. Much of the startup money was in the form of interest-free loans, many of which were repaid within a few years. Unfortunately, the only distinction the annual reports make is between interest-free capital and interest-bearing deposits, and it is unclear what portion of each fund’s interest-free capital is a donation, interest-free loan or retained profit. We estimate initial gifts and interest-free loans to have been in aggregate around £30,000, constituting an on-going subsidy to the operations of the loan funds worth an upper bound of £900 per annum (assuming an interest rate of 3% and, clearly counterfactually, that none of the interest-free loans was ever repaid).¹¹

There were multiple — and sometimes conflicting — rationales for donating money to a loan fund. Poverty relief at no cost to the rate payer had considerable appeal at a time when many landowners were concerned about the imposition of rates to finance relief under the Irish Poor Law of 1838. This motivation’s importance is evidenced by reports from various funds describing how borrowers had “been raised from poverty and despair to comparative comfort and confidence, and *saved from being a charge on the Poor Rate or Mendicity Institution*” (our italics - Third Annual Report of the Loan Fund Board, p.17). Many supporters of loan funds seem to have been motivated by an interest in improving the “morals” of the poor. While this language is

unfashionable today, the meaning is not: borrowers obtained experience about the obligation of meeting a rigid commercial contract. Making the weekly repayments required considerable discipline, and there was no room for personal favors in forgiving the loan or for elasticity in repayment dates. Many donors declared an altruistic desire to alleviate poverty in their neighborhood and perhaps gained in social prestige from the endeavor. In other cases the funds were a tool to generate economic rents which were extracted as salaries or some other financial benefit. Some funds were said to have acted as *de facto* collection agencies: a landlord would encourage a tenant to take out a loan to pay the rent, and then leave it to the fund to collect on the loan, so that “the county constabulary are indirectly made the means by which the landlord recovers his rent” (Kennedy 1847, p. 222).

Deposits

While donations served as a crucial catalyst in the initiation of most funds, they accounted for less than 10% of fund assets in 1843. Attracting deposits was crucial to the system’s success. Domestically, the loan funds faced competition from both joint-stock and savings banks (and from the mattress) for deposits. In 1843 the average fund had deposits of around £1200 from 20 individuals for an average deposit of £60.¹² A few funds encouraged small deposits in order to act as a savings bank for the poor, and may have elicited some new sources of savings. For example, one witness before the 1855 Select Committee recollected that “an old lady smuggled in a sum of money which she said she did not wish her husband to know she possessed” (Report from the Select Committee on Loan Fund Societies (1855), p.52). The number of depositors in 1843 was just over 5000, or about one in 1500 persons. Depositors were “generally small farmers, petty shop keepers, aged servants who have saved a few pounds... and lastly managers of loan funds and members of their families. The

majority are of the middle class not very educated but shrewd persons generally”(Madden, Vol. 3, p.26).

Loan funds paid interest at rates up to 6% in 1843, while deposits at banks yielded between 0% and 2%. High interest rates caused “oversubscription” at some funds, thus the Board lamented in 1841 that “many persons, to secure five or six per cent. for their money, force it on (Loan Fund) Societies” (Third Annual Report of the Loan Fund Board, p.20). However, the “charitable” aspect of the loan funds may also have been important in attracting deposits. Loan funds in this, as in other respects, were hybrid institutions, neither purely charitable nor purely commercial.

Most loan funds were riskier depository institutions than the banks since all their loans were to the poor living in their locality. Their lack of geographic diversification made them vulnerable to large local and national negative shocks, and the Great Famine made it clear that this imposed considerable risks on depositors. This contrasted with the banks, which were diversified geographically and across types of assets. For example, especially before 1850, U.K. government bonds formed a large proportion of bank assets. Nevertheless, the structure of loan fund assets tended to achieve a high level of diversification given the constraints on the types of loans they could make. First, the average fund had a portfolio in the early 1840s of over 1600 loans, with no loan constituting more than 1% of assets. To the extent that individual borrower risks were uncorrelated, this provided excellent diversification. Second, the weekly repayment system was unsuitable for financing crops, thus insulating funds from the vagaries of crop yields. In addition, for some ordinary savers, lacking financial sophistication, the fund may have appeared safer than a bank because it was a fairly transparent intermediary in the sense that an informed depositor could gauge the value of its portfolio of local loans. In contrast, a bank is

relatively opaque since its loan portfolio cannot be readily identified.

Aside from the possibility of a severe negative shock correlated across borrowers (and this was very rare, the Famine of the late 1840s being a singular event) depositors faced the most risk from dishonesty, incompetence, or shirking by the manager or clerks. Depositors in banks faced similar problems, and “reports of managerial incompetence and fraud at branch level are frequent in early [bank] minutes” (Ó Gráda, 1994, p. 140). This remains widespread, as Besley (1995) notes: “... the higher tier agency problem between the bank employees and their principals is key to understanding how formal sector lending has worked in LDC's” (2175). Dishonesty of the manager or clerk can be seen in a principal-agent context, with the usual issues of asymmetric information and moral hazard. Funds used two important mechanisms to help mitigate these problems. First, depositors in each fund had the power to elect the manager, who was typically a local clergyman or landowner. Confidence in the fund was increased since depositors were likely to have personal knowledge of, and connections to, the manager and his extended family. Thus, while the community-based nature of the funds limited asset diversification and restricted the set of potential managers, it provided a check on corruption and increased the institution's credibility. Managers were prevented from obtaining any remuneration from their office but were expected to supervise the operations and ensure good practices. Day to day operations were performed by paid clerk(s), some of whom obtained extravagant wages and appear to have extracted substantial rents from the funds which they operated.

The second mechanism which helped to minimize managerial fraud or incompetence was supervision by the Loan Fund Board, a central regulatory authority financed by a small charge on all loans and deposits. Germany's successful Raiffeisen credit cooperatives had similar auditing federations, unlike the unsuccessful Irish credit cooperatives studied by Guinnane (1994). As

charitable institutions with no residual claimant, loan funds were vulnerable, and in some instances succumbed, to being “hi-jacked” by rent-seeking managers and clerks.¹³ The Board provided information and reassurance to depositors, as do modern central regulatory authorities, by inspecting each loan fund’s books and publishing annual statistical tables so that depositors were aware not only of their own, but also of other funds’ operations. The Board also communicated good practices across funds. For example, some managers tried to make the funds more “altruistic” by not imposing fines, or by charging below the maximum rate of interest, a practice which the Board discouraged as being detrimental to the interests of both depositors (financially) and borrowers (morally). The Board exercised an important function in minimizing both altruism and corruption.

Lending

Loans were discounted and the principle repaid in 20 weekly installments of 1s per pound (although some funds also allowed monthly repayments). This repayment schedule limited the types of activities that the loan funds could finance, and it was poorly suited to financing crops. The average effective interest rate was 11.3% *per annum*, though as Figure 2b shows, there was some variation over the rate of interest charged: some funds charged almost nothing because the managers wished to assist borrowers, and at the other extreme a few funds were making substantial profits. Punctuality was enforced by a system of fines for late payments. The fine for being one day late was normally 1d or 2d per pound on the face value of the loan (0.4% - 0.8%). Fines constituted a very important source of income at some funds and were not employed at others, as shown in Figure 2c, which shows the amount of fines divided by the face value of loans. Penalizing borrowers with less steady cash flows, fines created an *ex post* separation of borrower types. They were also heavy enough that only borrowers facing real liquidity problems

would be willing to pay them, signaling strongly to the fund that the borrower needed further investigation. The weekly repayment system imposed substantial time costs on borrowers who lived at a distance from the loan fund office but seems to have engendered fewer defaults, perhaps by encouraging a constant flow of effort. One manager who had started a fund in Roscommon in 1822 reported that when they switched from monthly to weekly repayments there was a dramatic decline in defaults (Report from the Select Committee, 1855, p. 228).

According to Gulliver and Silverman's (1995) status-class hierarchy, small farmers, dealers, and common laborers constituted the lowest rungs of society, and Cullen (1972, p.111) estimates they made up around 70% of the population. This group constituted the principal clients of the loan funds, as we see in Table 2, showing the occupations of borrowers from loan funds in Ballycastle, Co. Antrim and Castletown Delvin, Co. Meath. Support for this contention also comes from many witnesses before the Devon Commission on the Occupation of Land in 1845: for example, "The tenant seldom depends upon the loan funds unless he holds a very small portion of land, and follows some trade, and is poor" (Devon Commission, Vol II, p 515, Witness 513).¹⁴ Of particular interest, 27% of borrowers at Ballycastle were women, almost all spinsters and widows. At least one loan fund served only women and a small number of funds had women managers. Data from other funds after 1870 show a similar proportion of female borrowers, suggesting the loan funds were particularly successful at reaching this important segment of the poor population.

Loans were intended to finance "reproductive" projects which would generate sufficient cash flow to match the repayments. Suitable projects might include the purchase of a dairy cow, whose milk could be sold, or implements for a craftsman, or stock for a dealer. Reports filed by the Ballycastle and Castletown Delvin funds, shown in Table 3, provide a sample of the lending

practice. In line with the goals of the system, “reproductive” loans are dominant — most are financing investment rather than consumption.¹⁵ Nevertheless, in both funds a substantial proportion is used for paying rent and buying food in bulk. Naturally, the purposes of loans varied with location; for example, the Wicklow loan fund lent out a considerable sum to pay for hay, horses and materials for carts to help meet the “demand for conveyances for Sulphur Pyrites from the mines to the shipping ports” (Third Annual Report of the Loan Fund Board, 1841, p. 21).

An important advantage possessed by loan funds, presumably as a result of their charitable status and poverty alleviation role, was an exemption from paying the stamp tax, a levy of about 2% that allowed the Justice of the Peace to enforce contracts rather than the slower Quarter Sessions. This effectively made them preferred over any creditor (such as merchants, landlords and moneylenders) who had not paid the stamp tax, since “A Loan fund decree can always be obtained sooner than a quarter sessions decree.”¹⁶ Banks typically required borrowers to pay for the stamp to ensure their priority as a creditor.

Management

Successful intermediation requires able management, and this was a significant problem for funds since, while managers might derive some social reward, by law they could not be remunerated in any way. Thus many funds found it difficult to recruit volunteers for the work, and the Secretary of the Board in 1857 lamented that abuses of the system were inevitable since managers had “trouble without recompense, negligence without liability” (Madden, 1857, Vol. 4, p.6). An often repeated criticism was that “The want of adequate supervision” by volunteer managers was “the monster evil of the System” (Madden, 1857, Vol. 3, p.26). This difficulty was echoed in the beginning of the twentieth century by the experience of the Irish credit

cooperatives. A 1931 analysis of the failed Irish credit cooperative system opined that “The conclusion seems unavoidable that Ireland has not produced a large class of persons capable of and willing to run a local credit society with success” (cited in Guinnane, 1994, p. 55).

Funds used several mechanisms to mitigate this problem. First of all, as mentioned above, depositors elected the manager which put the ultimate power in the hands of those who were local and could observe at least some of the operations of the fund relatively easily. Second, periodic inspections were conducted by the Loan Fund Board, and each fund was required to submit detailed annual reports. Third, negligence by the manager was somewhat lessened in importance by the fact that hired clerks handled the daily operations. The Board provided a template for the clerk’s work, and had standardized procedures which facilitated both administration and inspection. The manager’s actual role was thus to exercise limited supervision over the clerk(s). While far from perfect, the Board was a crucial instrument in both monitoring and disseminating good practices across funds. Aiding the latter may have been the funds’ charitable nature; they were willing to make successful practices public in a period when much learning was occurring and the institution had little experience in financial intermediation.

Overhead costs were also minimized. For example, since only a limited range of services were offered, and most (or all) loans had the same 20 week maturity schedule, repayment could be noted by a mark in the loan fund ledger, simplifying the accounting. Some funds operated only one or two days a week. Occasionally, taking advantage of their charitable nature, funds obtained free accommodation in public buildings. The average administrative cost per loan was 1.3% of its face value, which shows that the nature of the system and local management were, in general, very effective in keeping costs in check. However, as Figure 2d indicates, there was considerable variation, with many funds having expenses twice as high as the average. After bad

debts and expenses, profits ranged from -£132 to £832, with an average of £51, as shown in Figure 2e. The reason for a large loss in a given year was typically defalcation by a clerk.

Charitable Donations

Loan funds, having no residual claimant, gave away a substantial portion of their profits to other charities. Local infirmaries and schools were the charities of choice, although all kinds of projects were sponsored. The loan fund at Tyrrell's Pass (Co. Westmeath) boasted that as "collateral operations" in 1840, it:

- (1) acted as a savings bank;
- (2) supported an infants' school of 120 students;
- (3) established a plating school;
- (4) employed a Scottish agriculturist to train local farmers;
- (5) furnished new seed varieties to farmers and sold fertilizers at "Dublin price";
- (6) "worked the machinery of a Ladies' Society for the improvement of the female peasantry" (with 417 female peasants assisted);
- (7) laid in stores of coal and meal to sell at cost during times of scarcity;
- (8) employed an average of 82 distressed laborers per day on public works; and
- (9) exercised "an extensive moral influence by the encouragement of habits of temperance (Third Annual Report of the Loan Fund Board, pp. 22-23.).

Tyrrell's Pass was larger than average and spent £900 on these unusually large charitable operations. The actual distribution of donations over profits is shown in Figure 2f; the average donation was £37, still a sizeable amount in many of the small communities in which the funds operated. In 1843, 54% of the funds reported making no donations; of the funds in this group that operated in adjacent years, 28% and 24% made donations in the previous and following one

respectively. Despite negative profits, 3% of funds report donations, and 15% report donations larger than positive profits.¹⁷ In effect, the local community became the fund's residual claimant.

The present value of donations by loan funds over the years was substantially more than the sum of donations and interest-free loans they had received as start-up capital, so that even aside from the value of credit to the poor, loan funds offered good value to their communities.

3 Why the loan funds and not the banks?

The loan funds appear, in some ways, to have been rather deficient organizations. They lacked competent and committed management, paid high interest rates because of poorly diversified portfolios, and had inadequate capital resources to protect depositors. This makes it puzzling that they should not only have been able to coexist with the much more substantial banks, but to *dominate* in the market for small loans. In this section we consider three hypotheses to explain this puzzle.

1. *Funds made small loans only because they were restricted by the £10 loan maximum.*

A refutation of this possibility is provided by the pattern of lending by loan funds. The average loan size at loan funds in 1843 was under £4, suggesting that the maximum legal loan size of £10 was *not* binding, and that the loan funds were not trying to avoid smaller loans. In contrast, to the extent that banks made small loans at all, they tended to be around £10 rather than £4. Thus it appears that banks and loan funds had quite different optimal loan sizes. At the same time, there is some evidence that banks had no objection to the credit risk of small borrowers, since some banks lent money to loan funds to be lent to the poor.¹⁸ The implication is that loan funds were somehow better able to make those small loans.

2. *The loan funds were successful because they had lower costs than banks, owing to the stamp tax exemption, the voluntary labor of managers, and the initial donations which*

formed their capital.

To evaluate this hypothesis, we consider the value to the average fund of these externally granted advantages, using generous estimates. The stamp tax exemption was worth at most 2% on the value of outstanding loans, or £25 per annum for the average fund.¹⁹ Initial donations and interest-free loans were approximately £100, which, given an interest rate of 3% and assuming they were never repaid, was worth at most £3 per annum. Volunteer managerial labor is more difficult to value. A bank branch manager might have earned £400 annually, working a 48 hour week. For 3 hours a week spent on a loan fund, which is probably a rather generous estimate of managerial devotion, the pro-rated wage would have been £25, so that the average loan fund received an external “subsidy” of around £53 a year in total. However, loan funds paid 5.7% on deposits, while banks paid at most 2% on deposit accounts. Thus loan funds paid *at least* 3.7% more on deposits, or, for the average fund, £46 more than a bank would have paid.²⁰ Higher interest costs caused by the funds’ non-diversified portfolio, therefore, essentially balanced out the externally granted advantages, which suggests that it was not those advantages alone which made the loan funds successful in the market for small loans. Had the banks been able to duplicate the success and profitability of the loan funds in small-scale loans, they presumably would have done so. That the banks did not enter this market successfully suggests that the *structural* advantages of the loan funds, their superior selection, monitoring, and enforcement abilities, gave them a decisive advantage. This is not to claim that the external advantages were unimportant; on the contrary, they were probably essential to the success of the loan funds, and without them loan funds would not have existed.

3. *The loan funds had superior ability to identify creditworthy borrowers or to enforce repayment.*

For the loan funds to have succeeded in the market for small loans when the banks did not, if the reason for their success was not externally-granted subsidies, they must have been more efficient in some way. There is no reason for supposing that the loan funds had lower administrative costs per loan, since the entire administration of loan funds was left in the hands of paid clerks. Had a bank wished to hire a clerk to make small loans, the administrative costs should have been identical. This leaves two possibilities: first, the loan funds were better able to identify creditworthy borrowers; or second, they were better able to enforce repayment. We consider these in turn.

All the managers and staff of the loan funds were local, and were thus relatively well-informed about borrower characteristics. In contrast, bank managers were highly mobile and typically came from outside the community. For example, the Provincial Bank recruited its managers almost exclusively from Scotland (Ó Gráda, 1994, p.139). As noted by the trustees of the Callan in 1841, the funds “avoided much of the evil consequences which naturally resulted from the ordinary banking system; first, from a knowledge of the parties....” (Third Annual Report of the Loan Fund Board, 1841, p. 19). Some loan funds benefitted from monitoring of borrowers by depositors, as in the credit cooperatives analyzed by Banerjee, Besley and Guinnane (1994). Certain funds required that all borrowers be recommended by a depositor, and, to encourage carefulness in recommendations, some even published statistics identifying the defaults on loans recommended by each depositor (Second Annual Report of the Letterkenny Loan Fund Society, 1939). Such monitoring would be efficient if the depositors had access to information about borrowers at lower cost than the fund. This would most frequently have been the case when the borrower was a tenant and the depositor his landlord or property manager, but could have operated through any commercial or personal relationship. In that case, the depositor

would already have the information and the only cost would be of communicating it.

Informational advantages of this sort were of less value to a fund where the ratio of borrowers to depositors was large. On average in 1843 the ratio of depositors to loans was on the order of 1:100, so it was unlikely that every borrower would have personally known a depositor. This problem was somewhat mitigated by the fact that every borrower was required to have two co-signatories or “bailsmen” who were jointly liable for repayment. Thus a sufficiently large number of the borrowers (or bailsmen, or members of their families) might have been personally known to either the depositors, clerks or managers, to allow the fund an important informational advantage over the banks even when the number of borrowers was large. However, this kind of advantage was likely to be more pronounced in smaller towns and villages, since such personal connections and information would be less developed in larger centers. Indeed, over the latter part of the nineteenth century, as the population grew increasingly urban, the loan funds shrank in importance.

A second possibility is that loan funds were better at enforcing repayment. This might have been the case since, as local charitable organizations, loan funds were likely the beneficiaries of community sanctions unavailable to any bank external to the community. Extensive community involvement meant that many individuals in the community — not just depositors — had an interest in protecting the fund from borrowers who intentionally defaulted. Failure to repay would result, first, in a decrease in the profits of the fund and hence in fund donations to other charities. If defaults were large, then depositors would be at risk. Such a situation might promote community pressure to repay. In contrast, defaulting on a bank loan had no local consequences and hence there would be no social pressure to repay. Strong community effects on reducing moral hazard are well documented; see for example Hoff and Stiglitz (1993,

p. 43) and essays 5 through 10 in the collection edited by Hoff, Braverman and Stiglitz (1993). Guinnane (1994) argues that the Irish credit cooperatives at the end of the century did not obtain substantial social pressure of this sort. Key to his argument, though, is that most of the money the cooperatives lent was not local but provided by banks or government whereas, for the funds, local residents were the depositors and local charities were the residual claimants, so all defaults represented transfers within the community.

If, as we argue, loan funds had better information and stronger community pressure than the banks, this advantage would have been largest in less urban areas. We also expect that, given the structure of their loans and the advantages of diversification, they would finance cottage industries and traders preferentially over agriculture. In order to explore the operations of the funds as a function of their environment, we present a series of regressions across the 32 counties using 1841 census data in Table 4. Fund activity is much greater in more rural counties as expected given the competing activity of the banks and the goals of the funds, and the coefficient on the urban variable is everywhere negative and significant. Focusing on the first two variables in Table 4, agriculture and other, which indicate the fraction of families who obtain their main source of income in each industry (the omitted industry being manufacturing), it is clear that the funds were less active (columns 1-3) in regions with higher fractions of primarily agricultural workers. These regressions imply that funds were most active in counties with higher levels of manufacturing activity. This is consistent with both the funds' goal of promoting diversification and small non-farm activities (discussed below), and the short repayment schedule which was not well suited for farming. Rural, small-scale artisans and tradesmen seem to have been important clients of the loan funds, either as borrowers or depositors. In contrast, families who derived some income from the cloth trade seem not to have used the funds as much, as reflected by the

negative coefficients on the cloth variables. The cloth industry seems to have been more successful in obtaining financing from banks.²¹ Interestingly, fines (column 4) are not as high in agricultural regions, perhaps because of a preference for monthly repayment schemes. Finally, gross profits divided by assets (column 5) are equalized across counties with respect to industrial employment, as one might expect in a competitive market. To a much greater extent than loan funds, banks located in the most commercially active areas, especially in Dublin and Ulster. Bank and fund incidence by county is contrasted in Table 5. Using the only bank data of which we are aware, we compared loan fund and bank incidence across counties in 1842 and 1843. Loan fund incidence appears to be poorly explained by the available variables, whereas that of the banks appears more responsive to measurable economic factors, particularly manufacturing activity. Lower explanatory power for loan fund *incidence*, compared to that for assets and amount circulated (Table 4, columns 1 and 3), appears to arise since, while size-weighted measures of fund activity are correlated with our industrial and demographic measures, the pure counts are not because a large number of small funds seem to exist for reasons not correlated with the economic variables available to us. In a SUR framework, testing revealed that the urban coefficient was significantly different between banks and funds at the 7% and 10% levels for 1842 and 1843 respectively.²² In summary, both loan funds and banks favored counties with higher levels of manufacturing, but the banks preferentially located in urban counties, and the loan funds in more rural counties. Loan funds were in locations in which it was possible to obtain personal information about borrowers to assist in lending decisions, while banks operated in major centers in which they were required to rely on using the security of collateralizable assets.

4 Did the loan funds achieve their goals?

The loan funds were instituted with specific social goals and we offer a brief evaluation of their role in alleviating poverty and aiding the industrious poor in this section. In some senses, they succeeded far beyond any expectation, as they expanded in scale to reach almost every corner of Ireland. However, the loan funds were the subject of considerable controversy in the last century: critics claimed they were not well suited to serving the poor, and many believed that “any Loan Fund Institutions, however well managed, invariably generate habits of improvidence and recklessness among the humbler orders of people” (Report of the Select Committee, 1855, p. 323).

We start by asking whether the loan funds appear to have been useful to borrowers. As we showed in section 2, the loan funds were lending to the poorer 70% of the Irish population to finance (mainly) productive investments. They had coverage all over the island and in 1842, funds operated in over 250 towns or villages, while bank branches were in only 84.²³ Their loans were also economically significant to the borrowers. Mokyr (1985) estimates the average per capita income of the poorest 66% of Irish households around 1840 at £4.30 (pp.10-11). (For the entire population, he estimates income per capita at around £10.) The average loan was about £4 in the late 1830s and 1840s, or almost as high as the per capita annual income of borrowers. Several farming implements, a pig, a small quantity of stock for a shop, or inventory for a dealer or huxter could have been purchased with this sum. Despite their rural clientele, the loan funds tended not to finance crops but instead promoted economic diversity. This was important, since according to the estimates of the 1845 Devon Commission, the minimum farm size required to sustain a family of five was between 6.25 and 10.5 acres, so that small-holders typically had to supplement their income as laborers on other farms and/or in some other way, such as selling

eggs and cheese, or keeping a pig (Mokyr 1983, p.175). Loans were a vehicle for financing such non-crop activities, and they were thus instrumental not only in increasing household income, but in developing diversity in rural production and introducing borrowers to the formal financial system. They were particularly prominent in some towns: for example, one loan fund boasted in 1849 that “the town of Newtownstewart and its trade depend chiefly, at present, upon the circulation of money given by the Loan Fund” (Eleventh Annual Report of the Loan Fund Board, 1849, p. 21).

It is unlikely that this source of credit merely displaced another since it is doubtful that the banks would have provided small loans to the poor had the loan funds not existed. Banks could have provided small loans despite competition from the loan funds, yet even in the mid-1850s it was very uncommon for banks to make loans as small as £5.²⁴ Loan funds seem to have displaced moneylenders to some extent, however the rate of interest charged by private moneylenders was considerably higher than that charged by the funds, with 25% to 100% being the norm. Since funds charged approximately 12%, they must have increased the number of viable projects considerably. Funds were also successful in obtaining deposits which were unlikely to have gone to moneylenders (who could provide little security to the depositor), so the loan funds must have caused a net increase in the supply of credit to the poor.

An important contemporary source of information gives a rather less positive view of the loan funds than we have drawn. The Devon Commission of 1845 heard from hundreds of witnesses on the effect of the loan funds. The Commissioners reported:

We cannot avoid directing attention to the evidence almost universally given, with respect to the injurious effects of the loan fund system on an agricultural population. Well adapted as it may be, or useful as it may

have proved to tradesmen and others, resident in towns and villages, who use the money borrowed as capital, and repay the instalments from their weekly profits, it evidently produces much evil, when resorted to by the small farmer for the purpose of paying rent, in which case he has no weekly earnings to defray the instalments, and when resident from the loan office is subjected to much loss of time in making the repayments.

Their report then recommends that loan funds in rural areas should require monthly, instead of weekly, repayments of interest, at a rate of interest 5% higher, and continues:

An improved system of loan funds under the provision to which we have referred, might operate to check the usurious interest which is usually exacted by money lenders from small farmers, and of which many flagrant instances are detailed in the Evidence (Devon Commission, Vol. I, p. 42. PP 1845, XIX.).²⁵

It is difficult to see what tortured logic the Commissioners may have employed to reach the conclusion that higher loan fund interest rates would serve to hold down the rates charged by moneylenders; but the chief criticism, that most witnesses claimed there was an “injurious” effect on the farming population, is of concern. Those witnesses who saw such negative effects were almost all wealthy landlords, priests, and large-scale farmers who took a very patronizing attitude towards the poor in their testimony. While some witnesses had a positive view, commenting that the funds provided great benefits to “very poor tenants; holding about three acres of ground...; living in bog districts” (Kennedy 1847, p. 229), this was relatively rare. A typical comment was that the poor “do not know how to calculate, and they are apt to waste the money” (p.225). Lord Fitzwilliam’s agent, testifying before the commission, stated that “My opinion is [the loan funds] are very bad things; I think nothing but the needy dabble with them, and when they do break,

they break more irrecoverably than if the loan fund had not existed.” However, he also observed that “I should have thought [the loan fund] tended to diminish [usurers]”(Devon Commission, Vol III, p.540). Another witness claimed that “the system is very destructive,” but continued with the observation that “Previous to the establishment of loan funds, needy persons had recourse to usurers, whose usual rate was twenty-five per cent. on even short periods” (1847, p.222), so it is not clear what alternative is proposed, except that the poor should be prohibited from borrowing from any source.

The general tone of these negative comments is that the poor need to be protected from their own propensity to borrow foolishly. Undoubtedly some borrowers did borrow foolishly; and some borrowed to finance projects which did not turn out well. However, the fact that hundreds of thousands of individuals borrowed from loan funds every year suggests that borrowers must have been aware of the risks they were bearing, since everyone knew others who had borrowed. Overall, perhaps finding that the two main borrower classes, tenants needing to pay rent and those investing in productive activities (this latter group being the nominal target of the fund system), were not equally well off after borrowing should not be viewed as surprising given the contemporary Irish economic environment: they were not equally well off before borrowing.

Mokyr dismisses the loan funds with a quote from the Devon Commission to the effect that “as loan funds are usually constituted, the highest praise that can with truth be allowed to them is, that they are less ruinous than private usurers” (1983, p.186). While this may be interpreted as suggesting that the loan funds were somehow inadequate, being “less ruinous” than other forms of financing was precisely their purpose: not to provide relief (directly), but to make loans at a fair rate of interest. They mobilized substantial deposits, which might have purchased

British government bonds or sat under a mattress, and made loans to the very poorest persons in Ireland. Of course, giving credit to the poor also means giving them debt, and some borrowers would undoubtedly have been better off without a loan at all. However, given that there was no compulsion to borrow, revealed preference shows that those who borrowed must have expected to be better off by doing so: a criticism of an institution that increases the options of the poor can be based only on a patronizing assumption of their irrationality.

5 Conclusions

During the early 1840s, the loan funds appear to have been the principal institutional source of credit in the districts in which they operated outside the larger towns, although their loans targeted mainly the poorer 70% of households. While some loans were used to pay rent, a large proportion helped to finance the acquisition of farm animals and stock for traders and artisans. Compared to the per capita income of the borrowing households, loans were significant (though they were much smaller than loans normally made by banks), and had the potential to make a considerable difference to the wealth and income of borrowers. Funds had much wider geographical coverage than banks, but, conditioning for the degree of urbanization, were more active in counties with higher rates of manufacturing employment. While we cannot argue that the loan funds solved the problem of rural undercapitalization, they had an important role, since the distribution of capital is important, particularly when the economy is so poor that many are on the brink of starvation. During the 1840s and 1850s the scale of the loan funds was large enough that they would have made a significant difference to poverty relief.

Economic historians have previously assumed that the banks were not catering to the Irish poor because they were not financially active, perhaps because the marginal product of capital in their hands was too low. This paper presents evidence that the Irish middle and lower classes

were in fact being served by an alternative system, and were actively borrowing for a variety of purposes. The extent of loan fund operations also allows us to reject Ó Gráda's suggestion that the Irish poor were "not ready" for banking, and it casts doubt on claims that the degree of monetization was too low for credit before the Famine.

We have argued that loan funds were more efficient in providing microcredit to the Irish poor than other commercial institutions such as the joint-stock banks in the mid-nineteenth century. This advantage grew not out of any externally provided subsidy or regulation (though that was important) but out of the loan funds' structure as local organizations. Because their depositors, employees and borrowers lived in the same small communities, they were able to use local information to improve credit decisions. That the government did not provide capital or loans to the funds was thus an important feature of the system, since to mobilize deposits, funds were required to maintain portfolio quality. Local depositors were better able to monitor the performance of the fund than any central authority, and because of the independence of each fund they had the incentive to do so. Funds may also have benefitted from giving profits to other local charitable organizations which increased the number of individuals who had a "stake" in the loan fund's prosperity and likely created social pressures on borrowers not to default. It may also have been important in encouraging donations to, or deposits in, the loan funds.

Ireland's loan funds also provide both an encouraging example, and a warning, for microcredit organizations in developing countries today. Microcredit, even when widespread and long-lived, is not a panacea for development and in isolation need not bring about above average economic growth. The Irish experience, however, suggests that reliance on the local community for deposits and management may be important in helping lenders to make good decisions and enforce repayment. Governments can stimulate loan funds, without direct

transfers, by providing an appropriate legal environment and promoting enforcement: in this case it was limited to removing a tax on contracts and imposing a system of regulation financed by the funds themselves. Further, the successful operations for a span of over 100 years, including the period of the Great Famine, shows that such institutions can endure.

Appendix - Data Description

Annual reports of the Central Board, beginning in 1838, are our principal data source. From 1838 to 1849 the format of the report grew to include an increasing number of variables. Occasional values are missing, especially in the early years and for smaller funds. By 1841 it seems that all of the funds were known to the board and that reporting was more regularized, although the notes to most reports list funds that did not make the deadline for publication. Financial duress was frequently cited as the cause. We aggregated fund data to the county level for the cross-sectional regression, so there are 32 observations.

Variables on the loan funds are from 1843 because we believe that data to be more reliable than data for earlier years, yet it is close to the census. The independent variables, *AGRI*culture, *OTHER*, and *MANU*facturing indicate the fraction of families in the county whose main source of income was the indicated industry. *Urban* is the fraction of the county's population living in towns larger than 2000. *Cloth* indicates the fraction of households obtaining any fraction of their income from the cloth industry. These data were kindly provided by Joel Mokyr, who abstracted them from the "Reports of the Commissioners Appointed to Take the Census of Ireland for the Year 1841." A substantial fraction of workers, from 13% to 46%, with an average of 22%, were primarily involved in manufacturing. The manufacturing was *not* heavily concentrated in more urbanized counties; the correlation is 0.24 and insignificantly different from zero.

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Table 1 - Financial Statements for the "Average" Loan Fund, 1843

Balance Sheet	(£)		(£)
Assets (Dec 31)	1363	Deposits	1241
Loans Outstanding	1236	Capital	136
Cash	127		
Income Statement	(£)	Summary Statistics	
Face value of loans	5503	number of loans	1649
Interest received	145	average loan size	£3.34
Fines received	44	interest rate on loans	11.3%
Interest paid	(73)	finer/loans	3.4%
Wages	(45)	number of depositors	19
Other expenses	(20)	average deposit	£65.52
Net Profit	51	Dep. interest rate	5.7%
Donations	(37)	profit/capital	37.5%
Retained Profits	14	Avg wage/employee	17.71
		number of employees	2.5

Notes: These figures are the arithmetic mean of 299 loan funds operating in 1843 which reported to the loan fund board. The interest rate received (paid) is based on average of loans (deposits) outstanding at year end 1843. Deposits and capital are estimated, since capital is not distinguished from deposits until 1845 in the financial statements; capital is estimated by deducting retained profits for intervening years from the 1845 capital. Deposits are then derived by deducting capital from total assets. Wage per employee is an underestimate inasmuch as some employees were part-time.

Table 2 - Borrower Occupations

Ballycastle 1838-40		Castletown Delvin 1841		Total Loans (£)	Avg. Loan (£)
Borrowers	#	Borrowers	#		
Farmers	604	Farmers < 5 acres			
Labourers	354	and labourers	283	1179	4.2
Weavers	127	Dealers or huxters	556	982	1.8
Shoemakers	64	Farmers > 5 acres	160	834	5.2
Dealers	33	Tradesmen	61	338	5.5
Blacksmiths	28	Weavers or spinners	49	165	3.4
Tailors	23	Other	133	626	4.7
Fishermen	22				
Stonemasons	19				
Carpenters	17				
Teachers	10				
Other men	136				
Total	1407		1042	4124	3.9
Spinsters	392				
Widows	163				
Married Women	30				
Total	555				

Table 3 - Stated Purpose of Loan

Ballycastle 1840			Castletown Delvin 1840	
Purpose	Number	Amount (£)	Number	Amount (£)
Pigs, Cows Goats	486	2902	293	1137
Provisions	670	1853	160	635
Shop goods	321	1635	143	764
Rent	346	1818	28	123
Oats, Straw, Hay	142	690		
Yarn	196	860	61	191
Wool, Flax	218	588		
Horses	62	374	34	104
Leather	59	238	36	173
Seed	82	425	9	30
Clothes, Furniture	9	24	26	143
Timber	26	134		
Farm Implements	3	9	14	80
Iron	27	87		
Poultry	13	67		
House or land	8	50		
Debts	11	33		
Fishing Tackle	7	25		
Handicraft Tools	1	4		
Total	2532	10959	933	4072

Sources: Ballycastle: Third Annual Report of the Loan Fund Board, p.12;
 Castletown Delvin: Reports of the Castletown Delvin and Mullingar
 Loan Funds, 1854, p 6. The occupations are as stated by
 borrowers.

Table 4 - Loan Fund Characteristics Across Counties, 1843

	(1) assets /pop	(2) # dep / pop	(3) amt circ / pop	(4) fines / gross pft	(5) gross pft / assets
Agr.	-0.33*** (.109)	-0.48*** (.148)	-1.17** (.474)	-0.68*** (.231)	-0.07 (.073)
Other	-0.34 (.224)	-0.38 (.306)	-1.04 (.979)	-0.23 (.479)	0.10 (.151)
Urban	-0.15** (.065)	-0.24** (.089)	-0.66** (.286)	-0.34** (.139)	-0.09** (.044)
Cloth	-0.24** (.106)	-0.38** (.144)	-0.84* (.461)	-0.64*** (.225)	-0.13* (.071)
Const.	0.38*** (.108)	0.53*** (.147)	1.35*** (.472)	0.84*** (.230)	0.21*** (.072)
R ²	.28	.31	.22	.38	.31

Notes: One, two and three asterisks represent significance at the 10, 5 and 1 percent levels respectively. N=32. See the data appendix.

Table 5 - Bank and Loan Fund Incidence by County

	(1) Loan Funds / pop	(2) Bank Branches(1842) / pop	(3) Bank Branches(1843) / pop
Agr.	-0.09 (.086)	-0.12*** (.037)	-0.13*** (.037)
Other	-0.06 (.177)	-0.26*** (.076)	-0.22*** (.076)
Urban	-0.09* (.052)	0.02 (.022)	0.004 (.022)
Cloth	-0.13 (.083)	-0.041 (.036)	-0.05 (.036)
Const.	0.14* (.086)	0.13*** (.037)	0.14*** (.037)
R ²	.15	.51	.47

Notes: One, two and three asterisks represent significance at the 10, 5 and 1 percent levels respectively. N=32. See the data appendix. Bank branch information is from Barrow (1975), p. 215-9.

NOTES

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1. Williamson (forthcoming 1997) argues forcefully that development economists ignore economic history at their peril.
 2. See for example Bell (1987), Stiglitz (1990), Varian (1990), Besley, Coate and Loury (1993), Besley (1995), Udry (1994), and Hoff, Braverman and Stiglitz (1993).
 3. On Ireland, see Ó Gráda (1994) p. 142 and Vaughan (1994) p.86. On Europe, see Rosenthal (1994) for France, and Guinnane (1997), or Banerjee, Besley and Guinnane (1994) for Germany.
 4. The banks' lack of involvement with the greater part of the Irish population is strikingly illustrated by Ollerenshaw's assessment of their performance during the Famine. He notes that they were little affected by the Famine since few of their depositors were poor, and does not even mention borrowers (Ollerenshaw 1987, p. 66-7). Mokyr (1983) observes, generalizing from testimony of witnesses before the Devon Commission of 1845, that banks occasionally discounted farmers' bills for small amounts : £8 - £20 (p. 185-6).
 5. Whether there was a shortage of capital available to large scale entrepreneurs is a separate issue. Ó Gráda (1994, p. 142) lists several large projects financed by the banks.
 6. The circulation of the loan funds in 1838 were Carlow, £2662; Athy, £2961; Mullingar, unknown; and Strabane, unknown.
 7. There was a continued suspicion of usury in Ireland, and so banks may not have been willing to make loans at effective interest rates above 20%.
 8. For example, upon visiting the Loan Fund at Mullinahone, in Tipperary, the loan fund board inspector found that in this village of 1200, there were at least five moneylenders and the loan fund (Fourth Annual Report, pp. 28-30).
 9. One must be cautious with this evidence. High interest rates may also indicate that many borrowers defaulted; but even so, most borrowers must have paid the interest required.
 10. See, for example, Thomas Mooney's open letter to "The farmers of Ireland" in 1837, pointing to the problem of insufficient capital and the opportunity presented by underused labour (cited in Barrow, 1975 p.119).
 11. Our estimate is rather generous compared to the guess of the Secretary of the Board in the 1850s, who thought that gifts to the loan funds were not more than around £8000 (Report of S.C. 1855, p.352).
 12. In comparison, the average opening balance at the Provincial Bank's Parsonstown branch during its first year was £250 (Ó Gráda, 1989 p.152).
 13. There was clearly a large extent of such activity at the end of the nineteenth century, as

detailed in Hollis and Sweetman (1997).

14. Other witnesses, whose knowledge of loan funds was naturally limited to the local fund, noted that it was mainly dealers who were financed (Vol II, p. 957, Witness 714) and that the loan funds dealt only with the needy (Vol III, p 540, Witness 953).
15. Another loan fund in Armagh which had made 5,860 loans by 1846 showed that 13% had been to pay for rent (Kennedy 1847, p. 217).
16. "Report of the Trustees of the Lurgan Loan Fund" February 1848 Dublin: Hodges and Smith. NLI IR 3306 D4.
17. An 1838 Act instituted a rule that all funds had to donate 50% of their annual profits to other charities, but this seems not to have been enforced unless some uncommon definition of profits was employed.
18. See, e.g. Letterkenny Report (1839). p. 19; Fourth Annual Report of the Loan Fund Board, p.35.
19. This is probably an overestimate, since loan funds would likely have chosen not to pay stamp duty on all loans in the absence of the exemption.
20. Funds paid more than banks because they were legislatively required to hold geographically undiversified portfolios and therefore presented a higher risk of failure. (Note that while the average rate of default at funds was higher, this was adequately compensated for by the relatively high rate of interest charged.) Fund losses from 1843 to 1851 were approximately £20,000 (Madden, Vol. 4, p.6) or about 0.3% of bank deposits at that time, so even if bank portfolios had included all the loan funds' loans to the poor in their portfolios, the losses from the Famine would have been almost inconsequential to them, and therefore had the banks held the loan funds' portfolio, this would not have caused depositors to require a higher rate of interest.
21. See Gill (1925, pp. 315-6) for more on bank finance of the linen industry.
22. A Lagrange-Multiplier test (Breusch and Pagan, 1980) was also used to see if the residuals of the bank and fund regressions were correlated. While such a test relies on large sample properties, it might have power enough to reject the null that the errors are independent if they are very highly correlated. The null was not rejected (Chi² statistics of 0.25 (p=.61) and .003 (p=.96) for 1842 and '43 respectively). This reinforces the idea that the banks and funds were responding to neither the same observed nor unobserved economic factors in choosing their locations.
23. Indeed, several counties had only one town with a bank branch.
24. Report of the S.C., 1855, p. 338.
25. This was signed by 5 persons, including one who was a LF Board member in 1840 - 42.