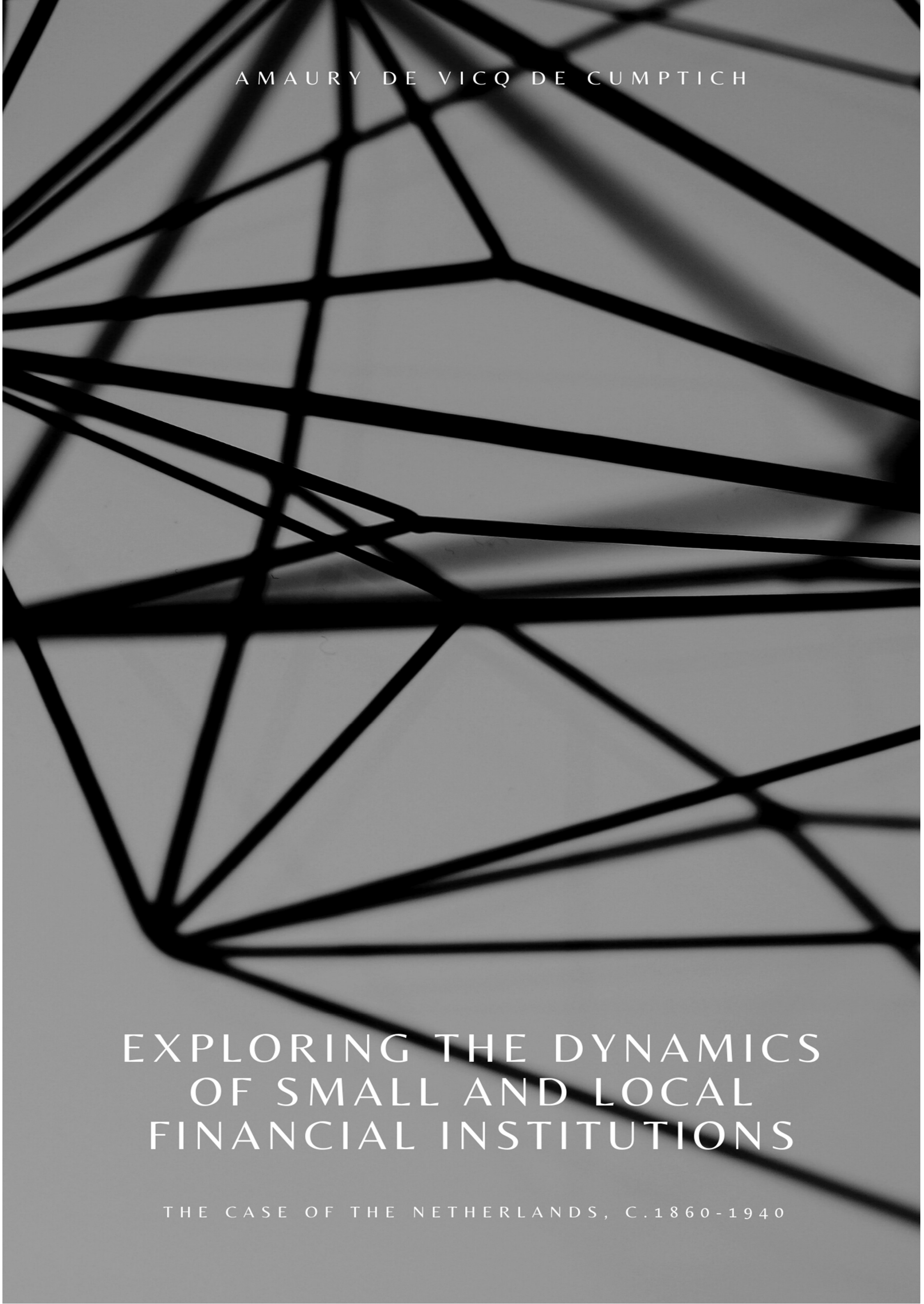

AMAURY DE VICQ DE CUMPTICH

EXPLORING THE DYNAMICS OF SMALL AND LOCAL FINANCIAL INSTITUTIONS

THE CASE OF THE NETHERLANDS, C.1860-1940

Exploring the Dynamics of Small and Local Financial Institutions

The Case of the Netherlands, c.1860-1940

Exploring the Dynamics of Small and Local Financial Institutions

The Case of the Netherlands, c.1860-1940

De dynamiek van kleine en lokale financiële instellingen

Een studie over Nederland, c.1860-1940

(met een samenvatting in het Nederlands)

Proefschrift

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Curriculum Vitae

Amaury de Vicq is a PhD fellow at Utrecht University. He obtained his BA, MA in History and his MSc in Business Economics from the KU Leuven. In addition, he also obtained an MSc in Political Economy from the London School of Economics and Political Science (LSE). After completing a Blue Book Traineeship at the European Commission, he worked for the Belgian Financial Services and Markets Authority (FSMA) as a Policy Advisor, and as a Private Banker for BNP Paribas. Currently he is working as a Postdoctoral Fellow at the Paris School of Economics (PSE) and at Groningen University.

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After working on and finally finishing my manuscript, I feel like I am in a comfortable enough position to judge the accuracy of some of the prejudices and myths surrounding a Ph.D. project. Simply put, writing a Ph.D. does indeed require a hefty time investment and can be quite demanding, both intellectually and psychologically. Contrary to what many people believe, academic writing is far from a solitary business. Indeed, this manuscript would not have been accomplished if I had not had the privilege of meeting plenty of people over the years with whom I could talk, be it about my research or other, more mundane (but often much more important) issues.

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Samenvatting in het Nederlands

Dit onderzoek gaat over de ontwikkelingen van het Nederlandse financiële stelsel vanaf het midden van de 19de tot het begin van de 20ste eeuw. In tegenstelling tot eerder onderzoek, richt deze studie zich in de eerste plaats op de financiering van het midden– en kleinbedrijf. Middelgrote en kleine ondernemingen (MKB's) zijn nog steeds een van de drijvende krachten achter de economische groei: ze vertegenwoordigen 60% tot 70% van de werkgelegenheid en 55% van het BBP in de meer ontwikkelde economieën. Het is dus van essentieel belang om MKB's een betere toegang te verschaffen tot bedrijfsfinanciering en ze zo in staat te stellen hun potentieel volledig te benutten. Dit proefschrift bestudeert hoe financiële instellingen in het verleden in deze kapitaalbehoefte voorzagen en welke lessen hieruit te trekken zijn voor het heden.

Eerdere onderzoekers die zich toelegden op de Nederlandse financiële geschiedenis, in het bijzonder Joost Jonker, kwamen tot de conclusie dat de late opkomst en ontwikkeling van grote commerciële banken in Nederland niet betekende dat de grootindustrie kampte met een tekort aan financiering. Integendeel, de financiering was rijk en gediversifieerd: het omvatte *prolongatie* leningen, participaties, de verkoop van aandelen en talrijke andere vormen van krediet. Dit manuscript komt tot een gelijkaardige conclusie wat betreft de financiering van het midden- en kleinbedrijf in de 19de en begin 20ste eeuw: ook hier had de late doorbraak van het commerciële bankwezen in Nederland niet tot gevolg dat het midden– en kleinbedrijf kampte met een tekort aan financiering.

Dit proefschrift biedt drie aanvullingen op de literatuur. In de eerste plaats, door het bestuderen van het geheel aan financiële instellingen en hun onderlinge dynamiek. Deze blik op het systeem als geheel is een aspect van de Nederlandse financiële geschiedenis dat tot nu toe wat onderbelicht is gebleven. Veel van de bestaande studies richten zich namelijk op één soort instelling en hebben de neiging om hierbij het grotere verhaal wat uit het oog te verliezen. Om het systeem zelf en de samenhang tussen de verschillen instellingen daadwerkelijk te begrijpen is het echter noodzakelijk om onze bestaande kennis te consolideren en uit te breiden. We willen weten hoe dit financiële systeem er echt uitzag en hoe dit systeem evolueerde doorheen de tijd.

Naast deze temporele dimensie is het ook belangrijk om stil te staan bij de geografische dimensie. Klopt het dat het Nederlandse financiële stelstel in de periferie, ver van de financiële centra (in de eerste plaats Amsterdam), zo achtergesteld was als eerdere historici beweerden? Of hadden eigenaars van kleine bedrijven en individuele huishoudens gelijke toegang tot financiële diensten ongeacht waar ze woonden? Ten slotte kijkt dit proefschrift ook naar de interne dynamiek van specifieke instellingen. Wat voor financiële diensten leverden ze, hoe

waren ze georganiseerd? Hoe, en waardoor, evolueerde hun bedrijfsmodel en bedrijfsvorm doorheen de tijd?

Hoofdstuk 1 van dit manuscript benoemt de voornaamste conclusies over de stand van zaken in de internationale en Nederlandse historiografie.

Vervolgens presenteert hoofdstuk 2 een nieuwe databank die inzicht geeft in de locatie, start- en eindjaar van zo'n 6.000 financiële instellingen. De databank bevat een volledig overzicht van spaarbanken, kredietverenigingen, middenstandsbanken, boerenleenbanken en hulpbanken, maar ook van commerciële banken en hypotheekbanken, en dit voor de periode 1860-1940. Uit deze gegevens blijkt dat het aantal bestaande instellingen vele malen groter was dan aanvankelijk werd aangenomen op basis van een eerdere studie van De Nederlandsche Bank. Daarnaast toont dit hoofdstuk ook aan dat de sector erg dynamisch was. Talrijke instellingen verschenen, maar konden na enkele jaren ook plots weer verdwijnen. Zo waren kassiers en commissionairs in effecten nog erg talrijk in de 19de eeuw, maar verdwenen ze nagenoeg geheel van het toneel tegen het begin van de 20ste eeuw. Een ander bekend voorbeeld is dat van middenstandsbanken, wier aandeel na de crisis van de jaren-1920 ook beduidend afnam.

Hoofdstuk 3 gaat verder met deze vogelvlucht doorheen het Nederlandse financiële landschap van de 19de en de 20ste eeuw. In tegenstelling tot hoofdstuk 2, wordt hier stilgestaan bij de private kredietmarkt en in mindere mate de notariële kredietmarkt. Laatstgenoemde markten werden blootgelegd aan de hand van een gestratificeerde steekproef van de zogenaamde *memories van successie* (een overzicht van de baten en lasten van een nalatenschap van de 30% rijksten van de samenleving) van 2.321 individuen uit 1921. Een van de voornaamste bevindingen van dit hoofdstuk is dat het aantal financiële transacties, in het bijzonder kredietransacties, op deze private markt vele malen groter was dan op de institutionele kredietmarkt. Met andere woorden, zelfs in het goed ontwikkelde Nederlandse financiële systeem in 1921, waren persoonlijke transacties nog steeds onontbeerlijk.

Hoofdstuk 4 bestudeert de geschiedenis van één soort instelling in het bijzonder, de zogenaamde hulpbanken. Deze instellingen waren qua doelstelling en bedrijfsmodel verwant met de meer bekende kredietverenigingen: beiden waren gericht op het verstrekken van kleine bedragen om ondernemers een duwtje in de rug te geven. In tegenstelling tot laatstgenoemde functioneerden deze hulpbanken relatief beter in steden dan op het platteland. Hulpbanken kenden hun hoogtepunt in de jaren 1920. Er waren toen een 100-tal van dergelijke hulpbanken actief doorheen het land, die gezamenlijk 10,000 leningen per jaar verzorgden. Na de crisis van de jaren-1930 en door de opkomst van de welvaartstaat geraakten ze in ongebruik. Tegen jaren de 1960 waren ze nagenoeg allemaal verdwenen, hoewel een aantal lokale instellingen bleef doorbestaan tot in de jaren 1990.

Hoofdstuk 5 kijkt vervolgens naar de geschiedenis van kredietverenigingen vanaf het midden van de 19de tot het begin 20ste eeuw. Het toont aan hoe deze kredietinstellingen doorheen de tijd evolueerde van een coöperatieve tot een meer commerciële instelling en licht toe hoe deze verandering precies tot stand kwam. Hoewel kredietverenigingen aanvankelijk een belangrijke rol vervulden in de financiering van het midden- en kleinbedrijf, richtten zij hun pijlen vanaf het einde van de 19de eeuw op de meer profijtelijke grootindustrie. Deze tendens (ook wel bekend als ‘ missie-drift’) is nog steeds een gangbaar probleem bij dit soort instellingen. Dit hoofdstuk tracht dan ook om deze tendens meer inzichtelijk te maken door de oorzaak hiervan, althans in het geval van kredietverenigingen, bloot te leggen.

Waar hoofdstuk 4 en 5 stilstonden bij de dynamiek van bedrijfsmodellen, bestudeert hoofdstuk 6 de drijfveren achter wijzigingen in de bedrijfsvorm. Het maakt gebruik van het voorbeeld van de Twentsche Bank om aan te tonen dat ondernemers in Nederland creatieve alternatieven vonden voor de naamloze vennootschap (NV). Als commanditaire vennootschap slaagde de Twentsche Bank er namelijk lange tijd in om succesvol te concurreren met haar directe rivalen die wel georganiseerd waren als een NV. De concentratiebeweging in het Nederlandsche bankwezen, gepaard met de naoorlogse economische groei en familiale disputen dwongen de bank echter tot het aannemen van de NV-vorm in 1917, meerdere decennia na haar directe concurrenten.

Samengenomen onderstreept deze dissertatie dat het Nederlandse financiewezen in staat was om alle financiële diensten aan te bieden die men normaliter ook kan vinden bij universele banken. Er was dan ook allerminst een tekort aan financiële dienstverlening voor MKB’s.

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General Introduction

1.1. Introduction

For decades, the central debates within financial history were closely aligned to those within the broader field of economic history, economic and industrial development in particular.[1] Following the seminal work of Schumpeter on the so-called finance-growth nexus, later reiterated by Gerschenkron, traditional financial historians held the persistent belief that joint-stock commercial banks played a decisive role in financing industrialisation.[2] These historians pointed at the informational, diversification and scale advantages provided by these banks that gave them the best position to provide financial services.[3] These advantages allowed such banks to push down costs, finance large projects and ultimately break the shackles on capital markets that were supposed to have held back economic growth for so long.[4]

Further empirical work led to a more nuanced interpretation of the role played by commercial banks in industrial development.[5] Cassis, Edwards and Ogilvie, Feldenkirchen and Fohlin (among others) examined the available evidence, in particular for Germany, and refuted the claim that industrial joint-stock companies, and through them the universal banks, were crucial for industrialisation. They found that the importance of joint-stock companies and

[1] Another major debate in financial history (and banking history for that matter) is on the root causes and consequences of financial crises and depressions. However, this literature, popularised by the likes of Friedman and Schwartz (*A Monetary History*) and Kindleberger (*Maniacs, Panics and Crashes*), is beyond the scope of this dissertation. For a recent literature review, see Colvin, 'The Past, Present and Future of Banking History', 89-106.

[2] While the debate on the finance-growth-nexus can be traced back to at least the 1870s in the work of Bagehot, it was the seminal work of Schumpeter, later reiterated by Gerschenkron which popularized this idea in English historiography. See Bagehot, *Lombard Street*, 12. For earlier German scholarship which linked universal banking with Germany's industrialisation, see Hilferding, *Das Finanzkapital*; Jeidels, *Das Verhältnis*; and Riesser, *Die Deutschen Großbanken*. See also Fohlin, 'Universal Banking', 307 for a brief review on this literature.

[3] For Schumpeter, innovation was the key driver of economic growth and universal banks were instrumental to facilitate economic development, at least in the early stages of economic growth. See Schumpeter, *Theorie der Wirtschaftlichen*, 201-207. Based on a systematic comparison of industrial latecomers such as Germany with France, Russia and the United Kingdom, Gerschenkron expanded this idea and asserted that universal banks substituted for factors like the endowment of natural resources. This, according to Gerschenkron, allowed Germany to catch up, whereas other countries such as France fell behind. See Gerschenkron, *Economic Backwardness*, 14; Gerschenkron, 'The Modernization', 137; Gerschenkron, 'Europe', 98-99.

[4] The orthodox model of financial system, sometimes referred to as the 'Gerschenkronian' paradigm, did not go unnoticed. From the onset, it inspired a rich literature which set out to verify Gerschenkronian's idea on the finance-growth nexus. For example, empirical work of McKinnon and Shaw illustrated the close ties between financial and economic development and argued in favour of financial liberalisation, especially in developing countries. This is because financial markets promote economic growth by mobilising savings to finance the most productive investments. But this effective allocation mechanism could be impeded by pervasive financial regulation. See McKinnon, *Money and Capital*; Shaw, *Financial Deepening*. Another noteworthy proponent of this orthodox paradigm was Chandler, who argued that universal banks were 'the instruments' that made the rapid industrialisation of Germany possible. See Chandler, *Scale*, 416. Romer, Lucas and more recently Calomiris contributed to the 'Gerschenkronian' view on economic growth by arguing that the informational, diversification and scale advantages provided by universal banks gave them the best position to provide financial services. See Lucas, 'On the Mechanics', 3-42; Romer, 'Increasing Returns', 1002-1037; Calomoris, 'The Costs of Rejecting Universal Banking', 257-277.

[5] Cassis, 'Financial History', 20.

banks, both in absolute as well as in relative terms, was simply too minor in the early twentieth century, and that they were far from a leading sector.[6] Moreover, these scholars provided evidence that even in heavily finance-dominated regions, such as the Ruhr area, internally generated funds often sufficed for industrial companies to finance their investments.[7] Firms needing external finance had to issue stocks, thus relying on the capital market. Universal banks, they concluded, played an important role in arranging the details of such issue, but were seldom a source of long-term investment finance themselves.[8]

Taken together, this strand of literature thus downplayed the necessity of joint-stock commercial banks, absolving them from 'the sin of failing industry'.[9] Laggard industrial development could no longer merely be attributed to differences between a 'German' bank-oriented or a 'British' market-oriented system, as both systems could meet demand for capital and were much less distinguishable than the orthodox paradigm made us believe.[10] But the reinterpretation of financial history has not stopped there. The new scholarship on banking history also showed that more decentralised financial systems, characterised by specialised local banks, sometimes performed better than more centralized financial systems dominated by large universal banks, as the latter tended to neglect smaller companies and thus could hinder local economic development.[11]

This reappraisal of small and local financial institutions began with the work of Guinnane and Lamoreaux on Germany and New England, respectively. In Germany, Raiffeisen credit cooperatives—established within close-knit local communities—were able to screen potential members, monitor outcomes and enforce repayment with relatively low costs. Guinnane's main contribution has been to illustrate that by relying on social capital and joint liability, these institutions were able to overcome issues related to moral hazard and adverse selection, which plagues small-scale lending, and which prevented more conventional banks from reaching out to the rural poor.[12] In New England, Naomi Lamoreaux found local bankers engaged in 'insider lending', i.e. the allocation of credit through personal connections between bankers and

[6] Edwards and Ogilvie, 'Universal Banks', 437.

[7] Feldenkirchen, *Eisen-und Stahlindustrie*, 287.

[8] Feldenkirchen, *Banks*, 15-33; Fohlin, 'Universal Banking', 327-328.

[9] Cassis, 'Financial History', 14.

[10] Fohlin, 'Universal Banking', 310. See also Cottrell, *Industrial Finance*; Cameron, *Banking in the Early Stages;* Cameron, *Banking and Economic Development;* Collins, *Banks and Industrial Finance;* Collins, *Banks and Industrial Finance*; Mathias, *Financing the Industrial Revolution,* for a more in-depth reading of the British perspective on the finance-growth debate.

[11] Edwards and Ogilvie, 'Universal Banks', 44; Cassis, 'Financial History', 14; Wadhwani, 'Small-scale Credit Institutions', 204.

[12] Ghatak and Guinnane, 'The Economics of Lending', 195-228; Guinnane, 'Cooperatives as Information Machines', 366-389; Guinnane, 'The Early German Credit Cooperatives', 77-92.

business owners. This peer-to-peer lending left little or no room for joint-stock commercial banks in the funding of businesses.[13]

The literature on these alternative forms of business finance has continued to grow. Expanding Guinnane's work on local financial institutions in Germany, Henning, Born and Donaubauer have documented the role of pawn shops, savings banks, credit cooperatives and private banks in offering small-scale loans that universal banks were unable or unwilling to grant.[14] In France, as shown by Hoffman et al., notaries played a key role as financial intermediaries up until World War I.[15] In the North Atlantic Core, Cull et al. found an impressive variety of small and local financial institutions that supplied smaller companies with financing throughout the nineteenth and twentieth centuries. These financial institutions were also able to tap into local information networks and therefore extend credit to firms that were either too young or too small to rely on large joint-stock banks.[16]

Now that it was clear that a broad variety of small and local financial institutions existed in many places, scholars started asking exactly how efficient they really were, and what determined their success or failure. Guinnane himself provided institutional reasons to explain why Raiffeisenism 'failed' in Ireland when compared to Germany.[17] A few years later, Colvin and McLaughlin strengthened Guinnane's findings by pointing out how differences in the socio-religious and socio-economic contexts in which these institutions operated determined why they prospered in the Netherlands but faltered elsewhere.[18] Other examples of scholarship which attempted to unearth the performance of small and local financial institutions include a study of Woolcock in which he examined the failure of the People's Banks in late-nineteenth-century Ireland to identify best practices that led to successful replication.[19] Furthermore, there is the work by Hollis and Sweetman on Irish loan funds, which they consider to be antecedents of

[13] Lamoreaux, *Insider Lending*, 31-51.
[14] Born, *Industrial Banking*, 107-110; Henning, *Industrialisierung*, 257; Donaubauer, *Privatbankiers*, 206-209. Other noteworthy scholarships which point out the relative importance and competitiveness of small and local financial institutions vis-à-vis joint-stock commercial banks include the following: (i.) Tebbutt, *Making Ends Meet*; Calder, *Financing the American Dream*; Hudson, *Pawnbroking*; Woloson, *In Hock: Pawning in America* for pawn shops (ii.) Ago, 'Enforcing Agreements'; Nussdorfer, *Brokers of Public Trust* for notaries; and (iii.) Payne and Davis, *The Savings Bank of Baltimore*; Olmstead, *New York City Mutual Savings Banks*; Wadhwani, 'Citizen Savers'; Kuwayama, 'Postal Banking'; Pix and Pohl, 'Invention'; Thomes, 'German Savings Banks'; Ziegler, 'The Origins' for Savings Banks and Postal Savings Banks.
[15] Hoffman et al, *Dark Matter Credit*, 218-238. Also see their earlier work: Hoffman et al., 'Information and Economic History'; Hoffman et al., *Priceless Markets*.
[16] Cull et al., 'Historical Financing', 3017-3042.
[17] Guinnane, 'A Failed Institutional Transplant', 38-61.
[18] Colvin and McLaughlin, 'Raiffeisenism Abroad', 512-513. Other paired comparisons include the following: Guinnane and Henriksen, 'Why Danish Credit Co-operatives were so Unimportant'; Garrido, 'Why did Most Cooperatives Fail?'; Guinnane and Martínez-Rodríguez, 'Cooperatives before Cooperative Law'.
[19] Woolcock, 'Learning from Failures in Microfinance', 17-42.

modern microfinance institutions.[20] Their scholarship also includes a comparison of other nineteenth-century European small and local financial institutions to uncover factors of institutional design conducive to their success.[21] Their studies, in turn, inspired contributions by Goodspeed, McLaughlin and Rowena, which pay more attention to the specific historical circumstances in which these loan funds operated.[22] Finally, Van Leeuwen, van Nederveen Meerkerk and Heerma van Voss looked at how the elderly were provided for by so-called almshouses, which operated most effectively in relatively urbanised and monetised areas of north-western Europe.[23]

In short, there is ample evidence that in many cases small and local financial institutions may have been more efficient in providing small-scale credit than large universal banks. Apart from their institutional set-up, this advantage grew out of their local embeddedness. Because their depositors, borrowers and staff lived within close proximity, they could effectively rely on relationship lending to screen their clientele. These institutions also found innovative solutions (ranging from mutuality to co-signatory lending) to persistent funding problems in small-scale lending, which allowed them to remain competitive despite the limited scale of their operations.[24]

This dissertation adds to this growing literature by investigating how the financial system, and in particular small and local financial institutions, developed in the Netherlands between 1860-1940. This research question is particularly relevant for the Dutch case, in this vibrant period of growth, structural change, and crisis. Dropping back from its early modern economic leadership and financial sophistication, the country was both a late industrializer and a late developer of commercial joint-stock banking, though the supposed links between the two phenomena are no longer accepted.[25] However, from 1870 banking developed quite rapidly resulting by 1920 in a countrywide, highly diverse financial system covering nearly every imaginable demand segment. So far however, much of the Dutch scholarship has focussed on

[20] Hollis and Sweetman, 'Microcredit in Prefamine Ireland', 347-380; Hollis and Sweetman, 'The Life-Cycle of a Microfinance Institution', 291-311; Hollis and Sweetman, 'Microfinance and Famine', 1509-1523; Hollis and Sweetman, 'Woman and Micro-credit', 73-89.
[21] Hollis and Sweetman, 'What Can we Learn from the Past?', 1875-1891.
[22] Goodspeed, 'Microcredit and Adjustments to Environmental Shock', 258-277; Goodspeed, 'Environmental Shocks and Sustainability', 456-481; McLaughlin and Pecchenino, 'Ireland's Peculiar Microfinance', 1-4; McLaughlin, 'A Note on Mutual Savings and Loan Societies', 48-68; Cf. also the work of Shepelwich on remedial loan associations: Shepelwich, *Remedial Loan Associations*, 5-6.
[23] Van Leeuwen, van Nederveen Meerkerk and Heerma van Voss, 'Provisions for the Elderly'.
[24] For a more theoretical explanation of the persistent funding issues in small-scale lending, Cf. Cressy, 'Funding Gaps', 255-304; Beck and Demirgüç-Kunt, 'Small and Medium-Sized Enterprises', 2931-2943. See also Ross, 'The Unsatisfied Fringe', 37-41, for a better understanding of why these issues are so perennial. For the Dutch case, see Peeters, 'Solving the Perennial Small Firm Credit Problem'.
[25] Jonker, *Merchants, Bankers, Middlemen*; Jonker, 'The Alternative Road'.

the role of large commercial banks and the stock-market in the funding of business. It has also been mostly limited to Amsterdam, turning somewhat of a blind-eye to the developments outside of the economic nexus. The existing literature for the Netherlands thus leaves many questions about the functioning of financial system, and the part played by small and local financial institutions in it, unanswered.

1.2. The Case of the Netherlands

Like in many other countries, the historiography on banking and finance in the Netherlands has been shaped by Schumpeter's seminal essay on the role of (German) universal banks in the finance-growth nexus, and the subsequent elaboration of a stage theory of financial development by Gerschenkron. As the Netherlands were slow to industrialize in the nineteenth century, while being at the forefront of financial innovation in previous centuries, Dutch historians were eager to find out whether banks had failed in their supply of finance to the industrial sector.[26]

Some of the earliest contributions were made by Eisfeld, Hirschfeld, Van Tienhoven, Westerman and Wibaut in the period 1910-1920. Westerman briefly discussed the Dutch financial system in the nineteenth century, but as with Eisfeld a few years prior, the focal point of his study is on the advent of universal banks – notably the Bank(s) of Amsterdam (*Amsterdamsche Bank)*, Rotterdam (*Rotterdamsche Bank)* and Twente (*Twente Bank)*[27] – in the Netherlands.[28] Westerman explains why and how these banks from 1911 onwards took firm control over the financial system by aggressively acquiring existing private banks and setting up new branches.[29] Wibaut corroborated this assessment of the concentration movement in the banking sector by pointing out the substantial increase in the number of links between banks and industry.[30] Hirschfeld heralded these trends as a sign of modernity, with banking finally embracing closer ties with trade and industry.[31] Van Tienhoven and to a lesser extent Eisfeld were perhaps the only scholars at the time to look at the entirety of the Dutch financial system and (in particular) small and local financial institutions outside of the economic heartland.[32]

[26] Cf. Schumpeter, *Theorie der wirtschaftlichen*, 201-207; Gerschenkron, *Economic Backwardness*, 14; Gerschenkron, 'The Modernization', 137 and Gerschenkron, 'Europe', 98-99. See also Jonker, 'Lachspiegel', 5-23 and Lugt, 'Het Commerciële Bankwezen', 406-417 for a review on Dutch historiography on financial and banking history.
[27] The so-called *Incasso Bank* established in 1891 and the Dutch Trading Company (*Nederlandsche Handel-Maatschappij)* established in 1824 complete the list of the five largest commercial banks at the time.
[28] Eisfeld, *Das Niederländische Bankwesen,* 1-7.
[29] Westerman, *De Concentratie,* 227-270*;* Eisfeld, *Das Niederländische Bankwesen;* Harthoorn, 'Hoofdlijnen'.
[30] Wibaut, 'De Nieuwste Ontwikkeling van het kapitalisme', 337-345.
[31] Hirschfeld, *Nieuwe Stromingen,* 5-15.
[32] Van Tienhoven, 'Provinciale Banken', 829-842; Eisfeld, *Das Niederländische Bankwesen,* 114-185.

The first generation of Dutch banking historians focused on contemporary developments in the Dutch financial sector in the period 1860-1920, including the advent of large universal banks, the subsequent concentration movement of the 1910s as a belated response to the rapid expansion of Dutch industry from 1895 and the impact this advent was supposed to have had on the real economy.[33] They asserted that the Dutch financial system prior to the events of the 1910s was still in its infancy, only 'coming of age' when universal banks started to participate more actively in the real economy.

Apart from a handful of memorials devoted to commemorate the history of the largest commercial banks, there was somewhat of a drought in Dutch financial history, throughout the 1930s-1960s.[34] This lack of interest coaligned with the supposedly rather uneventful development of the Dutch financial system throughout the interbellum.[35] As later scholars such as Barendregt and Visser would argue, the commercial banks' heyday lasted for about a decade, for after a sharp rise in the 1910s-1920s, the financial crisis of the 1930s and World War II hindered these banks from further expanding their activities. This changed from the 1960s onwards, when the largest commercial banks started to develop an extensive branch network and moved into retail banking. The opening up of the European markets led to a merger wave and (in its wake) an increase in the demand for credit. History repeated itself, as these banks once more seemed forced to follow suit and responded by consolidating their market shares through a series of acquisitions, just as they had done prior to the 1920s. Perhaps the most notable merger that took place during this period was when two of the largest banks, the Bank of Amsterdam and the Bank of Rotterdam, joined forces to become AMRO Bank in 1964.[36]

These events reinvigorated interest in Dutch financial history from the mid-1960s onwards. However, most of these contributions did not focus on contemporary issues, but rather on events that had occurred around World War I. Testimony to this was the company history by A.M. de Jong on the Dutch Central Bank (*De Nederlandsche Bank*), finalised in 1967.[37] In this extensive study (i.e., consisting of four volumes and five parts of several hundred pages), De Jong uses a detailed account of the bank, which developed from a privately owned commercial

[33] Hirschfeld, *Het Ontstaan van het Moderne Bankwezen in Nederland,* 16-38.
[34] See Brouwer, *De Amsterdamsche Bank*; Uitgave Maandblad De Bank, '50 Jaar Incasso-Bank' for (respectively) the history of the Bank of Amsterdam and the so-called Incasso Bank, which was one of the five largest commercial banks at the time, until it was acquired by the Bank of Amsterdam in 1948.
[35] For a more in-depth overview of these memorials, see Lugt, 'Het Commerciële Bankwezen', 406-408.
[36] Barendregt and Visser, 'Towards a New Maturity', 173.
[37] De Jong, *Geschiedenis van de Nederlandsche Bank*.

institution into a nationalised central bank, as a lens through which he looks at the wider changes in the Dutch financial system throughout the period 1814-1914.[38]

In the following years, Dutch banking history was mostly concerned with the absence of large universals banks up to the dawn of the twentieth century, an absence they perceived to be an important factor in the laggard industrial development of the Netherlands.[39] Brugmans, for instance, echoing earlier work of Hirschfeld and his contemporaries, branded as a culprit the lack of a well-developed banking system engaging in industrial financing. However, he also pointed out the lack of interest of Dutch investors in funding domestic business endeavours.[40] Similarly, he considered the more active role of large universal banks, in particular the Bank of Rotterdam and Bank of Amsterdam, from the 1910s onwards to signal the beginning of the 'modern age'.[41] Van den Eerenbeemt studied how manufacturing companies in and around Den Bosch were financed throughout the nineteenth century, which led him to draw a similar conclusion to Brugmans: the lack of external finance hindered the rapid expansion of industry.[42] Berghuis and Klein also clung to this belief and emphasised the primitive status of the Dutch banking sector throughout the nineteenth and early twentieth centuries.[43]

In other words, as Jonker asserts in his overview on Dutch financial history published in 1991, Dutch scholars throughout the 1960s-1980s seemed stuck in the orthodox paradigm.[44] Even the monographs of Kymmel and Wijtvliet, which appeared after Jonker's critical review, mostly reiterated the 'Gerschenkronian' notions on the root causes of Dutch industrial backwardness.[45] Their work, grounded on a richness of financial data drawn from annual accounts, statistical series and archival research, focusses on the advent of large universal banks, in particular the Bank(s) of Rotterdam, Amsterdam and Twente. Just like Westerman et al. more than half a century ago, Kymmel and especially Wijtvliet argued that while the outlines of a modern banking system in the Netherlands already existed by the mid-1860s, it took over half a century

[38] About a decade later, De Vries expanded this series by adding a fifth volume in two parts on the period 1914-1948, the first of which focused on G. Vissering, the president of the Bank who played an important role in restoring the gold standard and on the impact of the aforementioned international trends on the Dutch economy. See De Vries, *Visserings Tijdvak 1914-1931.* Jonker revisited this topic a few years later, emphasising that the Bank's reluctance to accept its incumbent responsibility as a supervisory institution, reinforced the already conservative attitude of commercial banks towards industrial financing throughout the 1930s-1950s. See Jonker, 'Between Private Responsibility and Public Duty', 146-152.

[39] Van den Eerenbeemt, 'Een Eeuw Bedrijfsfinanciering'; Berghuis, *Ontstaan en Ontwikkeling*; Klein, 'Kapitaal'; Van Stuijvenberg, 'Economische Groei'.

[40] Brugmans, *Paardenkracht*, 267-268.

[41] Brugmans, *Begin van Twee Banken*, 43-67

[42] Van den Eerenbeemt, 'Een Eeuw Bedrijfsfinanciering', 670-691.

[43] *Berghuis*, Ontstaan en Ontwikkeling, 105-116; Klein, 'Kapitaal'.

[44] Jonker, 'Lachspiegel', 8-12.

[45] Kymmel, *Geschiedenis. Vol 1*; Wijtvliet; *Expansie en Dynamiek*. However, Kymmel asserts that Dutch banks ought not be blame for laggard industrial development. See Kymmel, *Geschiedenis. Vol. 1,* 35-40.

before banks were able to fill in these outlines.[46] They considered the concentration movement in the Dutch banking following the merger of the Bank of Rotterdam and the *Deposito-en Administratie Bank* in 1911 to be a turning point, the dawn of a more modern financial system in the Netherlands.[47] In a few years, these universal banks had managed to build an impressive branch network, now providing a wide array of financial services all across the country. Perhaps more importantly, they were now more involved in the funding of large-scale industrial enterprises. For both scholars, but especially for Wijtvliet, incorporation was a necessary condition for this expansion, at least implicitly, labelling other organisational forms such as the limited partnership to be inferior.[48]

While the work of Kymmel and Wijtvliet remained faithful to a more orthodox strand of financial history, other Dutch banking historians started moving in new directions. Scholars such as Mokyr, Bos and Griffiths started to challenge the traditional axiom that the absence of industrial development in the early nineteenth century was the direct consequence of a lack of financing and, more precisely, the dearth of a universal banking system. Mokyr emphasised the importance of retained earnings as the primary source of finance for industry and pointed out other factors – including the high cost of labour – as a root cause for the lack of industrial development in the Netherlands in the early nineteenth century.[49] Bos and Griffiths argued that whereas France, Belgium and Germany developed industrial banks, the Netherlands and England did not require such active involvement from banks. Manufacturing companies could and would rely on other sources of funding, including local capital markets, which were well-developed in the Netherlands. Banks, they concluded, played an essential role as intermediaries, but were seldom a source of long-term investment finance themselves.[50]

These studies on early industrialization in the Netherlands did not immediately absolve Dutch banks from the 'sin of failing industry' as the capital requirements of most industrial firms were limited anyway.[51] The question remained whether firms suffered from inadequate funding during the Second Industrial Revolution. Several business historians began to explore exactly that. Through a detailed case study of the textile industry of Twente in the period 1865-1900, Fischer and De Peuter demonstrated that textile producers were quite capable of expanding their operations by merely relying on retained earnings and did not require external finance from

[46] Wijtvliet; *Expansie en dynamiek*, 256-261.

[47] Wijtvliet refers to the Bank(s) of Amsterdam and Rotterdam as trailblazers of a modern banking sector (*wegbereiders van het moderne*) bankwezen. See Wijtvliet; *Expansie en Dynamiek*, 195-251.

[48] Wijtvliet, *De Overgang*, 38-57.

[49] Mokyr, 'The Industrial Revolution', 365-391; Mokyr, 'Capital, Labor and the Delay of Industrial Revolution in the Netherlands', 280-299.

[50] Griffiths, 'The Creation of a National Dutch Economy', 513-537; Bos, 'Kapitaal en Industrialisatie', 93-104.

[51] Cassis, 'Financial History', 14. See also Jonker, 'Lachspiegel', 12-14 for a more detailed review of this scholarship.

banks.[52] Sluyterman and Van Hooff corroborated this finding by looking respectively at cigar manufacturers and machine factories. Besides retained earnings, they also pointed to the importance of trade credit and funding from family, friends and business associates – the so-called 'closed financial market' as a functional alternative to banks.[53]

It was Jonker who finally put an end to the misguided view on the absence of universal banks and the impact this supposedly had on laggard industrial development in the Netherlands. By looking closely at the businesses of two rural cooperative banks (*boerenleenbanken)* in the south of the Netherlands, he demonstrated that the local demand for agricultural credit was already satiated by the time these cooperatives arrived. These new cooperatives were mainly used as savings institutions, a type of service already provided by incumbents such as savings banks, and hardly as a source of credit.[54]

But Jonker's reassessment of Dutch financial history went much further. By carefully analysing what type of function financial institutions performed and how this developed throughout time, he showed that the concentration movement of the 1910s was not the turning point traditional scholars such as Wibaut claimed it to be. Stimulated by the buoyant post-war economic climate and with the support of the government, large joint-stock commercial banks quickly rose to become the dominant actor in providing industry finance and other financial services. However, this spurt, which by the late 1910s had turned into a frenzy, was short-lived. Shaken by the recession of the early 1920s, banks became overly cautious and ceased their industrial lending activities almost entirely.[55]

Furthermore, Jonker demonstrated that the banking concentration in the Netherlands meant an expansion of the existing type of banking rather than a fundamental change. Even during the period of the 1910s and 1920s, the large commercial banks continued their rather passive intermediation typical of mercantile finance and never truly embraced the (German) universal banking model.[56] Nevertheless, the Dutch economy continued to grow, but it did so seemingly without being overly reliant on commercial bank credit, instead financing its activities primarily through alternative sources.[57] In the following years, Jonker further fleshed out some of these alternative sources, first and foremost the local credit markets. By closely analysing eighteenth- and nineteenth-century Amsterdam, he unravelled a sophisticated financial system

[52] Fischer and De Peuter, 'Winstontwikkeling', 192-244.
[53] Sluyterman, *Ondernemen in Sigaren*, 205-266; Van Hoof, *De Nederlandse Machinenijverheid*, 100-113.
[54] I am indebted to the earlier work of Jonker, 'Lachspiegel van de Vooruitgang', 12-18, for the analysis of the work of Bos, Griffiths, Sluyterman and Van Hoof.
[55] Jonker, 'Waterdragers', 187-190.
[56] Jonker, 'Spoilt for Choice', 188-189.
[57] Jonker, 'Spoilt for Choice', 203-204.

consisting of a wide variety of intermediaries together, providing most, if not all, of the services traditionally associated with universal banks, thus further undermining the perceived necessity of the latter in a modern economy.[58]

A key takeaway of Jonker's research, later reiterated in the edited volume of 't Hart et al., is that while the Dutch industry expanded rapidly from the 1860s and especially from 1895 onwards, banking remained in a relatively archaic state.[59] The Dutch financial system, which it inherited from its Golden Age, was so advanced that there was simply no need for universal banks.[60] A functional alternative, the so-called *prolongatie* system, a short-term credit instrument that used financial securities (primarily exchange-listed bonds and shares) as collateral, effectively outcompeted banks because their implicit borrowing rates were much lower than those offered by banks.[61] This system was made possible by a dense network of intermediation by stock brokers, cashiers and merchant bankers through which securities found their way to the public and savings went to the open market.[62]

The outbreak of war in July 1914 changed the situation. The Amsterdam stock exchange was temporarily closed for fear of a crash, and the *prolongatie* system, which relied on a functioning exchange, was consequently frozen. The closure of the Amsterdam stock exchange--the leading platform for these short-term callable margin loans--during the hostilities, heralded the end for this system, leaving a void waiting to be filled.[63] As discussed, the more direct involvement of Dutch banks in industrial finance was only temporary and they would soon retract their engagement. Unlike Van Zanden and Van Riel, Jonker did not believe this hindered industrial development.[64] Retained earnings and informal funding by family, friends and business relations sufficed for the need of industry.

What sets Jonker's work apart from that of most other (Dutch) historians is his (occasionally implicit) functional approach to financial history.[65] Financial functions and not institutions were taken as the conceptual 'anchor'. This perspective, which assumes financial systems are meant to perform six core functions, allowed for a much clearer overview of financial development.[66] It aided Jonker to unravel the existence of various functional alternatives to

[58] Jonker, *Merchants, Bankers, Middlemen*.
[59] Jonker, 'Spoilt for Choice'.
[60] Jonker, 'The Alternative Road', 122.
[61] Jonker, 'Spoilt for Choice', 190-192.
[62] Jonker, 'The Alternative Road', 122.
[63] Jonker, 'The Cradle'; Colvin et al., 'Predicting the Past'.
[64] Van Zanden and van Riel, *The Strictures of Inheritance*, 271-272.
[65] A more theoretical discussion of this functional analysis is set forth and synthesised in Merton and Bodie, 'A Conceptual Framework', 4-30 and more recently in Wilson and Campbell, 'Financial Functional Analysis', 413-417.
[66] Merton and Bodie distinguish the following core functions performed by the financial system: (i.) to provide ways of clearing and settling payments to facilitate trade; (ii.) To provide a mechanism for the pooling of resources and for

universal banks, demonstrating that industrial enterprises throughout the nineteenth and twentieth centuries were 'spoilt for choice'.[67] Consequently, the works of Jonker together with Cassis, Edwards and Ogilvie, Feldenkirchen and Fohlin were among the first to provide a more nuanced interpretation of the role played by commercial banks in industrial development.[68] Like Mathias, he demonstrated that a more decentralised financial system (characterised by specialised local banks and savings banks) had its advantages over a more central financial system (dominated by large universal banks), as the latter tended to neglect smaller companies that could hinder local economic development.[69]

Moreover, he argued that despite the rather stale institutional development of large commercial banks, the Dutch financial market appeared to have been remarkably efficient.[70] The (at times) tardy economic development of the Netherlands during the nineteenth and early twentieth centuries could not therefore be blamed on uncooperative bankers and investors, but on general economic circumstances.[71] This is further corroborated by the fact that many small and local financial institutions developed which successfully provided new solutions to persistent funding issues, carving a niche for themselves. These institutions ranged from rural credit cooperatives to urban credit unions and both private as well as public savings banks. Their importance, Jonker argued (analogous to Guinnane and his co-authors), did not lie in their capital power or size, but in the fact that by building on the mutual trust of small communities, they provided an innovative solution to small-scale funding issues.[72]

Jonker's work should therefore be considered as belonging to a wider literature which helped spark a paradigm shift in financial history and mapped the contours of the empirical challenges that now lies ahead. To put it in laymen terms, we require a deeper understanding on how business was actually financed and how the Dutch financial system in its entirety – and not solely large commercial banks and stock markets – developed. This means we need to explore what key actors – large and small alike - operated in the financial system, but also when

the subdividing of shares in various enterprises; (iii.) To provide ways to transfer economic resources through time, across borders and among industries; (iv.) To provide ways of managing risk; (v.) To provide price information to help coordinate decentralised decision-making in various sectors of the economy; (vi.) To provide ways of dealing with the incentive problems created when one party to a transaction has information that the other party does not or when one party acts as agent for another. For an in-depth description of these functions, see Merton and Bodie, 'A Conceptual Framework', 7-22.

67 Jonker, 'Spoilt for Choice', 203-204.

68 Cassis, 'Financial History', 20.

69 Mathias illustrated how the development of London as a financial centre, hindered peripheral companies all across England their access to credit. See Mathias, 'Financing the Industrial Revolution', 158.

70 Jonker, *Merchants, Bankers, Middlemen*, 274.

71 Jonker, *Merchants, Bankers, Middlemen*, 278.

72 Jonker, 'The Alternative Road', 121.

such institutions originated, and how and why they developed over time and across space. Notwithstanding all his notable contributions to the field, Jonker never truly explored in depth such developments, nor did he pay that much attention to Dutch provincial banking, which he and later scholars deemed to be weak and underdeveloped.[73] He did however, inspire a growing number of scholars, who since the early 2000s have devoted themselves to reappraise these small and local financial institutions in the Netherlands. Most of this research consists of micro-oriented case studies which take a close look at how local credit markets operated and at the many intermediaries that coexisted alongside joint-stock commercial banks. Colvin for instance strengthened the analysis of Guinnane, demonstrating that credit cooperatives relied on joint liability and social screening to offer solutions to small-scale lending issues and to weather financial distress.[74] McCants illustrated that pawnshops were a critical component of urban credit networks, albeit she emphasised that such institutions did not serve the poorest of the poor, but rather their better-situated peers for whom collateral was more easily obtainable.[75] Dankers et al., as well as Jacobs, came to a similar conclusion for savings banks and so-called 'help banks' (*hulp banken)*. These institutions adjusted themselves well to the changing circumstances in which they operated, but throughout it all they mainly targeted middle-income groups and did little to combat poverty.[76] This is a point later reiterated by the work of Deneweth et al., in which they tried to unravel a complex network of financial intermediation, private efforts and government initiatives throughout the eighteenth and nineteenth centuries.[77]

This then brings me to the three questions that have guided my research. First, apart from the aforementioned study of Deneweth et al. and more recently Colvin et al., most research on Dutch banking history has focused on single institutions.[78] However, if we really want to understand the intricacies of the Dutch financial system, we need both to consolidate the findings from these separate studies into a single one and complement it with information on all other types of financial institutions. How did the Dutch financial sector in its entirety operate? How did institutions interact with one another? What demand segments did they serve and what were their comparative (dis)advantages? Second, we need to take into account the spatial dimension of this development, which is often overlooked. Was the Dutch financial system outside of the financial centres (first and foremost Amsterdam) as backwards as it was

73 Jonker, 'The Alternative Road', 99-119; Barendregt and Visser, 'Towards a New Maturity', 173-177.

74 Colvin, 'Organizational Determinants', 678-689; Colvin et al., 'The Origins', 23-24; Colvin, 'Banking on a Religious Divide', 910-911.

75 McCants, 'Goods at Pawn', 213.

76 Jacobs, *Nutshulpbank Utrecht*; Dankers et al., *Spaarbanken.*

77 Deneweth et al., 'Microfinance', 79-110.

78 Colvin et al., 'The Origins', 1-34. Another noteworthy exception is the statistical publication of the DNB which will be discussed in more detail in the subsequent chapter: De Nederlandse Bank, *Nederlandse Financiële Instellingen*.

traditionally believed?[79] Or, did business owners and individual households in the periphery have access to financial services regardless of where they lived? Third, in order to fully grasp the process behind these dynamics, we need to take a closer look at how some of these institutions developed over time. How and why did their business form adjust over time? What motivated these alterations?

1.3. Approach

This dissertation makes use of the 'functional approach' popularised by Merton and Brodie to analyse how the Dutch financial system developed in the period 1860-1940. [80] It focusses on the role played by small and local financial institutions in the financing of small businesses and households. It starts by sketching the broader sectoral developments (Chapter 2) and corresponding changes in the demand side (Chapter 3). It then looks at how institutions which were specifically designed to provide small-scale financial solutions adjusted their lending system, business model and liability regime to changes in socio-economic circumstances (Chapter 4, 5 and 6). Uncovering these developments is, first of all, an empirical challenge. The historical record of small and local financial institutions is much thinner than that of large commercial banks.[81]

Therefore, a first necessary step was to actually count the number of financial institutions. Building on the work of the Dutch Central Bank (DNB), which published a first overview of the incidence of banks over time, this dissertation then tried to complete the list collected by systematically going through a commercial directory for the Netherlands (*Financieel Adresboek voor Nederlands).* The directory was published annually and listed banks and other useful information for businessmen and administrators working in the nineteenth- and twentieth-century Netherlands. More specifically, for each municipality, this directory provided the name of every financial institution, along with available additional information such as address, date of founding, corporate form, type of business (e.g., cashier, stockbroker, mortgage bank and/or merchant banks), names of the board of directors of the supervisory board and whether the institution was a separate branch or a subsidiary.[82]

[79] Jonker, 'The Alternative Road', 99-119.
[80] Merton and Bodie, 'A Conceptual Framework', 7-22.
[81] Cassis et al., 'General Introduction', 6.
[82] This methodological approach of going through these sources is similar to the one propagated by Hoffman et al. in their latest work, where they used commercial directories to reconstruct a history of the diffusion of banks in France from 1800-1910. See Hoffman et al., *Dark Matter Credit*, 150-174.

The commercial directories do not offer a complete picture, however. Their primary focus is on commercial institutions with only incidental references to charitable, cooperative and small-scale financial institutions for basic savings and credit facilities, which appeared from the mid-nineteenth century onwards. These include savings banks, postal savings banks, pawn banks, help banks and most importantly credit cooperatives, which constituted an essential part of the Dutch financial system. Many of these institutions were semi-philanthropic and often had a clear social agenda, i.e. they were designed to combat or at least alleviate poverty. Because of that the government had a strong interest in monitoring their activities and we can use official reports on these institutions to paint a complete picture of the Dutch banking landscape. The government reports give information on the balance sheet account, profit and loss account and the investment account on many of the individual institutions which are explored in detail throughout this study.

The construction of the new dataset on '*Banks in the Netherlands between 1860-1940'* is described in Chapter 2, which also offers a first interpretation of the major trends in the data. It looks at the banks' incidence, their numbers over time and their outreach. It provides a more streamlined 'bird's-eye view' on the development of the Dutch financial sector as a whole and provides a steppingstone towards the more in-depth analysis of individual institutions in the following chapters.

The third chapter, *'Exploring Modern Bank Penetration'* (jointly with Oscar Gelderblom, Joost Jonker and Ruben Peeters) asks how important banks were for the provision of credit in The Netherlands. We analyze the estate composition of people who died in The Netherlands in 1921 to find that households used a broad range of institutions to meet their financial demands. Goods and services were either paid in cash or settled periodically with suppliers. Despite the strong growth of commercial banking in the previous decades, households still made extensive use peer-to-peer loans, with or without the added security of notarial contracts. Banks only possessed a competitive edge in savings accounts for small surpluses or current accounts for business owners. Chapter 3 uses the data collected in the Dutch Banking Database to demonstrate distance to the nearest bank office did not matter for these people, but wealthy urbanites were more inclined to use banks than their counterparts in the countryside.

The second half of the dissertation extends the source base with a broad range of additional quantitative and qualitative evidence. The fourth chapter, '*Historical Diversity in Financial Intermediation: Co-signatory lending institutions in Europe and North America*' (jointly with Christiaan van Bochove), looks at the advent of a specific financial institution, i.e., help banks. It uses data from government reports and archival records of individual institutions to chart the development of these helps banks over time and show how they adapted to changes in the socio-economic environment over time. It also points to the importance of co-signatory lending for these help banks – an institutional arrangement that has been documented for other countries as well.

Chapter 5, *'Caught between Outreach and Sustainability: The Rise and Decline of Dutch Credit Unions'* adds another layer to the empirical foundation of the research project as it uses several thousands of individual loan applications to explore the history of Dutch credit unions. Unlike help banks, these institutions were more susceptible to 'mission drift' whereby they increasingly targeted a wealthier echelon of clients at the expense of their poorer customers. This chapter is devoted to understanding why this was the case and how this ultimately determined the development of these institutions.

Chapter 6, *'Exploring the limits of the limited partnership: The Case of the Bank of Twente',* looks at the choices made by the owners of individual banks. Through the study of company statutes, contemporary opinion pieces and the bilateral communication between various stakeholders it reconstructs the decision-making process within the Twentsche Bank (Twentsche Bankvereeniging). The bank was launched in 1861 and for most of the subsequent decades the country's largest, fastest growing and most profitable bank. The chapter follows a narrative analysis approach, relying on an interpretative model embedded in the literature on the agency problem, to illustrate that the limited use of a limited partnership was rooted in the organizational form having a flaw of its own which, under particular circumstances, created serious agency costs. As the bank grew, so did the agency costs, finally forcing the bank to incorporate in 1917.

The seventh and final chapter presents a brief conclusion and reviews the main findings of the previous chapters. It reflects on the overarching trends in the development of the Dutch financial markets and summarises the main contributions of this research. Moreover, it attempts to distil lessons for contemporary financial institutions struggling with small-scale lending by analysing and reiterating which socio-economic circumstances are most conducive to the success of small and local financial institutions. Finally, it also points out possible avenues for further research.

Chapter 2

Construction of a Database on the Dutch Banking Landscape

Amaury de Vicq

Abstract: Chapter 2 provides a description of a new dataset on '*Banks in the Netherlands between 1860-1940*'. It offers a first interpretation of the major trends in the data. It looks at the banks' incidence, their numbers over time and their outreach. It provides a more streamlined 'bird's-eye view' on the development of the Dutch financial sector as a whole and provides a steppingstone towards the more in-depth analysis of individual institutions in the following chapters.

2.1. Introduction

In recent years, historians have increasingly highlighted the relative importance of small and local financial institutions in the historical record. Many of such financial institutions, ranging from savings banks to credit unions, were found to play a pivotal role in financing small businesses.[83] Moreover, a number of social and economic historians demonstrated the important role of such institutions in extending financial products and services to ordinary households.[84] Finally, as Wadhwani asserts, this historical interest coincided with growing theoretical interest, as the diverse organisational forms of these institutions often provided interesting analogues for contemporary issues in credit intermediation, particularly in the field of microfinance.[85]

The spur in interest in small and local financial institutions thus represents a shift in historiography and has recently led to scholarship which sets out to quantify the number of such institutions. This includes the work by Hoffman et al. on Britain and France and ongoing efforts by Turner et al. on Ireland and Molteni on Italy.[86] Regardless, for most countries we simply do not know how many financial institutions there were, what kind of services they provided, how they were organised or how they developed over time. The Netherlands is a case in point. Several scholars have explored the functioning of local credit markets and partial overviews of particular types of alternative financial institutions have been compiled (see Chapter I). However, if we really want to understand the dynamics of the Dutch financial system, we need both to consolidate these separate datasets into a single one and complement it with all other types of financial institutions.

This chapter presents the preliminary results of an ongoing project which attempts to remedy this statistical gap by building a freely accessible online database that lists every financial institution active in the Netherlands between 1860 and 1940. It focusses on this period because this is when the statistical gap is the most profound. For this research, information was collected for each institution's founding year, its location, the type of business and whenever available the year of its closure through merger or acquisition, business failure or voluntary liquidation. The research builds on an earlier publication of the Dutch Central Bank (DNB), which represented

[83] Carnevali, *Europe's Advantage*.
[84] Cf. Lamoreaux, *Insider Lending*; Moody, *The Credit Union Movement*; Johnson, *Saving and Spending*; Wadhwani, *Citizen Savers*; Mason, *From Buildings and Loans*.
[85] See most notably the work of Guinnane and his co-authors on credit cooperatives, such as Banerjee et al., 'Thy Neighbor's Keeper'. More recently, the work of Colvin, including 'Organizational Determinants'. See also Wadhwani, 'Small-scale Credit Institutions', 192-211 for a review of this more recent literature.
[86] Hoffman et al., *Dark Matter Credit*; Turner, *Banking in Crisis;* Molteni, 'Bank Failures'.

the first overview of the development of Dutch banks.[87] We then extended this overview by consolidating existing lists on particular types of banks and by trawling a series of previously underexplored sources to actually count the number of financial institutions. The result is a comprehensive dataset with detailed information on thousands of financial institutions.

Using this newly constructed database, we aim to corroborate three important findings from recent scholarship regarding the Dutch financial system prior to the 1940s: (i.) the incidence of small and local financial institutions was higher than previous scholars believed; (ii.) the Dutch financial system was dynamic, as several financial innovations were introduced which persisted throughout the period 1860s-1940s, whereas other institutions did not stand the test of time and gradually died out; and (iii.) the Dutch financial system was inclusive from a geographical point of view and deeply penetrated even into smaller communities. Or, to put it in simple terms, Dutch business owners and households had access to a wide variety of financial services no matter where they resided, especially from the 1920s onwards.

The remainder of this chapter is structured as follows. Section 2.2 details the scope of the database and explains on which grounds it was decided to include or omit financial institutions. Section 2.3 discusses the sources which were used to construct this database and our methodology. Section 2.4 illustrates how our database is structured, and we coded each entry. Section 2.5 present our actual analysis regarding the Dutch financial system before the Second World War on the basis of this database. Section 2.6 concludes and explores the possibilities for future extensions and amendments to the database.

2.2. Scope of the Study

A necessary first step in the reconstruction of the Dutch banking landscape was to decide which financial intermediaries to include in our analysis. Recent studies often rely on a legal definition that is embedded in financial regulation on the national or the supranational level. Unfortunately, we do not have the luxury of relying on such a legal framework, as Dutch financial regulation at the time was notably hands-off.[88] However, we can take a pragmatic approach by merely asking which financial institutions played a role in the financing of the real economy of the Netherlands between 1860 and 1940. Based on the overview of the existing literature on the Dutch economy and its financial intermediaries in this period, this means we had to include (commercial) banks, savings banks, postal saving banks, cooperative farmer banks, cooperative

[87] De Nederlandse Bank, *Financiële instellingen in Nederland*; De Nederlandse Bank, *Nederlandse Financiële Instellingen*.
[88] Colvin et al., 'Predicting the Past', 99.

SME banks, help banks, credit unions, mortgage banks, cashiers, pawn banks, trust offices and stockbrokers.

Savings banks (*Spaarbanken)* already existed in the early nineteenth century and were the leading market player for saving services. This changed in the 1880s with the arrival of the postal savings bank (*Rijkspostspaarbank*) and again in the 1890s with the arrival of cooperative farmer, or so-called Raiffeisen banks.[89] Whereas savings banks were set up as private societies, the postal savings bank was established by the state, and Raiffeisen banks took the cooperative form.[90] Credit unions, SME banks and even cashiers were also active in the market for saving services, but this was not their core activity. Even the large commercial banks hardly attracted deposits, instead focusing on short-term mercantile finance throughout most of the nineteenth and early twentieth centuries.[91] It was only from the 1960s onwards that they more actively engaged in the market for savings.[92]

Similar to its savings counterpart, the market for loans was characterised by a wide variety of incumbent credit providers. This market was markedly segmented. The lower echelons of the market were served by pawn banks (*Bank van Leening*). These private pawn banks, which had existed since the seventeenth century, and their public counterparts which were introduced in the mid-nineteenth century by the Dutch government, were specialised in very small loans aimed at smoothing cash flows. Help banks (*Hulp Bank*), which arrived in the late 1840s, targeted a similar segment but issued larger loans, which had to be repaid in weekly instalments and which were guaranteed by at least two co-signers. [93] Credit unions (*Credietvereeniging*) were introduced in the early 1850s and relied on mutuality to provide productive loans to the wealthier members of the middle class. They were also a conduit for the Dutch Central Bank's discounting facilities across the Netherlands.[94] Modelled after the German Schulze-Delitzsch credit cooperatives, their function was later taken over by cooperative SME banks (*Middenstandsbank*).[95] Meanwhile, mortgage banks (*Handelsbank*) emerged from the 1860s and provided mortgage loans to asset-rich individuals.[96] Commercial banks generally targeted an even higher segment, focusing on providing credit almost exclusively to large joint-stock

[89] Colvin et al., 'The Origins', 4; Deneweth et al., 'Microfinance', 79-110. Raiffeisen banks are also referred to as cooperative farmers banks and rural cooperatives.
[90] Some rural credit cooperatives were organized as societies. See Colvin et al., 'The Origins', 4.
[91] Jonker, 'Spoilt for Choice', 188-192. SME banks are also referred to as cooperative SME banks and SME cooperatives.
[92] Boter and Gelderblom, 'The Dynamics of Inclusive Finance', 17-21.
[93] Deneweth et al., 'Microfinance', 79-110.
[94] Jonker, 'Between Private Responsibility and Public Duty', 140-144.
[95] Colvin, 'Organizational Determinants', 661-678.
[96] Van Bochove and Hasken, 'The Modernization of Credit Markets'.

enterprises.[97] Some 30 years later, around the 1890s, Raiffeisen banks emerged with a particular emphasis on reaching a rural clientele and fulfilling a dual savings – loan function.[98]

Looking at the market for investment and payment services, the main players were stockbrokers, private banking firms and (to a lesser extent) cashiers. These institutions dominated the Dutch financial system up until the first half of the nineteenth century.[99] While technically distinct, in practice it often proved difficult to distinguish between stockbrokers, cashiers and so-called private banking firms. This is mainly because cashiers, whose original business was limited to holding money of a client in escrow and providing payment services, started expanding their activities over the course of the nineteenth century. By the mid-nineteenth century, their services often included current account and deposit activities.[100] Many of them also developed a business in buying and selling securities, thus blurring the lines with traditional stockbrokers. To complicate matters further, the hands-off regulatory regime allowed financial businesses to adopt labels as they saw fit. Consequently, throughout the nineteenth century, a growing number of former cashiers and stockbrokers chose the label of bank and advertised themselves as such.[101] This practice was considered bona fide at the time and embodied their accumulation of financial services. As such, we cannot fully exclude the possibility of this or any other type of erroneous categorising.[102] Trust offices, constructs in vogue today, were a last notable actor included in the database.[103]

2.3. Sources and Data

Almost 40 years ago, the Dutch Central Bank (DNB) published a first overview of the history of Dutch banks. [104] The statistical publication provided aggregated accounting information on a number of financial institutions plus a list of approximately 1,000 financial institutions with their start and end year. The study purposefully focussed on commercial banks and does not substantially include information on alternative financial institutions. The DNB published a

[97] Chapter 5 of this PhD-manuscript.
[98] Colvin et al., 'The Origins', 4.
[99] Jonker, *Merchants, Bankers, Middlemen*, 148-154 and 233-235.
[100] Jonker, *Merchants, Bankers, Middlemen*, 148-154 and 233-235.
[101] Kymmel, *Geschiedenis. Vol. 1*, 129-135.
[102] We are aware that, in some cases, the distinction between categories included or left out is a difficult one. For example, we included commission traders (*commissionairs*) in securities and bills, but left out brokers (*makelaars*) in the same goods, since the former were permitted to do lending and borrowing for their own account, whereas the latter were not. However, we cannot exclude that some brokers ignored the law and did do business for their own account on the side.
[103] De Jong et al., 'Repurposing Institutions', 1-2.
[104] De Nederlandse Bank, *Financiële Instellingen.*

revised overview in 2000, but it did not broaden its scope.[105] We use the DNB dataset as a first stepping stone to our more extended Dutch banking database.

By methodically going through a commercial directory for the Netherlands (*Financieel Adresboek voor Nederlands),* we then tried to systematically complete the list collected by the DNB publication. The directory was published annually and listed banks and other useful information for businessmen and administrators working in nineteenth- and twentieth-century Netherlands. More specifically, for each municipality, this directory provided the name of every financial institution and additional information where available, such as its address, the date on which it was founded, its corporate form, its type of business (e.g., cashier, stockbroker, mortgage bank and/or merchant banks), the names of the board of directors of the supervisory board and whether it was a separate branch or a subsidiary.[106]

Originally, we intended to construct the database as a dynamic time series, based on the start and end year of every single institution. Unfortunately, we soon realised that the commercial directory for the Netherlands did not consistently provide this data. Keeping in mind this inherent limitation of the source, we instead opted to create a census of sorts and to gather all the information from certain periods in time, with a twenty-year interval: 1860, 1880, 1901, 1920 and finally 1940.[107] This allowed us to provide an accurate count of the number and variety of financial institutions over time. That said, we did rely on individual directories across the entire timespan (1860-1940) in order to fill in missing and/or incomplete entries.

There exists a possibility, perhaps even a likelihood, that the information for any given year was incomplete. As a commercially published directory, the *Financieel Adresboek* probably charged a fee for being listed. Even low fees are likely to have deterred small, one-man bands, notably the ubiquitous commission traders, cashiers, and private pawnshops, from getting a listing, all the more if they did business in small towns or the countryside where people knew how to find them without a directory. Also absent from the *Financieel Adresboek* are the notaries (*notarissen*) and lawyers (*advocaten*) who provided financial services side-by-side with their legal practice, sometimes on a considerable scale.[108] We have found no way of filling these lacunae.

[105] De Nederlandse Bank, *Nederlandse Financiële Instellingen*. For 1921 as an example, we counted up to five thousand institutions, while previous estimates by the Dutch National Bank (DNB) only identified about one thousand. Admittedly, DNB chose not to count the more than 2,000 savings banks, but the difference between estimates was large nevertheless.
[106] This methodological approach of going through these sources is similar to the one propagated by Hoffman et al. *Dark Matter Credit*, 150-174, where they used commercial directories to reconstruct a history of the diffusion of banks in France from 1800-1910.
[107] We chose 1901 because we were unable to locate the commercial directory for 1900.
[108] De Vries, 'Notarispapier'.

Another inherent limitation of these commercial directories is that they primarily focus on commercial institutions and neglect the number of charitable, cooperative and small-scale financial institutions for basic savings and credit facilities which appeared form the mid-nineteenth century onwards. This includes savings banks, postal savings banks, pawn banks, help banks and, most important, credit cooperatives. It would be erroneous to omit these institutions as they constituted an essential part of the Dutch financial system, especially for the period under scrutiny. Therefore, as a third step, we collected data on these banks that were semi-philanthropic and often had a clear social agenda, i.e., they were designed to combat or at least prevent poverty. As such, the government had much interest in monitoring their activities and provided detailed information on their activities. These governmental reports allowed us to complete our database. Unlike the commercial directories however, these reports were not a continuous series, as the designated governmental agencies varied over time. We therefore had to rely on a combination of these reports in order to put our attempt to achieve completeness to a good end, which we will now discuss in chronological order.

From 1814 onwards the Dutch government published annual reports on welfare provision to poor households.[109] The first reports already described the activities of municipal pawn banks.[110] From 1823 onwards the *Armverslagen* also reported the total number of savings banks, most of them founded by the philantropic society *Maatschappij tot Nut van 't Algemeen.* The reports also mentioned the help banks that offered small loans to petty business owners in urban areas. The nature of the information provided in the reports varied over time. Savings banks and help banks were under no formal obligation to provide information on their operations but many did, enabling the editors of the annual reports to estimate the total number of banks and the total size of their clientele.[111]

In 1884 the Dutch government published its first annual report on what it then called the charity savings and loan banks.[112] It listed all the individual banks with their name, location, founding year, plus the size of their clientele, the total value of savings and/or loans outstanding, and other bank assets and liabilities. In 1911 the Statistics Netherlands (*Centraal Bureau voor*

[109] Published first as *Verslag omtrent het armbestuur en de opvoeding der armen-kinderen* (1814-1818), then as *Verslag van den staat van het armwezen* (1819-1871) and from then on as *Verslag over de verrichtingen aangaande het armbestuur* (1872-1964). Cf. for a detailed source description: Kingma and Van Leeuwen, 'Verslagen Armwezen'.
[110] Maassen *Tussen commercieel en sociaal krediet*.
[111] In 1909, the number of institutions in the register and the percentage of those reporting statistics, respectively, is as follows: savings banks (number: 346, reporting: 62-71%); Raiffeisen banks (603, 95-97%); help banks (112, 46-62%); pawn banks (17, 100%). Coverage was thus relatively high. See Colvin et al., 'The Origins', 15.
[112] Departement van Waterstaat, Handel en Nijverheid, *Statistiek der Philantropische Spaar- en Leenbanken in Nederland*. Continued as separate volumes in the series *Bijdragen tot de Statistiek van Nederland*: Centraal Bureau voor de Statistiek, *Statistiek der spaar- en leenbanken in Nederland.*

Statistiek CBS, which had taken over publishing from the Department of Infrastructure, Trade, and Industry in 1895) stopped reporting the very detailed accounting information but it continued to provide a complete list of charity savings and help banks, including the newly established rural credit cooperatives (from 1898 onwards) and SME banks (*Middenstandsbanken*, from 1915 onwards). The last of these full lists appeared in the report for the year 1918-1919, published in 1920.

After that CBS only published more concise reports on the annual savings of Dutch households, providing summary statistics of the number of banks, number of accounts, annual deposits and withdrawals, and the end-of-year balance of savings accounts of the three major networks of savings banks: *Rijkspostspaarbank*, the *Bijzondere Spaarbanken* and the *Boerenleenbanken*). These reports were published every year until the fourth quarter of the twentieth century after which summary data on Dutch savings behaviour were only published as part of the *Statistical Yearbook*. The Statistical Yearbook never provided information on individual banks but it did report the total number of banks, their account holders, and the amounts they saved. After World War II CBS added information on popular credit by pawn banks (*banken van lening*) and help banks (*hulpbanken),* with retrospective figures for the early 1940s. As time went by CBS also started to add more information on the supply of commercial credit, referred to as *gezinscrediet* or *consumptief krediet*.[113]

CBS's decision to stop detailed reporting on the Dutch savings banks made sense because the national union of savings banks (*Spaarbankbond*) had started to publish its own annual Savings Banks Guide in 1909.[114] Like the government reports before them these handy green booklets listed the name, location and founding year of almost all savings banks, including key indicators of their financial operations. The government reports on savings banks also reported on the postal savings banks, notably the total number of savings booklets issued by the bank, along with annual deposits and withdrawal. The location of the more than 1,200 post offices that administered these savings booklets was never mentioned, however.[115] Data on the locations of these post offices can be easily retrieved from another government publication, the *Postgids voor*

[113] The Statistical Yearbook was first published in 1882 under the title *Jaarcijfers omtrent bevolking, landbouw, handel, belastingen, onderwijs enz.* by the Vereeniging voor de Statistiek in Nederland. It was continued by the Centraal Bureau voor Statistiek in 1884 as the *Jaarcijfers voor het Koninkrijk der Nederlanden*, and then, from 1923 through 1970, as *Jaarcijfers voor Nederland.* Since 1971 CBS publishes *The Statistical Yearbook of The Netherlands.*

[114] Nederlandsche Spaarbankbond, *Gids voor Nederlandsche bijzondere Spaarbanken*. From 1943 through 1964: *Gids voor Nederlandsche Spaarbanken*.

[115] For more information on the history of saving banks and the postal saving bank throughout the 19th and early 20th century, see Barendregt and Overman, *Ondernemend in Financieel Nut*, 31-33 Cf. also Deneweth et al., 'Microfinance', 87-90.

het Koninkrijk der Nederlanden published since 1870, and continued as the *Post- en Telegraafgids* from 1894 onwards.

The database is constructed using these primary sources and data previously collected by other scholars. For each of the different types of banks this was done as follows:

For commercial banks we use the second edition of the DNB database (published in 2000) to obtain basic information on the commercial banks that were active in The Netherlands between 1860 and 1940. We supplement these data on individual banks data with information obtained from the *Financieel Adresboeken* for 1880, 1901 1920 and 1940. We have also done additional research on individual banks in primary and secondary sources - including annual reports and bank memorials - to complement the DNB data.

For the savings banks we use the listings of individual savings banks, their location, and year of establishment published in the *Annual Reports on Savings and Loan Banks* (until 1919) to identify the savings banks that were active in the benchmark years from 1860 through 1920.[116] We do the same for 1940 with the *Spaarbankgids* of that year, and we use the detailed information on individual banks in this guide to reconstruct the development of the sector between 1920 and 1940. The savings banks in the Bank File also include institutions called *volksbank, schoolspaarbank, spaarkas*, and *spaar- en kredietbank.*

As for the postal savings bank we use the *Post and Telegraph Guides* that appeared from 1870 onwards to determine the location of all the main and auxiliary post offices (*hoofd- en bijpostkantoren*) through which RPS and PCGD offered their services. This gives us the number of 'bank branches' for every year between 1881 and 1940 as well as the location of individual post offices in the benchmark years 1901, 1920, and 1940.

The DNB database only contains information on the two central offices of cooperative farmer banks. To identify the rural credit cooperatives that were actually offering their services in villages and towns in 1901, 1920, and 1940 we use the membership lists of the *Boerenleenbank* and *Raiffeissen* network, published in two commemorative volumes in 1939 and 1948, respectively.[117] These volumes give the name, location, and date of establishment of all the individual banks that belonged to their network at the time. To overcome the obvious survival bias in the retrospective listings, we apply the same procedure as Chris Colvin and his co-authors did reconstructing the early years of the sector: we compare the membership lists from 1939 and 1948 with the names of individual banks reported in the *Annual Reports on Savings and Loan*

[116] Dankers et al., *Spaarbanken* already published data on the annual number of savings banks and operations and they shared their data with us.

[117] Van Haastert and Huysmans, *Veertig jaren landbouwcrediet* 579-586; Weststrate et al., *Gedenkboek Coöperatieve Centrale Raiffeisen-Bank* 380-398.

Banks in 1899, 1904, and 1918-19.[118] We combine these annual reports with information from CBS' *Statistical Yearbooks* to measure the total number of rural credit cooperatives active in every year between 1898 and 1940.

Between 1905 and 1918 a total of 95 cooperative SME Banks created in The Netherlands. In his PhD Dissertation Chris Colvin used the DNB dataset and annual reports from individual banks to compile a dataset of 77 SME banks that were active between 1907 and 1927.[119] Data from the *Financieel Adresboeken* and archival materials from individual banks enabled Ruben Peeters, in his PhD Dissertation to append Colvin's dataset with 18 SME banks that were also in operation in 1918. The total number of SME branch offices peaked at 305 in that same year. In the early 1920s about one third of the SME banks failed, after which a large number of institutions merged into the Nederlandsche Middenstandsbank in 1927, which had 62 branch offices in 1940.[120]

For *Hulpbanken* we relied on Deneweth et al., which used the Huygens ING database on *Armenzorgverenigingen* and the secondary literature to identify 119 help banks that operated in the second half of the nineteenth century.[121] De Vicq and Van Bochove appended this data with information from the *Statistiek der Philantropische Spaar- en Leenbanken* and the *Statistiek der spaar- en leenbanken in Nederland* to chart the development of the *hulpbanken* until 1960.[122] Besides hulpbanken these data also include institutions that were called *voorschotbanken, Israelische hulpfondsen, leenfondsen, credietbank tegen woeker, hulpkas,* and *volkskredietbank*.

From the 1850s onwards business communities in several of the bigger cities in The Netherlands created credit unions. Modelled after the German Schulze-Delitzsch credit cooperatives, these credit unions offered business loans to the wealthier members of the middle class. In the final quarter of the nineteenth century their clientele had grown large enough for the Dutch Central Bank to use the credit unions to offer its discounting facilities across the Netherlands.[123] The DNB database contains information on less than a dozen credit unions. We identified more than 75 credit unions (including branches) using the Financial Address Books and additional primary and secondary sources such as the annual reports of various credit unions.

[118] Colvin et al., 'Origins'. For Colvin's reconstruction of the sector between 1919 and 1925, cf. Colvin, 'Banking on a Religious Divide'.
[119] Colvin, 'Banking on a Religious Divide'.
[120] Stoffer, *Het Ontstaan;* Peeters, 'Small Firms', 50, 70-71, 136; Number of branch offices in 1940 reported in NMB *Jaarverslag* 1940.
[121] Deneweth et al., 'Microfinance'; Schouten and Van Tielhof, *Verenigingen armenzorg*.
[122] De Vicq and Van Bochove, 'Lending a Hand'.
[123] Jonker, 'Between Private Responsibility and Public Duty', 140-144.

Pawn banks already existed long before the nineteenth century either as private enterprises or municipal institutions.[124] The banks specialised in small loans secured on household items and sometimes also commercial stocks. Since the beginning of the nineteenth century all private and public banks were listed in the *Poor Relief Reports, and after 1884 their activities were recorded in the* Annual Reports on Savings and Loan Banks.

The DNB database contains information on only six mortgage banks (*hypotheekbanken*) but there were many more.[125] We know from an early study by Glasz that the first mortgage bank was founded in 1861; a second one in 1864, and a third in 1877.[126] In 1889 the number of banks stood at 11, in 1897 there were 23, and in 1902 there were 43 according to Glasz. However, the *Financieel Adresboek* already mentioned 56 mortgage banks, and while Glasz counted 50 in 1905, *Van Oss' Effectenboek* for 1908 reported that 66 mortgage banks were active in 1906.[127] In 1920 the *Financieel Adresboek* listed 118 mortgage banks, including a small number of ship mortgage banks and *grondbriefbanken*, of which 84 remained in the *Financieel Adresboek* for 1940. Glasz reported a much lower number (47 in 1930, and 38 in 1933), based on the membership of the *Nederlandsche Vereeniging van Hypotheekbanken* (41 members in 1935).[128] *Van Oss' Effectenboek* for 1941 reported that in 1938 the stock of 38 mortgage banks had been traded on the Amsterdam Exchange.[129]

Finally, for trust offices, stockbrokers and cashiers we relied on the *Financiaal Adresboek*. These types of financial institutions were prevalent, but mostly concentrated in and around the financial center of Amsterdam.

2.4. First Glance at the Database

With the sources described in the previous section, we built a database of all financial intermediaries active in the Netherlands between 1860 and 1940 for five benchmark years, 1860, 1880, 1901, 1920, and 1940. It contains information on approximately 6,000 financial institutions. More specifically, for every individual institution, it is stated in which year it was active and in which municipality it was established. These municipalities were geocoded using the NLGis

[124] Maassen, *Tussen Commercieel en Sociaal Krediet*.
[125] Numbers: 6, 56, 226, 351, 826, 857
[126] Glasz, *Hypotheekbanken*, 8-9. For later years, 18-19, 30-31.
[127] *Van Oss' Effectenboek voor 1908*, cited in Klein and Vleesenbeek, 'Geschiedenis hypotheekbankwezen', 120.
[128] Glasz, *Hypotheekbanken*, 20 cited a contemporary economics magazine, *De Kroniek van Dr. A. Sternheim. Halfmaandelijksch tijdschrift voor economie - financiën - statistiek – bedrijfshuishoudkunde*, from November 1st, 1934, that counted 60 mortgage banks.
[129] Klein and Vleesenbeek, 'Geschiedenis', 13.

ACODE system and shapefiles to allow systematic comparison over time.[130] For approximately half of these institutions, we have found information on their exact starting and ending years, which allows us to plot their development more dynamically over time. We also categorised every single intermediary based on its institutional type, as was discussed in Section 2.2. The format of the dataset is straightforward. It is structured as a spreadsheet listing information on all financial institutions established in the Netherlands between 1860 and 1940. The data is stored in a CSV format to allow future users to use a variety of software packages and/or programming languages: Excel, Tableau and/or Power BI for descriptive statics, and Stata, Python and/or R for more advanced inferential statistics and/or other sorts of computational statistics and data analysis.

Inspired by the work of Jonker, who underlined the merits of functional analysis to deepen our understanding of the Dutch financial system, we then assigned the dozen institutional types to three functional categories.[131] We made this distinction based on the primary financial functional they provided--saving (S.), borrowing (B.) and/or investment services (I.), although some institutions were attributed to multiple groups if they performed multiple functions. Based on the information we gathered from the existing literature and what we learned from our own research, we assigned all institutions as follows (Table 2.1).

Table 2.1: Overview of All Financial Institutions Included in the Database
(including their code, English translation and their original Dutch name)

Type code	English name	Dutch name	Core function
HNB	Bank	*Handelsbank*	Borrowing, saving & investment
BLB	Cooperative farmers bank	*Boerenleenbank*	Borrowing & saving
CVE	Credit union	*Credietvereeniging*	Borrowing & saving
MSB	Cooperative SME bank	*Middenstandsbank*	Borrowing & saving
HYB	Mortgage bank	*Hypotheekbank*	Borrowing
HLP	Help bank	*Hulpbank*	Borrowing
BLE	Pawn bank	*Bank van Leening*	Borrowing
RPS	Postal savings bank	*Rijkspostspaarbank*	Saving
SPB	Savings bank	*Spaarbank*	Saving
CEF	Stockbrokers	*Commissionair in effecten*	Investment
ADM	Trust office	*Administratiekantoor*	Investment
KAS	Cashier	*Kassier*	Payment (& investment)

[130] For more information, see Boonstra, 'NLGis Shapefiles' (https://easy.dans.knaw.nl/ui/datasets/id/easy-dataset:44426/tab/1).
[131] The author thanks Oscar Gelderblom to suggest this approach and Ruben Peeters for helping to code the data.

2.4.1. The Incidence of Small and Local Financial Institutions

The newly constructed database allows us to corroborate some of the findings of Dutch financial history. First, it illustrates that small and local financial institutions were indeed an important factor in the Dutch financial landscape--or at least, their incidence was much higher than earlier scholars believed. This is well-exemplified by Tables 2.2 and 2.3. In 1920 for example, we count over 5,700 active financial institutions, while previous estimates by the DNB only identified about 1,000 in total, across all years, and only 309 for 1920.[132] Admittedly, the DNB chose not to count more than 1,500 savings banks and postal savings banks but the difference was still significant. There were almost 400 cooperative SME banks and about 1,300 cooperative farmer's banks. Then there were slightly over 70 credit unions, some 70 help banks, more than 100 mortgage banks and up to 1,200 commercial banks, which included the large joint-stock banks but also a large number of private banking firms. In addition to this, investors who wanted to buy domestic or foreign securities could turn to almost 100 cashiers, 100 trust offices and 700 stockbrokers.

[132] These numbers include branches and other types of subsidiaries.

Table 2.2: The number of Financial Institutions in the new Database

Type code	Full name	1860	1880	1901	1920	1940
HNB	Bank	95	226	475	1,323	1,465
BLB	Cooperative farmers bank			114	1,194	1,302
CVE	Credit union	1	17	29	75	10
MSB	Cooperative SME bank				394	161
HYB	Mortgage bank		3	56	118	84
HLP	Help bank	24	43	52	73	60
BLE	Pawn shop	28	26	26	21	17
RPS	Postal savings bank		841	1,239	1,241	994
SPB	Savings bank	152	294	323	440	353
CEF	Stockbroker	22	863	753	675	532
ADM	Trust office			47	119	484
KAS	Cashier	60	199	205	107	41
TOTAL		382	2,512	3,319	5,780	5,503

For the period 1880-1940, we unearthed approximately ten times as many financial institutions as the original DNB publication. Even when limiting our focus to commercial banks, we found that the incidence of such banks was higher than originally believed. In 1901 for example, we found 475 banks, whereas the DNB counted 136.

Table 2.3: The number of Financial Institutions in the DNB database

Type code	Full name	1860	1880	1901	1920	1940
HNB	Bank	61	96	136	243	257
BLB	Cooperative farmers bank			1	3	2
CVE	Credit union	1	8		10	6
MSB	Cooperative SME bank				1	8
HYB	Mortgage bank		2	4	5	5
HLP	Help bank					1
RPS	Postal savings bank		1	1	1	1
SBE	Savings bank		1	3	8	4
CEF	Stockbroker	8	16	5	17	23
ADM	Trust office				2	6
KAS	Cashier	20	38	26	19	13
TOTAL		90	162	176	309	326

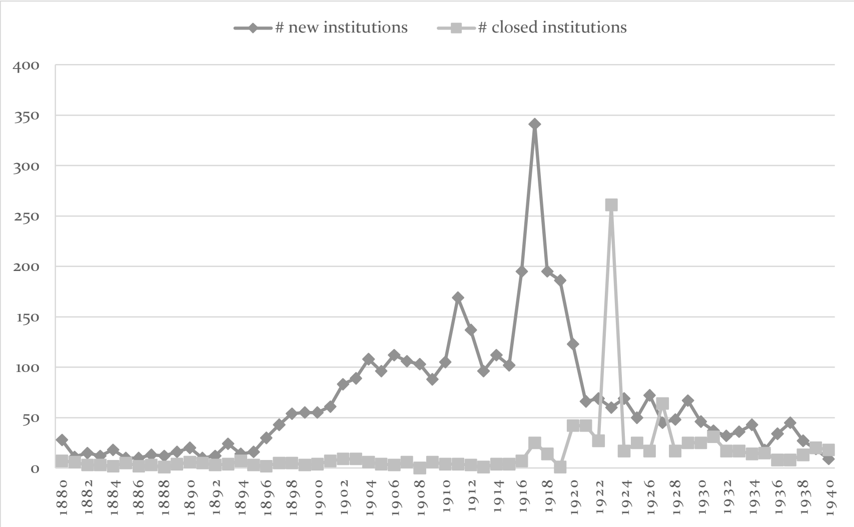
2.4.2. The Dynamics of the Dutch Financial System

Figure 2.1 reports the number of newly established institutions on a yearly basis. Conversely, it also shows the number of institutions, including their branches, which closed their business due to failure, bankruptcy or voluntarily liquidation. Finally, some institutions also disappeared because they either merged with or were acquired by others. Evidently, these newly *formed* financial institutions were counted as newly *established* ones. Unfortunately, we were unable to trace the starting year and closing year of every institution, which means these values should not be taken at face value. However, Figure 2.1 does corroborate earlier findings regarding the boom-and-bust periods of the Dutch financial sector by adding further empirical evidence.

More precisely, Figure 2.1 indicates that the sector as a whole experienced a rapid growth from the mid-1890s onwards. Prior to the First World War, the increase in the number of institutions was most notable in the commercial banking sector, averaging almost nine establishments annually for the period 1880-1914. The surge in commercial banks was closely followed by an increase in the number of stock brokers, averaging around six new establishments in a similar period of time. As in most neutral countries, the Dutch financial sector experienced its most buoyant growth during and immediately following the war, fostered by the increased demand for goods and services from the belligerent countries.[133] In the period 1918-1919, a whopping 350 financial institutions were established. The post-war boom prolonged their prosperity until the early 1920s.[134]

[133] Jonker and Van Zanden, 'Method in Madness', 79.
[134] Colvin et al., 'Predicting the Past', 97.

Figure 2.1: The Absolute Number of Financial Institutions



In contrast, for most of the pre-war period, the total number of financial institutions which closed down their businesses was rather low, usually fluctuating below five establishments on an annual basis. However, a significant number of institutions failed during the crisis of the 1920s. Including branches, more than 100 commercial banking institutions and almost 250 SME banks disappeared. Other types of financial institutions were hit less severely by the crisis. Even taking into consideration the limitations of our dataset we can thus conclude that the financial crisis of the 1920s may have been more severe than earlier scholars have believed, as earlier studies estimated that only 59 banks were hit by the crisis.[135]

The macroeconomic causes of the crisis are fairly well-explored. In short, the Netherlands followed a familiar pattern of debt deflation after the war. Between 1920 and 1923 the price level of all goods fell by 27%. As prices fell, many financial institutions were squeezed between defaulting debtors and crashing asset prices, coupled with a sharp decrease of their own capital value. Financial institutions with the highest exposure to the real economy, in particular SME banks and other commercial banks engaged in industry finance, suffered the most.[136]

Following this violent shock, both the number of newly established as well as failing financial institutions dropped markedly. On the one hand, this was due to the normalisation of

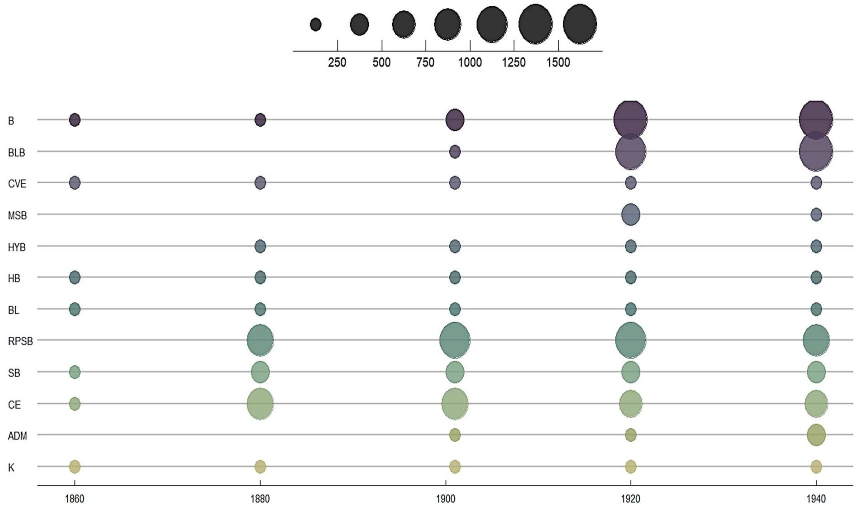
[135] Jonker and Van Zanden, 'Method in Madness', 80; De Vries, *Geschiedenis Nederlandsche Bank*, 230-264.
[136] Jonker and Van Zanden, 'Method in Madness', 79-81; Colvin, 'Organizational Determinants', 13-17.

economic development and the absence of inflation during the remainder of the inter-war years.[137] On the other hand, this was because the Dutch financial sector met its experience with deflation with an excessive concern for liquidity and a refusal to return to the mixed banking embraced just before and during the war. This collective flight-to-safety also explains why the Dutch financial sector was hardly hit throughout the 1930s. It also explains why the sector was less dynamic throughout the 1940s and 1950s. [138]

Figure 2.2 looks at the relative importance of various financial institutions, further underlining the rather dynamic nature of the Dutch financial sector as a whole. It illustrates that up until the 1880s, there were relatively few commercial banks. Cashiers, credit unions, and even pawn banks were still an integral part of the financial landscape. Stockbrokers and especially savings and postal savings banks were, when considered in absolute number, more prevalent still. The incidence and relative importance of these alternative financial institutions did not decrease in the years to come. Except for cashiers, their numbers continued to grow. Moreover, a number of innovative intermediaries appeared, including cooperative farmer banks, which first arrived in 1901 and quickly became a prominent player in the market for savings and loans. Another important player whose presence quickly increased after World War I was the cooperative SME bank. It was only in 1940 that commercial banks truly became the most prominent actor.

[137] Jonker and Van Zanden, 'Method in Madness', 79-81
[138] Jonker, 'Spoilt for Choice'. A flight-to-safety or flight-to-quality can be defined as a sudden increase in appetite for safe assets relative to risky assets. This can be a combination of a preference for safe assets (low volatility, downside risk), high-quality assets (low default) and highly liquid assets. See Caballero and Krishnamurthy, 'Collective risk management', 2195-2230.

Figure 2.2: The Relative Importance of Financial Institutions



2.4.3 *The Outreach of the Dutch Financial System*

So far, we have looked at the development of the Dutch financial system from a national perspective, and we have found that the number of financial institutions was larger than initially perceived and that the system itself was more dynamic. To really understand the intricacies of this system however, we also need to take into account the spatial dimension. In other words, was the development of the financial system limited to a certain region, e.g., the financial centres of Amsterdam and Rotterdam, or was it a national affair?

A first step in answering this question was to simply count the number of financial institutions by municipality. We then grouped these municipalities by the number of citizens. Table 2.4 indicates that by 1920, all provincial capitals possessed commercial banking firms of one sort or another, one or two stockbrokers, plus a pawn bank, a savings bank and a cooperative bank for small and medium enterprises, while smaller towns and many villages would normally have (in addition to a post office) a savings bank and credit cooperative. The question is how deep this bank penetration really was, both in terms of local supply of their services and the actual use people made of them. As Table 2.4 shows, both the postal savings banks and the cooperative farmers banks had developed very dense networks, reaching over two-thirds of all places with 5,000 inhabitants or less. General savings banks and SME banks did reach beyond the big cities as well, but they were only present in half of the smaller towns with 5,000-15,000

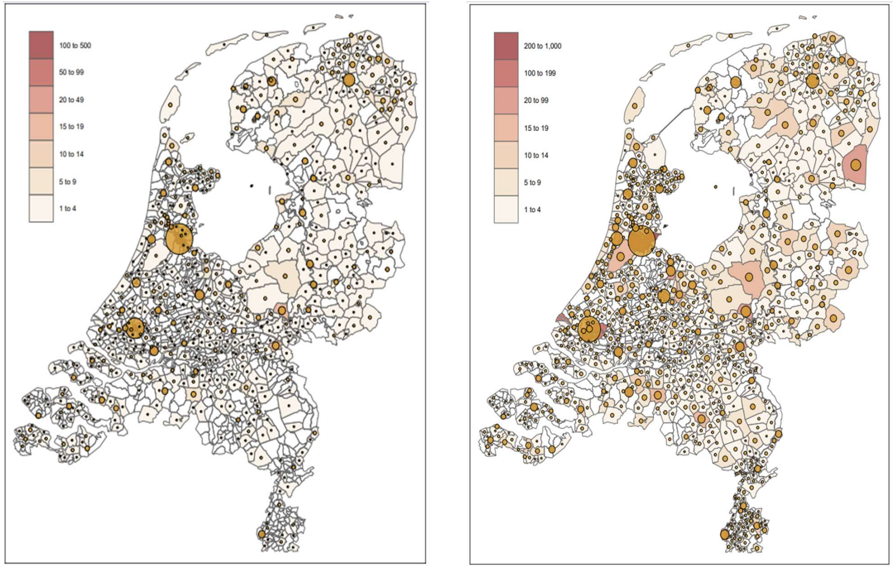
inhabitants and in one out of five communities with less than 5,000 inhabitants. General banks were present in about as many of the smallest communities and in two-thirds of the towns with 5,000-15,000 inhabitants. Credit unions and mortgage banks, whose numbers were small anyway, hardly spread beyond the biggest cities.

Table 2.4: The Incidence of Financial Institutions by Location

Type of Intermediary	N =	<5,000	5k-15k	15k-100k	4 Cities
General saving banks	440	20%	54%	86%	100%
Postal savings bank	1,241	74%	95%	98%	100%
Cooperative farmers banks	1,194	65%	90%	86%	100%
Cooperative SME banks	394	17%	47%	88%	100%
Credit unions	75	1%	12%	46%	100%
Mortgage banks	118	1%	3%	29%	100%
General banks	1,323	23%	69%	91%	100%

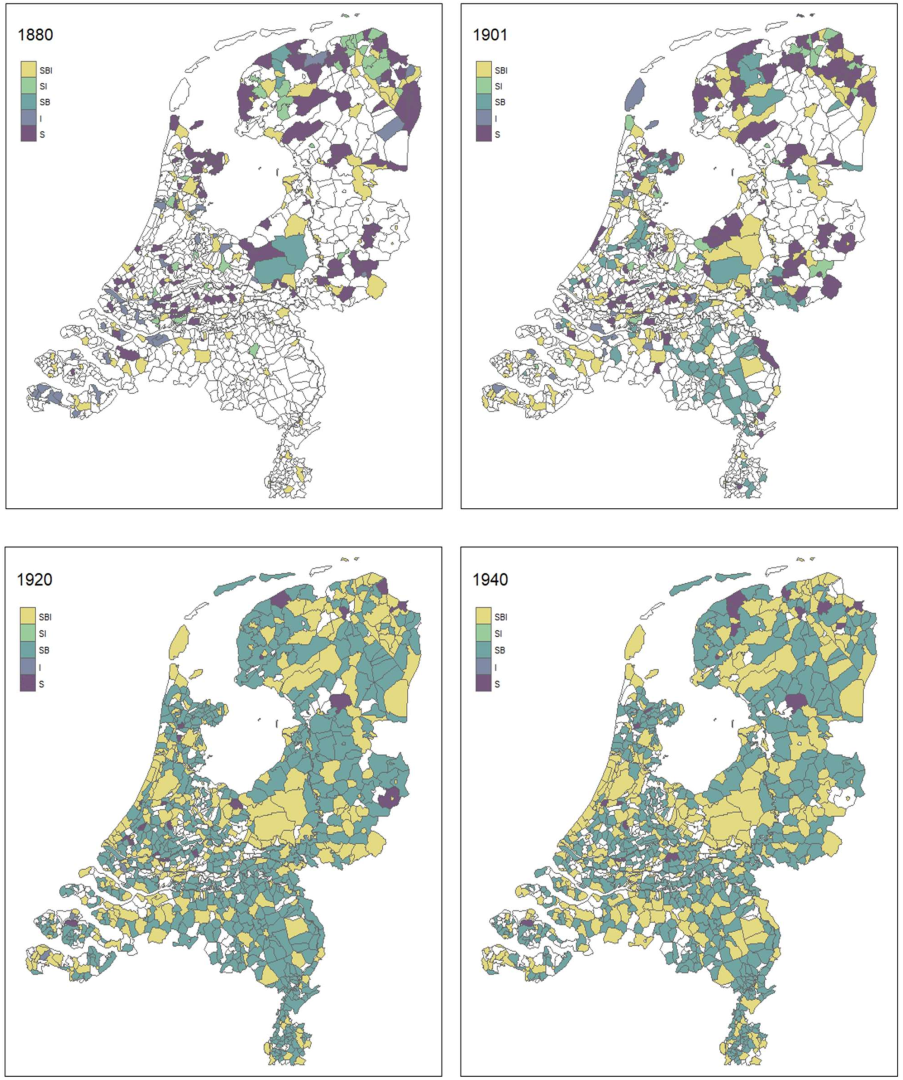
Furthermore, having geocoded the location of all financial institutions included in the database, we could create a 'financial atlas of the Netherlands' of sorts. Figure 2.3 corroborates the previous assessment that the Dutch financial system outside of the financial centres Amsterdam, The Hague, Rotterdam, and Utrecht (i.e., the so-called '*Randstad*') was relatively well-developed as early as the 1880s. By 1940, there were only a handful of municipalities where no financial institutions were present.

Figure 2.3: The outreach of Financial Services in 1880 *(left)* **and 1940** *(right)*



In order to bring this point further home, Figure 2.4 provides a functional perspective on the Dutch financial system in the period 1860-1940. Here we attempted to distinguish so-called 'financial hubs', which we defined as municipalities where citizens had access to saving (S.), borrowing (B.) and/or investment services (I.). This allowed us to distinguish six types of hubs, but we limited ourselves to only portray the five most common combinations to prevent visual clutter. What this figure illustrates is that already in 1920, financial institutions provided saving and borrowing functions in all but a select few municipalities, thus indicating that the Dutch financial system was already well-integrated. It is also a testament to the dynamics (i.e., across space and time) of the Dutch financial system.

Figure 2.4: The Outreach of Financial Services *(functional perspective)*



2.5. Conclusion

This chapter has described the creation of a comprehensive database of financial service providers active in the Netherlands in the period 1860-1940. By building on the existing database created by the DNB, by combining existing micro-studies conducted by earlier scholars and by systematically going through new sources, we were able to significantly expand the existing lists of approximately one thousand unique institutions to several thousand. The newly constructed database does not limit itself to commercial banks but also includes a wide variety of other types of small-scale financial institutions ranging from stockbrokers and credit cooperatives to specifically tailored local banks.

Using this newly constructed database, we set out to corroborate three important findings regarding the Dutch financial system prior to the 1940s: (i.) the incidence of small and local financial institutions was higher than traditional scholars believed; (ii.) the Dutch financial system proved to be dynamic, as several new financial institutions were introduced which persisted throughout the period 1860s-1940s, whereas others did not stand the test of time and gradually died out; (iii.) Dutch businessowners and individual households, especially from the 1920s onwards, had access to a wide variety of financial services no matter where they resided. These findings will be explored in greater depth in the following chapters of this dissertation.

Chapter 3
Exploring Modern Bank Penetration: Evidence from the Early Twentieth-Century Netherlands

Revise and resubmit for publication in *Economic History Review*

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Abstract: In this chapter, we analyze the estate composition of the richest 30% of the people who died in The Netherlands in 1921 to find that households used a broad range of institutions to meet their financial demands. Goods and services were either paid in cash or settled periodically with suppliers. Despite the strong growth of commercial banking in the previous decades, households still made extensive use of peer-to-peer loans, with or without the added security of notarial contract. Banks only possessed a competitive edge in savings accounts for small surpluses and current accounts, the latter used most frequently by business owners born after 1870. Distance to the nearest bank office did not matter for these people, but wealthy urbanites were more inclined to use banks than their counterparts in the countryside.

3.1. Introduction

The tacit assumption underlying most if not all financial history is that the penetration of financial services is driven by supply-side innovation. The arrival and spread of new institutions, whether they be medieval Italian public pawn banks or that 19th-century wave of savings banks, mortgage banks, joint-stock commercial banks, and Raiffeisen-type banks is invariably interpreted as modern, efficient services either filling a gap or replacing obsolete, economically suboptimal arrangements. Joint-stock banks in particular have long been considered, ever since Gerschenkron, as the standard bearers of economic modernity.[139]

This old consensus about joint-stock banks has begun to crumble. They developed slower than once thought, did offer some business finance, but their exposure remained as modest as their customer base was limited.[140] In a recent study on the organization of credit markets in France between 1740 and 1914 Hoffman et al show that banks and traditional peer-to-peer lending arranged by notaries complemented each other until the end of the nineteenth century. Extending their earlier work on Paris, Hoffman et al. demonstrate how recording real estate transactions and other contractual agreements gave notaries control over information on potential borrowers and lenders which they used to good effect to make a market for mortgage loans. As a result, commercial banks mainly served wealthy businesspeople in big cities whose financial demands went beyond an occasional mortgage loan.[141]

Notarial credit was but one form of finance that made a successful transition from the Middle Ages to the twentieth century. Business owners also continued to use private, peer-to-peer loans and trade credit. Whenever historians have analyzed what credit facilities people actually used in the nineteenth or early twentieth century, they found them combining these old forms with newer ones supplied by banks.[142] Premodern financial practices were therefore quite resilient, that is to say, not economically inferior to the new, bank-provided services, as the historiography tacitly assumes.

We add to this growing literature by investigating the pattern of financial services used by Dutch wealth owners in 1921. The question of commercial bank penetration versus non-bank financial services is particularly relevant for the Netherlands. Dropping back from its early modern economic leadership and financial sophistication, the country was both late industrializer and a late developer of commercial joint-stock banking, though the supposed links between the two phenomena are no longer accepted.[143] However, from 1870 banking developed quite rapidly resulting by 1920 in a countrywide, highly diverse financial system covering every demand segment imaginable with a wide variety of institutions, private firms, cooperatives, savings-and-loans-type mutuals, state-sponsored savings banks, mortgage banks, colonial banks, and joint-stock commercial banks.[144] The question is, then, to what extent did people actually use them?

The literature on Dutch banking provides a very incomplete answer to this question. Commercial joint-stock banks offered their services primarily to colonial and industrial firms.[145] Mortgage banks financed large urban housing projects but they did not invest in residential mortgages for individual home owners.[146] The postal and general savings banks put almost two thirds of their money in public and private securities, one third in corporate mortgages, and almost nothing else.[147] Rural credit cooperatives used private savings to fund agricultural industries like creameries and sugar refineries and they provided short-term loans to about half their membership.[148] In the cities, SME banks and credit unions lent money to retailers and other small business owners but their portfolios remained tiny in comparison to those of the commercial banks.[149] So far, the only bank we know about that offered loans to private individuals were pawn banks and commercial money lenders targeting poor households, and the so-called 'help banks' created to offer the same services on friendlier terms and conditions.[150]

To find out how Dutch private households borrowed and lent money at the turn of the 20th century, we adopt an approach pioneered by Di Matteo, Di Matteo and Redish, and Lindgren

[139] Gerschenkron, *Economic Backwardness*. Cf. also Cameron, *Banking*; Sylla and Toniolo, *Patterns*; Forsyth and Verdier, *Origins*; Grossmann, *Unsettled Account*.

[140] See, for instance, for the US: Lamoreaux, *Insider Lending*, 158-159; Calomiris and Ramirez, 'Role', 57-59; For the United Kingdom: Turner, *Banking*, 35-6; On Germany: Edwards and Ogilvie, 'Universal Banks', 437-439, 443; Fohlin, *Universal Banking*. A notable exception was Belgium where universal banks, Société Générale in particular, dominated industrial finance from the second quarter of the 19th century onwards: Van Overfelt et al. 'Do Universal Banks' 254-256.

[141] Hoffman et al., *Dark Matter Credit*, continuing the analysis set out in Hoffman et al., *Priceless markets* for the preceding period. Cf. also Hoffman et al, 'Entry'.

[142] On the combination of notarial loans and peer-to-peer credit in 18th century: Ogilvie et al., 'Household Debt'; Dermineur, ' Peer-to-Peer Lending'; Gelderblom et al. 'Public Functions'; On the use of trade credit and personal loans in the Netherlands: Jonker, *Merchants, Bankers, Middlemen*; and in France: Hautcoeur, 'Transformation' and Lemercier and Zalc, 'For a New Approach'; Di Matteo, 'The Determinants' and Di Matteo and Redish 'The Evolution' used inheritance tax returns to measure the use of different types of credit in Ontario, Canada; Lindgren, 'Modernization' did so for the town of Kalmar in Sweden.

[143] Jonker, *Merchants*; Jonker, 'Alternative Road'.

[144] For an overview: Jonker, 'Spoilt for choice'; Jonker 'Geld- en Bankwezen'.

[145] Barendregt, *Op weg*', 172-182; Jonker and Van Zanden, 'Old rules', 129-130.

[146] Glasz, *Hypotheekbanken*, 7-14, 49-51; Klein and Vleesenbeek, *75 jaar*, 13-16; Van Bochove, 'The Modernization of Credit Markets'.

[147] Dankers et al., *Spaarbanken*, 115-120, 161-163; Barendregt and Overman, *Ondernemend in Financieel Nut*, 63-70.

[148] Haastert and Huysmans, *Veertig jaren*, 117; Jonker, 'Welbegrepen'; Jonker, 'Boerenvreugde'; Colvin, 'Banking', 873-879.

[149] Colvin, 'Organizational', 6-7, 27; Peeters, 'Getting', 29; Chapter 5 of this PhD-manuscript.

[150] Van Dam, *75 jaar*, 13-19 Deneweth et al., 'Microfinance', 83-87, 94-98; De Vicq and Van Bochove, 'Lending a Hand'.

for respectively Canada and Sweden.[151] We analyze the estate composition of wealth owners from the inheritance tax returns of 1921, at the close of a long period of strong economic growth and fast banking development. We take a step further than they by drawing a national sample stratified by location and by wealth categories, so we can capture potential differences between more or less wealthy people, and between the economic core and periphery. With a tax free threshold of only 1,000 guilders our data capture the portfolio composition of the richest 30% of those who died in The Netherlands in 1921.[152] We chose this particular year for two reasons. First, death duty forms completed after 1927 are not yet publicly available in Dutch archives. Second, analyzing portfolios in 1921 allows us to capture banking at its widest expanse, bank assets to GDP peaking at about 70 per cent in 1920-1921 just before the sharp drop following the financial crisis which hit the sector in 1922.[153]

This chapter is organized as follows. We discuss the succession tax source which provides our private wealth data in Section 3.2. Then we analyse the different forms of borrowing and lending used by the people who died in 1921 (Section 3.3). In the next section (3.4) we compare the different forms of credit organized through banks, notaries, and personal relations. In Section 3.5 we explore the use of financial services across municipalities of different size. Section 3.6 analyzes the relationship between people's age and their use of various types of loans. Section 3.7 concludes.

3.2. The Dutch Succession Tax and Its Administration

For the Netherlands death duty forms are available from 1878 onwards for all decedents with an estimated wealth of 1,000 guilders or more.[154] Death duty forms needed to be submitted for estates believed to be worth one thousand guilders or more. During 1921 around 77,000 people died in the Netherlands on a total population of 6.8 million. Subtracting infants and minors from the total left tax inspectors with about 61,000 adults. Using the summary tables (*Tafels V-Bis*) of the fiscal administration we identified 24,263 estates initially considered for assessment in the succession tax, i.e. just over one third of the 1921 total. About a third of these estates ended up below the 1,000 guilders threshold, leaving some 16,000 people for which a full statement of assets and liabilities (*Memorie van Successie*) was filed with the tax authorities. That is to say,

[151] Di Matteo, 'Determinants'; Di Matteo and Redish 'Evolution; Lindgren, 'Modernization'.
[152] De Vicq and Peeters 'Introduction', 3.
[153] Jonker 'Statistical Speculations' 192-194; Jonker and Van Zanden, 'Method in Madness', 79-81; Colvin et al. 'Predicting the Past', 97-121.
[154] Before that date people with direct heirs were not subject to the tax: Bos, 'De Memories van Successie'; Bos, 'Vermogensbezitters'.

just over a quarter of adults who died in 1921 owned assets worth at least 1,000 guilders so their estates were taxed.

Our sampling strategy follows that of Piketty, Postel-Vinay and Rosenthal in their research on Parisian death duty forms so as to compensate the well known phenomenon that portfolio composition changes as people grow richer (cf. infra). We included all estates in the 100th percentile of the wealth distribution, half of those between the 95th and 99th percentile, down to every sixteenth estate in the bottom 70 per cent, plus one out of ten estates below the 1,000 guilders threshold. We drew this sample not for the Netherlands as a whole, but for each of the eleven provinces in order to account for potential regional wealth differences and financial sector presence.

Table 3.1: Stratified Sample Drawn from Memories van Successie in the Netherlands in 1921 [155]

			Drenthe	Friesland	Gelderland	Groningen	Limburg	Noord-Brabant	Noord-Holland	Overijssel	Utrecht	Zeeland	Zuid-Holland	Sample obtained
Class	*Sample designed*	*2,784*	*82*	*112*	*424*	*186*	*187*	*409*	*429*	*219*	*158*	*137*	*441*	
6	99 to 100th percentile	169	4	7	17	11	12	18	23	12	7	7	25	*143*
5	95 to 99th percentile	330	7	12	41	20	16	36	46	21	18	10	45	*272*
4	85 to 95th percentile	409	10	16	49	25	24	47	52	31	21	15	55	*345*
3	70 to 85th percentile	306	10	11	36	19	20	39	42	21	15	12	37	*262*
2	0 to 70th percentile	772	23	30	101	46	47	98	109	54	46	34	114	*702*
1	Wealth <1,000 gldrs.	801	16	19	77	32	29	87	56	36	18	33	53	*456*
7	Negative Assets		3	4	26	9	5	24	24	14	11	7	14	*141*
	Sample obtained		*73*	*99*	*348*	*162*	*153*	*349*	*352*	*189*	*136*	*118*	*343*	*2,321*

Our sampling resulted in a total of 2,321 *Memories,* split about equally between men and women. The death duty forms in our sample list over 75,000 assets and liabilities, each of which we coded by hand using the codebook presented in the Appendix. As Table 3.1 shows, the sample obtained is smaller than the one we designed because 466 *Memories* referred to in the summary tables could not be found. These missing *Memories* are more or less randomly dispersed over the different wealth classes and provinces, except for the lowest, Class 1. We miss 223 estates there, probably because their value ended up below the 1,000 guilder threshold. Even so our sample does retain 597 *Memories* with a net value below 1,000 guilders, 141 of whom actually

[155] Source: De Vicq and Peeters, 'Introduction'.

owed debts exceeding 1,000 guilders, some of them by substantial amounts. We classified this latter group of 141 estates as a separate Class 7.

We are still aware of two sample biases. First, estates worth less than 5,000 guilders are underrepresented in the succession tax assessment.[156] We may therefore miss some evidence of financial services targeting lower middle class clientele, such as savings banks or credit unions. Second, due to the nature of our source the elderly are overrepresented in our sample. In 1920 men and women of 65 years and older made up six per cent of the Dutch population, but they accounted for 45 per cent of the decedents in that year (Table 3.2). As wealthy people tended to live longer, the age bias in our *Memories* is stronger still: sixty per cent of the people whose wealth was recorded in the death duty forms of 1921 died 65 or over.[157]

Table 3.2: Age Distribution of the Dutch Population, All Decedents, and Sampled Population in 1921 [158]

Age	Population 1920		Decedents 1920[a]		Memories 1921	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*
44 and younger	79%	77%	46%	42%	11%	12%
45-54 years	9%	10%	7%	7%	10%	10%
55-64 years	7%	7%	11%	10%	17%	18%
65-74 years	4%	4%	16%	17%	27%	29%
75 and older	2%	2%	20%	24%	34%	31%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Age obviously matters in our analysis. Older decedents are less likely to draw income from full-time work and to care for under-age children, and more likely to have reached the stage at which preserving wealth may have been more important than aggressively seeking to grow it. We have to tread carefully, however, as life-cycle effects are notoriously difficult to observe at the individual household level.[159] Also, many financial institutions common in 1921 were effectively innovations, new solutions for arranging one's affairs that were simply not there in the third quarter of the 19th century, when the elderly of 1921 had entered their adult lives. But whether

[156] See Appendix A. One possible reason is the concealment of movable wealth. Removing ready cash, paintings, and other portable values could bring the estate's value down to a level below the 1,000 guilders tax threshold. End-of-life medical expenses and funeral costs may have played a role as well.
[157] On the differential mortality of more or less wealthy people: Piketty et al., 'Wealth Concentration', 250-1.
[158] Source: Volkstelling 1921; Memories 1921 Database; (a) excluding infants.
[159] Cf. Campbell, 'Household Finance' and Bodie et al. 'Theory' on the difficulties establishing the effect of age on the investment behavior of individual people.

this really kept them from using these new institutions is an empirical question to which we will return in Section 6.

3.3. Assets and Liabilities

The literature on estates composition in the Netherlands and elsewhere conforms to a basic logic of investment behaviour unchanged from the early modern period until today.[160] Whenever people earned enough to build up savings, they first created a financial buffer for fluctuations in income and expenditure, then started buying more and better clothes, jewelry, furniture, and other household items.[161] As a next step they purchased real estate, their home and yard.[162] Once past this threshold, richer individuals either extended their portfolio of real estate or turned to financial assets with a strong preference for relatively safe public bonds, or long-term loans to relatives and friends.[163] Finally, the wealthiest individuals increased both the value and variety of domestic and foreign stocks and bonds in their portfolios, though many amongst them continued to prefer relatively safe investments despite growing wealth.[164]

[160] Cf. for instance on the Netherlands in the 19th and 20th centuries: Wilterdink, *Vermogensongelijkheid*, 181-214. On the Dutch Republic: Wijsenbeek-Olthuis, 'Achter de Gevels', 114-150. In early modern Germany: Ogilvie et al. 'Household Debt'. In Canada in the late 19th century: Di Matteo, 'Determinants'. On differences in investment behavior between elites, the middle class, and poor households: Hoffman et al. *Surviving*, 75-100.
[161] Deneweth et al., 'Microfinance'. For the use of consumer goods as a material store of wealth to be converted in cash, when need be, see McCants, 'Goods at Pawn'.
[162] Wijsenbeek-Olthuis, 'Achter de Gevels', 116-120. Faber, 'Inhabitants'; Wilterdink, *Vermogensongelijkheid*, 181-214; Korevaar, 'Reach', Figure 5.
[163] On the portfolio composition of urban elites in Holland in the 18th century: De Jong, *Met Goed Fatsoen*, 108-118; Kooijmans, *Onder regenten*,99-106; Prak, *Gezeten Burgers*, 113-141; On the possessions of Amsterdam's middling groups: McCants, 'Inequality', 19-20. On 19th century Amsterdam elites: De Vries, 'Amsterdamse'. On investment portfolios of urban and landed elites in various parts of the Netherlands in the 19th and early 20th century: Moes, *Onder Aristocraten*, 143-175.
[164] Zandvliet, *De 250 rijksten*; Wilterdink, *Vermogensongelijkheid*, 186-187. Cf for a similar diversification of portfolios among Parisian elites in the 19th century: Piketty et al., 'Inherited', 31-34. For the Netherlands: Van Berckel, *De Maatschappelijke*, 143-150; Van der Valk, 'Household finance', 14-17; For the US and Sweden: Campbell, 'Household Finance'.

Table 3.3: The Percentage Share of Assets and Liabilities in the Estates of 1921 [165]

Wealth (guilders)	Movables	Cash	Real Estate	Securities	Receivables	Liabilities
0-1,000	4%	2%	37%	35%	22%	*17%*
1,000-5,000	16%	2%	50%	15%	17%	*24%*
5,000-15,000	9%	3%	41%	15%	32%	*22%*
15,000-50,000	6%	1%	40%	29%	24%	*17%*
50,000-250,000	4%	1%	35%	35%	25%	*18%*
>250,000	3%	1%	21%	49%	27%	*14%*

The 1921 *Memories* show Dutch wealth owners conforming to that general pattern.[166] Table 3.3 reports the estate composition of six wealth classes, starting with decedents owning between 0 and 1,000 guilders, up to people worth 250,000 guilders or more.[167] Cash was present in all estates with a negligeable share in total assets, while the relative value of movable goods dropped from nine per cent in the smallest estates to three per cent in the big ones. For people owning up to 50,000 guilders, houses and land were the main store of wealth, making op 38 to 49 per cent of assets. As one would expect the share of real estate in total assets fell as people became wealthier, from almost half to 20 per cent, whereas the share of securities rose. In estates below 15,000 guilders stocks and bonds made up 14-15 per cent of assets, against half for estates worth 250,000 guilders or more.[168] Those securities were bought through the country's dense network of brokers, directly at the Amsterdam stock exchange, or via a bank.[169]

We first turn to receivables and debts in the 1921 estates. Receivables amounted to 15-30 percent of the estate value at every wealth level. Estates below 5,000 guilders held relatively few

[165] Table 3 is constructed using the following categories of assets and liabilities: *Movables*: 6.1-6.3; *Cash*: 4.1-4.2; *Real Estate*: 5.1-5.2; *Securities*: 3.1.1-3.2.3; *Receivables*: 2.1.1-2.3.8; *Liabilities*: 1.1.1-1.5.3. Cf. Table 3.A1 for further details.

[166] Wilterdink, *Vermogensongelijkheid*, observed this using the fiscal returns of 1916 and 1960. Van der Valk used a different source to show the same pattern. De Vicq et al. use these succession tax returns to establish the same constancy from 1860 through to the present.

[167] Our stratified sample of the Memories of 1921 under-represents lower wealth classes. To correct for this in Tables 3.3, 3.4, 3.5 and 3.9, and Figures 3.1 through 3.4, we multiply the assets and liability in the estates by 10 when they are in Wealth Class 1, by 16 in Wealth Class 2, by 8 in Wealth Class 3, by 4 in Wealth Class 2, by 2 in Wealth Class 5, and by 1 on Wealth Class 6. In doing so we extrapolate our sample to a dataset representative for the population of deceased wealth holders in the Netherlands in 1921. Through this correction, our dataset increases from 2,164 real asset portfolio's derived from the primary sources to an extrapolated 19,437 portfolio's.

[168] We choose 250,000 guilders as a threshold because a 5 per cent yield on the investment of such an amount is about equal to the emolument of a Dutch cabinet minister in 1921: 12,000 guilders.

[169] Van der Werf, *De Bond*; De Vicq, 'Construction'; Mutual funds were not very important as supplier of investment services. Slot, 'Iedereen', 90 identified eight funds that were active between 1900 and 1920 but their names appear in only 46 of the 2,321 estates in our sample, and very sparingly at that.

receivables, but then those lists were generally much shorter than the ones above that threshold. Perhaps people in that wealth bracket had less money to begin with and thus kept their credit lines short; perhaps their inheritors had been more assiduous in chasing debtors before drafting the tax assessment form. Among estates worth 5,000 guilders or more receivables made up a quarter to a third of assets. As for debts, these weighed a bit more heavily on the smaller estates (21 to 23 per cent) than on the very big ones (14 per cent). Of course the nature of the source means that we need to be careful to draw conclusions from these data. At time of death some of them were still economically active with proportionally more receivables and debts, whereas others had become passive investors; some estates held more death-related items, such as as funeral expenses, doctor's bills, and claims on life insurance policies or other pension forms, than others.

We then grouped receivables and debts by the type of relationship and by their relative occurrence in the dataset (Table 3.4). We distinguished four relationship types: (1) money owed to suppliers of goods and services; (2) peer-to-peer loans, that is items without mention of either a bank or a notary; (3) notarized contracts; and (4) bank facilities. The first column lists the number of estates in our sample, the second their share in the sample, and the third the extrapolated shares taking into account the bias towards larger estates in our data.

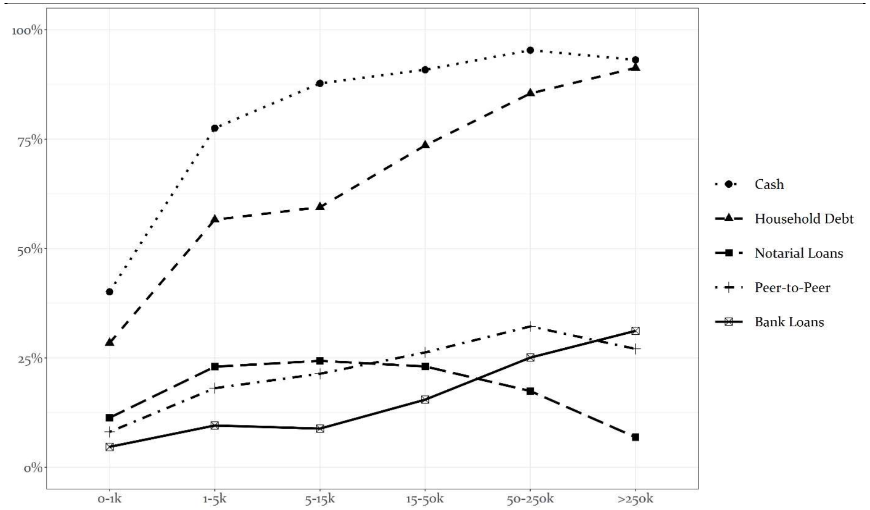
Table 3.4: Financial Relations Recorded in the Estates of 1921 [170]

Relationship	Number of estates	Share in sample	Extrapolated Share
Suppliers of Goods and Services	1,099	50.8%	41.9%
Peer-to-peer Loans	1,026	47.4%	39.9%
Notarial Credit	782	36.1%	31.9%
Bank Deposits and Bank Loans	1,042	48.2%	43.1%
None of the above	468	21.6%	25.7%

[170] Table 3.3 is constructed combining the following categories of assets and liabilities for each of the four types of financial relations: *Suppliers of Goods and Services*: 1.3.1 and 1.3.4; *Peer-to-Peer Loans*: 1.3.3 and 2.3.3; *Notarial Loans*: 1.2.1 and 2.2.1; *Bank Balances and bank loans*: 1.5.1, 2.1.1, and 2.1.4 through 2.1.11. Cf. Table 3.A2 for further details. Source: Memories 1921 Database.

Table 3.4 shows that all four types were used in about equal measure, with notarized contracts appearing slightly less frequently than the others. Banks were important but not essential with only 51.7 per cent of Dutch wealth owners having a bank relation, half of which consisted of simple savings booklets with a general savings bank, the postal savings bank, or a rural credit cooperative.[171] By modern standards of account penetration the Netherlands in 1921 were still a financially exclusive country.[172]

Figure 3.1: The Share of Estates with Cash, Household Debt, or Loans Received from Peers, Notaries, and Banks in 1921 [173]



[171] Extrapolation of the data on wealth owners in our sample with a bank relation to all wealth owners in 1921 yields the following breakdown: 48.3 per cent without a bank account, 26.7 per cent with only a savings booklet; 4.7 per cent with a savings booklet and a positive bank balance with a commercial bank; 8.6 per cent with money in a commercial bank only. The remainder of the wealth owners only had a bank loan (6.7 per cent) or a bank loan plus a commercial bank account (5.0 per cent).

[172] The World Bank's Global Findex measures the share of households with a bank account. In most western countries today this index is above 95 per cent: Demirguç-Kunt et al., 'Financial Inclusion'.

[173] Figure 3.1 is constructed using the following categories of liabilities: *Cash*: 4.1; *Household debt*: 1.3.1 and 1.3.4; *Notarial loans*: 1.2.1; *Peer-to-peer loans*: 1.3.3; *Bank loans:* 1.5.1. Cf. Table 3.A2 for further details. Source: Memories 1921 Database.

Let's further unpick the aggregate data by looking, first, at the smallest and most common items, cash and household bills due (Figure 3.1). The Netherlands being, as we have seen, a highly cash-oriented society, coins and banknotes were present in 60-90 per cent of the estates, with the median amount rising from 25 guilders in the lowest wealth bracket to almost 850 guilders in estates worth 250,000 guilders or more.[174] Credit received from shopkeepers, artisans, landlords, and other providers of goods and services was clearly very common, so people kept money at hand to pay all kinds of bills. If still listed as unpaid, we coded them as household debt if they were small with either a clear description (i.e. for food, fuel, clothing and other household items purchased, services, house rents, contributions, subscriptions, insurance premiums), or with a non-round figure, except when a loan was mentioned.[175] The amounts were small, ranging from a few guilders to perhaps two hundred or so, with a median of 35 guilders.[176]

Household debts were present in about half of the estates in the two lower categories rising to over 85 per cent in the two top ones, reflecting their greater creditworthiness and perhaps the then common retailers' complaint that the rich paid late.[177] Coupled to the frequent occurrence of cash in the estates and to the low share of bank money in the Dutch money supply those household debts underline that most people did not need a bank account for their payments.[178] Indeed, the *Postcheque and Girodienst* created two years earlier to carry out giro transfers through the national network of post offices, had attracted only 27 clients among the 1,608 people in our 1921 sample.[179]

[174] The median amount of cash held by private individuals increased with the value of their estate. In estates worth between 1,000 and 5,000 guilders, the median amount of cash was 25 guilders; in estates worth 250,000 guilders and more it was 844 guilders. Source: Memories 1921 database.

[175] We excluded death-related liabilities such as medical bills and funeral costs (codes 1.1.1 and 1.1.2, see Table 3.A1) for not reflecting what people normally did with their money.

[176] Among the liabilities in our full sample of 2,321 estates are 13,646 household bills (codes 1.3.1 and 1.3.4) with a median value of 35 guilders and an average value of 153 guilders, the latter pushed up by very wealthy individuals sometimes owing several thousand guilders to suppliers. In addition, the database also contains about 1,000 debts receivable for goods and services sold by the decedents, with a slightly higher median value (44 guilders) and a much larger median value (660 guilders).

[177] On rising debts owed by customers of shops at the beginning of the 20th century: Pyfferoen, *Petite Bougeoisie* 293; Peeters, 'Getting'. Cf. for the payment habits of French elite customers: Lemercier and Zalc, 'New Approach', 673, 684.

[178] Cf. for the predominance of cash payment of household expenses until the 1960s, Boter, 'Male', and Boter and Gelderblom, 'Dynamics'; On Dutch bank money, see Kuné and van Nieuwkerk, 'Ontwikkeling'.

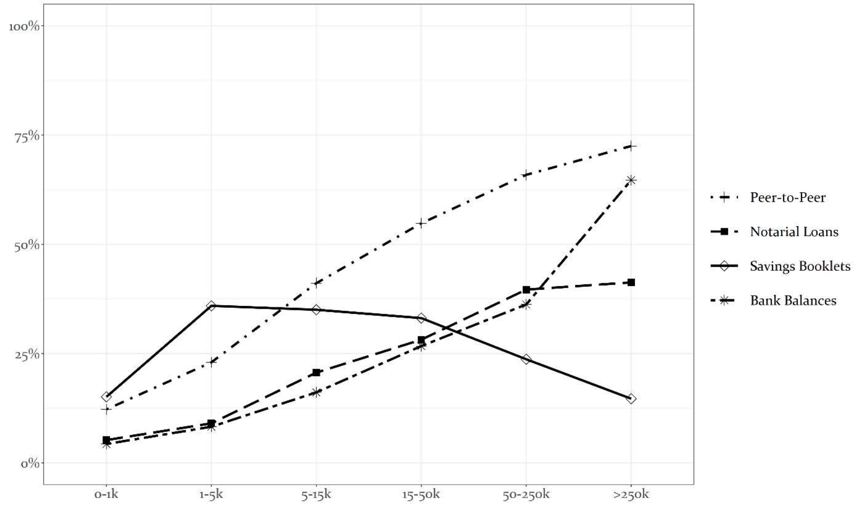
[179] Only two decedents with an account in the *Postcheque and Girodienst* (PCGD) had an estate worth between 5,000 and 15,000 guilders; all the others were in the higher wealth brackets. The median balance in their PCGD accounts was 717 guilders, the average balance 1,099 guilders. One person had an account in two different post offices. Cf. on the *Postcheque and Girodienst:* Niesten, 'Betalingsverkeer'. Two years before the PCGD was created, the city of Amsterdam established its own *Gemeentegiro* for the payment of salaries to some of its senior civil servants. In the Memories of 1921 three people had an account in this local giro bank, bringing the total number of giro accounts in our sample to 31.

Debts in round sums and non-round ones identified as such we coded as loans from respectively private individuals (peer-to-peer), notaries, or banks. Disaggregating these loans by wealth bracket highlights slightly different preferences for loan types. Appearing in one out of four estates, notarial loans were the most common form of credit in the two lowest wealth groups, but as people got wealthier the incidence of peer-to-peer credit outstripped it. One out of three individuals worth between 50,000 and 250,000 guilders borrowed from peers.[180] Bank loans and notarized mortgage debt scissored just above the 50,000 guilder bracket, the former rising from 10-15 per cent of estates to about 30 per cent in the highest category, the latter dropping from about 25 per cent in the lowest three categories to less than 10 per cent in the highest ones. This suggests that, as people became richer, they were more likely to turn to a bank if they needed to borrow.[181]

The relationship between people's wealth and their preference for a particular credit supplier was more marked yet for the loans they supplied themselves (Figure 3.2). Again peer-to-peer loans stand out, occurring in a quarter of the smallest estates, rising to three quarters of the biggest ones. Bank balances came second, up to the 50,000 guilder bracket mostly in the form of savings banks deposits. Deposits at commercial banks were as common as notarial loans, rising from less than 10 per cent in the lowest bracket to more than 35 per cent among people whose estate was valued between 50,000 and 250,000 guilders. Only the richest people were more likely to deposit money with a bank (65%) rather than provide a notarized loan (40%). Thus in the Netherlands there existed, like in France and entirely undiscovered until now, a huge mass of 'dark matter credit', loans provided by private individuals and notaries that, taken together, dwarfed bank loans.[182]

[180] We excluded claims on and debts to siblings or spouses as death-related and not reflecting day-to-day financial behaviour.
[181] Cf Table 3.5 below for the various types of loans provided by banks.
[182] Hoffman et al, *Dark Matter Credit*.

Figure 3.2: The Share of Estates with Savings Booklets, Bank Balances, Notarized Contracts, or Peer-to-Peer Loans in 1921 [183]



However, half the people in our sample used two out of three channels, and twenty per cent used all three of them, suggesting that people used specific forms of credit for particular purposes.[184] We cannot tell what drove them to choose one type of credit or another, since we only observe their liabilities and receivables at a specific point in time, but we can use reported details of transactions to tease out some more information about the functions which the respective credit channels appear to have performed.

[183] Figure 3.2 is constructed using the following categories of assets: *Cash*: 4.1; *Notarial loans*: 2.2.1; *Peer-to-peer loans*: 2.3.3; Savings Booklets: 2.1.4 through 2.1.6; *Bank balances:* 2.1.1 and 2.1.7 through 2.1.11. Cf. Table 3.A2 for further details. We classify all accounts with the rural credit cooperatives as 'savings booklets' but the descriptions in the death duty forms show that a handful (3 out of 186) actually were *lopende rekeningen*, i.e. current accounts that could also be used to obtain short-term credit. The annual report of the *Boerenleenbanken* headquarted in Eindhoven from 1921 put the number of current accounts at 5,269 against 113,008 savings booklets: Haastert and Huysmans, *Veertig*, 117. Source: Source: Memories 1921 Database.
[184] As summarized in Table 3.3, our sample includes 690 people who used a notary to borrow or lend money, 156 of whom (23%) only had that one type of financial relation. Among the 927 people with personal loans there were 288 (31%) without any other financial relation. The share of such 'single users' was smallest among the 588 people with a bank relation: 108 (18%) of them did not contract loans through notaries or personal relations. Beyond these single users of each of the three types of loans there were 242 people who had personal loans and notarial loans, 188 people with personal loans and bank loans; and 81 people with notarial loans and bank loans. Finally, against 334 people without any financial relation, there were 211 who used all three channels.

3.4. The Use of Private Lenders, Notaries and Banks

We begin with comparing the value and price of different loan types. Table 3.5 reports these numbers for all debt titles in the 2,321 estates sampled, that is including those which turned out to be too small to be taxed but nevertheless contain valuable information on the credit instruments used by the decedents. The first two columns report both the number of loans in our stratified sample and the estimated number of loans of all wealth owners deceased in 1921 extrapolated from this sample. We extraopolate because the composition of estates varies according to their size (cf. supra). The loan volumes, principals, and interest rates charged are based on this extrapolation.

Table 3.5: The Value and Price of Credit Transactions Reported in the Estates of 1921 [185]

	Number of Loans		Total Value	Loan Principal			Interest rate[a]	
	Sample	*Extrap.*	*Extrapolated*	*Max*	*Avg.*	*Med.*	*Avg.*	*Med.*
Liabilities			74,838,900					
Notaries	666	6,431	30,404,758	150,000	4,728	2,500	5.0%	5.0%
Peer-to-peer	1,093	7,649	20,625,489	135,602	2,696	800	4.7%	5.0%
Banks	454	2,522	23,815,612	224,340	9,443	3,100	5.3%	5.0%
Receivables			137,589,172					
Notaries	2,516	10,283	51,853,899	625,000	5,043	2,000	5.0%	5.0%
Peer-to-peer	4,174	20,051	62,633,015	1,084,094	3,123	1,100	4.9%	5.0%
Commercial banks	792	3,654	16,379,802	2,194,338	4,483	1,000	4.7%	4.0%
Savings booklets	708	6,872	6,729,381	19,683	979	500	4.1%	4.0%

The relative volumes of the three main lending and borrowing channels throws the limited bank penetration into sharp relief. Loans raised through notaries or personal networks made up almost two thirds of the sum total.[186] The dominance of notaries and personal networks was even stronger on the receivables side, providing 84 per cent of the total. The respective ratios are perhaps more telling: the number of peer-to-peer receivables was more than three times the amount held in bank accounts and savings booklets, the number of notarized receivables almost

[185] Table 3.4 is constructed using the following categories: *Peer-to-peer loans*: liabilities, 1.3.3; receivables: 2.3.3; *Notarial loans*: liabilities 1.2.1; receivables 2.2.1; *Bank balances*: liabilities, 1.5.1; receivables: 2.1.1 and 2.1.7 through 2.1.11; *Savings booklets*: 2.1.4 through 2.1.6; Cf. Table 3.A2 for further details. Source: Memories 1921 Database; (a) average interest rates weighted by loan size.

[186] Dividing the estimated total number of loans received through notaries (6,431), peers (7,647) and banks (2,522) between decedents aged 25 to 65, and 65 and over, yields the following share for economically active people: peers 44%, notaries 38% and banks 18%; and for the over-65s: peers 53%, notaries 43%, and banks 14%.

2.5 times, underlining a clear preference for peer-to-peer and notarized transactions over bank intermediation. Therefore, even at its 1921 peak, after some 50 years of development and growth, Dutch banking as a whole had made only quite modest inroads on the 'dark matter credit' of peer-to-peer lending and notarized loans.

The ratio of peer-to-peer loans to notarized ones highlights another striking aspect of Dutch dark matter credit: its amazing lack of formality. The notarized loans received and extended were overwhelmingly mortgages, 80 per cent. Notaries possessed a formal monopoly on registering real estate transactions and liens. They recorded some very large loans of several hundreds of thousands of guilders, but even the median notarial loan of 2,000 to 2,500 guilders equalled the annual wage of a skilled labourer, while the average notarial loan of 5,000 guilders equalled that of a civil servant.[187] Though we did find occasional references to notaries acting as local bankers taking depositis, making loans, or keeping current accounts, there is little evidence of Dutch notaries taking a similar, active role intermediating between lenders and borrowers like their French counterparts as documented by Hoffman et al.[188]

The other 20 per cent of notarized loans differed from the thousands of peer-to-peer loans only in being notarized rather than underhand IOUs, presumably because lenders wanted formal proof.[189] A handful of cases apart, such IOUs had no specified collateral. That is to say, the providers of all those loans had sufficient confidence in getting their money back to accept a minimum of formalities, a handwritten contract or simply a ledger entry, in some rare cases oral testimony alone.[190] Therefore this 'dark matter credit' really uncovers a close-knit society in

[187] Bureau van de statistiek der gemeente Amsterdam. *Uitgaven*, 18-20; Statistisch Bureau der gemeente 's-Gravenhage. *Uitkomsten*, 35-37.

[188] Besides the loans contracted before a notary, the death duty forms contain numerous other financial claims involving a notary, but they are typically related to their active role in the execution of an estate or the sales of movable or immovable property. Strictly financial relations were rare: two notaries held cash money for a client (Idno. 25863, 29216) and one notary signed two prolongaties for a decedent (Idno. 63835, 63837). Among the 2,321 people in our sample, we counted 18 who kept a current account with a notary, the purpose of which we do not know (Idno.'s 3283; 7307; 10661; 12885; 17232; 3076930973; 40276; 45202; 47220; 56882; 57422; 57788; 65133; 67650; 70825; 70928; 77295). Finally among the peer-to-peer loans (codes 1.3.3 and 2.3.3) there were 18 loans from notaries, 21 loans to notaries, and 6 deposits made with a notary. The quasi-banking activities of notaries discussed in De Vries, 'Notarispapier'. Hoffman et al. *Dark Matter Credit*, 4-5, 57-60.

[189] This is also documented for the early modern Netherlands: Gelderblom et al. 'Public Functions', 183. In Dutch bankruptcy law only mortgages and collateralized debts took precedence in case of bankruptcy, all other creditors were concurrent.

[190] The inheritance returns would have listed the collateral specified in the IOU as belonging to the estate and thus taxable. The filing of inheritance tax returns was based on a careful study of the decedent's private administration. Some registrars chose to record claims in very succinct wording but out of the 1,056 personal loans received in our sample, more than half (585) explicitly refer to the paper proof underlying the transaction. The most common descriptions werel *'(onderhandse) schuldbekenteninissen', 'schuldbewijzen', 'akten', '(ondertekende onderhandse) akten', '(onderhandse) obligaties', 'rekeningen (courant)'*. It is telling that in a small number of cases (12) the registrar explicitly mentioned the lack of evidence (*'zonder bewijs'*) adding to the impression that the use of some form of paper evidence was very common in the registration of private loans. Remarkably, the paper trail produced by money lent

which lenders and borrowers knew each other as family members, business relations, members of a social group, links in a supply chain, neighbours in a particular area, or perhaps simply introduced to each other by a mutual acquaintance.

Knowing each other also made it easy to tailor amounts and maturities to the borrowers' specific needs, giving both a wide variety. Loans were priced at very similar mean and median interest, almost identical to the rates of notarial loans. While we cannot exclude the possibility that these rates resulted from private lenders rationing credit, the overall volume of peer-to-peer loans suggests it to have been a popular, smoothly functioning, and capacious lending system.[191] Some of the lenders came close to being bankers, holding loan portfolios worth 100,000 guilders or more, but the vast majority had provided only a handful of loans.[192]

The huge volume of peer-to-peer and notarized loans dwarfed the bank balances in our sample. Moreover, those balances served quite specific purposes. Table 3.5 splits the bank transactions recorded in the estates sampled by type.[193] Saving accounts with one of the three savings banks networks were surprisingly popular given the fact that these institutions targeted customers of modest means and paid interest on balances up to a certain amount only.[194] Interest-bearing deposits at commercial banks attracted clients probably for the same reasons, safely storing surplus sums with which one would not or could not buy other assets. Loans backed by securities were the most common type of bank facility used on the estates' debit side, signalling the well-known shift away from the Amsterdam stock exchange's *prolongatie* system to the banks after its August 1914 collapse.[195] The Nederlandsche Bank provided a considerable

to others is hardly visible in the Memories of 1921. Out of 4,223 receivables there only 130 with an explicit description of the contract signed ('*schuldbewijs*', '(*onderhandse) akte*', *'rekening courant or 'obligatie'*) While this could in theory mean that no paper trail existed, it is far more likely that the claims were directly copied from the decedent's private papers, for no less than half of the personal loans mentioned the loan maturity and the exact date on which interest was due – loan characteristics that could only be retrieved from some kind of register.

191 Hoffman et al. document how French notaries combined the information they had on their clients with a widely accepted cap on the loan-to-collateral to ration credit. This effectively created a priceless market in which virtually every loan carried the same interest rate – an outcome very similar to the interest rates recorded in the Dutch death duties of 1921. Cf. Hoffman et al., *Dark Matter Credit*, 197; Hoffman et al., *Priceless Markets*.

192 Personal loans were recorded among the receivables of 780 of the 1,608 estates worth 1,000 guilders or more. One such loan appeared in 263 estates (33.7 per cent); two to four in 294 estates (37.7 per cent); five to nine in 123 estates (15.8 per cent); ten to twenty-five in 71 estates (9.1 per cent); and 25 to 50 in 26 estates (1.6 per cent); three estates had 54, 69, and 108 loans, respectively.

193 The number of recorded bank transactions is too small and their distribution across wealth classes and specific loan types too uneven to extrapolate their value to all decedents in 1921.

194 The maximum interest-bearing amount of a savings booklet with RPS was 1,200 guilders in 1921: Barendregt and Overman, *Ondernemend in Financieel Nut*, 81, 84. The general savings set the bar higher but Dankers et al. *Spaarbanken*, 167, 236, do not give the amount. In the Memories 1921 Database there are 470 decedents with one savings booklet, 78 with 2, 18 with 3, 6 with 4 and 1 with 5

195 Jonker, *Merchants*; Jonker, 'Geld en bankwezen'. The estates possessed very little money put on *prolongatie* via banks on the receivables side.

slice of those loans collateralized on securities, confirming the thesis that its countrywide network weakened provincial banking.[196] On the other hand, the huge volume of peer-to-peer and notarized loans versus the paucity of bank balances belies the often cited opinion that the *prolongatie* system caused the Dutch banks' to be short of deposits.[197] People with money to spare clearly preferred those alternatives to bank accounts. Nor did joint-stock banking possess a competitive edge in mortgage loans. Specialized mortgage banks existed since the 1860s, but by 1921 they had hardly made inroads on private mortgage lending. Just over one fifth of the bank loans in the sample (102) consisted of mortgages, averaging 8,000 guilders per loan. These loans were bigger than the ones contracted directly through notaries, but their overall volume remained small. Indeed, if we extrapolate these numbers to all deceased wealth owners in 1921, the estimated amount of bank-supplied mortgage debt to people who died in that year was 4.2 million guilders, only a quarter of the (extrapolated) value of their notarized loans: 15.9 million guilders. Clearly people still preferred privately arranged mortgages over bank-supplied ones.[198]

Joint-stock banking's only competitive product were current accounts and overdrafts, the most common form in the estates with average amounts clearly above that of the notarial and peer-to-peer loans (Table 3.6). However, the low median value of 1,600 to 2,000 guilders suggests that these current accounts were either used for payments or for temporary storage purposes rather than borrowing facilities. The same was true for the *Postcheque and Girodienst*, and may also have been for the SME banks.

196 't Hart et al, *Financial history* 109-112; Jonker, 'The Cradle' 85-89.

197 Eisfeld, *Das Niederländische Bankwesen* 270-271.

198 Klein and Vleesenbeek, 'Geschiedenis, 12; Van Bochove and Hasken, 'The Modernization of Credit Markets'.

Table 3.6: The Value and Price of Bank Transactions Reported in 2,321 Estates in 1921 [199]

Type of transaction	*Number of Entries*	*Maximum Value*	*Average Value*	*Median Value*	*Median Interest*[b]
Bank Loans					
Current Accounts	134	129,622	13,042	3,159	NA
Mortgages	102	115,000	11,511	7,325	5.0%
'Prolongaties'	74	224,340	18,837	10,000	6.0%
Other	143	140,000	12,637	3,000	6.0%
Savings Booklets					
General Savings Banks	217	17,225	1,186	600	4.0%
Postal Savings Bank[c]	305	3,690	463	263	2.6%
Rural Cooperative Banks	186	15,790	2,101	1,000	4.0%
Specialized Bank Balances					
Postal Cheque and Giro Services	31	6,697	1,196	717	NA
SME Banks	46	30,614	2,611	877	NA
Commercial Bank Balances[a]					
Current Accounts	236	2,194,338	17,315	1,914	NA
Deposit	215	400,000	7,561	2,000	4.0%
'Prolongaties'	27	60,000	13,204	10,000	NA
Other	313	400,794	6,499	998	4.0%

Source: Memories 1921 Database; (a) includes credit unions (61 contracts); (b) interest rates reported for categories with at least twenty given rates; (c) the statutory interest rate on savings accounts with the Rijkspostspaarbank was 2.64%.

199 Table 3.5 reports different types of loans in the categories *Bank loans* (1.5.1), *Savings bank balances* (2.1.4 through 2.1.6), *Specialized bank balances* (2.1.7 and 2.1.9), and *Commercial bank balances* plus *Credit union balances* (2.1.1, 2.1.8, 2.1.10 and 2.1.11). Cf. Table 3.A3 for further details.

Summarizing, by 1921 banking's penetration of household finance at the top end of the wealth distribution was still very limited because people preferred lending and borrowing via their social networks. Supplies of goods and services were paid in cash or bought with short-term credit. Bank deposits and savings banks were used to store small amounts of money, the bulk went into peer-to-peer lending and notarized loans. Further down the wealth distribution that pattern is likely to have been more widespread simply because the amounts concerned were smaller and therefore unremunerative for banks other than the mutuals, the coops, and the savings banks designed to provide low-cost services.[200] Before coming to a final conclusion two issues still need to be addressed: whether distance to the nearest service point mattered and whether the age bias in our data has an impact on our outcomes. We turn first to the distance issue.

3.5. Proximity and Bank Services Use

During the late 19th century the Netherlands became a much more homogeneous country, as large infrastructure projects and regular postal services, telegraph and telephone drew the country together.[201] By 1921 all provincial capitals possessed commercial banking firms of one sort or another, one or two stockbrokers, plus a pawn bank, a savings bank and a cooperative bank for small and medium enterprises, while smaller towns and big villages would normally have, in addition to a post office, a savings bank and credit cooperative.[202] Even so people might have considered banks too far away to bother.

To answer the question of whether distance mattered we first grouped known banking firms and facilities by municipality and number of inhabitants and then calculated the percentage of firms or facilities present in them (Table 3.7). Unsurprisingly the rural credit cooperatives, then close to the point of their widest expansion, and the Postal Savings Bank which piggybacked on post offices, had the densest networks, present in 65-74 per cent of the smallest communities. By contrast, savings banks and SME banks spread thinner beyond the four big cities Amsterdam, Rotterdam, the Hague, and Utrecht, to only half of the towns with

200 Colvin and McLaughlin, 'Raiffeisenism'; Chapter 5 of this PhD-manuscript; Peeters, 'Getting'.
201 Knippenberg and De Pater, *Eenwording.*
202 On the spread of commercial banks and stockbrokers: Jonker, 'Spoilt'; Jonker, 'Geld-en Bankwezen', Jonker, 'The Alternative Road'. On credit unions: Jonker, *Merchants¸ Bankers, Middlemen*; Chapter 5 of this PhD-manuscript; On rural credit cooperatives: Knippenberg and de Pater, *Eenwording*, 109-111; Jonker 'Welbegrepen'; Colvin et al. 'Origins'; Colvin and McLaughlin, 'Raiffeisenism'; On SME Banks: Colvin 'Organizational determinants'; Peeters, 'Getting'; on the Postal Savings Bank and general savings banks: Dankers et al., *Spaarbanken*; Deneweth et al. 'Microfinance'. On mortgage banks: Van Bochove and Hasken, 'The Modernization of Credit Markets'. Not included in the table are the so-called *hulpbanken*, local banks offer small loans to retailers: Deneweth et al. 'Microfinance'; Van Bochove and De Vicq, 'Lending a Hand'.

5,000 to 15,000 inhabitants and no more than a fifth of communities with fewer than 5,000 inhabitants. Joint-stock commercial banks showed a similar pattern, available in nearly all cities, most mid-size towns, and rarely in small communities. The handful of credit unions and mortgage banks were urban phenomena.

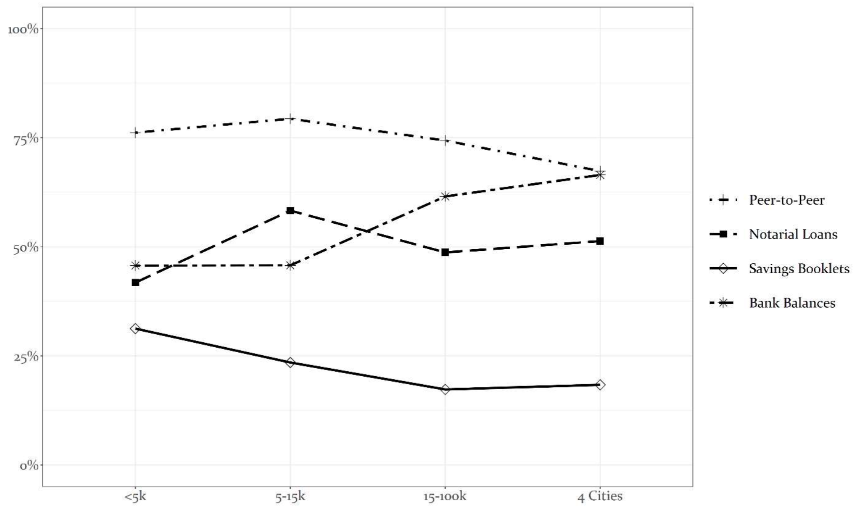
Table 3.7: Bank Diffusion by Agglomeration Size, the Netherlands in 1921 (Population x 1,000) [203]

Bank Type	Number	<5k	5-15k	15-100k	4 Cities
General Saving Banks	440	20%	54%	86%	100%
Postal Savings Bank	1,241	74%	95%	98%	100%
Rural Cooperatives[204]	1,194	65%	90%	86%	75%
SME Cooperatives	394	17%	47%	88%	100%
Credit unions	75	1%	12%	46%	100%
Mortgage banks	118	1%	3%	29%	100%
Commercial Banks	1,323	23%	69%	91%	100%

To explore the effect of population size on financial service use we compare the composition of estates worth 50,000 guilders or more across municipalities of different size (Figure 3.3). Peer-to-peer loans, received or extended, were clearly the most popular in all communities, marginally less so in the four big cities though still present in 70 per cent of estates there. Commercial bank accounts appeared in less than half of estates from communities with fewer than 15,000 inhabitants, but in two-thirds of urban estates. Notarized loans did not show a clear trend, but the use of savings facilities was clearly more popular in small communities than in large ones, though only present in 20-25 per cent of estates.

[203] Source: De Vicq, 'Construction'.
[204] Neither the *Boerenleenbank* nor the *Raiffeisenbank* had an office in Amsterdam in 1921. The *Raiffeissenbank* did have offices in Utrecht, Rotterdam, The Hague.

Figure 3.3: The Share of 512 Estates of 50,000 Guilders or More Using Financial Services in Agglomerations of Different Size in The Netherlands in 1921 [205]



To find out more about whether location mattered for the type of financial transaction used we calculated the percentage of transactions which occurred in the same municipality. For about two-thirds of the almost 13,000 credit transactions recorded in estates worth 1,000 guilders or more we know the location of the bank, the notary, or the private individual with whom the decedent had a loan. With this information we calculated the distance as the crow flies from the decedent's residence to the bank, the notary, or the counterparty concerned. Table 3.8 reports the percentage share of contracts for which this distance was zero.[206] To throw these percentages into relief and capture the everyday reality of people in small communities always having to travel to purchase goods and services, we added the percentage of doctor's bills in the same community calculated in the same way.

[205] For the data coding used, see Table 3.2.
[206] The incomplete registration of loan characteristics in the source renders calculating median or average distances between borrower and lender located in different places impractical. Indeed, our positive identification of loans contracted locally (i.e. in the decedent's place of residence) may still underestimate the percentage share of such local loans, simply because registrars familiar with the counterparty of any contract they found in the decedent's administration may have refrained from recording their place of residence. Source: Memories 1921 Database.

Table 3.8. The Percentage Share of Counterparties Located in the Same Municipality in Credit Transactions Reported in the Estates of 1921 [207]

	Number of transactions	*% known location*	*<5k*	*5-15k*	*15-100k*	*4 Cities*
Doctor's Bills[a]	2,877	59%	39%	50%	71%	81%
Liabilities						
Peer-to-peer loans	1,076	59%	42%	40%	47%	58%
Notarized loans	648	89%	14%	36%	47%	70%
Bank loans	448	79%	22%	29%	46%	62%
Receivables						
Peer-to-peer loans	4,166	63%	39%	46%	40%	49%
Notarized loans	2,482	81%	21%	44%	39%	45%
Bank balances						
General Savings Banks	214	76%	29%	41%	76%	86%
Rural Cooperative Banks	183	93%	71%	70%	na[c]	na[c]
General Banks[b]	759	65%	7%	18%	58%	84%

Most of the outcomes are what one would expect. In the four big cities 80 per cent of people visited a local doctor, whereas only 40 per cent of people in rural communities did so, presumably because no doctor lived there, or they needed specialized services elsewhere. The bank balances pattern closely reflects the institutional spread of Table 3.7: savings banks and general commercial banks were a predominantly urban phenomenon, so people in cities used their local bank whereas most rural savers had to find a commercial bank or savings bank outside their own community. Conversely, about 70 per cent of people living in communities of up to 15,000 inhabitants entrusted money to their local cooperative bank.

The pattern of peer-to-peer loans is fairly stable across the board: about 40-50 per cent of borrowers and lenders in all communities, big and small, had a local counterparty. That is to say, those borrowers and lenders were likely to have known each other. Notarized loans followed a similar pattern as far as the lenders were concerned: they signed 30 to 50 per cent of loans with a local notary. For borrowers things were different. In the smallest communities with fewer than 5,000 inhabitants they almost always had to travel to a notary. In bigger places it was easier to find one locally, up to the point that in Amsterdam, Rotterdam, The Hague, and Utrecht 70 per cent of the borrowers signed their loan with a local notary. These patterns are similar to the geography of notarial credit in France: borrowers in smaller places who could not find a

[207] Table 3.7 reports the calculated 'zero' distances for *Medical bills* (1.1.2); *Peer-to-peer loans* received (1.3.3); *Notarial loans* received (1.2.1); *Bank loans* received (1.5.1); *Peer-to-peer loans* extended (2.3.3); *Notarial loans* extended (2.2.1); *Commercial bank balances* plus *Credit union balances* (2.1.1, 2.1.8, 2.1.10 and 2.1.11); and two kinds of savings bank balances: those from the *General savings banks* (2.1.4) and the *Rural credit cooperatives* (2.1.6). Results for the *Postal Savings Bank* are not reported because the location of the post office is mentioned for only eight savings booklets. Source: Memories 1921 Database; (a) including apothecaries' bills; (b) including credit unions; (c) less than 5 transactions.

counterparty locally turned to notaries in bigger places to find one.[208] For lenders in these bigger places local notaries were the logical go-between with people in the wider region they served.

3.6. Did Age Matter?

Before we conclude we must consider the relationship between people's age and their use of different forms of credit. Some 60 per cent of the estates we sampled belonged to men and women who died age 65 and over. Their financial behavior may have been different because of their advanced age but also because they became economically active before banks formed available, perhaps even familiar alternatives to personal networks. On the other hand, there were no pensions as we know them today and it was quite common for people to keep working into old age. [209] Apart from that, some 40 per cent of the decedents in 1921 were under 65 and for them joint-stock commercial banks, the Postal Savings Bank, mutual credit unions, rural credit coops and SME banks may have been a regular part of their menu of choices.

Ideally, we would use differential mortality rates across age groups to extrapolate our estates data into a projection of financial service use patterns amongst the living, in the way wealth inequality researchers sometimes do.[210] Dutch demographic data would allow us to create such 'estate multipliers' but our estates data do not. Bank loans appear in small numbers only, as do young decedents, and these two factors combined would lead to unacceptably high error margins. We therefore limit ourselves to a simple description of loans received and extended by the people who died in 1921.[211]

Figure 3.4 reports the presence of notarial loans, bank loans, and personal loans in the estates of people in different age groups. The assets show that except for people who died very

[208] Hoffman et al, *Dark matter*.

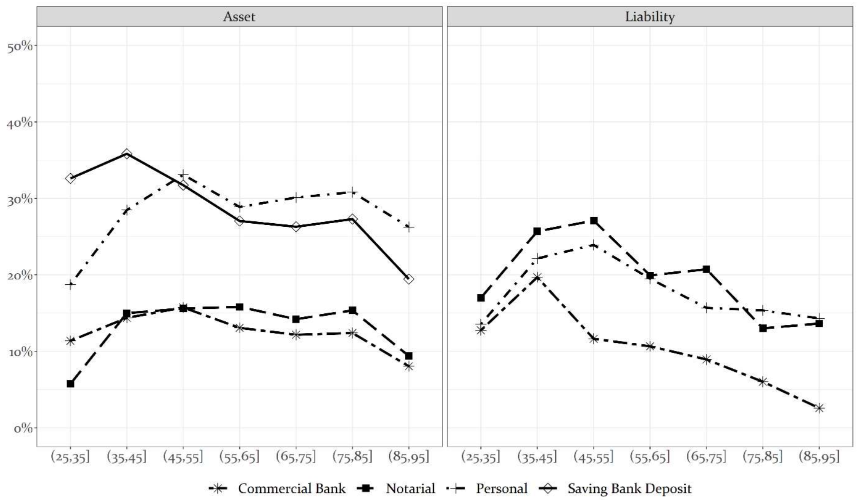
[209] Except for civil servants and the managerial staff of big companies there were no pension schemes for Dutch workers: Nijhof, 'Pensions'; Van den Berg en Nijhof, *Menselijk*, 147-169; Van Nederveen Meerkerk and Peet, *Peertje*; Van Gerwen en Van Leeuwen, *Zoeken*, 63-66. At the same time very few decedents were wealthy enough to live entirely off the income earned with their investments. At the going interest rate of 5 per cent an estate had to be worth 120,000 guilders to earn an income equal to that of a civil servant (6,000 guilders). Only 3.3 per cent of the people who died in 1921 had an estate worth that much.

[210] Piketty et al.' Wealth Concentration'.

[211] To isolate the effect of age, wealth, location, and other factors on the composition of the 1921 estates, we ran a series of logit regressions with the absence or presence of notarized loans, peer-to-peer loans, savings booklets, commercial bank accounts and accounts with a rural credit cooperative as dependent variables and decedent's wealth, residence, age, gender, and number of children as independent variables. The regression results, available upon request, show that wealth was the principal determinant of a person's use of different types of loans, while the size of the population in the place they lived was also related to their financial sector use in the way we observe in the descriptive statistics. Controlling for these factors and additional personal characteristics, a person born aged between 25 and 65 was more likely to borrow money through any of the three major channels, and also more likely to have an account with a rural cooperative or a commercial bank.

young (under the age of 35) or very old (85 and over) the use of different channels to extend loans was quite similar across age groups. About 30 per cent had personal loans outstanding while 15 per cent had notarials loans. Savings booklets did appear more frequently among younger decedents but other bank balances—current accounts in most cases— were as common for them as they were for older people. Loans received do appear more frequently in the estates of people who died between 35 and 54. We also observe a possible cohort effect with regard to bank loans: they were just as common as personal loans for people below 45 but they occurred much less frequently among the liabilities of older people.

Figure 3.4. The Percentage Share of Estates with Notarial Loans, Personal Loans and Bank Balances in The Netherlands in 1921, according to age groups [212]



[212] For the data coding used, see Table 3.B2. Source: Memories 1921 Database; not included are decedents under 25 and decedents older than 95.

Table 3.9. The Share of Different Types of Credit Across Age Groups in the Estates of 1921 [213]

	Loans Extended					Loans Received			
Age	*Value (mln gld)*	*Notarial*	*Personal*	*Bank*	*Savings*	*Value (mln gld)*	*Notarial*	*Personal*	*Bank*
25-34	9	6%	88%	1,8%	4%	1	38%	39%	24%
35-44	85	8%	90%	0,5%	2%	8	22%	15%	63%
45-54	86	47%	49%	0,7%	3%	42	23%	25%	52%
55-64	116	30%	65%	1,1%	4%	40	55%	27%	19%
65-74	426	57%	41%	0,4%	1%	90	54%	39%	7%
75-84	560	72%	26%	0,3%	2%	19	25%	61%	14%
85-94	39	40%	59%	0,4%	1%	4	7%	21%	72%
All	**1.320**	**56%**	**41%**	**0,4%**	**2%**	**206**	**43%**	**34%**	**23%**

Table 3.9 reports the total value of loans extended and received by decedents of different age in 1921, and the distribution of these loans across the main lending channels. Among the assets, the value of bank balances was very small in every age group, since people used their accounts to make payments, not to store wealth. Savings booklets did serve that purpose but only for small amounts as banks capped the interest-paying balances.[214] Personal loans and notarial loans, on the other hand, were an attractive store of wealth, with notarial loans—mortgages in many cases—the most popular one especially for people aged 65 and over. The value of loans received by decedents in 1921 was six times smaller than the value of loans extended. Notarial loans and personal loans made up 80 per cent of the total value but banks were the most important suppliers of credit to decedents under 55, notably because the average bank loan was twice as large as a notarial loan, and 3.5 times the size of a personal loans (cf. Table 3.5). Still, even among the youngest decedents notaries and peers made up one third to one half of all credit supplied. This suggests that by 1921 bank penetration may have been deeper among younger borrowers, but it did not end their use of other channels.

[213] Source: Memories 1921 Database.
[214] Barendregt and Overman, *Ondernemend in Financieel Nut*, 75.

3.7. Conclusion

We analzyed the estates of 2,321 top Dutch wealth owners who died in 1921 to discover their financial behaviour. Only half of those people had a bank account at all. Banks were clearly irrelevant for their payments, done by cash or periodic settling of suppliers' bills. Nor did people need banks for trading the large volume of securities owned, they could do that through stockbrokers. The banking system's main competitive advantages existed in savings accounts for people unwilling or unable to buy securities, and in current accounts for businesses. Our sample probably underestimated both, the former because savings accounts will have been more widespread among younger people, the latter because many if not most of the people in our sample were no longer in active business.

The most surprising outcome, however, is the sheer volume of financial services provided or received by the people in our sample which entirely bypassed the banks. Peer-to-peer and notarized loans, including mortgages, dwarfed the volume and value of bank loans and deposits in the estates of the people that died in 1921. Cost and distance do not appear to have made much of an impact on whether or not people used banks, though wealth level and location did: put simply, top urban wealth owners were more likely to have an account. Now a lot of the peer-to-peer business was probably too small, that is to say, unremunerative for banks so they did not seek to canvass it. However, the point is that in 1921, in a country with a highly developed economy and financial infrastructure, it was not just normal, but highly common for people to lend and borrow amounts large and small amongst themselves, with or without collateral, with or without notarized contracts, without banks. By all accounts that behaviour had become rare by the end of the 20th century, which raises the question: when and why did it change?

Appendix A. The Dutch Succession Tax and its Administration

The uniform and national succession tax introduced in the Netherlands in 1818 was levied on the net value of estates of childless decedents, widened to include all estates worth more than 1,000 guilders in 1878.[215] By 1921 slightly over 25 per cent of Dutch estates were assessed for the tax, and about half of them ended up above above the 1,000 guilder threshold and payed tax accordingly.[216] The documents produced by the fiscal administration provide us with a near ideal, standardized source. Inheritors of estates likely to be assessed had to submit a formal inventory of a deceased's assets and liabilities with their respective value to one of the nine regional tax offices, which listed them alphabetically in annual ledgers known as *Tafel Vbis*. If over the tax threshold, the inventory was turned into a *Memorie van Successie* itemizing the estate's composition and the estimated value of the individual items, grouped as real estate, financial assets, debts and claims, cash, and movables. Having filed the documents, heirs or executors had to take a formal oath swearing to the truth of the data submitted, a written statement of this procedure being added to the papers. Upon completion the entire file was examined by tax inspectors, who verified the liabilities and assets using a variety of sources, such as wealth and income tax ledgers and the real estate cadaster. They could demand additional information or documents and, if heirs were uncooperative in producing these, inspect and assess the value of assets themselves or order a professional estimate of the inheritance. Penalties for fraud and evasion were about twice the due tax plus any costs.

Once satisfied that the various data were correct, the inspectors drew up a *Memorie van Successie*, the official statement of assets and liabilities and the corresponding tax assessment. The procedure's effectiveness of course depended on the inspectors' ability to verify the data submitted. The value of real estate, securities and bank accounts could be checked easily, but amounts given for private debts and claims were more difficult to assess. However, the scope for tax evasion or downright fraud appears to have been fairly limited. Unquoted securities, sometimes seen as a potential fraud source, could be valued using a specialist weekly publication, for instance, and the tax inspector could ask heirs and executors for proof of private debts.

Aggregated data on inheritance tax returns were published from the mid-1850s by the national bureau of statistics (CBS) and its predecessors.[217] They were used by Wilterdink for

[215] Bos, 'Memories'; Bos, 'Vermogensbezitters'.
[216] In 1921 77,002 people died, of whom 24,295 were considered potentially taxable. Eventually about two thirds of these decedents (16,316) were taxed. De Vicq and Peeters, 'Introduction'.
[217] Bos, 'Vermogensbezitters', 554.

analyzing the evolution of wealth inequality in the Netherlands.[218] For our present purpose we wanted much more detail than available in the published data, so we constructed a sample of original *Memories* taking into account potential regional differences in both wealth levels and financial behaviour. We did this as follows. During 1921 around 77,000 people died in the Netherlands on a total population of 6.8 million. Subtracting infants and minors from the total leaves us with about 61,000 adults. Using the summary tables (*Tafels V-Bis*) of the fiscal administration we identified 24,263 deceased persons for whom a *Memorie* was submitted, just over one third of the adults who died in 1921.[219] Following Piketty, Postel-Vinay and Rosenthal in their research on Parisian death duty forms, for each of the eleven Dutch provinces we designed a stratified sample, including everybody in the 100th percentile of the wealth distribution, half of the deceased with wealth between the 95th and 99th percentile, down to every sixteenth person in the bottom 70 per cent of taxed decedents, plus one out of ten people whose assessment fell below the 1,000 guilder threshold.[220]

Table 3.A1. Stratified Sample Drawn From Memories van Successie in The Netherlands in 1921

			Drenthe	Friesland	Gelderland	Groningen	Limburg	Noord-Brabant	Noord-Holland	Overijssel	Utrecht	Zeeland	Zuid-Holland	Sample obtained
Class	*Sample designed*	*2,784*	*82*	*112*	*424*	*186*	*187*	*409*	*429*	*219*	*158*	*137*	*441*	
6	99 to 100th percentile	169	4	7	17	11	12	18	23	12	7	7	25	*143*
5	95 to 99th percentile	330	7	12	41	20	16	36	46	21	18	10	45	*272*
4	85 to 95th percentile	409	10	16	49	25	24	47	52	31	21	15	55	*345*
3	70 to 85th percentile	306	10	11	36	19	20	39	42	21	15	12	37	*262*
2	0 to 70th percentile	772	23	30	101	46	47	98	109	54	46	34	114	*702*
1	Wealth <1,000 gldrs.	801	16	19	77	32	29	87	56	36	18	33	53	*456*
7	Negative Assets		3	4	26	9	5	24	24	14	11	7	14	*141*
	Sample obtained		*73*	*99*	*348*	*162*	*153*	*349*	*352*	*189*	*136*	*118*	*343*	*2,321*

Source: De Vicq and Peeters, 'Introduction'.

Our sampling of the data resulted in a total of 2,321 *Memories* listing over 75,000 assets and liabilities, each of which we coded by hand using the codebook presented in the Appendix. As Table 3.1 shows, the sample obtained is smaller than the one we designed because 466 *Memories* referred to in the summary tables could not be found. These missing *Memories* are

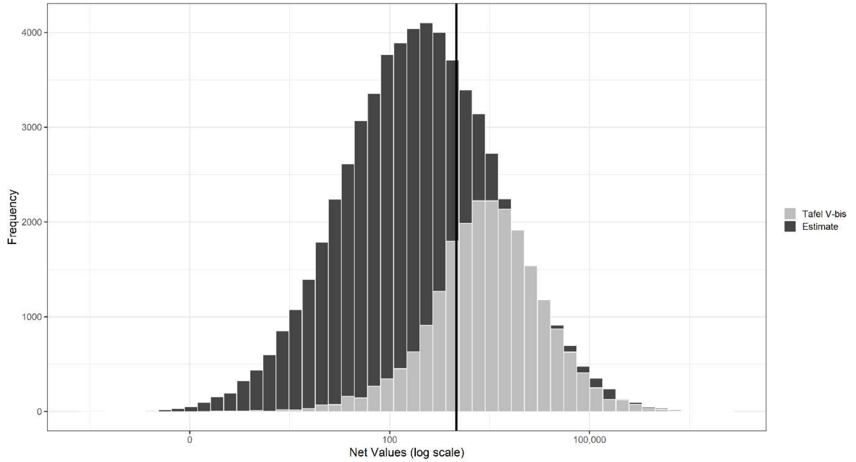
[218] Wilterdink, *Vermogensverhoudingen*.
[219] For a detailed description of this identification, see De Vicq and Peeters, 'Introduction'. The data from the Tafel Vbis is published here: doi:10.24416/uu01-qg9q8b.
[220] Piketty et al. 'Inherited', 25; Peeters and De Vicq, 'Inheritance'.

more or less randomly dispersed over the different wealth classes and provinces, except for the lowest wealth Class 1. We miss 223 decedents there, probably because the estate's value ended up below the 1,000 guilder threshold. Even so our sample does retain 597 *Memories* with a net value below 1,000 guilders, 141 of whom actually owed debts exceeding 1,000 guilders, some of them by substantial amounts. We classified this latter group of 141 estates as a separate Class 7.

Given the long-established, strict administrative procedures we may safely assume that the *Memories* adequately reflect the right tail end of the wealth distribution. If we then assume a lognormal distribution of wealth in the Netherlands in 1921 as stated by Wilterdink and compare the estimated wealth of all persons deceased in that year as taken from the summary tables used by the fiscal authorities with the wealth of the people in our sample, we can estimate how representative in terms of net wealth our sample is for the entire population. Figure 3.A1 shows that the median wealth at death in 1921 of the total population was 300 guilders, while the threshold for assessment was 1,000 guilders (the black line), and the median wealth in our sample stood at 5,000 guilders. Therefore our sample underrepresents estates worth between 1,000 and 5,000 guilders. These estates may have escaped taxation because the heirs understated their value, or else because on final assessment the net value was below 1,000 guilders.[221]

[221] Spousal claims arising out of nuptial agreements and sibling claims issuing from undivided estates could also weigh heavily on an estate and lower its net worth. Medical costs and funeral expenses could indeed exhaust small fortunes. Even in our sample these costs, though mostly around 5-10 per cent of liabilities, they sometimes reached 15, 20 or even 25 per cent, notably in lower wealth categories. This is one reason why the fiscal authorities in 1921 listed in their summary *Tafels V-bis* numerous estates with zero wealth.

Figure 3.A1. The Estimated Wealth Distribution of the Dutch Deceased in 1921 and the Tafel V-bis



Source: De Vicq and Peeters, 'Introduction'.

Appendix B. Code Book

We follow Di Matteo (1997), Lindgren (2002) and Ogilvie et al. (2012) in inferring financial behaviour from the number, value and description of assets and liabilities in the 1921 estates. To achieve that, we wrote a detailed codebook dedicated to teasing out what the estates could show us about the deceased's financial behaviour, though not limited to that sole purpose.

Our identification of different types of assets in the death duty forms follows administrative practice at the time as far as the major categories are concerned: cash, movables, real estate, securities, receivables and liabilities. For the purpose of our investigation, we refine these categories with more specific subdivisions, for instance for local and foreign currencies, domestic and foreign securities, stocks and bonds and specific types of movables related to business or financial transactions. The resulting coding scheme with the total number of items in each category is reported in Table 3.B1, with the exception of receivables and liabilities that are coded in greater detail still in Table 3.B2. In a limited number of cases, the tax administrators only entered the sum total of all assets and liabilities (the 'passive' and 'active'), which we coded separately in order to sort estates that do and do not allow a detailed analysis of descendants' credit transactions.

Table 3.B1: Major Categories Identified in the 1921 Death Duty Forms

Main category	Code	Description	Items
Movables	6.1	Movable goods	2,238
	6.2	Gold and silver	69
	6.3	Business inventories, incl. ships	285
Real Estate	5.1	Houses and land (domestic)	2,623
	5.2	Houses and land (foreign)	9
Cash	4.1	Domestic cash	1,751
	4.2	Foreign currencies	207
Securities	3.1.1	Stock	7,699
	3.1.2	Bonds	12,445
	3.1.3	Other	858
	3.2.1	Stock	1,172
	3.2.2	Bonds	7,387
	3.2.3	Other	657
Receivables	2	[specified in Table 3.A2]	13,102
Liabilities	1	[specified in Table 3.A2]	25,748
Other	7	Balance	514
Unknown	999	Unidentifiable	37
Total			76,801

Half of the 76,801 items listed in our sample of 2,321 death duty forms are credit transactions: 13,102 among the estates' liabilities and 25,748 among the receivables. For each of them, we can distinguish between four main categories, reported in Table 3.B2: short-term credit related to delivery of goods and services, loans registered with notaries, financial sector claims (i.e., banks and insurance companies) and personal loans. Among the liabilities, we identify three additional main categories: medical bills and funeral costs related to a person's passing and fiscal claims issuing from the division of their estate.

Distinguishing between the four major categories is done on the basis of the detailed description of most items and the additional ordering by the tax officials of items under separate headings. Household debts are easily identified through references to specific goods and services, including rent arrears, but also the mentioning of suppliers' names, as well as their systematic grouping together. As for notarial loans, the tax officials and executors of estates simply reported the contents of the official deeds found among the decedent's papers. With our coding, we separate privately contracted loans from (a) peer-to-peer claims related to the execution of the estates (usufruct, bequests, payments on life annuities, attribution of estate shares to different heirs) and (b) equity claims related to the deceased business operations.

Table 3.B2 reports the distinction of financial sector claims in four different categories: besides the bank balances of interest to our analysis of credit institutions, we separately coded bank costs, interests and dividends and insurance and pension claims. We exclude bank costs, interest and dividend payments from our analysis because this would lead to both an overestimation of the number of bank relations (for the related bank account will already be counted) and an overestimation of the mean and median size of bank balances, as costs and interests are typically very small amounts.

Table 3.B2: Major Categories of Liabilities and Receivables

Liabilities	Code	Items	Receivables	Code	Items
Household debts	1.3.1	12,260	Household debts	2.3.1	1,008
Rent arrears	1.3.4	1,386	Rent arrears	2.3.4	2,470
Notarial – mortgages	1.2.1	509	Notarial – mortgages	2.2.1	2,299
Notarial – other loans	1.2.2	79	Notarial – other loans	2.2.2	0
Personal loans	1.3.3	1,184	Personal loans	2.3.3	4,482
Division of estate	1.3.5-7	949	Division of estate	2.3.5-7	160
Business claims	1.3.8	76	Business claims	2.3.8	76
Bank balances	1.5.1	453	Bank balances	2.1.*	1,500
Bank costs	1.5.2	132	Interest, dividends	2.1.3	722
Insurance & pensions	1.5.3	304	Insurance & pensions	2.1.2	357
Funeral costs	1.1.1	1,797			
Medical bills	1.1.2	2,911			
Fiscal claims	1.4	3,708			
Total		25,748	Total		13,102

Table 3.B3 reports the different codes attributed to bank accounts kept with savings banks, cooperative banks, specialised banks, and general banks. Among the latter category we distinguish between general commercial banks, the 'Big Five' branch banks that came to dominate the financial system in subsequent years—*Amsterdamsche Bank(vereniging), Rotterdamse Bank(vereniging), Nationale Bankvereniging, Incassobank, NHM, Twentsche Bank*—and *De Nederlandsche Bank*, whose hybrid status of private commercial bank and state-backed note issuing bank set it apart from the other commercial banks.

Table 3.B3: The Coding of Bank Assets According to Bank Types

Bank Type	Code	Items	Type of Bank	Code	Items
Savings Banks			Specialised Banks		
General savings banks	2.1.4	217	Credit unions	2.1.8	61
Postal savings banks	2.1.5	306	*Postcheque- en Girodienst*	2.1.9	31
Cooperative Banks			Commercial Banks		
Rural cooperative banks	2.1.6	186	General banks	2.1.1	453
Middenstandsbanken	2.1.7	46	'Big Five'	2.1.10	192
			De Nederlandsche Bank	*2.1.11*	8

Finally, to distinguish between different types of bank balances, we added an extra descriptive code to the transactions identified as bank loans (code 1.5.1) and the various types of bank assets (2.1.1 through 2.1.11): Current Account, Mortgage, Deposit, *Prolongatie* and Other. It is worth noting that the mortgages among the bank loans and bank assets were as a legal requirement also registered by notaries.

Chapter 4

Historical Diversity in Financial Intermediation: Co-signatory Lending Institutions in Europe and North-America

Revise and resubmit for publication in *Social Science History*

Amaury de Vicq and Christiaan van Bochove

Abstract: This chapters uncovers a type of small-scale credit institution so far mostly overlooked by existing scholarship: the co-signatory lending institutions (CLIs) that operated in Europe and North America from the 1700s until the 1960s. Like credit cooperatives, CLIs provided small loans to poor households and small businesses. Unlike credit cooperatives, however, CLIs' loans were repaid in weekly instalments (instead of less frequent instalments) and secured by co-signers only (instead of a stronger form of joint liability). Whereas existing literature emphasised that credit cooperatives performed best in small, homogeneous societies, this chapter confirms theoretically and empirically that CLIs performed best in large, heterogeneous societies. Through an extensive literature review, this chapter documents the origins, clientele and lending of CLIs. Based on this overview, it also provides insights for present-day microcredit institutions.

4.1. Introduction

Since its inception in the 1970s, albeit not free of criticism, microcredit has improved access to credit for poor households and small businesses around the globe.[222] By helping them cover setbacks in revenues and expenses and fund investments, microcredit has strengthened the functioning of such households and businesses.[223] While their shared poverty makes the poor a relatively homogeneous group, microcredit institutions nevertheless differ widely in form, operations and success. A flourishing literature has emerged to explain these differences, but analyses are impeded by the (still) short lifespans of microcredit institutions.[224] Consequently, there is still much uncertainty about the circumstances under which a particular institution did or did not work to improve access to credit; further insight into these circumstances can be useful in guiding the microcredit industry towards deciding how to best tailor its services.[225]

Research has therefore turned to historical counterparts for better understanding the effectiveness and perseverance of providers of small loans. The different organisational forms of these lenders were often designed to deal with idiosyncrasies, which makes them interesting analogies for uncovering successful lending formats.[226] Wadhwani labelled this range of credit institutions – on average, small in size and locally embedded – as small-scale credit institutions. This categorisation helps distinguish them from the organisational structure and practices of the commercial banks, investments banks and other large-scale financial intermediaries. Small-scale credit institutions include pawn shops, various rotating saving and credit associations (ROSCAs) and, perhaps most notably, credit cooperatives.[227] Indeed, most of the historical literature has focused on credit cooperatives, especially rural ones. This is understandable, given that even today, rural credit cooperatives, or so-called Raiffeisen banks, are still one of the most enduring and most prevalent forms of organised microcredit in the world.[228]

However, due to the focus on rural credit cooperatives, some scholars have been blind to the historical diversity of financial intermediation. This chapter sets out to uncover one of

[222] Morduch, 'The Microfinance Promise'; Cull et al., 'Financial Performance and Outreach'; Cull and Demirgüç-Kunt, 'Microfinance Meets the Market'; Dichter and Harper, 'What's Wrong with Microfinance?'; Hishigsuren, 'Evaluating Mission Drift'; Mersland and Strøm, 'Microfinance Mission Drift?'; Armendáriz and Szafarz, 'On Mission Drift'; Hermes and Lensink, 'Microfinance'.
[223] Collins et al., *Portfolios of the Poor*.
[224] Cull et al., 'Financial Performance and Outreach'; Cull and Demirgüç-Kunt, 'Microfinance Meets the Market'; Mersland, 'The Governance'; Armendáriz and Szafarz, 'On Mission Drift'; Serrano-Cinca and Gutiérrez-Nieto, 'Microfinance'; Schlossarek, 'The Relevance'.
[225] Collins et al., *Portfolios of the Poor*; Banerjee et al., 'Thy Neighbor's Keeper'.
[226] Caprio and Vittas, 'Financial history'; Mersland, 'The Governance'; Bátiz-Lazo and Billings, 'New perspectives'; Cassis et al., 'General Introduction'; Wadhwani, 'Small-scale Credit Institutions'.
[227] Wadhwani, 'Small-scale Credit Institutions', 192-193.
[228] Hollis and Sweetman, 'Microcredit in Prefamine Ireland'.

these somewhat overlooked small-scale credit institution. Like credit cooperatives, these so-called co-signatory lending institutions (CLIs) were designed to provide small loans to customers, but their loans were repaid in weekly instalments and were secured by co-signers only. The lending mechanism of CLIs was flexible and worked in societies characterised by large differences in wealth and economic structure. These institutions thrived as loan funds in Ireland, Morris Plan banks in the United States, Hebrew free loan societies in Europe, Canada and the United States and, lastly, help banks (*hulpbanken*) in the Netherlands. Many of these institutions were introduced in the early nineteenth century and continued to play an important role in the local financial markets well into the twentieth century.

Unravelling the history of these once important (but now mostly overlooked) institutions warrants further research. This is not only because processes of economic development and urbanisation increased the demand for credit in urban settings from the nineteenth century onwards, but also because urban environments are becoming increasingly important in present-day developing economies. Furthermore, our findings indicate that CLIs relied on social capital instead of tangible collateral in order to secure loans.[229] This allowed them to keep transaction costs low and to balance outreach with sustainability, something with which providers of small loans struggle to this day.[230] Laying bare the development of CLIs may hence offer valuable lessons to contemporary microcredit institutions. This study provides a first contribution to this research agenda by providing an extensive review of the existing scattered literature and by supplementing it with an analysis of the geographical prevalence of CLIs in the United States and the Netherlands. The literature review is confined to countries for which local literatures could be located and read. Thus, it should not be ruled out that CLIs operated under different names in even more locations.

The chapter proceeds as follows. Section 4.2 briefly discusses the literature on credit cooperatives. It then provides an analysis of the co-signatory lending of CLIs and how it differed from the joint liability lending of credit cooperatives. Relying on the economic theory developed by Mushinski and Phillips and echoing earlier work by Ghatak and Guinnane, this chapter hypothesises why the lending model of these CLIs worked better in more heterogeneous, urban settings, while the joint liability model of credit cooperatives worked better in more

[229] Tebbutt, *Making Ends Meet*; Calder, *Financing the American Dream*; Hudson, *Pawnbroking*; Woloson, *In Hock: Pawning in America*.
[230] Engels, 'Mission Drift in Microfinance', 24-25. Engels, 'Mission Drift in Microfinance'; Hermes and Lensink, 'Microfinance'; Cull et al., 'Financial Performance and Outreach'; Dichter and Harper, 'What's Wrong with Microfinance?'; Hishigsuren, 'Evaluating Mission Drift'; Mersland and Strøm, 'Microfinance Mission Drift?'; Armendáriz and Szafarz, 'On Mission Drift'; Hermes and Lensink, 'Microfinance'.

homogeneous, rural settings.[231] Section 4.3 provides empirical evidence for this geographical regularity. The chapter then sets out to uncover the advent of these historically important financial institutions. By looking at their origins, lending model, clientele and incidence, this chapter provides empirical support for the economic theory on the advantages and disadvantages of co-signatory lending compared to joint liability lending. Section 4.4 first discusses the origins of CLIs and traces these back to the early modern period. A link between CLIs operating under different names in different places and times is established as well. Section 4.5 subsequently identifies similarities and differences in the rise, functioning and decline of CLIs. Section 4.6 then documents that CLIs formed an important source of credit to local communities. It shows that despite some local variation, CLIs were remarkably similar in terms of their clients and lending. Finally, Section 4.7 summarises and concludes.

4.2. Credit Cooperatives and Co-signatory Lending Institutions

There is a rich historiography on rural credit cooperatives. Often referred to as Raiffeisen banks after their founder Friedrich Wilhelm Raiffeisen (1818-1888), these institutions were designed in mid-nineteenth century Germany and were frequently copied abroad by rural elites and reformers as a means to improve farmers' lives by giving access to small loans.[232] In the footsteps of Guinnane, several country-specific case studies have studied the rise (or absence thereof) of credit cooperatives, thus encouraging international comparison. Consequently, we now have a relatively good understanding of the regional variance in credit cooperatives, along with equally well-developed insight into how these local differences ultimately impacted their various degrees of success.[233]

Regardless of these regional variations in institutional set-up and performance, [234] most scholars agree that the basic form of cooperatives was remarkably similar. Moreover, the consensus now exists that the key to credit cooperatives' success was that they operated in small, rural communities. This was the case because these institutions relied on social capital to

[231] Mushinski and Phillips, 'The Role of Morris Plan Lending Insitutions'; Ghatak and Guinnane, 'The Economics of Lending'; Ghatak, 'Group Lending'; Guinnane, 'Cooperatives as Information Machines'.
[232] Colvin and McLaughlin, 'Raiffeisenism Abroad', 492.
[233] Ghatak and Guinnane, 'The Economics of Lending'; Guinnane, 'Cooperatives as Information Machines'; Guinnane, 'The Early German Credit Cooperatives'; Guinnane, 'A Failed Institutional Transplant'; Colvin and McLaughlin, 'Raiffeisenism Abroad'; Colvin, 'Banking on a Religious Divide'; Nath, 'Find Raiffeisen'.
[234] Irish credit cooperatives for instance were shown to differ from their German counterparts in two important ways. One, in contrast to the German variant, the Irish one relied less on deposits. Two, the Irish cooperatives never set up strong apex federations that provided essential guidance to German credit cooperatives. Colvin and McLaughlin have even argued that German, Irish and Dutch cooperatives performed different financial functions. See Guinnane, 'A Failed Institutional Transplant'; Colvin and McLaughlin, 'Raiffeisenism Abroad'.

overcome the information asymmetries between lenders and borrowers. This worked best, these studies argued, when institutions operated in small, tight-knit and stable communities where people knew a great deal about one another.[235] Rural cooperatives, often considered to be one of the first institutions to develop the principle of small-scale joint liability lending, thrived in this setting and have often served as a source of inspiration for studies on microcredit institutions in contemporary developing countries.[236] Consequently, the microeconomic mechanisms that enabled credit cooperatives to successfully provide small loans in rural settings have also been the focus of extensive research.[237]

By contrast, urban credit cooperatives, usually in the lesser-known form of Schulze-Delitzsch banks, have received much less scholarly attention. This is most likely because these institutions were often less successful than their rural counterparts in reducing poverty through access to credit.[238] Echoing a frequently raised criticism on today's microcredit industry, the urban cooperatives' failure is sometimes ascribed to them resolving the trade-off between financial sustainability and outreach with mission drift: to raise revenues, they increasingly reached out to wealthy clients at the expense of poor ones.[239] Consequently, they were more akin to commercial banks, relying less on joint liability and screening by peers and more on traditional lending practices, in particular the use of collateral.[240] Furthermore, the studies that have focused on urban credit cooperatives have shown that they engaged in overly buoyant lending practices. In the Netherlands, for instance, such mismanagement resulted in the failure of approximately 30% of these institutions (*middenstandsbanken*) during the financial crisis of the 1920s.[241]

The fact that credit cooperatives were more successful in the countryside than in cities may explain why an important alternative to cooperatives has so far been largely overlooked.[242] This chapter identifies this alternative as so-called CLIs and shows that they effectively reached out to the urban poor without succumbing to mission drift. Much like credit cooperatives, there existed regional variation in the set-up and functional performance of these institutions, the details of which will be carefully reviewed in the subsequent Sections. CLIs differed mostly in

[235] Ghatak and Guinnane, 'The Economics of Lending'.
[236] Armendáriz and Morduch, *The Economics of Microfinance*.
[237] Banerjee et al., 'Thy Neighbor's Keeper'; Ghatak and Guinnane, 'The Economics of Lending'; Guinnane, 'Cooperatives as Information Machines'; Suesse and Wolf, 'Rural transformation'.
[238] Engels, 'Mission Drift in Microfinance',24-25.
[239] Hermes and Lensink, 'Microfinance'.
[240] Guinnane, 'The Early German Credit Cooperatives'; Banerjee et al., 'Thy Neighbor's Keeper'; Guinnane, 'Regional Organization'; Chapter 5 of this PhD-manuscript.
[241] Colvin, 'Organizational Determinants'.
[242] This paper defines 'countryside' as small, homogeneous societies, and 'cities' as large, heterogeneous societies.

the extent to which they were either philanthropic or for-profit, with Hebrew free loan societies on the one side of the spectrum and Morris Plan banks on the other. This translated itself into differences in the price of loans and the way in which these institutions were funded.[243] Similar to credit cooperatives, however, the basic form of CLIs exhibits enough commonalities that justifies a stylised characterisation. Four core features stand out in this regard.

First, CLIs were specifically designed to issue small-scale loans, often with the explicit social agenda of helping poor households to raise their incomes through productive investments. The propagators of these institutions fully realised that the challenge resided in how such loans could be provided efficiently to those who could not rely on incumbents. Private credit markets and pawnshops, for instance, had been in existence for centuries, but both had their shortcomings: the former because homogenously cash-strapped groups found it difficult to find counterparty; the latter because of their reliance on collateral that not everyone might possess or could do without. As existing commercial banks almost exclusively targeted the wealthy middle and upper classes, credit markets were often characterised by a lacuna that CLIs attempted to fill.[244] Second, CLIs attempted to address the inherent information asymmetry of small-scale lending and the resulting market failures by being deeply embedded into the local community. Relying on their social connections, the staff running and managing credit allocation were able to garner the necessary information on their clientele to reduce information asymmetries. Furthermore, because these institutions were often at least in part run by volunteers, they were able to keep transaction costs low. Third, while loans were granted for a relatively long period of time, usually one year, they had to be repaid in weekly instalments. Clientele which repaid the loans in time were rewarded, while those who failed to do so were fined. This system served as an additional mechanism to keep their borrowers in check and effectively reduced moral hazard. Fourth, and on top of this, CLIs secured their loans by requiring at least two co-signers. Since co-signing involved the possibility of a real economic loss to co-signers in case borrowers defaulted, co-signers with positive net wealth would only accept this risk if they believed loan applicants to be trustworthy and likely to repay loans. As such, co-signing provided an effective signalling function, further reducing adverse selection and moral hazard. This in turn made screening, monitoring and enforcing easier and cheaper for lenders.[245]

[243] See Table 3.1.
[244] See, for instance, Capie and Collins, 'Industrial Lending'; Jonker, 'Spoilt for Choice'.
[245] Banerjee et al., 'Thy Neighbor's Keeper'; Ghatak and Guinnane, 'The Economics of Lending'; Guinnane, 'Cooperatives as Information Machines'; Mushinski and Phillips, 'Morris Plan Banks'; Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions'.

Evidently, CLIs were not the sole financial institution which relied on co-signers to secure its loan. Peer-to-peer lending secured through collateral or co-signing was very common in pre-industrial societies. In large and developed credit markets, like eighteenth-century Amsterdam, for instance, such loans were so frequently made that local bookshops sold pre-printed forms for recording them.[246] Co-signing was also a common practice in accommodation papers and in endorsing bills of exchange. More traditional financial institutions, such as privately run commercial banks, often relied on co-signing as well, but often did so in combination with more tangible collateral.[247] Unlike CLIs, these banks also targeted wealthier clientele, provided much larger loans and did not receive scheduled, weekly repayments. Furthermore, in most of their loans, credit cooperatives also relied on co-signing, but on top of this, cooperatives also imposed joint liability on all their members.[248]

Indeed, compared to rural credit cooperatives' joint liability lending model, CLIs relied on the simpler co-signatory model. According to Mushinski and Phillips, the credit cooperatives' practice essentially involved a broader group of co-signers in the aforementioned process of assortative matching.[249] In case of default, members of a cooperative not only faced social sanctions from a broader and more diverse group, they also stood to lose economically through their share in the cooperatives' capital and the deposits they may have held there. As both of these channels improved cooperatives' ability to select trustworthy borrowers, they could offer their members better loan conditions and, in some cooperatives, dividend payments. In a context where people could impose a wider variety of economic and extra-economic sanctions on one another, this was evidently more effective.

Joint liability thus offered real benefits to actual and potential members, but also imposed a risk. Risk-averse individuals were of course only willing to accept the joint liability risk that came with membership of a cooperative when they personally knew the other members, could assess the nature of the investments they planned and were able to punish bad behaviour.[250] Consequently, not only would joint liability lending in an urban context (where actual and potential members had less knowledge of each other's customs and abilities) be less effective; it would also be less desirable.[251] To put it in layman's terms, individuals with next to nothing in common would simply not be willing to rely on mutuality: the risks would exceed the benefits. This may explain why the existing evidence indicates that the joint liability lending

[246] Van Bochove and Kole, 'Uncovering Private Credit Markets'.
[247] Capie and Collins, 'Why did Bank Refuse Loans?'; Galassi and Newton, 'My Word is My Bond'.
[248] Ghatak and Guinnane, 'The Economics of Lending'; Guinnane, 'Cooperatives as Information Machines'.
[249] Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions'.
[250] Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions', 132-137.
[251] Guinnane, 'Regional Organizations', 254.

model of urban cooperatives was less effective than that of their rural counterparts and why these urban institutions were comparatively less successful in reaching out to the poor.[252] It may also explain why co-signatory lending can be a preferred choice in a more urbanised context compared to joint liability.

Table 4.1 summarises some of the main findings of this section by providing a stylised overview of the core attributes of rural credit cooperatives and CLIs. For the sake of completeness, urban credit cooperatives and pawnshops are also included in this comparison.

Table 4.1: Stylised Characteristics of Cooperatives, Co-signatory Lending Institutions and Pawnshops [253]

	Rural credit cooperatives	Urban credit cooperatives	Co-signatory lending institutions	Pawnshops
Enterprise form	Cooperative	Cooperative	Society	Society
Liability / lending model	Joint liability (Co-signatories, property)	Often limited liability (traditional banking model)	Co-signatory lending	Pawn loans
Duration	Medium- and long-term (up to 10 years or more)	Short-term (90 days)	Medium-term (up to 2 years)	Short- to medium-term (up to 1 year)
Loan size	Medium	Large	Small	Very small to small
Capital	Deposits	Equity	Varied	Equity
Active in	Rural	Urban	Mostly urban	Mostly urban

4.3. The Locations Of Co-signatory Lending Institutions

The most active Hebrew free loan societies in the United States and Canada could be found in urban centres such as Boston, Chicago, Montreal, New York and San Francisco. As their economies developed and industrialised, the populations of these cities grew rapidly and this created a demand for credit among consumers and producers alike. This is not to say, however,

[252] See Guinnane, 'The Early German Credit Cooperatives', 84; Banerjee et al., 'Thy Neighbor's Keeper', 495-497; Guinnane, 'Regional Organization', 254.
[253] Source: see text. Based on the schema used in Hollis and Sweetman, 'Microcredit in Prefamine Ireland'; Colvin and McLaughlin, 'Raiffeisenism Abroad'; Colvin et al., 'The Origins'.

that Hebrew free loan societies could not be found outside the centres of industry, commerce, finance and transportation. Jewish CLIs were also established in smaller and more close-knit communities such as Altoona (Pennsylvania; 38,973 inhabitants), Elmira (New York; 35,672 inhabitants), Lafayette (Indiana; 18,116 inhabitants) and Shreveport (Louisiana; 16.013 inhabitants).[254]

The aforementioned also applied to the Morris Plan banks. As they were for-profit CLIs, however, their distribution provides a purer insight into the economics of establishing CLIs. Herzog's list of all 115 cities that had one or more Morris Plan banks in 1926 is a good starting point for analysing this. Table 4.2 combines these data with population figures from the 1920 census. What immediately stands out is the positive relationship between population size and Morris Plan bank incidence. All cities with more than one million inhabitants had a Morris Plan bank and all but one city with 500,000-1,000,000 inhabitants. Only some of the larger cities had more than one office and in rural communities and very small cities they were virtually absent. This point was not missed by Herzog, who commented that Morris Plan banks were present in most of the leading manufacturing cities, but absent where industrial development or favourable state law were lacking.[255] Population size and economic development were of course closely related, but combined they generated a substantial demand for credit from people in particular types of occupations.

Table 4.2: Morris Plan Banks (1926) and Population Sizes of All US Cities (1920) [256]

Inhabitants	Cities (N)	Morris Plan banks (N)	Cities with Morris Plan bank (%)
1,000,000≤	3	3	100.0%
500,000-1,000,000	9	8	88.9%
100,000-500,000	56	36	64.3%
50,000-100,000	76	30	39.5%
25,000-50,000	143	19	13.3%
10,000-25,000	459	11	2.4%
<10,000	14.946	8	0.1%

[254] Tenenbaum, *A Credit to Their Community*; Bureau of the Census 1901, 447, 454, 464, 471.
[255] Herzog, *The Morris Plan of industrial banking*, 77-82.
[256] Source: Herzog, *The Morris Plan of industrial banking*, 78-81; Bureau of the Census 1921, 50,178-319.

Data on help banks in the Netherlands corroborate the predominantly urban incidence of CLIs. Table 4.3 mirrors Table 4.2. Here too, it stands out that in large cities, help banks were well-represented. In smaller cities, they were all but absent. Given that help banks, like the other aforementioned CLIs, mainly targeted the labouring and lower middle classes and benefited from the philanthropic activities of well-endowed local elites, both of whom were more concentrated in urban areas, this trend is not that surprising.

The Irish loan funds deviated from the above pattern in that they not only flourished in urban areas, but also in rural ones.[257] What exactly was responsible for the latter is unclear, but it may be that Ireland's economic underdevelopment and poverty had to do with it. Poor farmers without sufficient assets possibly substituted credit secured by reputation (i.e., co-signed loans) for credit secured by assets (i.e., collateralised loans). CLIs may well have been their sole recourse to credit. By taking deposits and by providing small loans, the early rise of loan funds seems to have contributed to the floundering of credit cooperatives. The latter were introduced in Ireland relatively late and never became as successful as elsewhere in Europe.[258]

Table 4.3: Help Banks (1909) and Population Sizes of All Dutch Cities (1920) [259]

Inhabitants	Cities (N)	Help banks (N)	Cities with help banks (%)
100,000≤	4	4	100.0%
50,000-100,000	7	6	85.7%
25,000-50,000	14	10	71.4%
10,000-25,000	51	23	45.1%
5,000-10,000	134	11	8.2%
1,000-5,000	667	9	1.4%
<1,000	437	1	0.2%

[257] Guinnane, 'A Failed Institutional Transplant'; 'McLaughlin, 'A Note on Mutual Savings and Loan Societies'; Colvin and McLaughlin, 'Raiffeisenism Abroad'.
[258] The parish savings banks discussed by Guinnane and Henriksen in 'Why Danish Credit Co-operatives Were so unimportant' played a similar role in Denmark.
[259] Source: Centraal Bureau voor de Statistiek, Boonstra, '*Historische Database Nederlandse Gemeenten*'.

4.4. The Origins Of Co-signatory Lending Institutions

The earliest traces of CLIs are available for Jewish communities, such as Amsterdam's Sephardim, who established the Honen Dalim loan society in 1625. Guided by religious principles, the society charged no interest on its loans. Although the society initially provided small loans on collateral only, it later also offered co-signed loans.[260] This likely started before 1739, the year in which London's Sephardim – who copied most of their practices and institutions from Amsterdam – first discussed the establishing of a CLI.[261] The Amsterdam CLI survived the hand of time, and during the 1850s there even were two Jewish CLIs in Amsterdam: one for the Sephardim and the other probably for the Ashkenazim. At this time, Jewish CLIs also existed in Arnhem, Groningen, Leeuwarden and The Hague. They were all funded by gifts and members' contributions and they were considered the philanthropic version of the secular help banks discussed below.[262]

The Ma'asim Tovim society, the first CLI established by the London Sephardim, was founded in 1749 and was funded through gifts and members' contributions. It provided interest-free loans of up to £5 for productive purposes. Loans were secured by co-signers or collateral and instalments had to be made regularly. Those who defaulted on their loans were excluded from receiving charity (*sedaca*).[263] During the nineteenth and twentieth centuries, very similar institutions operated across England. The Jewish Board of Guardians in London and Manchester are examples of this.[264] In Manchester, immigrants from Eastern Europe also established the Russian Jews' Benevolent Society (1905) – renamed into Manchester Jews' Benevolent Society in 1911 – for providing exactly the same type of loans.[265]

Jewish communities also founded CLIs based on the same motivation and principles in Germany, Poland and Russia.[266] The first German CLI was established in Landsberg an der Warthe (now Gorzów Wielkopolski in Poland) in 1813 and a second CLI followed in Hamburg in 1816.[267] The fact that the founder of the Hamburg CLI (*Vorschuss-Institut*) was born in Zirke (now Sieraków in Poland), situated at only 60-70 kilometres from Landsberg, could suggest that Jewish CLIs already thrived in Eastern Europe. During the twentieth century, and especially

[260] Da Silva, *Geschiedenis der Portugeesche Joden*; Bernfeld, *Poverty and Welfare*.
[261] Lieberman, 'New Practices of Sedaca'; Lieberman, 'Few Wealthy and Many Poor'.
[262] 'Onze Hulpbanken'; Fokker, 'Voorschot-vereenigingen – Hulpbanken'.
[263] Lieberman, 'New Practices of Sedaca'; Lieberman, 'Few Wealthy and Many Poor'.
[264] Lipman, *A Century of Social Service*; Black, *The Social Politics of Anglo-Jewry*; Godley, 'Jewish soft loan societies'.
[265] Liedtke, *Jewish Welfare in Hamburg and Manchester*; Liedtke, 'The Uses of Benevolence'.
[266] Tenenbaum, *A Credit to Their Community*.
[267] A similar but short-lived Christian institute was founded in Hamburg in 1796, but Hamburg Jews do not seem to have taken their inspiration from it.

during the interbellum, Jewish communities continued to establish CLIs (*Darlehenskasse*) in Germany.[268]

Once the Jewish diaspora from Eastern Europe reached North America, they established their CLIs there as well. As immigrants, most Eastern European Jews had little collateral for securing the small loans they regularly needed. Loans by family and friends were often unavailable or insufficient, whereas loans from pawnshops or loan sharks were expensive, and loans from commercial banks were inaccessible because loan applicants were too poor and did not speak the language.[269] The first Hebrew Free Loan Society (*hevrot gemilut hasadim*) was established in Pittsburgh in 1887, and hundreds of similar societies in large and small communities across the United States would follow. They were typically operated by volunteers, and by 1927 there were over 500 of them.[270] The most important of these, the Hebrew Free Loan Society of New York, was founded in 1892 by immigrants from Vilnius (then part of Russia). From its foundation until 1940, this society provided $32.7 million in over 671,000 loans. From 1920 onwards, it regularly distributed over $1 million in loans per annum.[271] Inspired by their success in Europe and the United States, Hebrew free loan societies were also adopted in Montreal (Canada) in 1911. This first Jewish CLI in Canada lent almost $100 million to over 90,000 people.[272]

It is not unlikely that another major American CLI – the Morris Plan bank – found its origin in these Hebrew free loan societies. The Morris Plan bank, established in 1910 by Norfolk (Virginia) lawyer Arthur J. Morris, became America's leading provider of small loans secured by co-signing.[273] Relying primarily on time deposits and deposits obtained by selling instalment certificates to borrowers, the 109 Morris Plan banks together lent about $220 million in 1931.[274] A

[268] 'Bericht über das Vorschuß-Institut der Allgemeinen Armenanstalt'; Segall, 'Arbeiter-Kolonie'; Nathan, *Das Israelitische Vorschuss-Institut in Hamburg;* '10 Jahre jüdische Darlehnskasse in Berlin'; Liedtke, *Jewish Welfare in Hamburg and Manchester;* Liedtke, 'The Uses of Benevolence'; Fischer, 'Verfolgung, Selbsthilfe, Liquidation'; Schwarz, 'Das Israelitische Vorschuss-Institut in Hamburg von 1816'; Kreutzmüller, 'Jewish Credit Cooperatives in Berlin'.

[269] Day, 'Credit, capital and community'.

[270] Tenenbaum, 'Immigrants'; Tenenbaum, 'Culture and Context'; and Tenenbaum, *A Credit to Their Community* provide an elaborate overview of Hebrew free loan societies in the United States. Joselit, *Lending Dignity* and Godley, 'Jewish soft loan societies' discuss the Hebrew Free Loan Society of New York. Adelman, 'Hebrew Free Loan Association'; Rosen, 'The Gemiloth Chasodim of Rhode Island', Segal, 'Gemilath Chese'; Eisinger, 'A Brief History', Horvitz, 'The Jewish woman liberated', Pitterman, 'The Hebrew Free Loan Association'; Light, 'A Brief History'; Pollack, 'Communal Self Help' and Pollack, 'The Jewish Free Loan Societies' provide case studies of smaller societies.

[271] Tenenbaum, *A Credit to Their Community.*

[272] Guttman, 'The Hebrew Free Loan Association'; Taschereau, 'Les sociétés de prêt juives à Montréal'; Taschereau, 'Échapper à Shylock'.

[273] Herzog, *The Morris Plan of industrial banking*, 19-21, 60-64; Saulnier, *Industrial Banking Companies*, 72-83; Barron, 'Pathways to Legitimacy'; Mushinski and Phillips, 'Morris Plan Banks'; Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions'; Shepelwich, *Remedial Loan Association;* Barth et al., 'Industrial Loan Companies'.

[274] Mushinski and Phillips, 'Morris Plan Banks'; Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions'.

few years after establishing the Morris Plan bank, Morris was taken to court by his former client David Stein, who claimed to have originated the CLI's idea in 1898. Relevant for this chapter is that the evidence presented in court revealed that Stein became familiar with the lending format in Russia.[275] Given that Hebrew free loan societies also flourished there, it is plausible that Stein copied their lending format.[276] However, Stein and Morris did make one crucial alteration, that being turning their CLI into a for-profit company by charging interest. The latter was discounted up front, which – together with the weekly instalments – meant that the advertised interest rates were much lower than the annualised percentage rates of 16-19%.

Another strand of CLIs found their origin during the 1720s with Jonathan Swift, author, and Dean of St. Patrick's Cathedral in Dublin. According to his biographer Thomas Sheridan, Swift set out making loans 'to poor industrious tradesmen in small sums of five and ten pounds, to be repaid weekly, at two or four shillings, without interest'.[277] The sources cited by McLaughlin suggest the Italian and Dutch pawnshops to have been Swift's source of inspiration.[278] A connection with these institutions seems unlikely, though, as they provided interest-bearing loans, secured by collateral and repaid without weekly instalments.[279] In contrast, the striking similarities with the Hebrew free loan societies' practices – two co-signers, interest-free loans and weekly instalments – make it tempting to conclude that Swift, just like Stein and Morris, was inspired by these Jewish small-loan credit institutions.

While Swift still provided his loans on a peer-to-peer basis, the Dublin Musical Society was the first to institutionalise this practice in Ireland in 1747. Relying on the revenues of its concerts, this society offered interest-free loans to the poor. Other institutions followed the Musical Society's example, but only during the first half of the nineteenth century did the number of CLIs start to increase considerably. There then existed three types of Irish CLI: loan fund societies and reproductive loan funds could be found in the countryside, whereas friendly

[275] 'Universal Sav. Corp. v. Morris Plan Co. of New York et al.'; Trumbull, *Consumer Lending in France and America.*

[276] 'Injunction sought against the Morris plan' suggested that Morris Plan banks were modelled after the German Schulze-Delitzsch credit cooperatives, the urban counterpart of the Raiffeisen cooperatives. However, this seems unlikely because this does not explain where the use of weekly instalments came from or where the cooperatives' reliance on joint liability went.

[277] Sheridan, *The Life of the Rev. Dr. Jonathan Swift*, 234.

[278] McLaughlin, *Microfinance institutions in nineteenth century Ireland.*

[279] Bindon 1729; [S.] Madden 1816 (the 1738 edition could not be consulted). The fact that [R.R.] Madden 1857 could not be consulted is offset by the fact that Madden was interviewed by a parliamentary committee. Questions 6-10 in 'Report from the select committee on Loan Funds Societies (Ireland)' show that Madden was unaware of the origin of the Irish CLIs, which he merely 'presume[d]' to have been the Italian and Dutch pawnshops. It is also unlikely that Swift based himself on the system of cash credit introduced by the Royal Bank of Scotland in 1729. This introduction seems too late, and while cash credit was also secured by two co-signers, it mimicked the collateralized loans of pawnshops in bearing interest and lacking weekly instalments. See Roodman, *Due Diligence.*

society loan funds could be found in cities.[280] The loan fund societies were the most numerous of the three, and during the early 1840s, a total of 553 of them operated across Ireland. In 1840, they combined for £474,538 in 130,044 loans.[281] The nineteenth-century loan funds differed from Swift's model in two ways: they obtained about 90% of their funding through deposits, and they charged interest. Interest was discounted upfront, just as in the case of the Morris Plan banks, and the annualised percentage rate averaged about 11.3%. As loan funds reduced their operating costs by relying on the labour of unremunerated local elites, their annualised percentage rates fell between those of the Hebrew free loan societies and the Morris Plan banks.[282]

It was these rural Irish loan fund societies that Dutch philanthropists turned to during the late 1840s when looking for ways of providing credit to industrious people without much capital (*minvermogenden*) in the Dutch cities. Through an article in the French journal *Annales de la Charité* of 1847, the philanthropist W.H. Suringar became aware of these funds. He subsequently propagated their introduction in the Netherlands, going so far as to also propose statutes for the Dutch equivalents. Inspired by Suringar's plea, the first help bank was established almost immediately. Dozens more followed, and by the early twentieth century, around 150 help banks operated across the Netherlands. Like their Irish counterparts, Dutch help banks discounted interest up front with rates of 3-5% or an annualised percentage rate of 6.0-10.3%. Contrary to the Irish loan funds, which relied heavily on deposits, the Dutch help banks primarily relied on equity and, when necessary, loans. They probably kept from collecting deposits because dozens of savings banks across the Netherlands were already in this business.[283] Besides, local elites were large and wealthy enough to buy low-denomination shares. This, along with the retained earnings generated by their profitability, allowed the help banks to attain an equity to assets ratio of over 90% by 1910.[284]

280 Urban loan societies also existed in England and Wales. See 'A guide to the loan societies of London'; Lemire, *The business of everyday life*.

281 Hollis and Sweetman, 'What Can we Learn from the Past?'; Hollis and Sweetman, 'Microcredit in Prefamine Ireland'; Hollis and Sweetman, 'The life-cycle of a Microfinance Institution'; Hollis and Sweetman, 'Microfinance and Famine'; Hollis, 'Women and Micro-credit in History'; McLaughlin, *Microfinance institutions in nineteenth century Ireland;* McLaughlin, 'A Note on Mutual Savings and Loan Societies'; Goodspeed, 'Microcredit and Adjustments to Environmental Shock'; Goodspeed, *Famine and Finance;* Goodspeed, 'Environmental Shocks and Sustainability'; McLaughlin and Pecchenino, 'Ireland's Peculiar Microfinance Revolution'.

282 Hollis and Sweetman, 'Microcredit in Prefamine Ireland'; Hollis and Sweetman, 'The life-cycle of a Microfinance Institution'.

283 In order to smooth out lending, help banks did initially borrow from their directors and local savings banks. See also Dankers et al., *Spaarbanken*.

284 De Vicq and Van Bochove, 'Lending a Hand'.

4.5. The Rise And Fall Of Co-signatory Lending Institutions

While CLIs thus had earlier roots than the credit cooperatives, they tended to thrive in Europe and North America during the nineteenth and twentieth centuries, just as did the credit cooperatives. Changes in the demand for as well as the supply of small loans played a role in this. Demand for small loans had of course always existed as pre-industrial societies counted many self-employed manufacturers and shopkeepers in addition to ordinary labourers with low and irregular incomes. However, as social and economic modernisation changed the scale and structure of cities during the nineteenth century, the social networks that had traditionally supported urban credit markets came under pressure. While these networks consequently struggled to mobilise sufficient peer-to-peer lending, regular financial institutions did not replace them or only offered credit at high costs.[285]

It is here that CLIs, some of them driven by religion, a social mission and/or more practical reasons, changed the supply side.[286] The Hebrew free loan societies, referring back to Scripture, provided interest-free loans, but usually within Jewish communities only. Social reformers, inspired by the new ideas of scientific philanthropy, underlined the importance of reducing pauperism by helping people help themselves. Scientific philanthropists did not consider poverty the result of poor morality, but rather the result of market failures. They therefore emphasised the importance of encouraging the underprivileged to rely on their own resourcefulness; handouts were considered degrading and were blamed for perpetuating poverty by encouraging dependency. In contrast, reproductive loans promoted self-respect and responsibility and encouraged discipline and thrift among the borrowers who had to repay them.[287] The semi-philanthropic Irish loan funds and Dutch help banks intended to provide such loans. They charged interest—after all, they had to break even—but were not profit-oriented.[288] They provided loans regardless of religion, but they kept interest rates low through the unremunerated labour provided by the social reformers who operated them.

The Morris Plan banks took this one step further by turning co-signatory lending into a for-profit business. While Morris Plan banks could also lend to large parts of society, their

285 Johnson, *Saving and Spending*; O'Connell, *Credit and Community*.

286 McLaughlin and Pecchenino, 'Ireland's Peculiar Microfinance Revolution' argue that taxation (i.e., the poor law) stimulated the establishment and activity of Irish loan fund societies.

287 Tenenbaum, *A Credit to Their Community;* Shepelwich, *Remedial Loan Association;* De Vicq and Van Bochove, 'Lending a Hand'.

288 Inspired by the principles of scientific philanthropy, some Hebrew free loan societies diverged from Jewish culture by charging interest. Advocates of this practice considered providing convenient access to loans and allowing them to be repaid in weekly payments a great help in itself already. Interest-free loans, they believed, only degraded a self-respecting man by giving him something for free. See Tenenbaum, *A Credit to Their Community*.

interest rates were higher, as they could not rely on unremunerated workers. The Morris Plan banks' success also exposed a controversy inherent in for-profit lending of small sums. Supporters of the credit cooperative movement, for instance, criticised the Morris Plan banks for making a profit for outsiders instead of their client.[289] It has also been noted that the Morris Plan banks, like the help banks in the Netherlands, advertised discounted interest rates which concealed that annualised percentages rates were higher.[290] Whatever one makes of this, the Morris Plan banks' annualised percentage rate of 16-19% compared well to the rates of pawnshops and loan sharks, which could reach as high as 300%.[291] The success of the Morris Plan banks thus provides testimony to the effectiveness of CLIs in solving the problems inherent to the business of providing small loans.

Given that CLIs thrived under similar circumstances, it is not all that surprising that their eventual decline also shared several commonalities. Four of these can be discerned. First, economic development reduced the demand for small loans. The consolidation of stores and workshops transformed a demand for small loans previously provided by CLIs into a demand for large loans and equity that other suppliers of funding could better provide. Stable jobs with higher and more regularly paid wages likewise reduced the need for small emergency loans among labourers, but increased their demand for other financial products such as savings accounts and loans for durable consumer goods.[292] Second, the rise of the welfare state after World War II provided new solutions to the problems that small loans often sought to remedy. While unemployment benefits and old-age pensions helped mitigate reductions of income, the effects of unexpected shocks to expenditure were tempered by health insurance.[293] Combined, these measures reduced the need for the small loans typically provided by CLIs. Third, new technologies reduced the transaction costs of banks, which helped them become better and more competitive in small-loan lending. As rising wages helped banks to attract more clients, the creation and storage of financial transaction data increasingly enabled banks to build records of the financial behaviour of their clients.[294] This facilitated a shift from relationship-based lending to transaction-based lending, which was further stimulated by the introduction of computer technologies after World War II. As these technologies were subject to economies of scale, banks gradually obtained further cost advantage over their competitors.[295] This, then,

[289] Roodman, *Due Diligence*.
[290] Guinnane, 'The Early German Credit Cooperatives'; De Vicq and Van Bochove, 'Lending a Hand'.
[291] Calder, *Financing the American Dream*, 48.
[292] Calder, *Financing the American Dream*; Deneweth et al., 'Microfinance'; Boter and Gelderblom, 'The Dynamics of Inclusive Finance'.
[293] Lindert, *Social Spending and Economic Growth*.
[294] Lauer, *Creditworthy*.
[295] Berger and Udell, 'A more complete conceptual framework for SME finance'.

better enabled banks to provide new forms of credit – such as the credit card – and provide some of the loans previously provided by CLIs.

CLIs across Europe and North America responded similarly to the challenges posed by these developments. One of their responses was to start offering new types of credit, such as consumer loans, student loans and mortgages.[296] However, CLIs dipping their toes in this market faced fierce competition and more often than not saw their number of clients dwindle due to almost exponential growth of instalment credit from the 1920s onwards. This 'tidal wave' of retail instalment credit aligned with an increase in demand for durable consumer goods, such as automobiles, furniture, washing machines and vacuum cleaners.[297] Starting with car manufacturers, other companies soon followed suit, and by the 1930s virtually all retailers of durable goods had developed their own time payment credit system.[298] Realising they were fighting an uphill battle, many CLIs had closed their doors by the late 1960s, and those that continued to operate did so more as remnant of a bygone age than as key providers of small loans--a point not missed by other researchers.[299]

4.6. Lending Practices Of Co-signatory Lending Institutions

While the foregoing showed that there existed some differences in how CLIs across Europe and North America were funded, it is more noteworthy that they not only shared lending methods (with co-signers, weekly instalments and relatively low annualised percentage rates) but also the developments that influenced their rise and decline. This section takes a closer look at CLIs' lending practices to determine the extent to which their clients and the borrowing behaviour of these clients were also similar.

What stands out at most CLIs is the diversity of the borrowers' occupations. The Hebrew Free Loan Society of New York (1914), for instance, listed 138 occupations in its annual report for 1914. In general, about one-third of Hebrew free loan societies' borrowers consisted of artisans and other labourers. The other two-thirds consisted of storekeepers, peddlers, jobbers, contractors, butchers, teachers, booksellers and farmers, among others. While borrowers were

[296] The Hebrew free loan societies could also substitute recently immigrated Jews for clients who no longer required small loans. However, this applied less to other CLIs. See Joselit, *Lending Dignity*; Tenenbaum, *A Credit to Their Community*.
[297] Calder, *Financing the American Dream*.
[298] By then, instalment credit financed the sales of 60-75% of automobiles, 80-90% of furniture, 75% of washing machines, 65% of vacuum cleaners, 18-25% of jewellery, 75% of radio sets, and 80% of phonographs. See Calder, *Financing the American Dream*, 201.
[299] Tenenbaum, 'Culture and Context'; Guttman, 'The Hebrew Free Loan Association'; Jacobs, *Het lenen van geld is geen schande*; Taschereau, 'Les sociétés de prêt juives à Montréal'; Taschereau, 'Échapper à Shylock'; Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions'.

mostly of (Eastern European) Jewish origin, more than 15% of all loans were granted to non-Jews.[300] Loans were usually made for productive purposes, such as starting, continuing or expanding a business, but sometimes they were also used for financing personal expenditures.[301] It is important to note here that imposing a present-day, clear-cut distinction between producer and consumer credit to the past is somewhat of an anachronism. The vast majority of businesses were one-man enterprises, and there was hardly any separation between personal and business capital. Many goods and machinery funded with borrowed money served both productive as well as consumptive means. Conversely, loans aimed for consumption-smoothing purposes could be used to free-up capital, thus serving more productive investments.[302]

The main clients of the Irish loan funds were small farmers, weavers, spinners, dealers and labourers. Their loans typically were productive as well, and projects included the purchase of dairy cows, pigs, sheep, tools or inventory. However, loans were also used to pay for rent or to purchase food in bulk.[303] Borrowers who most commonly used the Dutch help banks were labourers, sales workers (in particular small merchants, grocers and shopkeepers) and, more generally, farmers or agricultural workers. A case study of the Nijmegen help bank identified around 200 occupations in loans made during the period 1871-1939. Approvable credit applications included but were not limited to the purchase of basic machinery (e.g., sewing equipment), fuel (e.g., coal and peat), raw materials needed to create manufactured goods (e.g., cloth and leather) or final goods which could be sold at a profit. Sometimes, loans were used to purchase shop inventories (e.g., fruit and vegetables) in bulk and in rare occasions even to pay for rent arrears, tuition fees and bail.[304]

Morris Plan banks likewise lent to borrowers in a wide range of occupations. For example, the Morris Plan bank of Detroit observed over 400 different occupations among its borrowers in 1926. Morris Plan bank borrowers primarily were low- and middle-income individuals who could not obtain loans from commercial banks. Reports of the Morris Plan Company of New York reveal that, during the first eight months after its establishment, borrowers were mostly clerks, state officials, salesmen and bookkeepers. More mature Morris Plan banks and such CLIs in other cities – where government jobs were less common – seem to

[300] Guttman, 'The Hebrew Free Loan Association of Montreal'.
[301] Tenenbaum, 'Culture and Context'.
[302] Lemercier and Zalc, 'For a New Approach to Credit Relations'.
[303] Hollis and Sweetman, 'Microcredit in Prefamine Ireland'; Hollis and Sweetman, 'The life-cycle of a microfinance institution'.
[304] De Vicq and Van Bochove, 'Lending a Hand'.

have attracted primarily clerical workers and wage earners who needed credit to cover unexpected events. Others borrowed in order to begin or expand their businesses.[305]

Generalising from the foregoing is complicated by the sources which often described jobs rather casually, did not specify the occupation of women and contained large groups of miscellaneous occupations. Nevertheless, the historical international classification of occupations (HISCO) system can be used to identify some patterns in the relative importance of large occupational groups.[306] This reveals that while borrowers from all occupational groups could be observed, most loans were provided to occupational groups 4 ('sales workers') and 7/8/9 ('production and related workers, transport equipment operators and labourers'). As indicated above, occupational group 3 ('clerical and related workers') was important in New York as well. Occupational group 6 ('agricultural, animal husbandry and forestry workers, fishermen and hunters') was relatively important in Ireland. The same applied to the help bank of Nijmegen, but not to a set of help banks located in the more developed western part of the country: Haarlem, The Hague and Utrecht.

All in all, the occupation data demonstrate that CLIs targeted notably heterogeneous occupational groups.[307] With clients and loan purposes so similar, it is not surprising that the same applied to loan sizes and instalments. Loans were generally small, but still large enough to be economically significant to borrowers and instalments suited borrowers' revenue streams (see Table 4.4). Average loans provided during the period 1892-1940 by the largest Jewish CLI in the United States, the Hebrew Free Loan Society of New York, ranged between $5 (1892) and $118 (1929). However, compared to the average loans of Jewish CLIs in other major American cities during the period 1925-1937, average New York loans were always smaller than the sample average. Despite such regional variations and changes over time, the average loan of the whole sample only exceeded $100 in 1925. Loans typically had to be repaid in six months.[308] In Hamburg,

[305] Herzog, *The Morris Plan of industrial banking*, 91-93; Saulnier, *Industrial Banking Companies*, 131-133; Neifeld, 'Institutional Organization of Consumer Credit'; Mushinski and Phillips, 'Morris Plan Banks'; Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions'.
[306] For more information on HISCO, Cf. https://iisg.amsterdam/en/data/datawebsites/history-of-work.
[307] Regionaal Archief Nijmegen, Catalogue number 894:1-15, Nijmeegse Hulpbank 1862-1966 (help bank of Nijmegen, selected years during the period 1871-1939); 'Jaarverslag van het Bestuur der Hulpbank te 's-Gravenhage' (help bank of The Hague, selected years during the period 1905-1929); 'Verslag van den Toestand en Werkzaamheden der Haarlemsche Hulpbank' (help bank of Haarlem, 1906); Hebrew Free Loan Society of New York 1914, 26-27 (Hebrew Free Loan Society of New York, 1914); Herzog, *The Morris Plan of industrial banking*, 92-93 (Morris Plan Company of New York, 1914-1915); Hollis and Sweetman, 'Microcredit in Prefamine Ireland', 361 (loan fund societies of Ballycastle, 1838-1840, and Castletown Delvin, 1841); Hollis and Sweetman, 'Microcredit in Prefamine Ireland', 302 (loan fund society of Mayo, up to 1838); Guttman, 'The Hebrew Free Loan Association', 70-71 (Hebrew Free Loan Association of Montreal, 1918); Jacobs, *Het lenen van geld is geen schande*, 52-53 (help bank of Utrecht, 1853); Saulnier, *Industrial Banking Companies*, 131-133 (Morris Plan banks and industrial loan banks, 1930s).
[308] Tenenbaum, *A Credit to Their Community*, 57, 64, 69.

Germany, average loans of the Jewish CLI ranged between 208 Mark ($50) and 354 Mark ($84) during the period 1875-1915.[309]

Loans issued by the Irish loan funds were significantly smaller. In 1843, the maximum loan size was £10 ($48), and the average loan at 298 loan funds then was £3.3 ($16), or a little less than the average per capita income.[310] Loans were repaid in twenty weekly instalments of equal size. As in the case of the Hebrew free loan societies, clients who failed to keep to their repayment schedules could be excluded from borrowing for a certain period of time. Punctuality was further enforced by a system of fines for late payments. The fine for each overdue day amounted from 0.4-0.8% of the face value of the loan.[311]

The average loan of the Dutch help banks increased from 67 guilders ($27) in 1849 to 528 guilders ($174) in 1921, which equalled about 25-55% of the annual per capita income of a typical borrower.[312] However, these averages hide the fact that some borrowers obtained much larger loans. For instance, at the Nijmegen help bank, the directors of a roof tile factory frequently received loans of several thousands of guilders.[313] The maximum duration of loans was in principle set at 50 weeks. Help banks' borrowers were held to strict repayment schedules, typically with weekly instalments and, as an extra incentive, a discount if borrowers repaid ahead of time. Clients who failed to keep repayment schedules were penalised and excluded from borrowing for a certain period of time.[314] As was the case with the other CLIs, the remarkably low number of defaulting repayments (i.e., in almost all cases below one percent) show that this rarely happened.

The loans issued by the Morris Plan banks averaged $126 in 1915 and $262 in 1926. During the period 1929-1938, the average loans of a sample of ten Morris Plan banks ranged between $228 and $317. This meant that these loans equalled 10-20 weeks of salary of an adult male. The formal lending scheme of Morris Plan banks was less straightforward than that of other CLIs. Loans typically had a maximum term of one year, but borrowers did not use their weekly instalments to redeem their loans directly and purchased certificates instead. When a loan matured, these certificates were exchanged for cash that was subsequently used to redeem the

[309] Nathan, *Das Israelitische Vorschuss-Institut in Hamburg;* Bosch, Reinoud, 'Exchange Rates to US Dollar'. All currencies are in nominal value. A sum of 1$ in the 1840s would be worth approximately 35$ today, while 1$ in the 1920s would be worth approximately $13 today. See Bureau of Labour Statistics price index (https://www.usinflationcalculator.com/).

[310] Hollis and Sweetman, 'What Can we Learn from the Past?', 1879; Hollis and Sweetman, 'Microcredit in Prefamine Ireland', 355; Bosch, 'Exchange Rates to US Dollar'.

[311] Hollis and Sweetman, 'Microcredit in Prefamine Ireland'.

[312] Bosch, 'Exchange Rates to US Dollar'; De Vicq and Van Bochove, 'Lending a Hand'.

[313] Regionaal Archief Nijmegen, Catalogue number: 894:13, Nijmeegse Hulpbank 1862-1966; (loan 527), 14 (loan 499), and 15 (loans 322 and 406).

[314] Geesink, 'De Hulpbanken en Hare Werking'; Deneweth et al., 'Microfinance'.

loan. As was the case in the other CLIs, defaulters were punished, but here too this was rarely necessary.[315]

4.7. Discussion And Conclusion

This chapter analysed co-signatory lending institutions in Europe and North America. By connecting small and disparate literatures, it could overcome the fact that CLIs differed in their names, funding and mission. While the differing natures of various CLIs had so far complicated the identification of CLIs as a separate and important institutional type, this chapter showed that they were precisely that, and it found that they thrived—as loan funds in Ireland, Morris Plan banks in the United States, Hebrew free loan societies in Europe, Canada and the United States and as help banks in the Netherlands. Table 4.4 summarise these findings by providing an overview of the CLIs uncovered in Europe and North America.

By contributing to our understanding of the historical diversity in financial intermediation, this study makes three important contributions. First, it showed that some of the institutions this study uncovered were much older than the German cooperatives established by the mid-nineteenth century. This suggests that searching for ways of improving access to credit was a historical constant and this chapter showed that, especially in more heterogeneous (i.e., urban) contexts, CLIs provided a convenient solution in this quest.

Second, it showed that co-signing combined with joint liability among all members of a credit cooperative was clearly not the only effective model for lending small sums to households and small businesses with little or no collateral. A simpler type of joint liability between a borrower and co-signers, combined with regular instalments, sufficed for this as well. It was argued theoretically that because of the unpredictability of joint liability in more heterogeneous (i.e., urban) contexts, borrowers would prefer co-signatory lending even if this – *ceteris paribus* – would worsen loan conditions. The empirical evidence presented in this chapter was consistent with this: CLIs were more common in heterogeneous, urban environments.

Third and arguably most important, the trade-off between outreach and sustainability, something with which providers of small loans struggle to this day.[316] Ample research has demonstrated that present-day microcredit institutions would not survive without external

[315] Herzog, *The Morris Plan of industrial banking,* 83; Robinson, 'The Morris Plan'; Saulnier, *Industrial Banking Companies,* 85; Mushinski and Phillips, 'Morris Plan Banks'; Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions'.

[316] See, for instance, Engels, 'Mission Drift in Microfinance', Hermes and Lensink, 'Microfinance'.

subsidies from the local government or foreign benefactors.[317] Regardless, many of these institutions still succumb to mission drift as they increasingly cater to customers who are better off than their original customers. Microcredit institutions who stick to their original mission, favouring outreach over sustainability, often fail, explaining the rather short life span of most institutions.

Table 4.4: Overview of CLIs in Europe and North America [318]

	Hebrew free loan societies	Loan funds	Help banks	Morris Plan banks
Origin place	-	Ireland	the Netherlands	the United States
Origin time	-	1747	1848	1910
Active in	Mostly urban	Mostly rural	Mostly urban	Mostly urban
Clients	Small merchants and manufacturers	Small merchants and manufacturers	Small merchants and manufacturers	Clerical workers and wage earners
Objective	Non-profit (philanthropic)	Non-profit (semi-philanthropic)	Non-profit (semi-philanthropic)	For-profit (commercial)
Capital	Contributions and gifts	Deposits	Equity	Deposits and equity
Interest	No (yes in some societies)	Yes	Yes	Yes
APR	0% (but positive in some societies)	11.3%	6.0-10.3%	16-19%
Duration	26 weeks	20 weeks	50 weeks	52 weeks

In contrast, CLIs seemed to have been equipped to balance outreach and sustainability. None of the institutions examined here relied on external subsidies, although some, primarily Hebrew free loan societies, relied on charitable donations. Without charity, some CLIs might never have existed in the first place, but it is clear that most of them operated without ongoing donations. Moreover, several CLIs were also profitable, most notably Morris Plan banks and help banks. CLIs managed to rely on retained earnings, attracted deposits, successfully issued equity, or relied on a combination of all the aforementioned, ensuring their financial sustainability. Conversely, this chapter found little if any evidence of mission drift at CLIs.

[317] Morduch, 'The Microfinance Revolution'; Johnson and Rogaly, *Microfinance and Poverty Reduction*. Also see Hollis and Sweetman, 'Microcredit', for a brief review of this literature.
[318] Source: see text. Based on the schema used in Hollis and Sweetman, 'Microcredit' and Colvin and McLaughlin, 'Raiffeisenism Abroad'.

Based on this review, the key to CLIs' success in balancing outreach with sustainability resided in getting the organisational structure right. The basic form of CLIs, whereby small loans were backed by co-signers and had to be repaid in weekly instalments, provided an effective mechanism to overcome information asymmetry. It was also flexible and worked in societies characterised by large differences in wealth and economic structure. CLIs thrived in Europe and North America and were well-adjusted to the local conditions and specific regional demands. Furthermore, CLIs were able to keep transaction costs low by relying at least in part on voluntary contributions of well-connected local elites with a solid understanding of the local markets. In this respect, CLIs differed from present-day microcredit institutions which often rely on external propagators who lack this local knowledge. This means that the staff running and managing credit allocation of present-day microcredit institutions are comparably less capable of garnering the necessary information on their clientele to reduce information asymmetries.

With due regard for the many differences in cultures and institutions between historical Europe and North America and modern developing economies, it is therefore possible to draw valuable lessons from the development of CLIs which can be applied to present-day microcredit institutions. Nevertheless, future research on these matters can be improved and extended upon in three ways. First, researchers can incorporate and analyse the interaction with alternative ways of raising credit, such as peer-to-peer lending, pawnshops, banks and both rural as well as urban credit cooperatives. Second, researchers can collect more information about the presence and possibly transplantation of CLIs. In particular, researchers can give more attention to the specific sociopolitical, cultural and technological circumstances in which these institutions developed over time and by analyse the 'niche' they filled in their respective financial market. Third, researchers can assess the impact of CLIs on the real economy and uncover the underlying reasons which motivated actual and potential borrowers to make use of their services.[319] Difficult as this may be for historical research, ongoing scholarship relying on financial diaries illustrates that fruitful results can be attained with this approach.[320] All of this applies to the CLIs covered in the present study, as well as to CLIs that may have operated in parts of the world not addressed here. These three steps will contribute to a better understanding of the composition and evolution of the market for small loans. This will generate better insights into how access to small loans was improved during the nineteenth and twentieth centuries, the historical circumstances that played a role in this and whether and how CLIs may be replicated in present-day developing economies.

[319] See, for instance, Collins et al., *Portfolios of the Poor*, for a present-day example of a study which aims to systematically explore how the poor find solutions to their everyday financial problems.
[320] Boter and Gelderblom, 'The Dynamics of Inclusive Finance'.

Chapter 5
Caught Between Outreach and Sustainability: The Rise and Decline of Dutch Credit Unions

Amaury de Vicq

Abstract: Chapter 5 adds another layer to the empirical foundation of the research project as it uses several thousands of individual loan applications to explore the history of Dutch credit unions. Launched to provide SME credit, these credit unions gradually drifted away from their original aims as they expanded to remain viable and competitive; hereby increasingly targeting a wealthier echelon of clients at the expense of their poorer customers. In the end, they were squeezed out of business between new, government-supported SME banks and the big commercial banks. This chapter is devoted to understanding why this was the case and how this ultimately determined the development of these institutions.

5.1. Introduction

There is a rich historiography on credit cooperatives, especially rural ones. Often referred to as Raiffeisen banks after their founder Friedrich Wilhelm Raiffeisen (1818-1888), these institutions were designed in mid-nineteenth-century Germany and frequently copied abroad by rural elites and reformers as a means to improve farmers' lives by giving access to small loans.[321] The literature on rural credit cooperatives emphasises the innovative nature of their organisational form, often drawing parallels with current-day microfinance institutions. As a rule, such parallels highlight the conditions for the cooperatives' success, such as their reliance on social capital and joint liability to overcome moral hazard and adverse selection, as well as the cultural and socio-economic factors affecting performance.[322]

By contrast, urban credit cooperatives (usually in the lesser-known form of Schulze-Delitzsch banks) have received much less scholarly attention, perhaps because, from a 'Welfarist' perspective (to use a contemporary microfinance term), these institutions were often less successful than their rural counterparts in reducing poverty through access to credit.[323] Echoing a frequently raised criticism on today's microfinance industry, the urban cooperatives' failure is sometimes ascribed to them resolving the trade-off between financial sustainability and outreach with mission drift: to raise revenues, they increasingly reached out to wealthy clients at the expense of poor ones.[324]

This chapter adds further evidence to the importance of the sustainability-outreach trade-off by analysing the rise and decline of a specific type of urban credit cooperatives, Dutch credit unions (*credietvereenigingen)*, during the late nineteenth and early twentieth century. Launched to provide SME credit, these credit unions gradually drifted away from their original aims as they expanded to remain viable and competitive. In the end, they were squeezed out of business between new, government-supported SME banks and the big commercial banks.

The chapter proceeds as follows. Section 5.2 discusses the origins, form, and business model of the first credit union and explains how its success inspired followers. Sections 5.3 and 5.4 explore how the business of these credit unions developed over time. It illustrates that while these institutions were financially successful, this success came at the expense of their initial

[321] Colvin and McLaughlin, 'Raiffeisenism Abroad', 492.
[322] Cf. Ghatak and Guinnane, 'The Economics of Lending', 195-228; Guinnane, 'Cooperatives as Information Machines', 366-389; Guinnane, 'The Early German Credit Cooperatives', 77-100; Guinnane, 'A Failed Institutional Transplant', 38-61. For an analysis which takes a more functional perspective and better includes contextual factors, see Colvin and McLaughlin, 'Raiffeisenism Abroad', 512-513 and Colvin, 'Banking on a Religious Divide', 866-919.
[323] Engels, 'Mission Drift in Microfinance',24-25.
[324] See Guinnane, 'The Early German Credit Cooperatives', 84; Banerjee et al., 'Thy Neighbor's Keeper', 495-497; Guinnane, 'Regional Organization', 254; Hermes and Lensink, 'Microfinance', 878-879.

objectives. Credit unions no longer targeted local petty businessmen, and this functional change drove significant institutional changes. Section 5.5 details why credit unions eventually died out. Section 5.6 concludes.

5.2. The Advent of Credit Unions in the Netherlands

5.2.1. The Introduction of Amsterdam's Credit Union

The first credit union was established in Amsterdam in 1853 by a small consortium of three bankers led by L.R. Bisschoffsheim.[325] Bisschoffsheim was inspired by various similar institutions in Belgium (*Union de Crédit*), Berlin (*Disconto Gesellschaft*) and Vienna (*Kreditvereine*), set up during the late 1840s and early 1850s.[326] These credit unions aimed to extend the benefits of credit to small businessmen, in particular shopkeepers and small merchants and manufacturers.[327] Bisschofheim modelled the Amsterdam credit union after these foreign examples, giving it a similar scope and institutional design.

Technically a joint-stock company, the Amsterdam credit union was really a cooperation with members instead of shareholders.[328] Those members subscribed to the union's capital but paid up only 10% of their share; the rest remained a personal pledge. Once screened by the board of admission, members could draw on the full amount of their financial participation.[329]

The credit union's statutes and annual reports show that it was designed to operate as a local institution providing loans to small business owners within Amsterdam. This local focus was crucial for using social relationships to yield information about neighbouring clientele in a

[325] Van Marken and Geljon, 'La Banque de Credit', 19-43.
[326] Based on a close reading of the original statutes of the Amsterdam's credit union and their discussion in several contemporary publications and newspaper articles, it is possible to gain a deeper understanding of where Bisschoffsheim found his inspiration. A particular source worth mentioning was a commentary piece by well-respected lawyer J. Pinner, whose views were widely followed and disseminated. In his work, Pinner heralds the advances of the *Disconto-Gesellschaft* in addressing the credit requirements of small merchants and manufacturers. The *Disconto-Gesellschaft*, cooperative in nature, was founded in Berlin in 1851 by the former minister of finance and president of the Prussian bank, D. Hansemann, who was concerned about the shortage of credit for small businessmen. According to Pinner, Bisschoffsheim admired this initiative, and Amsterdam's credit union was modelled after this institution. See Pinner, *De Statuten en het Reglement der Credietvereeniging te Amsterdam*.
[327] Jonker, *Merchants, Bankers, Middlemen,* 260.
[328] Cooperatives were only recognized in the Netherlands as a separate legal entity from 1876 onwards. A similar situation has been pointed out by Guinnane and Rodriguez, 'Cooperatives before Cooperative Law' for Spain, where the roots of the cooperative form lies in commercial organization and commercial law. In Spain, unlike France and most other countries, cooperatives were not treated as a separate species of business enterprise and were initially set up as corporations. One reason cooperatives wanted a legal framework was to allow their members to work together without police surveillance. See also Colvin, 'Banking on a Religious Divide' for a more elaborate discussion on the legal history of corporate, and especially cooperative law in the Netherlands.
[329] Jonker, *Merchants, Bankers, Middlemen,* 261.

way larger joint-stock banks could not, thus reducing screening and monitoring costs and enabling the credit union to discipline its clientele.[330]

The institutional set-up of the credit union was designed to further combat information asymmetries usually associated with small-scale lending. The credit union's board consisted of three to five directors who worked closely together with the assessment board (*raad van admissie)* that decided on admissions and loans. The assessment board was elected by the general assembly, which represented the interests of all the members of the cooperative and which was based on the simple principle of 'one member, one vote'. This assembly met once a year after the compilation of the annual report. The credit union also had a supervisory committee which oversaw the board of directors and the assessment board. Together with the board of directors, they decided on business terms and conditions, including the rates for loans, deposits and dividend pay-outs.[331]

Members of the board were required to participate in the cooperative for a statute-determined lump sum. Consequently, they would become jointly liable for potential losses, and perhaps more importantly would share in the cooperative's profits. Their remuneration thus usually consisted of a relatively small basic wage and an additional bonus in case of outstanding retained earnings. More precisely, profits were allocated along the following lines: (i.) first, all members would receive their guaranteed dividend fluctuating around 4%-5% of total paid-up capital; (ii.) from the remaining profits, 20%-30% would then be allocated to the board, including the directors, commissioners and other members of staff; (iii.) 20% would then usually be allocated to a reserve fund which would be drawn upon if needed to ensure a yearly dividend payout; finally, (iv.) the remaining 40%-60% would be granted to the members as additional compensation for their investments.[332] Based on this distributive system, it was clear that all stakeholders but especially members of the board would benefit significantly if profits exceeded expectations.

Membership approval and credit admission were delegated to the aforementioned assessment board, which gathered monthly or bimonthly, and typically consisted of about six to eight individuals who were chosen from different regional and occupational backgrounds. This was to ensure that the board, which consisted of the cooperatives' loan officers, had the necessary local background and sectoral expertise to make proper credit assessments. The credit

[330] Wadhwani, 'Small Credit Institutions', 205.
[331] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Statutory Changes' (*Vaststelling en wijziging van de statuten*), catalogue call number 2.25.08: 13438. Supplemented with information from the annual reports of Amsterdam's credit union (*Jaarverslagen Amsterdamsche Credietvereeniging*), 1853-1860.
[332] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Statutory Changes', catalogue call number 2.25.08: 13438. Supplemented with information from the annual reports of Amsterdam's credit union, 1853-1860.

union also enforced a stringent quorum (i.e., usually around 75%) for a board meeting to ensure proper representation of all interests. If this quorum was not reached, the board could not convene, and loan approvals would not be processed. Moreover, in case of larger loans, set initially as all those exceeding 5,000 guilders, a two-thirds majority vote was deemed necessary.[333]

Since it was often deemed too difficult to discuss all technicalities of these requests during board meetings, three or four reporters *(rapporteurs)* were assigned to each credit dossier. These recurring reporters were selected from the board of admission but differed in accordance to the expertise required, which allowed them to specialise and enhance the effectiveness of the decision-making process. In cases where these reporters needed additional information, they addressed the potential members themselves or other external contacts who might know something valuable about the loan applicants.[334]

5.2.2. *Credit Union Commercial Successes*

The business of Amsterdam's credit union grew quite fast in the years following its establishment. Throughout the period 1853-1870, membership increased from around 200 to around 2,300.[335] At the same time, paid-up capital increased from around 225,000 guilders to over 1.7 million guilders, total outstanding credit from 2.2 million guilders to almost 14 million guilders. Furthermore, the credit union was also relatively profitable. In the period 1853-1870, profits increased from around 26,000 guilders on an annual basis to almost 220,000 guilders, while their profitability rate (i.e., profits expressed as a percentage of paid-up capital) fluctuated around 13%-17%. Since losses remained limited, this allowed the credit union to pay a fixed interest rate of approximately 5% over the equity supplied, plus annual dividends of almost 7%. In assessing these returns over paid-up capital, it is important to take into account that it included a risk premium for the 90% of capital pledged. However, Jonker suggests that most members looked at the return over the money actually paid up rather than the amount

[333] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Statutory Changes', catalogue call number 2.25.08: 13438. Supplemented with information from the annual reports of Amsterdam's credit union, 1853-1860.
[334] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Supplementary rules regarding the organisation of the credit union' (*Vastestelling en wijziging van het Reglement voor de leden en van aanvullende reglementen met betrekking tot organisatie en taakuitvoering*, 1863-1909), catalogue call number 2.25.08:13800. It also based on archival evidence for Arnhem's credit union. See Archive of Arnhem's credit union (*Archief van de Geldersche Credietvereeniging*), held at Nationaal Archief in The Hague, 'Minutes of the board of admission' (*Notulen van de Raad van Admissie*), catalogue call number 2.20.01 - 12283-12285.
[335] By the early 1870s, Amsterdam's credit union was amongst the five largest commercial institutions in the Netherlands. By itself, it accounted for approximately 15 million out of the total of 130 million bank loans. See annual reports of Amsterdam's credit union (1853-1870) and Kymmel, *Geschiedenis. Vol. 2*, 446.

theoretically at stake.[336] From that viewpoint, the returns were well above the average for joint-stock companies at the time.[337]

While in Germany, the initial creation of a credit cooperative in the 1840s quickly led to a string of new establishments in other places, the example of Amsterdam's credit union was not immediately followed elsewhere.[338] In 1865, a second credit union was established in Rotterdam, followed by institutions in Arnhem (1866), Utrecht (1868), Dordrecht (1871), Maastricht (1872) and The Hague (1876 and 1880).[339] Each of these managed to attract several thousands of borrowers, as a result of which large commercial institutions like the Twentsche Bank started to take an interest and decided to set up their own subsidiary credit unions to act similarly as screens for a market they did not want to risk their bank's name in.[340] Consequently, by 1901 there were some twenty cooperatives with 60 branches and 35,000 members.[341] Together, these cooperatives accounted for approximately 25% of Dutch bank loans.[342]

The institutional set-up of these newly established institutions was nigh identical to their Amsterdam's counterpart, and their business equally successful. The paid-up capital for Arnhem's credit union, for example, increased from approximately 130,000 guilders to over 4.4 million guilders in the period 1867-1910.[343] At the same time, net profits increased from around 11,000 guilders to almost half a million guilders. Profitability rates fluctuated around 11.5%, allowing for a dividend payout of almost 8% throughout the entirety of this period. Smaller credit unions seemed just as thriving. This is illustrated by the case of the Dordrecht's credit union, whose paid-up capital increased from approximately 600,000 guilders in 1880 and a net profit of more than 22,000 guilders, to a paid-up capital of more than 1.5 million by 1910 and a net profit of almost 60,000, resulting in a profitability rate of more than 15% throughout this period and a dividend payout of slightly over 8%.[344] It is further corroborated by Utrecht's credit

[336] Jonker, *Merchants, Bankers, Middlemen,* 263.
[337] According to Jonker, dividends of joint-stock companies at the time averaged around 5% in the 1860s, by the 1880s this would increase to 6%-7%. Jonker, *Merchants, Bankers, Middlemen,* 256-257.
[338] In Germany, the first Schulze-Delitzsch credit cooperative was founded in the 1840s. By 1861, there were already 364 such cooperatives with over 49,000 members. See Guinnane, 'Cooperatives as Information Machines', 368.
[339] Technically, the so-called *Commandietkas* was the second credit union which was established in the Netherlands. It was set up in 1861 in Rotterdam but was already liquidated in 1871. Consequently, there is very little know about this institution. See Kymmel, *Geschiedenis. Vol. 1*, 135-136.
[340] Jonker, 'Between Private Responsibility and Public Duty'. See also Van der Werf, *Van Twentsche Bank naar Algemene Bank* for an in-depth account of the history of this bank and its subsidiary credit institution.
[341] De Vicq, 'Construction'.
[342] Kymmel, *Geschiedenis. Vol.1*, 135-136.
[343] Annual report of Amsterdam's credit union, 1910.
[344] Annual report of Dordrecht's credit union, 1910.

union, whose balance sheet indicates a similar profitability rate and dividend payout.[345] But here too, one has to take into account the risk premium for the 90% of capital pledged.

5.3. Credit Union Endemic Lack of Funding

From the 1860s onwards, Amsterdam's credit union distinguished between two types of stakeholders: the members proper, or the so-called the so-called 'borrowing' type, who actively took advantage of its credit facilities (*crediet-trekkende leden*) and the 'investor' type who had no interest in such facilities (*niet-crediet-trekkende leden*). The latter were meant to be wealthier members of the middle class, which supported the institutions financially. They would buy a share of the cooperative equal to 100% of their paid-up capital and, as previously mentioned, received non-trivial dividends in return. They were not considered as official members and were not held jointly liable for any losses.[346] While attracting such investors seemed efficacious at first, their numbers quickly stagnated at around 100, whereas the number of borrowers continued to grow.[347]

As such, the case of Amsterdam's credit union revealed – and as will subsequently be demonstrated in further detail – that the traditional 'German' cooperative model, whereby resources were pooled from the investments of wealthier members to lend out to the more impoverished ones, was not sustainable in the Netherlands. At least, this could not be the case for credit cooperatives working in more urbanised areas, targeting artisans, shopkeepers, and other members of the middle class. Unlike 'gentlemen farmers', the urban elite seemed too heterogeneous, too little-committed to a common social cause and perhaps also too 'spoilt for choice', to invest in the cooperative model.[348] Due to the nature of its clientele, the demand for loans quickly surpassed the institutions' small capital basis, and the credit union struggled to find new external investors. Soon enough, the propagators of the credit union were well aware that they would either have to operate with relatively limited means on a rather small scale and

[345] By 1910, Utrecht's credit union had a net profit of over 33,000 guilders and a dividend payout of 11%. See annual report of Utrecht's credit union, 1910.
[346] Jonker, *Merchant, Bankers, Middlemen,* 260-261. See also Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Statutory Changes', catalogue call number 2.25.08: 13438. Supplemented with information from the annual reports of Amsterdam's credit union, 1860-1880.
[347] Annual reports of Amsterdam's credit union, 1853-1870.
[348] Guinnane argues that credit cooperatives worked best in close-knit, rural communities. See for example Banerjee et al., 'Thy Neighbor's Keeper'; Jonker, 'Spoilt for Choice'. See also Gelderblom et al., 'Borrowing, Lending and Financial Intermediation' which shows that wealthier members of the middle class had a wide range of investment opportunities available.

that they would have to resort on the discounting facilities of the Dutch circulation bank (*de Nederlandsche Bank* or DNB) to expand their business.[349]

Small merchants, shopkeepers, and especially manufacturers were often paid with so-called IOUs (i.e., an informal document acknowledging debt) or, more rarely, bills of exchange which traditional banks (including the DNB) did not accept.[350] The credit union aimed to provide a solution by acting as an intermediary screening and monitoring service, in essence converting non-bankable securities into bankable securities ones on the strength of its members' joint liability.[351] In this manner, it hoped to simultaneously address its financial shortages and continue to reach out to its clientele.

However, the DNB only reluctantly agreed to expand its discounting facilities and imposed strict conditions with regards to the credit union's capital size, business structure and credit policy, about which the board had to report at regular intervals.[352] This made the credit union highly dependent on the goodwill of the DNB, which became ever more disgruntled with the institution's inability to raise its own funding. Amidst growing discontent, the DNB even decreased its maximum discounting facilities throughout the 1870s and obliged the credit union to adhere to a fixed leverage ratio, which the latter felt was a limiting factor to its further expansion.[353] Amsterdam's credit union found this interference by the DNB cumbersome and increasingly difficult to accept. In a bilateral correspondence dated 25th October 1878, the credit union's management started by expressing their gratitude towards the DNB's ongoing support, but then somewhat acrimoniously expressed their growing dissatisfaction regarding the latter's interference and their own perceived lack of independence.[354]

In an attempt to break away from the control of the DNB, the credit union increasingly resorted to collecting deposits. Unlike cashiers and other financial institutions at the time, which provided similar services, it paid out interest rates to its depositors from 1863 onwards. This was

[349] Kymmel, *Geschiedenis. Vol.1*, 96

[350] Cf. Lamoreaux, *Insider Lending*; Carnevali, *Europe's Advantage*, and Guinnane, 'The Early German Credit Cooperatives' on this type of lending which was typical for commercial banks at the time in the United States, Britain, France and Germany. See also Peeters, 'Getting'.

[351] Cf. Guinnane, 'Cooperatives as Information Machines' for a more in-depth discussion of the benefits of 'social capital' and 'joint liability' with cooperative banks. This point was also made by Jonker, 'Between Private Responsibility and Public Duty', but worded differently.

[352] Jonker, 'Between Private Responsibility and Public Duty', 142.

[353] Archieven De Nederlandsche Bank, held at Nationaal Archief, Grievances of the DNB regarding the policy of Amsterdam's credit union (*Nota betreffende eenige door de Nederlandsche Bank in den laatsten tijd tegen de Credietvereeniging te berde gebrachte grieven*), catalogue call number 2.25.08: 13797.

[354] 'Nog eene schrede verder en een uwer beambten wordt als wachter aan de kas en een tweede bij onze boeken geplaatst, in welk geval onze zelfstandigheid als crediet instelling nog maar alleen zou erkend worden bij het lijden van verliezen.' Archieven De Nederlandsche Bank, held at Nationaal Archief, Grievances of the DNB regarding the policy of Amsterdam's credit union, catalogue call number 2.25.08: 13797.

somewhat of a financial novelty in the Netherlands, as the standard practice at the time was that clients still paid financial institutions to store and safeguard their deposits.[355] Deposits were short-term, withdrawable within a one-day notice, or fixed for a more extended period of up to three months. Interest rates were pegged to the discount rates of the DNB and fluctuated between the lower margin of 2% and the upper margin of 4%. Often, an interest premium of up to 0.5%-1% was granted for long-term deposits. [356] This was done to avoid a mismatch between assets and liabilities, as most loans were offered for a renewable period of up to three months.

Moreover, Amsterdam's credit union also established multiple branches in an attempt to pool and subsequently transfer resources across regions and to obtain the necessary means to escape their narrow, provincial scope and expand their catchment area.[357] Table 5.1 illustrates that there were often substantial differences between the total outstanding loans issued at any given location and the deposits collected there (both in guilders). It also indicates that there were substantial changes over time. For example, in the case of the branch in Alkmaar, between 1890 and 1905, substantially more credits were granted than deposits were collected. However, by 1910 the situation had reversed. In some places, this mismatch was straightened by collecting relatively more deposits. Middelburg stands out in this regard. The demand for credit in this area was lower, but there was an established market for depositors. Nevertheless, based on the ratio of loans to deposits, it is clear that in many places the demand for credit far exceeded deposits.

[355] Kymmel, *Geschiedenis. Vol.1*, 97.

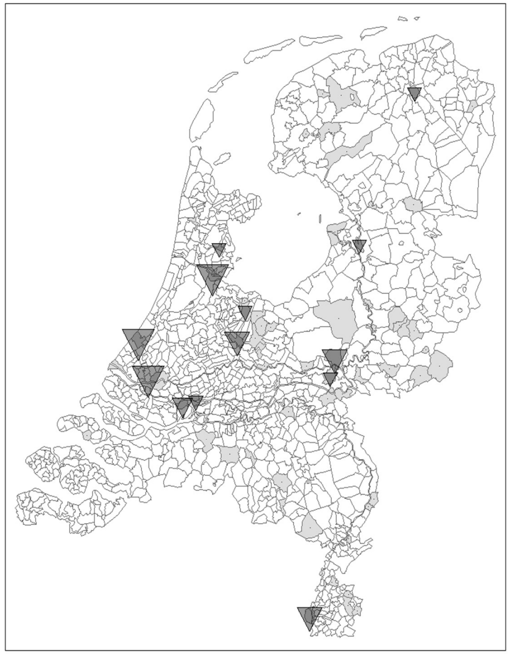
[356] 'Ekonomische berichten en nalezingen', 238-239.

[357] The earliest credit unions established in the Netherlands seem to have benefited from some sort of early-mover advantages, however, as they were often the most expansionistic. This is well-exemplified by Arnhem's credit union, which in the time period between the mid-1870s and the mid-1910s established 19 branches, and by the late 1910s already owned 41 branches and 33 agencies (*correspondentschappen*). Next in line was Amsterdam's credit union, which at its peak had over 15 branches. Other credit unions seemed less likely to branch out, and usually were limited to one or two local branches. See De Vicq, 'Constructing a Database'.

Table 5.1: Credits Granted and Deposits *(in thousands of guilders)* **Collected at Different Branches of Amsterdam's Credit Union** *(1890-1910)* [358]

	1890			1901			1910		
	Loans	Deposits	Loans: Deposits	Loans	Deposits	Loans: Deposits	Loans	Deposits	Loans: Deposits
Rotterdam	2,458	486	5.1	1,097	822	1.3	1,361	2,597	0.5
Alkmaar	420	21	20.0	138	18	7.7	0	0	0
Dordrecht	246	2,204	0.1	226	2,885	0.1	380	4,384	0.1
Groningen	615	145	4.2	1511	390	3.9	3,345	1,981	1.7
The Hague	0	0	0	1,495	1,600	0.9	3,251	1,499	2.2
Leeuwarden	809	100	8.1	446	204	2.2	1,156	162	7.1
Tilburg	550	235	2.3	1,509	46	32.8	3,195	67	47.7
Utrecht	1842	15	122.8	1487	77	6.3	924	63	14.7
Zwolle	539	20	27.0	328	2	164.0	319	140	2.3
Middelburg	370	1,525	0.2	207	1,952	0.1	197	3,166	0.1
TOTAL	7,849	4,751	1.6	8,444	7,996	1.1	14,128	14,059	1.1

Figure 5.1: Credit Unions and Their Branches in 1910 [359]



[358] Annual reports of Amsterdam's credit union, 1890-1910.
[359] De Vicq et al., 'Constructing a Database'.

The first-hand experience of Amsterdam's credit union had demonstrated to other credit unions that relying on the discounting facilities provided by the DNB as a source of funding was undesirable if they wished to preserve their independence. In response, these newly established credit unions also opted to gradually increase their reliance on deposits by offering various advantageous conditions. To this effect, Dordrecht's credit union for instance paid interests almost immediately and permitted its clients to withdraw deposits within a one-day notice.[360] More important, following the Amsterdam's example, most credit unions even set up two or more branches to expand their catchment area. Consequently, by the early 1900s, the twenty largest credit units had a relatively widespread network of branches, almost a decade before universal banks started branching out.[361] This is illustrated by Figure 5.1, which plots all the headquarters (dark grey triangle) of the major credit unions and their rather extensive branch network (blue polygon).[362]

At first glance, these measures seemed to have had their desired effect. At Amsterdam's credit union, deposits remained mostly negligible in the first five years, never exceeding 600,000 guilders. From 1858 onwards, deposits did increase, multiplying with a factor of nearly ten, in a matter of years, from 1,5 million guilders to almost 14 million guilders by the early 1870s. In case of Arnhem's credit union, deposits had increased from approximately 590,000 guilders in 1885 to almost 4 million guilders by 1910 and to almost 5.5 million by 1915. Smaller credit unions were somewhat less effective in this regard but managed to collect substantial deposits nonetheless.[363] The total nominal value of deposit liability at Dordrecht's credit union, for instance, grew from approximately 450,000 guilders in 1885 to well over a million guilders by 1910 and to approximately 2 million guilders by 1915.[364]

However, when compared to the value of total liabilities (i.e., including paid-up capital, deposits, retained earnings and discounts), deposits at credit unions stood consistently above 20%, but well below 40%. Throughout the 1900-1910s, this ratio fluctuated around 25%, rising to above 30% by the late 1910s, then to drop again in the early 1920s.[365] While deposits in the Dutch commercial banking system were also markedly low, it still stood at just over 40% of liabilities

[360] This is a paraphrase of 'De rente der deposito's, bij aanvang drieeneenhalf a vier percent … werd sedert 24 juni verlaagd tot drie a drieeneenhalf percent: cijfers, die in verband met de gemakkelijke voorwaarden onze deposito's (rente-genot één dag na storting tot één dag voor terugbetaling, en opvraging van alle depôts met één dag) zeker de vergelijking met de voorwaarden van andere Vereenigingen of particulieren kunnen doorstaan.' Source: Annual report of Dordrecht's credit union, 1876, 7.
[361] T' Hart, Jonker and Van Zanden, *A Financial History of the Netherlands*, 115-118.
[362] Author's own calculation using annual reports of various credit unions.
[363] Annual reports of Arnhem's credit union, 1885-1915.
[364] Annual reports of Dordrecht's credit union, 1885-1915.
[365] Own calculation based on the annual reports of Amsterdam's, Arnhem's, Dordrecht's and Utrecht's credit union (1885-1915).

before WWI, rising to 60% in 1918, before dropping back to around 50% in the early 1920s.[366] To all appearances then, credit unions – even more so than the banks – suffered from an endemic lack of funding. They could not attract deposits on a sufficient scale to sufficiently cover their credit risks and continued to be overly reliant on the patronage of the DNB.

There are two main explanations for credit union systems' inability to increase deposits. First and foremost, there was the existence of the large and very efficient *prolongatie* market, i.e., the lombard business on collateral of shares which formed the 'bread and butter' business of the Amsterdam stock exchange.[367] This market brought together the supply and demand for short-term credit, and the minor differences between short- and long-term interest rates severely limited the scope for deposit-taking. The existence of this efficient credit market also explains why Dutch banks only bothered to attract large-scale savings from August 1914, when the *prolongatie* system collapsed as a consequence of the closure of Amsterdam's stock exchange during World War I.[368]

Second, unlike their rural counterparts (i.e., whose deposits stood at over 90% of total liabilities in 1919), Dutch credit unions did not succeed in mobilising savings from either their members or external investors.[369] This is most likely because, in contrast to many Dutch farmers, their middle class clientele had no savings surplus, [370] and it was much more heterogeneous, lacking a real sense of communality. In fact, as noted by Amsterdam's credit union, their client's views were often contrasting, and competition amongst them could be fierce.[371] Furthermore, these rural cooperatives operating in more remote regions faced comparatively less competition from incumbent institutions, and were able to leverage their institutional advantages by relying on socio-religious ingroup versus outgroup differences to an extent that credit unions could not.[372]

366 Jonker, 'Spoilt for Choice', 190.
367 Jonker, 'Spoilt for Choice', 190-191; Van Zanden, 'Old Rules', 124-125.
368 Jonker, 'The Alternative Road to Modernity', 102.
369 Colvin, 'Banking on a Religious Divide', 878.
370 Jonker, 'Welbegrepen Eigenbelang', 205.
371 This is a paraphrase of 'Wij zullen niet ontkennen dat, die onderling aansprakelykheid een nuttig effect kan hebben en dus reden van bestaan heeft by de credietinstellingen uitsluitend voor den landbouw: by dezen hebben de deelnemers eenzelfde gemeenschappelyk belang. Die instellingen werken zuiver plaatselyk en de landbouwers in eenzelfde streek kunnen elkaar uitstekend beoordeelen; daardoor kan er dus een uitstekende onderlinge controle uitgeoefend worden, die zeker heilzaam kan werken. Waar by credietinstellingen voor de middenstand, vooral in eenigszins groote stad, is van dat alles niets te vinden. Het gemeenschappelyk belang is daarby ver te zoeken... Winkelier A heeft in het geheel geen belang er by dat winkelier B gemakkelyk aan crediet geholpen wordt om misschien dicht in zyn buurt hem een doodelyke concurrentie aan te doen.' Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797
372 For more information on how rural cooperatives relied on Dutch confessionalism to their benefit, see Colvin, 'Banking on a Religious Divide'. See also Colvin and McLaughlin, 'Raiffeisenism abroad', 512-513.

5.4. Favouring Sustainability Over Outreach

Another way in which credit unions attempted to address their endemic funding issues was by improving their profitability and reducing their screening and monitoring costs, as doing so would allow credit unions to raise more internally generated funds, i.e., retained earnings.[373] They hoped to achieve this goal by increasingly issuing larger, fully collateralised loans, which were less costly, thereby increasingly favouring sustainability over outreach.[374]

Until the mid-1850s, loan amounts at Amsterdam's credit union ranged from a minimum of 500 guilders up to a maximum of 25,000 guilders. By the mid-1860s, the majority of loans were between 3,000 and 10,000 guilders (37.7%). Throughout this period, average loan amounts fluctuated between 5,500 and 6,000 guilders, hardly increasing for almost two decades.[375] In the following years, this started to change. Whereas loans averaged around 7,500 guilders in the early 1870s, they increased to over 10,000 guilders by the late 1890s.[376]

Twente's credit union's loan portfolio followed a similar trend, as the average loan amount increased from around 6,000 guilders in the early 1870s to almost 12,000 guilders by 1880.[377] A drop-off in average amount occurred in the 1880s, but by the early 1900s it quickly picked up pace, reaching an average of over 18,000 guilders by 1910. In the case of Rotterdam's credit union, the trend was even more apparent. Here, the average loan amount between 1900 and the early 1920s grew from approximately 16,000 guilders to almost 36,000 guilders.[378] Smaller credit unions such as the one established in Sliedrecht in the early 1900s signalled a more modest (but still notable) increase in average loan amount from around 3,300 guilders in 1910 to almost 4,900 guilders by the late 1910s.[379]

Aggregated data (Table 5.2) on nearly 1,800 individual loans, based on the archival record of the minutes of the board of assessment of Arnhem's credit union for the period 1890-1900,

373 This is consistent with Myers 'pecking order theory", which states that managers generally prefer internal financing to external financing as a consequence of asymmetric information between aforementioned manager and outside investors. See for example Myers, 'The Capital Structure Puzzle', 575-581.
374 It is well-established that financial institutions prefer to issue large loans at the expense of smaller ones. This is because small loans generally require a similar credit investigation and office expense as the former, but bear more risks, as small companies which request such loans are often incapable of offering valuable assets as collateral. To make matters worse, such small-scale loans are also less profitable. See e.g., Calder, *Financing the American Dream*, 115-116.
375 This information is based on several unauthored publications in *De Ekonomist*, such as: 'De Amsterdamsche Credietvereeniging', 1857, 203-205; 'De Crediet-vereeniging te Amsterdam', 1859,225-229; 'De Crediet-vereeniging te Amsterdam', 1861,197-202.
376 Annual reports of Amsterdam's credit union, 1853-1915.
377 Annual reports of Twente's credit union (*Jaarverslagen Twentsche Credietvereeniging),* 1873-1909.
378 Janzen, *Het Middenstandsbankwezen*, 20.
379 Annual reports of Sliedrecht's credit union (*Jaarverslagen Credietvereeniging 'De Alblasserwaard' te Sliedrecht*) 1910-1917.

allows for a more detailed breakdown of the upward trend in average loan amount. The data indicate that when expressed in absolute numbers, small loans below 5,000 guilders remained by far the largest constituent of the total loan portfolio (i.e., 1.257 out of 1.765, or approximately 70%) and remained an important segment throughout this period.

Table 5.2: Loan Portfolio of the Arnhem's Credit Union Based on Lan Amounts *(1880-1910)* [380]

Bins (in guilders)	1890	1890	1900	1900	1910	1910
	#	Value %	#	Value %	#	Value %
500-1,500	638	6.5%	666	4.8%	789	3.50%
1,500-3,000	380	8.8%	448	7.2%	580	5.9%
3,000-5,000	239	9.8%	313	8.9%	426	7.6%
5,000-10,000	261	20.1%	333	17.9%	438	14.7%
10,000-15,000	93	11.9%	99	8.8%	146	8.2%
15,000-20,000	53	9.5%	77	9.6%	108	8.5%
20,000-25,000	31	7.2%	44	7.1%	111	11.2%
25,000-30,000	28	7.9%	36	7.1%	44	5.4%
30,000-35,000	7	2.3%	12	2.8%	29	4.3%
35,000-40,000	7	2.7%	11	2.9%	23	4.0%
40,000-45,000	6	2.6%	6	1.8%	14	2.8%
45,000-50,000	22	10.7%	62	21.1%	110	23.8%
Total	1,765	100%	2,107	100%	2,818	100%

However, when looking at their relative percentage to total outstanding value, they were of more marginal importance, accounting for less than 7% of total outstanding value by 1890. Moreover, their importance diminished further by the early 1900s. By that time, loans fluctuating between 45,000-50,000 guilders became increasingly important, as they grew from almost 11% in 1890 to almost 24% of total outstanding value by 1909.

These findings are consistent with data from other credit unions. While the downwards boundary remained mostly stagnant, the upwards boundary gradually rose over time. By the 1890s, loans often exceeded the 25,000 threshold, and even loans exceeding 45,000 guilders were increasingly issued. This trend was more notable for the largest credit unions, such as Amsterdam's credit union, whereby 1914 loans above 50,000 guilders accounted for 3.5% of all the number of loans, but nearly 45% in value. But it was also visible in the smaller unions.[381] At Utrecht's credit union, for instance, the relative number of loans in the 500-1,000 guilders bucket remained relatively constant throughout this period, fluctuating around (44%-47%). At the same time, the number of loans exceeding 30,000 guilders increased from less than 1% of the total loan

[380] Annual reports of Arnhem's credit union, 1890-1900.
[381] Annual reports of Amsterdam's credit union, 1870-1910.

portfolio to almost 13%.[382] In the subsequent decade, the upward boundaries of the sizes of loans issued by credit unions continued to rise significantly. By 1910, loans exceeding 100,000 guilders were increasingly issued by some of the larger credit unions.[383] Many of these loans were granted to industrial agricultural cooperatives and other types of cooperative associations, albeit industrial corporations also became part of their core clientele. A notable example was a large dairy cooperative originating from Rotterdam (*Coöperatieve Fabriek van Melkproducten der Vereenigde Zuivelbereiders*) which had successfully applied at Amsterdam's credit union for a loan in 1910 valued at 500,000 and once more in 1913 for 550,000.[384]

The upwards trend in average loan amount also reflected itself in how these institutions collateralised their loans. In its early days, the Amsterdam's credit union explicitly allowed their smaller members to borrow without any collateral (i.e., *blanco*) or on the basis of personal pledge (i.e., *borg*). It chose to do so, in an attempt to further increase outreach, as this group often lacked any tangible collateral, prohibiting access to credit facilities by traditional intermediaries.[385] However, a breakdown of the total value of all issued loans by type of collateral reveals that even in this early period collateral mostly (i.e., fluctuating around 50%--60%) consisted of first and second mortgages. Some loans were backed by bills and notes, or personal guarantees but this was relatively rare (i.e., respectively less than 5% and 15%, although the latter increased rapidly in the following years to over 25%). The remainder of the loans was uncollateralised. Furthermore, while collateralised loans already accounted for 70% in the early 1860s and for 75% by the early 1890s, they continued to increase sharply in the following years. By the early 1900s, strictly uncollateralised loans were becoming exceedingly rare, and by 1915 accounted for less than 5% of all the number of loans and 3% of the total value of all outstanding loans.[386] Smaller credit unions seemed equally less likely to issue uncollateralised loans as time passed by. For

[382] Annual reports of Utrecht's credit union (*Utrechtsche Credietvereeniging*), 1876-1890.
[383] Cf. in the case of Amsterdam's credit union, there were almost 30 loans issued exceeding 100,000 guilders by 1910. In the case of Twente's credit union, there were more than 15. This is explicitly mentioned in: Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797. Furthermore, I have based these figures on close archival research of individual loan applications at the Twente's credit union. See Twente's credit union (*Archieven Twentsche Credietvereeniging*), held at Overijssel Historisch Centrum, 'Minutes of the board of admission' (*Notulen van de Raad van Admissie*), catalogue call number 0173:2467-2477).
[384] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797; Twente's credit union, held at Overijssel Historisch Centrum, 'Minutes of the board of admission', catalogue call number 0173:2467-2477).
[385] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Statutory Changes', catalogue call number 2.25.08: 13438.
[386] Annual reports of Amsterdam's credit union, 1860-1915.

example, in the case of Dordrecht's credit union, the number of collateralised loans increased from approximately 62% to 78% in the period 1910-1917.[387]

Table 5.3 provides a more detailed overview of the absolute and relative number of loans sorted by different types of collateral for Arnhem's credit union for the period 1875-1910. It distinguishes between uncollateralised loans (i.e., *blanco)*, loans backed by a personal guarantee (i.e., *borgstelling*), first and second mortgages and a combination of the aforementioned (i.e., most commonly, a combination of a mortgage and some sort of security). It indicates that just as in the case of Amsterdam and Dordrecht's credit unions, the number of uncollateralised loans was still relatively high prior to the 1890s. In the following years, this number dropped quickly in favour of loans that were backed by first- and second-grade mortgages.[388] This meant loans issued by Dutch credit unions became increasingly inaccessible for the more impoverished members of the middle class which had little to no access to any valuable collateral.[389]

Table 5.3: Total Outstanding Loans by Type of Collateral in Absolute *(#)* As Well As in Relative Numbers *(%)* [390]

	1875		1880		1890		1905		1910	
	#	%	#	%	#	%	#	%	#	%
Uncollateralised	136	38,5%	49	13,9%	22	6,2%	47	13,3%	50	14,2%
Personal pledge	94	13,4%	68	9,7%	80	11,4%	180	25,7%	175	25,0%
Mortgage 1e	34	9,3%	26	7,1%	50	13,7%	105	28,8%	100	27,5%
Mortgage 2e	23	11,1%	18	8,7%	13	6,3%	61	29,3%	64	30,8%
Combination	6	7,8%	15	19,5%	4	5,2%	19	24,7%	21	27,3%

The data on individual loans also permits a breakdown of Arnhem's credit union's clientele for the period 1875-1910. The results (Table 5.4), illustrate that its membership consisted mostly of merchants, with a share of as much as 32%. This subcategory mainly includes (large) traders in commodities such as wood, iron and wine, but also (small) shopkeepers. Naturally, the heterogeneity within this subcategory is relatively large; unfortunately, the archival sources hardly allow for a further distinction, as they provide no information on the wealth of the loan applicant, making it impossible to distinguish between, for example, a wealthy and a somewhat impoverished merchant. Farmers and manufacturers together complete the top three of the

[387] Annual reports of Dordrecht's credit union, 1910-1917

[388] As in the case of Amsterdam's credit union, the number of loans backed by personal pledges remained high throughout this period and is consistent with earlier findings by Banerjee et al. on the use of joint-liability between the borrower and co-signers to reduce adverse selection and moral hazard. See Banerjee et al., 'Thy Neighbor's Keeper'.

[389] Kymmel, *Geschiedenis. Vol.1*, 135-136.

[390] Archive of Arnhem's credit union, held at Nationaal Archief in The Hague, 'Minutes of the board of admission', catalogue call number 2.20.01 - 12283-12285.

most common occupational backgrounds. Grocers, innkeepers, building contractors, butchers and carpenters also commonly applied for membership with Arnhem's credit union. Finally, notaries are also notably present. [391]

Based on these figures, it is hard to distinguish any significant trends, but purely based on the type of professions, it seems that Arnhem's credit union loan portfolio mostly did align with its original mission of serving the middle classes. However, given the substantial average loan size, these were undoubtedly the wealthier members of the middle class. This is corroborated by the fact that the GDP/capita fluctuated between 352 guilders and 1,200 guilders in the period between 1850-1910. Taking this measure at face value indicates that the average loan at a credit union equalled about ten to eleven times the average annual income.[392] In order to pay back such a substantial loan, these lenders must therefore have been wealthy, have had a flourishing business and/or a combination of both.

[391] Archive of Arnhem's credit union, held at Nationaal Archief in The Hague, 'Minutes of the board of admission', catalogue call number 2.20.01 - 12283-12285.

[392] GDP/capita serves as a crude approximation of the annual average per capita income of the Dutch population. Based on crude estimations by Van Riel, *Trials of Convergence*, 657, the annual household income averaged 581 guilders in the period 1866-1910. Using this alternative proxy does not change the conclusion with regards to average loan size when compared to average yearly income.

Table 5.4: Top 20 Occupational Backgrounds of Lenders at Arnhem's Credit Union [393]

	1875	1880	1885	1890	1905	1910	Total
Merchant	122	55	60	62	83	92	474
Manufacturer	29	36	29	18	41	42	195
Grocer	37	22	34	21	36	31	181
Farmer	24	19	19	18	50	45	175
Innkeeper	11	6	7	11	24	21	80
Carpenter	21	6	12	4	15	11	69
Contractor	4	6	6	6	20	17	59
Butcher	8	1	6	7	12	14	48
Baker	10	5	6	1	14	11	47
Notary	8	7	9	5	5	6	40
Miller	3	7	1	2	14	10	37
Painter	3	5	6	3	7	7	31
Tanner	6	1	3	1	7	4	22
Smith	2	0	7	2	7	2	20
Brewer	4	0	1	5	3	5	18
Shoemaker	6	1	6	1	1	3	18
Tailor	1	2	4	1	4	5	17
Cabinetmaker	6	1	7	1	2	0	17
Mason	6	2	1	2	2	3	16
Architect	3	2	2	1	3	3	14

Finally, the quantitative evidence that credit unions were actively seeking to improve their profitability and reduce costs of screening and monitoring is supported by qualitative evidence. Throughout several of their correspondences dating from the period between 1913-1916, the DNB raised the concern that Amsterdam's credit union was granting loans that were too large, and which went beyond its original intent.[394] The credit union acknowledged this concern, but pointed out that this was at least in part due to so-called 'progressive lending': many of its clients had simply grown out of their original business and had consequently reached a higher credit ceiling.[395] Moreover, the credit union deemed these larger loans to be essential for its business, as it allowed them to balance outreach with sustainability. This, the credit union argued, was because many of their smaller clients had organised themselves in cooperative associations which applied for and are granted notably larger loans (i.e., sometimes up to

393 Archive of Arnhem's credit union, held at Nationaal Archief in The Hague, 'Minutes of the board of admission', catalogue call number 2.20.01 - 12283-12285.
394 Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797. This document explicitly states, 'De Credietvereeniging zou veel te grote credieten geven, die niet in de lyn van haar werkkring liggen'.
395 For a more in-depth discussion on the concept of 'progressive lending', see for example Armendariz and Szafarz, 'On Mission Drift in Microfinance Institutions', 342.

500,000 guilders), which these associations then distributed themselves to their members. According to the credit union, issuing loans of this size (which were then split up into smaller parts) served a similar purpose to directly targeting small businessmen by issuing multiple smaller loans. However, it was more cost-efficient to screen and monitor such loans, especially because these cooperative associations took over many of the screening and monitoring obligations from the credit union.[396]

5.5. From Cooperatives to Corporations

Credit unions initially limited their operations to a specific region and were firmly rooted in the local economy, which also prevented them from competing with one another. This regional focus was formalised in their statutes and was reflected by their name, which referred to the city or region of their origin and main operating area.[397] The aforementioned decision of most credit unions to set up branches in order to expand their catchment area for deposits signalled a departure from this model which ultimately affected the business form of these cooperative institutions.

Foremost was the fact that members proper of these cooperatives gradually lost their mutual ties with one another. They were simply living too far from one another to have any strong sense of community. This is illustrated by Figure 5.2, which indicates that while in 1870, more than 80% of all loans were issued in Gelderland - to a large extent in and around the city of Arnhem - this decreased to around 55% by 1910. At the same time, loans issued outside of Gelderland, in the north (i.e., Groningen) and the south (i.e., Limburg) of the Netherlands, increased substantially (Table 5.5). The aforementioned table and figure are based on the archival research of approximately 1,700 loan applications assessed by the board of admission of Arnhem's credit union in the period 1875-1910. For each of these loans, information on the applicants place of residence was gathered. As with most other credit unions, individual loan

396 This is a paraphrase of 'Kan men beweren, dat door het geven van groot coöperatieve credieten het kapitaal der Credietvereeniging wordt onttrokken aan zyne bestemming… Neen. Integendeel. Gesteld men verleent een crediet van f. 150,000 aan een coöperatieve aardappelmeelfabriek dan zouden met dit kapitaal honderd boeren kunnen worden geholpen elk aan f. 1,500. Wat zouden die honderd boeren met die f. 1,500 hebben gedaan… zeker een deel voor huishoudelijk gebruik of voor zaken, die geen kapitaalsvermeerdering maar kapitaalsvernietiging teweeg brengen. Controle dat de door ons gegeven f. 1,500 productief wordt gemaakt ontbreekt natuurlijk geheel. Nu richten deze honderd boeren evenwel een coöperatieve fabriek op en krygen daarvoor een crediet van f.150,000. Dit kapitaal… wordt alleen en uitsluitend besteed om daarvan een fabriek te bouwen en verder als bedryskapitaal.' Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797.
397 Cf. Amsterdam's credit union from Amsterdam and Twente's credit union from Twente.

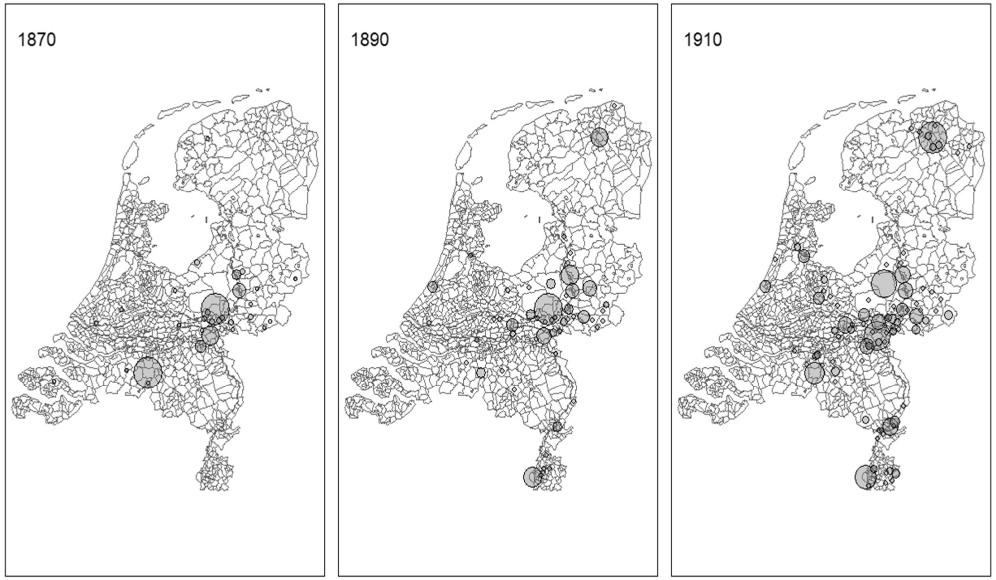
applications were assessed by the headquarter to ensure uniformity and prevent mismanagement by the local branches.[398]

Table 5.5: Regional Dispersion of Loans Issued by Arnhem's Credit Union

	1870	1875	1880	1885	1890	1905	1910
Drenthe	0.6%	0.8%	1.4%	0.0%	0.0%	0.5%	0.9%
Gelderland	81.4%	74.0%	65.6%	77.7%	62.9%	63.8%	55.6%
Of which in Arnhem	33.5%	23.8%	16.7%	14.6%	14.3%	8.4%	11.4%
Groningen	0.0%	3.6%	3.3%	3.1%	8.1%	7.0%	11.9%
Limburg	0.0%	15.3%	7.2%	7.7%	15.7%	11.3%	14.2%
Noord-Brabant	10.8%	3.0%	12.0%	3.8%	4.8%	10.3%	7.5%
Noord-Holland	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	2.8%
Overijssel	6.6%	2.7%	10.5%	6.9%	8.6%	5.0%	3.3%
Utrecht	0.6%	0.5%	0.0%	0.8%	0.0%	1.4%	1.9%
Total nr. of loans	167	366	209	260	210	417	429

[398] See Archive of Arnhem's credit union, held at Nationaal Archief in The Hague, 'Minutes of the board of admission', catalogue call number 2.20.01 - 12283-12285.

Figure 5.2: Regional Dispersion of Loans Issued by Arnhem's Credit Union



Since membership was no longer small and geographically concentrated, members became increasingly incapable of monitoring one another's behaviour, and by extension disciplining bad behaviour through social screening, thereby rendering it more and more difficult to prevent free-riding and moral hazard.[399] As joint liability became increasingly ineffective, an increasing number of credit unions favoured the adoption of limited liability, and the associated change from a cooperation into a corporation.[400] The well-documented case of Amsterdam's credit union demonstrated that this trend was further reinforced by more pragmatic reasons. Given that Dutch credit unions continuously struggled to increase their capital basis, the limited liability corporation seemed to be a more beneficial organisational form. This is because the corporate form, as opposed to the cooperative form which had to maintain a 'shareholders' (i.e., members) list and only permitted to transfer shareholdings under

[399] For a more in-depth analysis of the use of 'social capital' at Raiffeisen banks, see for example Guinnane, 'Cooperatives as Information Machines; Ghatak and Guinnane, 'The economics of lending with joint liability'. Also see Carnevali, *Europe's Advantage*, for a more in-depth (theoretical) discussion on the advantages of local banks in providing credit to small, local firms.

[400] The Dutch equivalent of the corporation, also referred to as the public company (*naamloze vennootschap*), derived its attributes from legislation enacted 1838 to replace the Napoleonic Code Civil (Wetboek van Koophandel, The Hague, 1838).

certain prescribed instances outlined in their articles of association, allowed credit unions easier access to the capital market by issuing tradeable shares.[401] Whatever the underlying reasons, an increasing number of credit unions incorporated. However, while exemplary, Amsterdam's credit union was not the first to incorporate. Most notably, Dordrecht's credit union had already abandoned joint liability in 1878, whereas Amsterdam's credit union abandoned it 1895. Arnhem's credit union in 1911 was one of the last to abandon joint liability.[402]

Uneasy with this trend, the DNB felt that Dutch credit unions, which were already in a precarious state due to their excessive reliance on the DNB's discounting facilities, were taking additional unwarranted risks.[403] Much in line with modern economic theory on cooperatives, the DNB praised the benefits of joint liability, claiming that it encouraged peer monitoring, which would reduce moral hazard and auditing costs as it gave members incentives to enforce the repayment of loans.[404] Small and local credit institutions based on cooperative principles would be more resilient and less susceptible to systemic risk than larger, corporate institutions.[405]

Wary of surmounting risks, the DNB increasingly interfered in the expansionistic affairs of these intermediaries. In 1896 for example, it directly hindered the ambitions of Dordrecht's credit union to branch out by arguing that such an expansion could potentially be dangerous, as the credit union's board of admission would no longer be capable of properly assessing and monitoring its membership.[406] It also strongly condemned Amsterdam's credit union's (and by extension earlier credit unions') decision to incorporate, labelling it a grave mistake to abandon joint liability.[407]

[401] Annual reports of Arnhem's credit union, 1911-1915.
[402] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797.
[403] Jonker, 'Between Private Responsibility and Public Duty'.
[404] Cf. Ghatak and Guinnane, 'The economics of lending with joint liability', 199 on the benefits of joint liability in the case of (German) credit cooperatives.
[405] As Colvin showed in the case of SME banks, history proved the DNB right. See Colvin, 'Organizational Determinants of Bank Resilience'
[406] This is a paraphrase of '…Iets anders is dat wij het eene Credietvereeniging niet geraden zich buiten hare omgeving uit te breiden. Wij hebben dit vroeger uiteengezet – toen de Credietvereeniging (van 1853) haar agentschappen wilde uitbreiden en toen betoogt dat zij gevaarlijk handelde met credietgeven aan pesonen die te ver af zijn om behoorlijk gecontroleerd te worden, die in een omgeving werken, die aan het toezicht der bestuurders ontsnapt'. See Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Untitled letter dd. 20th of January 1896', catalogue call number 2.25.68: 14539.
[407] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797.

Amsterdam's credit union personified the opposition to this view, stating that joint liability was, as they put it, nice in theory but unworkable in practice.[408] The credit union deemed it unlikely that in times of crises, when many of their members would potentially default, joint liability could actually help mitigate any losses as any shortfall had to be redeemed by partially relying on the same members that were unable to repay these loans in the first place.[409] Moreover, joint liability would not only offer little to alleviate potential losses, it also increasingly caused an adverse selection effect. This was because safer, wealthier borrowers were increasingly unwilling to accept joint liability as a necessary condition for a loan. Large corporate banks—which, following the concentration movement of the Dutch banking sector of the 1910s, were increasingly targeting the more affluent members of the middle class—did not have this requirement. According to Amsterdam's credit union, this caused credit unions to increasingly lose their most reliable, most profitable clients to their competitors. [410]

In other words, for the DNB this was a matter of stability over growth, fearful as it was that large, corporate institutions were more susceptible to systemic risk. Meanwhile, for most credit unions this was a matter of financial sustainability, i.e., survival. Given their ineptitude to increase external funding, they had little choice but to expand their catchment area and reform. The fact that, by the late 1910s, most if not all credit unions had abandoned joint liability and branched out, is testimony to this.

5.6. The Decline of Dutch Credit Unions

Following the outbreak of World War I, the number of independent credit unions dwindled rapidly. The timing and reason for this decline was no coincidence, but rather the result of changes in the socio-economic environment in which these institutions operated. While the two principal explanations for their decline, i.e., the big commercial banks' trend towards universalisation and the rise of government-supported SME banks, apply to all credit unions, it is nevertheless important to differentiate in how individual credit unions responded to these changes. Three broad categories can be distinguished based on these responses, and their ultimate outcome. In the subsequent section we will first discuss the challenges the credit union

[408] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797.
[409] Noteworthy was the opinion of Amsterdam's credit union on this matter: 'Wat is er nog van die menschen te verwachten voor de bypassing van het tekort? Immers niets!' See Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797.
[410] Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797.

system faced as a whole, and then we will discuss these categorical differences amongst credit unions.

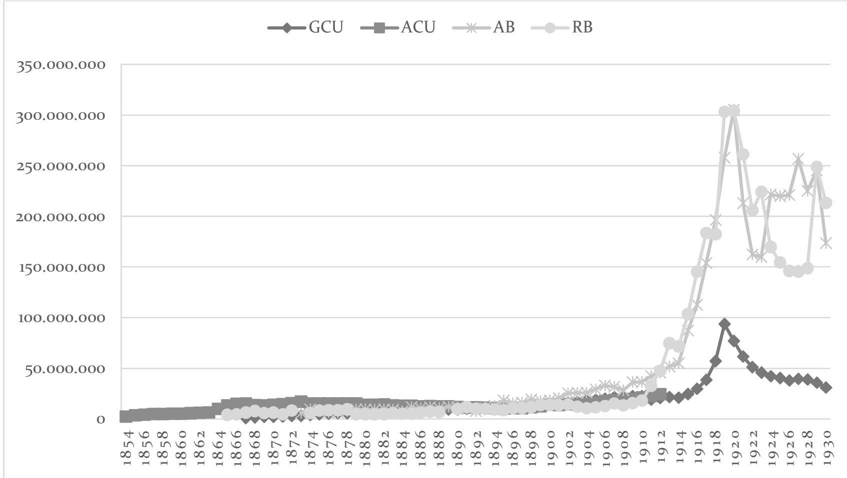
Various scholars have pointed out that World War I was a defining moment for the development of the Dutch financial system.[411] Immediately following the armistice, the Dutch economy experienced a significant upswing, leading to the rise of large-scale industrial enterprises and accompanying growth in the demand for credit and investment capital. In addition, the war had briefly put an end to the aforementioned *prolongatie* market that long hindered a shift towards more active financial intermediation.[412] This served as a decisive pull factor for the rapid development of the Dutch banking sector during and especially after the conflict period.

First and foremost, the development was characterised by the expansion and concentration of power of the five largest commercial banks.[413] Running parallel to this concentration wave was a move towards universal service provision, since these banks started to provide an ever-wider variety of financial services to an ever-wider range of clients.[414] Particularly problematic for credit unions, however, was the fact that this new type of universal bank increasingly targeted the same niche of clients, i.e., the upper middle class.[415]

Figure 5.3 illustrates that up until 1900, the value of total outstanding loans for the largest independent credit unions (i.e., Amsterdam's and Arnhem's credit union) rivalled those of two of the largest commercial banks (i.e., the Bank of Rotterdam and the Bank of Amsterdam), fluctuating around 14-15 million guilders for the former and between 14-18 million guilders for the latter.[416] By 1912, however, the total value of outstanding loans at the Bank of Rotterdam and the Bank of Amsterdam had risen to 45-47 million guilders, respectively, whereas for Amsterdam and Arnhem's credit unions, this had risen to 20-24 million guilders, respectively.

[411] Jonker, 'Spoilt for Choice'; Jonker, *Merchants, Bankers, Middlemen*; De Jong and Röell, 'Financing and Control in The Netherlands'; Van Riel, *Trials of Convergence*; Colvin et al., 'Predicting the Past'.
[412] Colvin et al., 'Predicting the Past', 97-99; Van Riel, *Trials of Convergence*, 486; Van Zanden, 'Old Rules, New Conditions', 124-127.
[413] Wijtvliet, *Expansie en Dynamiek*, 193-251.
[414] These five big banks were (in no particular order) the bank of Amsterdam (*Amsterdamsche Bank*, AB), the bank of Rotterdam (*Rotterdamsche Bank*, RB), the bank of Twente (*Twentsche Bank*, TB), the Dutch Trading Company (*Nederlandsche Handelmaatschappij*) and the *Incassobank*. See for example Jonker, 'Spoilt for Choice', 188.
[415] Jonker, 'Spoilt for Choice', 189-192.
[416] The credit union of Twente (the third-largest credit unions) is excluded in this comparison, as this institution (while independent) was still a subsidiary of the Bank of Twente (the largest universal bank).

Figure 5.3: Total Outstanding Loans at Two of the Largest Credit Unions Compared to Two of the Largest Commercial Banks [417]



GCU: Arnhem's credit union *(Geldersche Credietvereeniging)*
ACU: Amsterdam's credit union *(Amsterdamsche Credietvereeniging)*
AB: Bank of Amsterdam *(Amsterdamsche Bank)*
RB: Bank of Rotterdam *(Rotterdamsche Bank)*

Thus, in their own rights, the lending facilities of credit unions experienced notable growth, but one that was still far short of the booming rise of the 'big five', and by extension the Dutch banking sector as a whole.[418] In the years following 1910 this trend continued exponentially. The largest commercial banks proved capable of scaling up their activities at a much faster rate than the largest credit unions, and were increasingly threatening their high-end market share. The banks' growth was fuelled by an increase in deposits, made possible by the collapse of the *prolongatie* system. By 1918, 'big five' deposits to total liabilities stood at 60%.[419] While still relatively low compared to their namesakes in neighbouring countries, these numbers were still well above those of credit unions, which hardly exceeded 40%.[420]

[417] Own calculations using annual reports of respective financial institutions.
[418] Kymmel, *Geschiedenis. Vol. 2*, 446, estimates that the growth of credit facilities by the Dutch banking sector as a whole increased tenfold, from some 130 million guilders in 1875 to over 1,300 million guilders by 1913.
[419] Jonker, 'Spoilt for Choice', 190.
[420] Jonker, 'Spoilt for Choice', 189-192.

At the same time, credit unions faced competition in the lower echelons of the market due to the rise of a newly emerging financial institutions which specifically targeted the needs of small business owners.[421] These so-called SME banks (*middenstandsbanken*) first appeared in the Netherlands in 1905. Like Dutch credit unions preceding them, these institutions were de facto Schulze-Delitzsch cooperatives and were based on cooperative principles. These SME banks appeared partially as a response by small business owners, which felt that existing incumbents, in particular credit unions, were not (or were no longer) willing to provide them the relatively small credit facilities they required.[422] Unlike credit unions, however, these banks were set up by members of the middle class, for members of the middle class. The local elite played little part in their establishment. More importantly, as a consequence of the middle class' ability to exert intense political pressure, they received government subsidies and could thus stay afloat despite their relatively poor financial results.[423] This support helped these SME banks to seemingly achieve what credit unions could not: balance outreach with sustainability.

By the early 1900s, credit unions felt increasingly uneasy with what they perceived to be an uneven playing field. Amsterdam's credit union for instance stated that it was unfair that these SME banks received support from the government and the DNB. Furthermore, the credit union warned about the unwarranted risky practices of their ill-equipped management consisting solely of members of the middle classes who knew next to nothing about running a bank.[424] It concluded that, due to these subsidies and unwarranted practices, SME banks were forcefully pushing out Amsterdam's credit union from the lower segments of the market, [425] and that this middle class 'experiment' was bound to fail.[426]

While somewhat apologetic at the time, these claims soon turned out to be prophetic. After their initial introduction in the early 1900s, the number of SME banks soared in the subsequent years, from under 20 in 1910 to over 100 by 1918. Propagated at least in part by government support and subsidies, SME banks continued to expand. Including branches, the banks had 365 offices in 1920, mostly spread around the western and southern parts of the country.[427] Simultaneously, the inflationary post-WWI boom led to buoyant lending practices at many SME banks. Mirroring the earlier described trend for credit unions, loan amounts at some SME banks rose from an average of less than 1,000 guilders to over 10,000 guilders.[428] The 1920s financial crisis exposed these buoyant practices; as such, the banks' capital basis was simply too small, forcing several SME banks to file for bankruptcy due to overextended credit and defaulting loans.[429] While reluctant at first, the government finally intervened in 1927, merging the remaining SME banks (i.e., by then, approximately one-third of the SME banking system had failed) to form a centralised SME bank (*Nederlandsche Middenstandsbank,* NMB). Now acknowledging the trade-off between outreach and sustainability, the state-supported SME bank opted for the latter; small, unprofitable loans (i.e., below the 1,000 guilders threshold) would no longer be issued.[430]

Given the aforementioned trend towards issuing larger and more profitable loans and the (at least allegedly) unfair competition they faced in the lower echelons, credit unions

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[421] Another financial cooperative institution which appeared at this time was the so-called Raiffeisen bank (*boerenleenbank*). These banks were highly successful but specifically targeted the needs of impoverished farmers and agricultural workers. Consequently, they did not compete as directly with credit unions for their market share as SME banks and are therefore not explicitly discussed. Moreover, the history of these institutions is well-explored in other works, see for example Colvin, 'Banking on a Religious Divide' and Rommes, *Voor en door Boeren*.

[422] However, as argued by for example Colvin (Colvin, 'Organizational Determinants', 666-668) their emergence probably has just as much to do with the 'pillarization' of Dutch society, a phenomenon in which Catholics, Protestants, socialists and non-aligned 'neutrals' each established their own separate social and business organizations, including their own banks.

[423] Unlike credit unions, SME banks relied on a central association (i.e., Algemeene Nederlandsche Centrale Middenstandsbank, ANCM) which provided similar services to their German counterparts, including the provisioning of liquidity and emergency loans. See Colvin, 'Organizational Determinants of Bank Resilience' and Peeters, 'Solving the Perennial Small Firm Credit Problem'. The government subsidized the founding of new SME banks and the expansion of the ANCM. Annual subsidies went from 10,000 guilders in 1915 to over 80,500 guilders in 1916. See Peeters, 'Solving the Perennial Small Firm Credit Problem'. See also Peeters, 'Getting' on how this movement entrenched their political influence.

[424] This is a paraphrase of 'En zal men nu voor die tallooze bankjes steeds de geschikte leider vinden? Het streven is immers om die leiding zoveel mogelijk in handen van den Middenstand zelf te geven. Nu is credietgeven misschien zeer eenvoudig, maar het vereischt toch de nodige ervaring om de talryke gevaren, die zich daarby kunnen voordoen, goed onder oogen te zien en ten einde teleurstellingen te vermijden. Al die bankjes zullen toch graag zaken willen doen en, gelet op de by den Middenstand toch zeer sterk op den voorgrond tredende opvatting, dat die Middenstand op gemakkelyke wyze aan crediet geholpen moet worden, is het gevaar zeker niet denkbeeldig.*'* See Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797.

[425] This is a paraphrase of 'Ten slotte dient opgemerkt te worden, dat de Credietvereeniging wel genoodzaakt wordt tot het verleenen van grootere credieten, tegenwoordig zelfs meer dan vroeger, als noodzakelyk gevolg van het tegenwoordig sterk tot uiting komende streven tot oprichting van tallooze kleinere credietinstellingen voor landbouwcredieten enerzyds en voor middenstandsbehoeften anderzyds. Al deze instellingen zyn speciaal aangewezen op kleinere credieten., die overigens volledig in de lyn van de Credietvereeniging zouden liggen en nu kunne zij, voornamelyk de Middenstandscredietbanken, door de buitengewoon bevoorrechte positie waarin zy dank zy de hulp van Staat en Nederlandsche Bank gebracht zyn, die kleinere credieten tot dikwyls buitengewoon lage condities verleenen. Is het dan te verwonderen, dat die credieten voor de Credietvereeniging uitgesloten zyn en deze dus aangewezen blijft op die posten, die voor die andere instellingen te groot blyken? Wil dus de Nederlandsche Bank eenerzyds streng vasthouden aan het principe, dat de Credietvereeniging zich moet beperken tot kleinere credieten, terwyl zy anderzys hare medewerking verleent by het oprichten van credietinstellingen speciaal voor die kleindere credieten en die instellingen bovendien met hare hulp in eene buitengewoon bevoorrechte positie brengt? Dan is de noodzakelyke consequentie daarvan, dat er naar mening der Nederlandsche Bank voor de Credietvereeniging geen reden van bestaan meer is'. See Archieven De Nederlandsche Bank, held at Nationaal Archief, 'Grievances of the DNB regarding the policy of Amsterdam's credit union', catalogue call number 2.25.08: 13797.

[426] Colvin refers to the creation of SME banks as the 'The Great Middenstandsbank Experiment' Colvin, 'Organizational Determinants'.

[427] De Vicq, 'Construction'.

[428] Cf. Yearly Reports of Hanzebanks (*Jaarverslagen Hanzenbank*).

[429] Van den Eerenbeemt, 'Middenstandskrediet', 25-64; Stoffer, *Het Ontstaan van de NMB*; Colvin, 'Organizational Determinants', 674-678.

[430] De Brabander et al., *Het Middenstandscredietwezen*, 5–7. See also Peeters, 'Getting'.

forcefully continued to compete directly with commercial banks. Some credit unions, most notably Arnhem's, not only attempted to compete by branching out, but also by providing an ever-broader range of financial services themselves. While initially focusing on collecting deposits and providing credit services to its members, it formally changed its statutes to include trading in securities in 1906. In 1917, the statutes were changed once more. From that moment onwards, the mission of the credit union was described as to provide all sorts of bank, payment and trading services. Its mission even included active equity participation in other financial and non-financial joint-stock companies.[431] Both in its organisational form and business model, Arnhem's credit union (like many of its namesakes) was now mostly indistinguishable from the large corporate banks that became increasingly active in the market for commercial credit, though they suffered from an endemic funding issue. Furthermore, by scaling up their activities and through the process of incorporation, these intermediaries had lost all their efficiency advantage in providing funding to relatively small businesses.[432] Unable to compete with the smaller SME banks (which relied on local information to keep the cost of credit low, and on subsidies to ensure their sustainability in the lower echelons of the market), and unable to compete with universal banks benefiting from economic scale in the upper echelons of the market, credit unions' market share continued to shrink.[433]

As mentioned, the way in which credit unions responded to these challenges and their ultimate outcome differed in three ways. The first category of larger credit union attempted to stem the tide by cooperating and/or merging with commercial banks. This included Amsterdam's credit union, which joined forces with the banking association (*Bank-Associatie*) Wertheim and Gompertz in May 1918 and ceased to exist as an independent institution, asserting that a specialised financial institution focusing on providing credit had no future in the changing banking system.[434] One year earlier, Twente's credit union had already been integrated in the newly incorporated Bank of Twente (*N.V. Twentsche Bank*); as such, the bank put an end to its

[431] This is a paraphrase of 'De vennootschap heeft ten doel de uitoefening van het bankiers-, kassiers- en effectenbedrijf in den ruimsten zin, zoomede het deelnemen in instellingen van gelijksoortigen aard.' Art. 7, 'Statuten Der Naamloze Vennootschap Geldersche Credietvereeniging', 1917.

[432] These efficiency advantages of credit cooperatives have been well explored by for example Guinnane, 'Cooperatives as Information Machines' in the case of Germany and consisted of 'joint liability' and especially 'social capital'. This allowed cooperatives to gain better information about their borrowers and to use social sanctions no available to banks in order to monitor their borrowers. Due to mission drift, Dutch credit unions had ignored these efficiency advantages.

[433] Westerman, *De Concentratie in het Bankwezen*; Verrijn Stuart, *Het Bankwezen in Nederland*, 192.

[434] This is a paraphrase of '... Reden is de toegenomen concurrentie en concentratie binnen het bankbedrijf, die het voor eenzijdig gespecialiseerde banken moeilijk overleven maken.' Annual report of Amsterdam's credit union, 1918.

previously independent credit union.[435] Finally, after almost two decades of joint cooperation, Arnhem's credit union informed its stakeholders on November 1936 that the Dutch Trading Society (*Nederlandsche Handel-Maatschappij*) had acquired it in full, stating that this universal bank was better adjusted to the new economic realities and the needs of their clientele.[436]

Smaller credit unions, which formed the second category, often persisted throughout the 1930s, until they liquidated voluntarily in the early 1940s. The business of Dordrecht's credit unit is exemplary for this category. It continued to expand until the late 1920s, when the value of total loans issued stood at over 9 million guilders, deposits at over 4.7 million guilders and dividend payout at around 7.5%. In the following years, the value of outstanding loans dropped to less than 3 million guilders; deposits had decreased to 2.2 guilders and dividends to 2.5%. Incapable of reversing this trend, the credit union voluntarily liquidated by the early 1940s. The credit union was soon followed or even preceded by several of its counterparts.[437] Finally, a third category, consisting of only a handful of credit unions, most notably one from South Holland (*Zuid-Hollandsche Credietvereeniging*) went bankrupt due to overly buoyant lending practices.[438]

5.7. Conclusion

Recent empirical contributions in the field of microfinance reveal a trade-off between outreach (i.e., the social objective) and sustainability (i.e., the financial objective) that make financial institutions designed to support small businesses susceptible to mission drift: to raise revenues, they increasingly reached out to wealthy clients at the expense of poor ones.[439] This is not a novel concern, as German urban credit cooperatives seemed to have faced similar issues.[440] This chapter added further evidence on the importance of the sustainability-outreach trade-off by analysing the rise and decline of a specific type of urban credit cooperative—Dutch credit unions—during the late nineteenth and early twentieth century. Launched to provide SME

[435] See Van der Werf, *Van Twentsche Bank naar Algemene Bank* for an in-depth account of the history of this bank and its subsidiary credit institution. See also Chapter 6 of this PhD-manuscript.

[436] This is a paraphrase of '...dat een zuiver provinciale bankinstelling als de onze niet een zoodanige organisatie kan opbouwen en in stand houden, als noodzakelijk moet worden geacht om in de meer en meer ingewikkeld geworden nationale en internationale samenleving van heden aan de clientèle den vereischten steun te bieden.' Annual report of Armhem's credit union, 1936.

[437] This included the following less-documented credit unions: *Crediet- en Handelsvereeniging 'Banda'; Onderling Crediet; Credietvereeniging voor den Handel in Petroleumproducten; Credietvereeniging 'Het Anker'; Provinciale Credietvereeniging,* all of which were liquidated in the 1940s. Others, including *Limburgsche Credietvereeniging, Nederlandsche Credietvereeniging* and *Betuwsche Credietvereeniging,* had already been liquidated prior to the 1920s.

[438] Oosten, *De Zuid-Hollandsche Credietvereeniging*.

[439] Hermes and Lensink, 'Microfinance', 878-879.

[440] See Guinnane, 'The Early German Credit Cooperatives', 84; Banerjee et al., 'Thy Neighbor's Keeper', 495-497; Guinnane, 'Regional Organization', 254.

credit, these credit unions gradually drifted away from their original aims as they scaled up their activities and reformed to remain viable and competitive. In the end, they were squeezed out of business between new, government-supported SME banks and the big commercial banks.

These conclusions demonstrate that urban credit unions, unlike their rural counterparts which could leverage their social capital, were caught between outreach and sustainability. This trade-off proved instrumental in explaining how these institutions developed over time. Perhaps future financial historians can get inspired by these results and see to what extent this trade-off can explain the advent of other historical institutions, in different regions, across various circumstances. Not only would this improve our understanding of how the financial system developed over time, but it could also lead to potentially valuable lessons from the past which are applicable to the current day's microfinance industry.

Chapter 6
Exploring the Limits of the Limited Partnership: The Case of the Bank of Twente

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Abstract: This chapter presents a detailed historical account of the Bank of Twente (Twentsche Bankvereeniging), launched in 1861 and, for most of the subsequent decades, the largest, fastest-growing, and most profitable bank in the Netherlands. It follows the narrative analysis approach to illustrate that the circumscribed use of a limited partnership was rooted in the organizational form having a flaw of its own that, under particular circumstances, created serious agency costs. As the bank grew, so did the agency costs, finally forcing the bank to incorporate in 1917.

6.1. Introduction

The consensus used to be that the supremacy of the archetypal Anglo-Saxon corporate legal form required little explanation. Many scholars considered its key elements (legal personality, delegated management, capital lock-in, permanence, transferable shares, limited liability, and shareholder primacy) to be economically indispensable and superior to alternative forms of business organization.[441] Yet some scholars argue that this economic, deterministic account is fundamentally flawed from a historical standpoint. They claim that, from the perspective of contemporaries living in the 1800s and even the 1900s, the rise to dominance of the business corporation was not inevitable in any sense.[442]

Following the pioneering work of Lamoreaux and Rosenthal and colleagues, business historians have demonstrated that civil-law countries developed a wide menu of organizational forms that could provide more flexibility than, and were at least as favorable to economic development as, the corporation.[443] In doing so, these historians have managed to ' put the corporation in its place,' as other organizational forms have been proven to provide unique advantages over the corporation under certain conditions.[444]

One of these alternatives is the limited partnership. This type of partnership consists of one or more general partners who control the company and are subject to unlimited liability. Limited partners furnish capital and, provided they do not participate in the management of the company, enjoy the protection of limited liability. Some limited partnerships even issued tradable shares that enabled such businesses to raise capital from the broader public.[445]

As a halfway stage between the regular partnership and the corporation, this business form offers some of the advantages of corporations but imposes comparably lower regulatory costs. Moreover, compared with corporate management, general partners with skin in the game—a core characteristic of the limited partnership—are also ceteris paribus more likely to

[441] See, e.g., La Porta et al., 'Law and Finance,' 1113–1155; La Porta et al., 'Legal Determinants,' 1131–1150; La Porta et al., 'The Economic Consequences,' 285–332; Hansmann and Kraakman, 'The End of History for Corporate Law'; Chandler, *The Visible Hand*.
[442] Harris, *Industrializing English Law*, 14.
[443] See, e.g., Aldous, 'Avoiding Negligence'; Acheson and Turner, 'The Impact of Limited Liability'; Lamoreaux and Rosenthal, 'Legal Regime'; Martínez-Rodriguez, 'Creating the Sociedad de Responsabilidad Limitada'; Guinnane and Martínez-Rodríguez, 'Flexibility in the Spanish Company Law'; Hannah, 'The 'Divorce' of Ownership'; See also Colvin, 'Organisational Determinants,' 661–665, for a more in-depth discussion of this strand of literature.
[444] Guinnane, Lamoreaux, and Rosenthal, 'Putting the Corporation in Its Place.' See Appendix 1 for a stylized generalization of the characteristics of different organizational forms. This table is adopted from Guinnane and Schneebacher, 'Enterprise Form,' and supplemented with information for the Netherlands.
[445] The limited partnership should not be confused with the limited liability company, in which all members enjoy the protection of limited liability but shares are not tradable. Guinnane, Lamoreaux, and Rosenthal, 'Putting the Corporation in Its Place,' 9; Freedeman, *Joint-Stock Enterprise in France*, 47–65. Also see Appendix 1.

eschew excessive risk-taking, sharing fully in whatever gains or losses were gained by their decisions.[446] Because of these advantages, limited partnerships provide entrepreneurs a seemingly functional alternative, explaining their well-documented incidence in many civil-law countries, particularly France well into the nineteenth century.[447] Even in common-law countries, where the form was traditionally believed to have been rarely utilized, a more recent contribution for early nineteenth-century New York has shown that a surprisingly large percentage of firms adopted the limited partnership, thereby contributing to a reappraisal of the historical importance of this organizational form.[448]

Irrespective of historical significance, by the second half of the nineteenth century, the number of limited partnerships and their overall importance had rapidly diminished compared with corporations.[449] However, given that the limited partnership has received comparatively less scholarly attention, the reasons for this permanent decline have thus far not been studied in detail. For instance, Guinnane and colleagues have pointed out that the main disadvantage of the limited partnership was that silent partners had no say in how their investments were being used, leaving them open to exploitation by the general partner—but the authors do not explore this issue in much detail, never specifiying what this exploitation truly entails or the underlying factors driving it.[450] Lamoreaux provides more clarity by asserting that if limited partnerships were unusually successful, the general partners could extract excessive payments; still, she only briefly touches upon this issue.[451] Other scholars, including Freedeman, have explained this sudden decline as being due to a change in legislation that made the corporate form more accessible, but their analysis is focused solely on France.[452] By extension, we do not know if, and why, this decline also occurred in countries with a different legal system.

This chapter makes use of the case of the Bank of Twente (Twentsche Bankvereeniging, hereafter TWBv), founded in 1861, to offer an alternative explanation for the decline of the limited partnership. What makes the case of TWBv so interesting is that, unlike its direct

[446] Lamoreaux, 'Partnerships, Corporations, and the Theory of the Firm,' 68–69. Also see Lamoreaux, 'Constructing Firms'.
[447] In France, 1,340 limited partnerships with tradable shares were registered from 1823 to 1838, compared with only 157 corporations. See Freedeman, *Joint-Stock Enterprise in France*, 47–65; Martínez-Rodriguez, 'Creating the Sociedad de Responsabilidad Limitada,' 232.
[448] Hilt and O'Banion, 'The Limited Partnership in New York.'
[449] In Spain, e.g., the number of newly registered limited partnerships decreased from 228 in the 1900s to 76 by the 1920s. In contrast, the number of newly established corporation then averaged around 425. See Martínez-Rodriguez, ' Creating the Sociedad de Responsabilidad Limitada,' 231.
[450] Guinnane, Lamoreaux, and Rosenthal, 'Putting the Corporation in Its Place,' 9. Also see Guinnane, Harris, and Lamoreaux. 'Contractual Freedom'.
[451] Lamoreaux, 'Partnerships, Corporations, and the Theory of the Firm,' 69.
[452] Freedeman, *Joint-Stock Enterprise in France*, 100–114.

competitors (all of which were incorporated), the TWBv was not only a limited partnership until 1917, but also one of the largest and most important commercial banks in the Netherlands, demonstrating that the limited partnership should not be considered an inferior substitute for the corporate form.[453] TWBv was also one of the main antecedents of ABN AMRO, which (until it was split up and sold off in 2007) was the world's sixteenth largest bank.[454] Its historical and present-day significance makes the advent of this bank a case worth looking into, but it also ensured that its historical records—that is, its paper trail—are easier to track down than those of smaller institutions.

Other than the work of Wijtvliet and van der Werf, little research has been conducted into the history of TWBv.[455] In contrast to van der Werf's more overarching historical account, Wijtvliet paid a great deal of attention to the bank's adoption of the corporate form in 1917. However, his interpretation of the facts leading up toward incorporation is somewhat teleological, framing as it does the adoption of the corporate form as an inevitable outcome toward modernity, with few implications for further research outside of the Netherlands. In contrast, the present article follows the narrative analysis approach, relying on an interpretative model embedded in the literature on the agency problem, to illustrate that the circumscribed use of a limited partnership was rooted in the organizational form having a flaw of its own that, under particular circumstances, created serious agency costs. As the bank grew, so did the agency costs, finally forcing the bank to incorporate.[456]

An analytical narrative of the limited partnership can tell us much about the decline of the limited partnership form and the rise of the corporate form. In addition, a better understanding of limited partnerships deepens our understanding of the history of Dutch corporate governance from the mid-1850s to the early twentieth century. The Netherlands is a country notably missing in the literature on organizational forms. This is all the more surprising considering it is widely considered to be a forerunner in financial development and the birthplace of the corporate form.[457]

[453] Guinnane, Lamoreaux, and Rosenthal, 'Putting the Corporation in Its Place,' 24.
[454] Colvin, 'Interlocking Directorates,' 315. See also www.gfmag.com/archives/60-60-october-2005/1648-award-winners–the-worlds-biggest-banks-2005.html.
[455] Wijtvliet, *De Overgang*; van der Werf, *Van Twentsche Bank naar Algemene Bank*.
[456] Analytic narratives are a subset of a wider economic approach to business history. As stated by Brownlow, 'Back to the Failure,' 156–157, they attempt to resolve historical puzzles by reconciling the benefits of 'thin' descriptions with the advantages of 'dirty' empirics, allowing for a 'new business history' wherein the use of more general, analytic models allows business historians to connect particular cases to more general insights. See also Bates et al., *Analytic Narratives*; Levi, 'An Analytic Narrative Approach'; Alexandrova, 'When Analytic Narratives Explain'.
[457] For the Dutch origins of the corporation, see, e.g., Gelderblom et al., 'The Formative Years'; Dari-Mattiacci et al., 'The Emergence of the Corporate Form.' However, there is comparatively little research on corporate governance in

The remainder of this chapter is organized as follows. The second section (6.2) looks at the founding history of the bank. The third section (6.3) demonstrates that, as the bank grew in size, so did agency costs between general and silent partners. The fourth section (6.4) focuses on the discussions preceding and ultimately resulting in the bank's incorporation. The fifth section (6.5) then provides an interpretation of this historical narrative based on economic theory, and the final section (6.6) provides a concluding summary.

6.2. Adopting the Limited Partnership

6.2.1. Humble Beginnings: 1860s

TWBv originated in the eastern Twente region, the center of Dutch cotton manufacturing and allied engineering works. In 1835 B. W. Blijdenstein finished his legal studies and set up as a notary in Enschede. Adding money dealing to his practice, he gradually expanded that business until, by the mid-1850s, he had become more akin to a so-called cashier. Like most cashiers, Blijdenstein provided collecting and payment services and also dealt in coin, commercial paper, acceptances, and other short-term credit.[458] New opportunities opened for him when, in the spirit of growing liberalization and laissez-faire approach, the Dutch government ended the practical monopoly of trade with the Dutch East Indies of the Dutch Trading Company (Nederlandsche Handel-Maatschappij, or NHM), a large colonial trading company loosely modeled on the Dutch East India Company (Vereenigde Oostindische Compagnie, or VOC). Textile manufacturers now needed to arrange and finance their exports themselves, but they often lacked the necessary means or experience to do so. By contrast, Amsterdam- and Rotterdam-based merchant banks lacked the specific know-how concerning and ties to the Twentsche textile industry, which opened a business opportunity for a bank rooted in the local economy.[459]

Spotting this opportunity, Blijdenstein expanded his business. In 1858 he sent his son B. W. Blijdenstein (II) to London to start a firm buying bills for Twente clients.[460] In 1861 he launched the TWBv as a limited partnership with offices in Amsterdam, Enschede, and London. The bank's main business consisted of facilitating the export business of the Twentse textile

the mid-nineteenth-century Netherlands. Some exceptions include: De Jong et al., 'Dutch Corporate Finance, 1602–1850'; De Jongh, *Tussen societas en universitas*; Huussen-De Groot, *Rechtspersonen in de 19e Eeuw*.
[458] Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 33–46.
[459] Kymmell, *Geschiedenis van de Algemene Banken*, 163–164; Mensema, *Inventaris*, 13–25.
[460] Technically, B.W. Blijdenstein was named 'B.W. Blijdenstein Junior,' while his son was simply named 'B.W. Blijdenstein.' To avoid unnecessary confusion, his son will hereafter be referred to as B.W. Blijdenstein (II).

manufacturers and traders to the Dutch East Indies by offering them consignment credit, providing them with advances, and dealing in bills.[461]

6.2.2. *Explaining the Choice of Organisational Form*

Much of the existing literature has pointed out that in early nineteenth-century France, companies frequently adopted the limited partnership to escape the costlier governmental authorization associated with incorporation.[462] In the case of the Netherlands, this was no different.

The upheavals of the late eighteenth century and the occupation of the French had inaugurated a period of economic stagnation in the Netherlands lasting some fifty years. Recovery after the restoration of independence in 1813 proved relatively slow, until the mid-1820s. The lack of an economic impetus meant that most companies did not need to raise substantial amounts of capital.[463] Consequently, the vast majority of multi-owner firms were organized as ordinary partnerships. Tellingly, the business tax returns for 1826 list only sixteen corporations in Amsterdam.[464]

By the early 1850s, the Dutch economy finally started to industrialize, led by engineering works, sugar refineries, and gas works in Amsterdam and Rotterdam and nascent industries such as the textile industry in Twente and Brabant.[465] Dutch economic growth, placing new financial, technological, and managerial requirements on traditional businesses, stimulated the increased employment of more complex business forms than the ordinary partnership.[466] In 1850 there were only approximately 140 corporations for the whole of the Netherlands. By the 1860s this had increased to approximately 300, by the 1880s to 550, and by the early 1900s to more than 3,300.[467] As in France, however, there were several instances of financial institutions that

[461] Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 85–98.
[462] Guinnane, Lamoreaux, and Rosenthal, 'Putting the Corporation in Its Place,' 23; Martínez-Rodriguez, 'Creating the Sociedad de Responsabilidad Limitada,' 231; Freedeman, *Joint-Stock Enterprise in France*, 100–114; Freedeman, *Triumph of Corporate Capitalism*, 1–9.
[463] Jonker, *Merchants, Bankers, Middlemen*, 62.
[464] Jonker, *Merchants, Bankers, Middlemen*, 62–63.
[465] Van Zanden et al., *Strictures of Inheritance*; De Jong et al., 'Dutch Corporate Finance, 1602–1850,' 15–17.
[466] Jonker, 'Spoilt for Choice?'; Jonker, 'Sinecures or Sinews of Power?'. A similar observation for the United Kingdom was made by Harris, *Industrializing English Law*, 216.
[467] Author's own calculations using CBS, *Jaarcijfers voor het Koninkrijk der Nederlanden* (annual reports for the Netherlands), 1865–1920 and Van Nierop and Baak, *De Nederlandsche Naamloze Vennootschappen*. Also see De Nederlandsche Bank. *Nederlandse financiële instellingen* for an overview of the number of incorporated financial institutions.

adopted the limited partnership.[468] This included the two biggest Amsterdam manufacturers at the time, an engineering company and a sugar refiner, which were both limited partnerships with tradable shares.[469]

The basis of the Dutch legal system at the time was formed in 1811 when Napoleon first introduced the Code de Commerce. In the face of vociferous protest from the business community, the legislature adapted the system before finally accepting it in 1838.[470] The new commercial code of 1838 recognized three basic forms of business organization: the ordinary partnership (*vennootschap onder firma* in Dutch); limited partnership (*commanditaire vennootschap* in Dutch); and finally, the corporation (*naamloze vennootschap* in Dutch).[471] The first two were exempt from any bureaucratic procedures other than the registration of a deed of partnership with the local court. By contrast, a corporation required formal statutes drafted by a notary, approved by the Ministry of Justice, registered by the local Chamber of Commerce, and published in the *Government Gazette* (*Staatscourant*).[472]

Setting up the TWBv as a limited partnership made sense, given the available options. It represented the middle ground between a regular partnership and incorporation, but it imposed

[468] Some noteworthy examples of financial institutions include: Mispelblom Beyer (1858), Rensburg and Van Witsen (1866), Lotichius (1877), Leidsche Bankvereeniging H.F.C. Gerlings (1881), Hollandsche Crediet–en Depositobank Mees & Ritsema (1882), Bankvereeniging Commanditaire Bankvereeniging S. Meihuizen and Co. (1882), Venlosche Handelsbank (1883), Nijmeegsche Bankvereeniging Van Engelenburg and Schippers (1887), and Groningsche Bankvereeniging Schortinghuis and Stikker (1891). See de Vicq, 'Construction' ; Jonker, *Merchants, Bankers, Middlemen*.
[469] De Jong et al., 'Dutch Corporate Finance, 1602–1850,' 17.
[470] The government increasingly attempted to tighten its control over the economy from the 1820s onward. In the legislative proposal of December 17, 1833, it imposed procedures for official monitoring of annual reports, for the minutes of general shareholders' meeting, and even rules regarding capitalization. Finally, it also imposed stricter bureaucratic procedures, making it more costly to set up a corporation. Dutch businessmen argued that these governmental interventions were overly restrictive and in violation of the liberal principles of contractual freedom and laissez faire. The government defended its invention by relying on a similarly liberal principle, arguing that these measures would put an end to Dutch oligarchic tradition, as shareholders' meeting would now be able to take its place as the principal body within the company, and by imposing Article 54, which protected minority stakeholders. Following the revised, but according to the Dutch liberal businessmen still too obstructive, legislative proposal of April 1, 1835, the well-respected Amsterdam lawyer F. A. van Hall issued a public warning about the counterproductive outcome of this governmental interference. In his pamphlet, he argued that as in France and to a lesser extent in Germany, an increasing number of Dutch enterprises favored the limited partnership with tradable over incorporation, as it would allow them to raise capital from the broader public without obtaining governmental approval. Swayed by van Hall's warnings, the Dutch government gave in to the demands of the liberal businessmen. See de Jongh, *Tussen societas en universitas*, 559; Huussen-de Groot, *Rechtspersonen in de 19e Eeuw*, 123–124; Van Hall, *Nadere Verdediging*.
[471] De Jong et al., 'Dutch Corporate Finance, 1602–1850,' 15–17. The first legislation on the cooperative association (*coöperatieve vereeniging*), which was specifically designed for either producer- or consumer-owned organizations, was only implemented in 1876 ('Wet van den 17den November 1876, tot Regeling der Coöperatieve Vereenigingen,' Staatsblad van de Koningkrijk der Nederlanden). See: Colvin, 'Banking on a Religious Divide,' 873–879, for more information on the legislation regarding Dutch cooperative associations; Baljon, *De Commanditaire Vennootschap op Aandeelen*; De Jong and Röell. 'Financing and Control in the Netherlands'.
[472] De Jong et al., 'Dutch Corporate Finance, 1602–1850,' 15–17; De Jongh, *Tussen societas en universitas*, 558–559.

less formal requirements. Indeed, previous scholars such as Wijtvliet have explained the bank's choice of adopting this form as a means to escape higher regulatory costs associated with incorporation.[473] However, there were other, more idiosyncratic factors at play that explain this choice. The theoretical literature on the agency problem can help us better understand why TWBv adopted the limited partnership. The essence of this problem is the separation of management and ownership. In their seminal paper, Shleifer and Vishny provide a survey on corporate governance and assert that the agency problem might arise because a firm's stakeholders assigned to manage the firm (the agent) might have conflicting interests with the owner of the firm (the principal).[474] This can lead managers to forsake their fiduciary duties to maximize their own personal benefits at the behest of the principal investors, particularly shareholders, and even expropriate them.[475]

Ample research has shown that adopting an organizational form can offer legal protection from such managerial abuse and self-dealings.[476] At the time, the Dutch legal system allowed for three viable alternatives: the simple partnership, the limited partnership, and the corporate form. Blijdenstein's budding international mercantile business needed more capital than a simple partnership could provide. Attracting outside investors by turning the business into a corporation stood little chance of success, given the firm's relative obscurity. But with a limited partnership, Blijdenstein could draw his business associates—at the time primarily consisting of Twente's textile manufacturing elite—into his bank, which was important to them, as its primary services facilitated their trade.[477] Limited liability protected their investments, and for this they were willing to abdicate their direct influence over the management of the firm.[478]

Given the menu of organizational forms available in the Netherlands at the time, TWBv effectively had to choose between adopting the limited partnership or incorporation. According to relevant historical and legal research, the main differentiator between both forms is the general partner's unlimited liability.[479] In theory, unlimited liability ensures that general partners have more skin in the game, making them ceteris paribus more likely to eschew

473 Wijtvliet, *De Overgang*, 4–6.
474 Shleifer and Vishny, 'A Survey,' 740–741; Coase, 'The Nature of the Firm,' 386–405; Jensen and Meckling, 'Theory of the Firm,' 305–360.
475 Shleifer and Vishny, 'A Survey,' 742; Clark, 'Agency Costs Versus Fiduciary Duties.'
476 Tirole, *The Theory of Corporate Finance*, 15–75; Shleifer and Vishny, 'A Survey,' 750–753.
477 Wijtvliet, *De Overgang*, 4–6; Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 85–98. This is also consistent with the analysis of Hilt and O'Banion on why firms adopted the limited partnership for in early nineteenth-century New York. See Hilt and O'Banion, 'The Limited Partnership in New York,' 28.
478 Kymmell, *Geschiedenis van de Algemene Banken*, Vol. I, 47–65; Wijtvliet, *De Overgang*, 7–9.
479 Ribstein, 'An Applied Theory of Limited Partnership,' 847.

excessive risk-taking than managers of a corporation.[480] Using more standard corporate governance terminology, it serves as a contingent, long-term incentive contract ex ante to align the interests of both set of partners.[481] In layman's terms, the general partners' personal liability reduces the silent partners' monitoring costs and risks. Because the incentive effects of unlimited liability on the degree of risk-taking cannot readily be duplicated through creditor monitoring of corporate managers, this makes the limited partnership form appealing for external creditors.[482] This is especially the case in an inherently risky business such as banking.[483]

As the bank's manager, owner, and future general partner, B. W. Blijdenstein himself preferred the limited partnership over incorporation, because it imposed fewer regulatory costs.[484] Additionally, and arguably more importantly, it would consequently enshrine his control over the company—not only would a limited partnership remove silent partner voices from the management, it also provided more insulation from abdication, as silent partners could not readily get rid of Blijdenstein.[485] The former consequence was simply the price silent partners had to pay for limited liability, the latter was because removing the general partner would result in the partnership's dissolution.[486] Blijdenstein, a juris doctor who specialized in contractual law and corporate law, showed an acute awareness of the aforementioned theoretical benefits of unlimited liability, pointing out the reduced monitoring costs as a means to persuade his fellow—and future—silent partners to invest.[487] Nevertheless, despite his best efforts, his initial attempt in 1858 to set up the TWBv as a limited partnership was not successful. However, three years later in 1861, he succeeded.[488]

480 Guinnane, Lamoreaux, and Rosenthal, 'Putting the Corporation in Its Place,' 6; Ribstein, 'An Applied Theory of Limited Partnership,' 847–848.
481 Shleifer and Vishny, 'A Survey,' 744.
482 Ribstein, 'An Applied Theory of Limited Partnership,' 848.
483 This follows from the analysis by economic historians of the costs and benefits associated with limited and unlimited liability. For key references, see, e.g., Acheson and Turner, 'The Impact of Limited Liability'; Hickson, Turner et al. 'Much Ado About Nothing'; Koudijs, Salisbury, and Sran, 'For Richer, for Poorer'; Mitchener and Richardson, 'Skin in the Game'?'; Turner, 'Does Limited Liability Matter?'; Turner, *Banking in Crisis*; Calomiris and Carlson, 'Corporate Governance'.
484 Wijtvliet, *De Overgang*, 4–6.
485 On the flipside, silent partners could also threaten the dissolution of an otherwise successful business by liquidating their investments. However, this inherent drawback of the limited partnership was resolved in the early 1870s. See section *Trial of Strength*.
486 Ribstein, 'An Applied Theory of Limited Partnership,' 848. This is also consistent with the analysis of the legal status of Hilt and O'Banion on limited partnerships in New York. See Hilt and O'Banion, 'The Limited Partnership in New York,' 10.
487 Annual reports Twentsche Bankvereeniging, 1861.
488 Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 85–98.

6.3. The Limits of the Limited Partnership

6.3.1. From Provincial Upstart to Metropolitan Leader: 1860s-1900s

When Blijdenstein died in 1866, his son B. W. Blijdenstein (II) succeeded him as general partner together with a close associate, J. H. Wennink. B. W. Blijdenstein (II) was thoroughly trained by his father, shared the same business acumen, and could draw on a valuable experience garnered as manager of the London branch. Under B. W. Blijdenstein (II) the bank started to branch out. In 1868 the firm H. Ledeboer & Co. was founded in Almelo. Similar to Enschede, it had a growing textile industry making it the perfect venturing point. Moreover, by expanding its operations to Almelo, TWBv attempted to contend the Rotterdamsche bank's growing aspiration to enter this market. In the years following, the TWBv continued to expand. In 1878 de Jongh & Zoon, a stockbroker (i.e., *commissionair*) based in Rotterdam was acquired and was continued as the Wissel–en Effectenbank. In 1884 the Stichtse Bank was founded in Utrecht. In 1889 the TWBv acquired the cashier Bergsma & Dikkers located in Hengelo, and in 1893, the Bank voor Effecten–en Wisselzaken located in The Hague was established.[489]

Apart from these domestic expansions, the TWBv also expanded abroad. It started with the establishment of Blijdenstein & Co. in London in 1859. In 1875 the British and Foreign Exchange and Investment Bank was acquired jointly with its subsidiary, Ancienne Maisson Leon & Dreher Comptoir de Change, located in Paris. In 1890 the TWBv continued its international expansion and founded the Gronauer Bankverein Ledeboer located in Granau. The purpose of this bank was to provide funding to the Westphalian textile industry. In this regard, the acquisition in 1897 of the Rheiner Bankverein Ledeboer located in Rheine and TWBv's participation in the Westdeutsche Vereinbank located in Münster are also of note.[490]

These branches were generally newly established firms, supported financially by Blijdenstein (II). Only seldom did TWBv fully acquire existing firms. Consequently, these branches were tied to the TWBv via a personal connection and were mostly independent. The managers of these firms, however, were held personally liable for all losses brought on by negligence, oversight, or other personal misbehavior. In return, they would share in the profits.[491] Anecdotal evidence for TWBv's subsidiary Ledeboer & Co. suggests that this incentivized local management to properly manage their business and avoid unnecessary

[489] See Mensema, *Inventaris*, 13.
[490] Kymmell, *Geschiedenis van de Algemene Banken*, Vol I., 163–164; Mensema, *Inventaris*, 13–25.
[491] While their basic wages would be lower than the earnings of their fellow bank employees at other institutions, this system of remuneration could potentially be more rewarding. See Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 125.

risks.[492] More importantly, it aligned the interests of these branch managers with those of central management and allowed the TWBv to have a widespread network of branches, almost a decade before its main rivals, the Bank of Rotterdam (Rotterdamsche Bank, hereafter RB) and the Bank of Amsterdam (Amsterdamsche Bank, hereafter AB), started branching out.[493]

In tandem with its geographic expansion, the TWBv also expanded its business ventures. One of these was the Twentsche credit union (Twentsche Credietvereeniging, hereafter TWCv), an independent credit union within its fold operating similar to a mutual association with jointly liable members.[494] TWBv had set up the TWCv in 1871 in response to the growing success of the Amsterdamsche Credietvereeniging, founded in 1853, and the Geldersche Credietvereeniging, founded in 1866. The bank thereby sought to expand its circle of clients to attract the middle class while shifting the risk to its members.[495] It also began collecting deposits on a larger scale and became more actively involved in industry financing. Consequently, between the early 1860s and the late 1910s, the TWBv was the first Dutch commercial bank to steadily progress away from short-term mercantile financing toward serving a wider and more diverse customer base.[496]

As a result, it became the largest and most profitable commercial bank in the Netherlands, as shown by the total assets and net profits of the three largest Dutch banks. This is illustrated by Figures 6.1 and 6.2. More precisely, Figure 6.1 indicates that by 1890, TWBv's total asset size was almost equal to that of its direct competitors, the AB and the RB, combined. By 1910, the TWBv was almost twice as large as the AB and more than three times as large as the RB.[497] Figure 6.2 illustrates a similar pattern in terms of net profits.

[492] Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 112.
[493] By then, the Netherlands had finally made rapid strides in modernizing its infrastructure and communications, building roads, railroads, canals, and telegraph and telephone networks, all of which allowed these banks to reduce potential information asymmetries and other agency costs between the headquarters vested in the financial center and its peripheral subsidiaries. Case in point, we know that the RB expanded massively from 1911 onward and, in order to enhance communication between the different offices across the country, made use of rented telephone lines, a service that became available starting in 1907. From May 1911 onward, employees of the bank could make use of a direct trunk line between the main offices in Rotterdam and Amsterdam. See Hermans, *ICT in Information Services*, 164–175.
[494] Van der Werf, 'Van Twentsche Bank naar Algemene Bank,' 133–183. See also Chapter 5 of this PhD-manuscript, for an overview of the history of credit unions in the Netherlands.
[495] Kymmell, *Geschiedenis van de Algemene Banken*, Vol. I., 163–164; Mensema, *Inventaris*, 13–25.
[496] Jonker, 'The Alternative Road,' 116.
[497] In 1890, the total asset size of the TWBv equaled approximately 34 million guilders, whereas the asset sizes of AB and RB combined totaled approximately 38 million guilders. By 1910 these equaled 104 million guilders, 51 million guilders, and 30 million guilders, respectively. Source: author's own calculations using annual reports of the respective banks.

Figure 6.1: Total Assets of the Three Largest Dutch Commercial Banks
(in thousands of guilders, 1865-1909) [498]

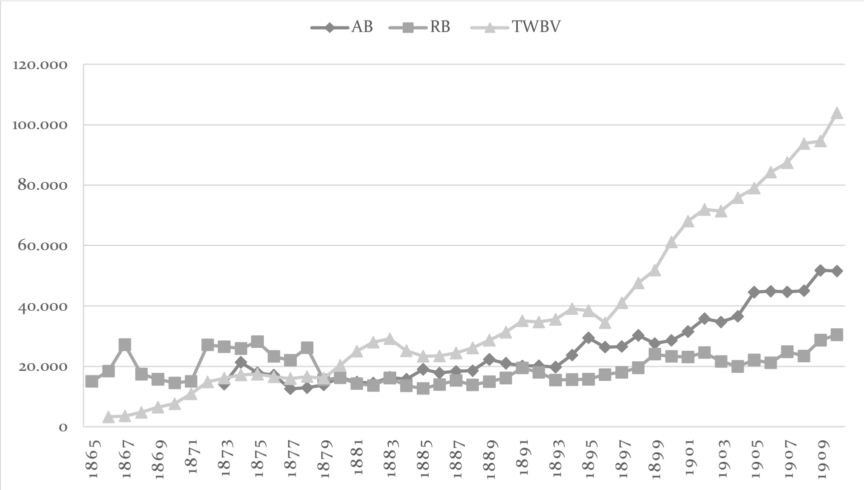
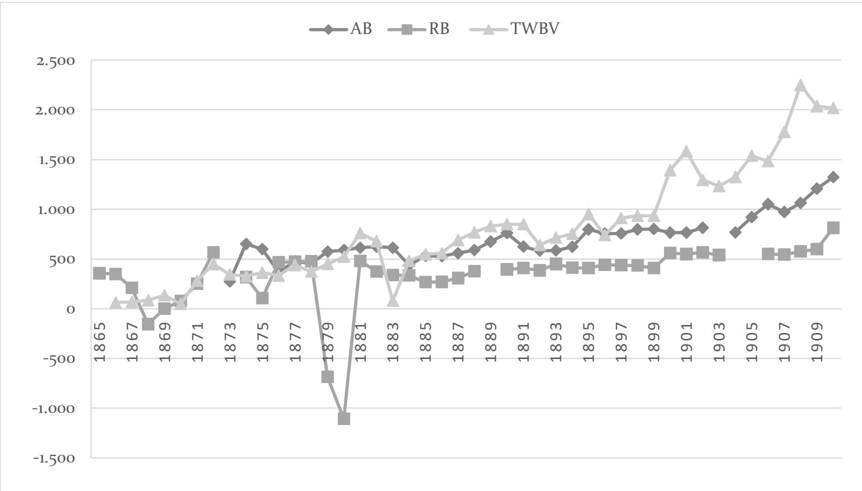


Figure 6.2: Net Profits of the Three Largest Commercial Banks
(in thousands of guilders, 1865-1909) [499]



[498] Amsterdamsche Bank (AB), Rotterdamsche Bank (RB) and the Twentsche Bankvereeniging (TWBv). Sources: annual reports of respective banks (1865-1910)
[499] Amsterdamsche Bank (AB), Rotterdamsche Bank (RB) and the Twentsche Bankvereeniging (TWBv). Sources: annual reports of the respective banks (1865-1910).

6.4. Trial of Strength

The status of limited liability excluded the silent partners from running the business,s but neither the law nor the TWBv's statutes gave further specifications as to the firm's corporate governance apart from annual meetings and accounts. Therefore, the TWBv's expansion turned into a trial of strength about how the partnership was supposed to work, leading to a series of adjustments to the original statutes. Over the years, this trial of strength raged over three main issues: the bank's capital basis, corporate governance structure and the distribution of profits. Three phases can be discerned, which ran throughout the 1860s, 1870s and 1880s, respectively.

1860s-1870s

The limited partnership form provided the TWBv with a practical alternative to the corporate form, as it could theoretically bring unlimited amounts of money into the business from an unlimited number of outside investors who would all enjoy limited liability for their participation. Furthermore, it preserved the personal connection between B. W. Blijdenstein and his family members and close business associates whom he approached as investors and partners—be it silent ones—instead of merely shareholders.[500]

In TWBv's founding years, its statutes did not require the small group of silent partners to pay a fixed amount. Instead, each partner pledged 10,000 guilders as callable capital.[501] That sum proved to be insufficient almost immediately, prompting a first amendment of the company statutes in 1863. This gave silent partners the opportunity to deposit at least 10,000 guilders, withdrawable at three months' notice, to which another 1866 amendment added deposits withdrawable at twelve months' notice, allowing the silent partners to threaten the dissolution of an otherwise successful business by liquidating their investments. The following year, the bank's constituency was widened by scrapping the 10,000 guilder minimum deposit and allowing investors outside Twente into the partnership.[502] These measures had the desired result. By 1868, the total number of silent partners exceeded seventy, with a joint participation of more than

[500] Wijtvliet, *De Overgang*, 7–9.
[501] Callable capital (*garantie kapitaal*) is defined as the part of a company's capital from the sale of shares for which the company has not been paid, but for which it can demand payment.
See https://dictionary.cambridge.org/dictionary/english/callable-capital.
[502] Archieven de Twentsche Bank (hereafter ATB), held at Rijksarchief in Overijssel (hereafter RO), catalog call number 0173:569, notes regarding the history of the Twentsche Bank in the period 1861–1869, specifically concerning the changes of the organizational form (*aantekeningen betreffende de geschiedenis over de jaren 1861–1869 van de Twentsche* Bankvereeniging in verband met *de omzetting van de Vereeniging in een naamloze vennootschap*); and annual reports (*Jaarverslag*) Twentsche Bankvereeniging, 1867–1868.

750,000 guilders. The total value of all deposits by silent partners in the meantime had risen to more than 437,000 guilders.[503]

With regard to corporate governance, few noteworthy amendments were made throughout this period. The statutes did little more than appoint B. W. Blijdenstein as general partner with the obligation to produce annual reports and convene general partnership meetings. Partners discussed proposals to change the statutes in these meetings and approved them with a two-thirds majority. The only subtle change came when Blijdenstein's son B. W. Blijdenstein (II) joined him as general partner in 1861. The bank's statutes were then amended, reserving the right to appoint general partners to Blijdenstein and his successors, effectively securing the family's hold in perpetuity and foreshadowing future conflicts of interest between both sets of partners.

Finally, the efforts to widen the constituency of the limited partnership went hand in hand with changes to the distribution of profits. Initially, the silent partners received only some commercial benefits, such as a reduction of charges on discounting and handling other commercial paper.[504] This type of reward sufficed to persuade Blijdenstein's Twente friends to back him with callable capital, but as the bank developed and needed more capital, remuneration had to change. During the 1860s, silent partners were first granted a favorable 7 percent interest on deposits. From 1866, silent partners received a dividend payment of 7 percent, then the general partners obtained 35,000 guilders, and any remaining profits were then split equally.[505]

1870s-1880s

The successful amendments to increase the bank's capital basis, however, failed to address a more fundamental legal limitation of limited partnerships: the lack of permanence. While the aforementioned right of appointment ensured some continuity by effectively securing the family's hold in perpetuity, it did not protect fully against liquidation. Silent partners could still withdraw their guarantee and/or deposits and threaten an otherwise successful business with dissolution. This possibility inaugurated new changes in the rules governing the bank's capital base aimed to prevent dissolution from happening.

In 1870–1871, the partners agreed on a first step toward locking in the silent partners' capital. Henceforth, all capital pledged had to be paid up either in cash or as securities deposited

[503] Wijtvliet, *De Overgang*, 9.
[504] ATB, RO, catalog call number 0173:569, notes regarding the history of the Twentsche bank in the period 1861–1869.
[505] ATB, RO, catalog call numbers 0173:499 and 0173:2046, printed statutes of the Twentsche bank, 1871–1962 (*Statuten, 1871–1962. Gedrukt*); annual reports Twentsche Bankvereeniging, 1866–1867.

with the bank, in return for formal share certificates classed respectively as A or B. A shareholder could trade both classes, but because both were registered shares (*aandelen op naam*) in practice, liquidity was low, as one could only sell them to an inner circle of closely associated businessmen.[506] The second step was taken in 1875, when the general partners and the silent partners agreed after some discussion to introduce a voluntary lock-in of capital for a period of five years. By 1876, a total of 178 silent partners had decided to fully or partly opt in for a total sum of almost 1.5 million guilders.[507]

In return for this capital lock-in, silent partners pushed forward statutory amendments to formalize corporate governance. The interest of silent partners would henceforth be represented by a board of non-executive directors (*raad van commissarissen*) composed from their numbers. The board verified the annual accounts and advised the general partners about the admission of new silent partners.[508] In practice, the board's influence over company affairs remained limited due to Blijdenstein (II)'s interference and hardly compensated the silent partners' loss of control over their stakes through the 1870–1871 capital lock-in. To put it in more standard corporate governance terminology, it did not reduce the discretionary control rights of the general partner.[509]

Parallel to the corporate governance issues, the partners argued about the distribution of profits. In 1871 Blijdenstein (II) proposed that, instead of reserving a dividend payment of 7 percent to the silent partners, all partners would share equally in the profits and receive a 4 percent dividend. Any remaining profits would then be split 45 percent to the silent partners and the general partner's 45 percent to a reserve fund; the remaining 10 percent would serve as remuneration for the auditing committee.[510] This fund would serve to guarantee the silent partners their 4 percent dividend at all times and would also provide a buffer against losses, thereby lowering their risk exposure.[511] The silent partners were wary of accepting a cut in dividends from 7 percent to 4 percent. To persuade them, Blijdenstein (II) raised the dividend to 5 percent and offered to leave the silent partners' risk-adjusted return unchanged by halving their exposure. Until then, the silent partners were only entitled to full dividend payouts if they

[506] ATB, RO, catalog call number 0173:569, notes regarding the history of the Twentsche bank in the period 1861–1869.
[507] ATB, RO, catalog call number 0173:569 notes regarding the history of the Twentsche bank in the period 1861–1869; ATB, RO, catalog call number 0173:502, documentation regarding the statutory changes, 1870–1910 (*stukken betreffende de wijziging van de statuten, 1870–1910*).
[508] ATB, RO, catalog call numbers 0173:499 and 0173:2046, printed statutes of the Twentsche bank, 1871–1962; annual reports Twentsche Bankvereeniging, 1866–1867.
[509] Shleifer and Vishny, 'A Survey,' 744.
[510] ATB, RO, catalog call number 0173:502, documentation regarding the statutory changes, 1870–1910; annual reports Twentsche Bankvereeniging, 1870.
[511] ATB, RO, catalog call number 0173:502, documentation regarding the statutory changes, 1870–1910; annual reports Twentsche Bankvereeniging, 1870.

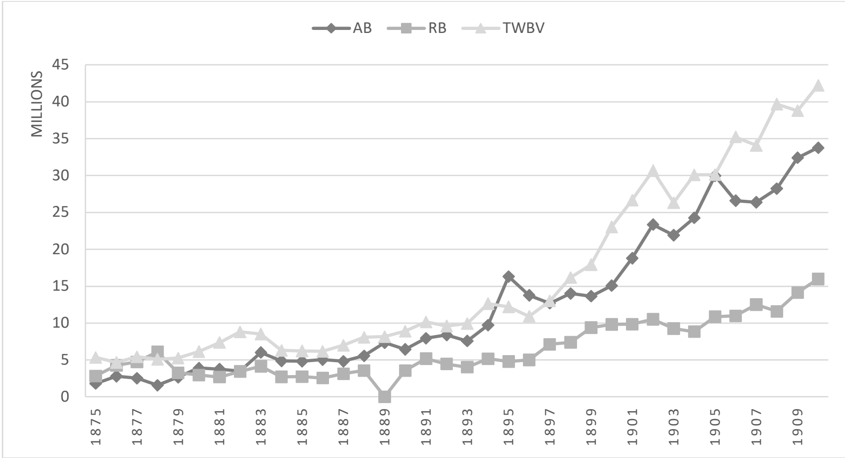
had pledged an initial sum of 10,000 guilders and deposited another 10,000 guilders. That requirement was now dropped to give silent partners with a share of 10,000 guilders or fewer the same entitlement, while the general partner's 45 percent share of remaining profits still went into the reserves. In 1875 the silent partners' dividend rate was increased to 6 percent in return for their consent to a voluntary opt in of a minimum of 20 percent of their capital for five years. [512]

1880s-1890s

Via the 1870–1871 and the 1875–1876 reforms, the TWBv had managed to introduce registered shares to a relatively close circle. It had achieved this by making clever use of the flexibility provided by Dutch legislation to circumvent some of the main disadvantages of the limited partnership. It did not stop there. To further widen its capital base and open the partnership to external investors, the TWBv started issuing tradable shares on the Dutch capital markets, once more profiting from the laissez-faire regulatory regime at the time.[513] Two successful public offerings by the TWBv followed, one in 1881 raising 3.1 million guilders and another one in 1899 of 2 million. Publicly issuing tradable shares on the capital market allowed the TWBv to keep pace with its competitors, the AB and the RB, both of which were incorporated (Figure 6.3).

[512] ATB, RO, catalog call number 0173:502, documentation regarding the statutory changes, 1870–1910; annual reports Twentsche Bankvereeniging, 1870.
[513] Colvin et al, 'Predicting the Past,' 99.

Figure 6.3: Liabilities of the Three Biggest Dutch Banks *(in millions of guilders, 1875-1910)* [514]



The TWBv de facto transformation into a limited partnership with tradable shares brought forward further changes to the corporate governance structure. In 1887 Blijdenstein (II) appointed an executive committee (*raad van bestuur*) consisting of H. Ledeboer, A. J. Brink, and A. Roelvink, like him fully liable and designated as his future successors, but technically not general partners.[515] The three were TWBv career men who enjoyed the silent partners' confidence. However, the appointments might have been an opportunistic move on Blijdenstein (II)'s part to limit his exposure to the bank's risk at a time when Dutch banking experienced some turbulence.[516] Four years later, after the turmoil has passed, B. W. Blijdenstein (II) revoked this decision and named his eldest son W.B. Blijdenstein (III) as his successor without consulting the silent partners. A few years later he consolidated the family's hold on the bank by appointing his younger sons J. T. Blijdenstein (III) and T. W. Blijdenstein (III) to the executive committee, naming them as successors should Willem prove unable or unwilling to fulfill this task.[517]

[514] Amsterdamsche Bank (AB), Rotterdamsche Bank (RB) and the Twentsche Bankvereeniging (TWBv). Sources: annual reports of respective banks (1865-1910).
[515] ATB, RO, catalog call numbers 0173:499 and 0173:2046, printed statutes of the Twentsche bank, 1871–1962; annual reports Twentsche Bankvereeniging, 1866–1867.
[516] Wijtvliet, *De Overgang*, 9.
[517] ATB, RO, catalog call number 0173:498, documentation regarding the renewal, revision, and amendment of the partnership's statutory arrangements (*stukken betreffende de hernieuwing, de herziening en de wijziging van de contracten van vennootschap, 1865–1917*).

These decisions, taken without consulting the silent partners, resulted in vociferous complaints about Blijdenstein (II)'s nepotism and high-handedness. In response, Blijdenstein (II) boosted his personal stake from 300,000 guilders in 1895 to 1.5 million guilders on total shareholders' equity approximating 11 million guilders by the early 1900s. Though downplaying this step as merely 'occasional,' Blijdenstein (II) clearly meant to silence his critics by becoming the banks' single largest shareholder, further entrenching his family's control over the bank.[518]

In parallel with B. W. Blijdenstein (II)'s efforts to increase his family's grip on the bank, he also pushed for a redistribution of profits. First, the statutory defined lump sum paid to general partners was raised from 35,000 guilders to 50,000 guilders. Simultaneously, the silent partners' dividend payouts were reduced from a guaranteed rate of 6 percent to 4 percent, topped up with an additional 2 percent conditional on profit levels. As payouts continued to fluctuate around 6 percent as before, the silent partners appear not to have lost out from this change at first sight, but appearances deceive. Figure 6.4 shows the dividend payouts to shareholders and silent partners of the three biggest commercial banks during the years 1865–1910. While TWB's initial payouts were comparable to those of its rivals, they began lagging during the 1890s, even though for most of this period the TWB's profits exceeded those of the RB and the AB by quite a margin (Figure 6.2). Bank reserves were comparable between the three banks, so if TWB's payout rates were considerably lower, we can confidently assume that its general partner's profit share far exceeded what the managers at the RB and the AB received. A closer analysis of the annual reports corroborates this fact. By the early 1900s, royalties (*tantièmes*) for the management of the RB and the AB fluctuated at around 60,000 and 120,000 guilders, respectively. At the same time, the general partners of TWBv received at least 210,000 guilders.[519]

518 Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 183–191.
519 Author's own calculation using annual reports of respective banks; ATB, RO, catalog call number 0173:494; annual reports (*Jaarverslagen, 1902–1927*) of the Twentsche bank, 1902–1927.

Figure 6.4: Dividend Payout (in %) at the Three Largest Commercial Banks *(1865-1910)* [520]

6.5. The Long Road Towards Incorporation: 1900s-1920s

Tensions between B. W. Blijdenstein (II) and the silent partners reached their zenith by the early 1900s. Blijdenstein (II)'s most critical silent partners found an ally in Roelvink, second only to Blijdenstein (II) as the bank's most influential manager. Roelvink was convinced that the TWBv needed to transform into a corporation if it was to face the challenges of modernization. In 1906 he presented a plan to adopt the corporate form, triggering a fierce discussion with Blijdenstein (II), who considered the proposal a takeover attempt by Roelvink, aimed at destroying his life's work. The rivalry between the men was fierce. In one of Blijdenstein (II)'s letters to Roelvink, the former cynically uttered that due to this reform 'the era of Adam Roelvink would commence,' even going as far as to state that ' whilst he was alive, he would only accept the reform of the TWBv to an corporation, if it was but a façade.' Clearly, he had no intention of relinquishing control.[521]

Even so, Blijdenstein (II) reluctantly agreed to appoint a committee tasked with exploring the possibility of adopting the corporate form. The committee, consisting solely of individuals favorable to Blijdenstein (II)'s demands, presented its result in early March 1907. It

520 Amsterdamsche Bank (AB), Rotterdamsche Bank (RB) and the Twentsche Bankvereeniging (TWBv). Sources: annual reports of respective banks (1865-1910).
521 Wijtvliet, *De Overgang*, 26–33.

recommended the bank adopt the corporate form but failed to address the silent partners' more substantial concerns, namely that the family kept control of the company and that shareholder influence remained limited at best.[522] Appalled by this blatant disregard of their interests, the silent partners rejected the proposal out of hand.[523] The ensuing mutual discontent halted any further progress toward a potential compromise.[524]

The prolonged struggle over the bank's reserve fund, introduced during the early 1870s and created from the general partners' 45 percent surplus profits share, further reinforced this standoff.[525] Though Article 9 of the bank's statutes did acknowledge that general partners owned that money by giving them a claim to a share in the reserves on Blijdenstein (II)'s death or retirement, they were otherwise required to leave it untouched.[526] In the debate following Roelvink's 1906 proposal to adopt the corporate form, Blijdenstein (II) used his claim on the bank's by now very considerable reserves to block incorporation. Roelvink had proposed creating a new reserve fund (B) fully owned by the bank to which surplus profits henceforth would be channeled. The original reserve fund (A) would remain part of the bank's reserves but would gradually be whittled down by annual payouts to the general partners. Blijdenstein (II) flatly refused to accept this solution, asserting that the bank was not a corporation and should not operate like one.[527]

The stalemate gradually came to an end following the retirement of B. W. Blijdenstein (II) in 1910.[528] Yet even in retirement Blijdenstein (II) obstructed the process toward incorporation until his death in 1914. Nevertheless, after prolonged negotiations, the TWBv at long last incorporated in 1917, roughly along the lines proposed by Roelvink a decade earlier. The silent partners became proper shareholders of an incorporated bank with all the associated shareholder rights, including a fully operational board of non-executive directors to represent their interests, the right to vote on important decisions during general shareholder meetings, and a more proportional share of the profits.[529]

522 ATB, RO, catalog call number 0173:498, documentation regarding the renewal, revision, and amendment of the partnership's statutory arrangements.
523 ATB, RO, catalog call number 0173:498, documentation regarding the renewal, revision, and amendment of the partnership's statutory arrangements.
524 Wijtvliet, *De Overgang*, 33–38.
525 The amendments to the distribution of profits in phase 2 (i.e., in the 1870s–1880s) led to the creation of a reserve fund, 45 percent of which consisted of the general partner's profits.
526 ATB, RO, catalog call number 0173:502, documentation regarding the statutory changes, 1870–1910.
527 Wijtvliet, *De Overgang*, 33–38.
528 This sentiment was aggravated by the retirement of A. Roelvink, who ended his farewell speech by stating that given the new economic circumstances and the management structure of the bank, the TWBv would, unless incorporated, eventually turn into a small family bank. See Wijtvliet, *De Overgang*, 38–55.
529 Wijtvliet, *De Overgang*, 38–55; annual reports Twentsche Bankvereeniging, 1917.

The Blijdensteins, however, extracted a high price for incorporation. Their share in the reserve fund would be left untouched until 1931, but they received shares worth 1.4 million guilders for goodwill, making them the largest shareholders. W. B. Blijdenstein (III), confirmed as managing director with his two brothers J. T. Blijdenstein (III) and T. W. Blijdenstein (III), received a lump sum of 350,000 guilders plus royalties valued at 125,000 guilders annually for a period of fifteen years.[530] The family lost the privilege to co-opt new members of the executive committee without shareholder consent, however, and those executives could now be voted out of office if they neglected their duties. Thus, the Blijdensteins' influence remained strong after the adoption of the corporate form, but their grasp quickly diminished. By the mid-1920s, the old reserve fund had been partially amortized and W.B. Blijdenstein and J. T.Blijdenstein (III) had resigned from the bank's executive committee.[531]

6.6. Explaining Agency Costs and the Push Towards Incorporation

While the theoretical literature on the limited partnership is relatively scarce,[532] it is possible to rely on the extensive literature on the agency problem to understand better the roots of the trial of strength that intensified over the years.[533] Agency problems and associated agency costs result from the separation of ownership and control within an organization. They are characterized by opportunistic behaviour, including self-dealings and shirking. The asymmetric relationship between the principal and the agent can also lead to moral hazard. A moral hazard may occur when the risk-taking agent's cost-benefit trade-off differs from that of the cost-bearing principal, particularly when the agent does not bear the full cost of that risk and is thus incentivized to take on excessive risks.[534]

A rich body of theoretical and empirical literature, focusing mainly on the financial sector, has illustrated that increasing the agent's skin in the game, either through increasing managerial equity ownership or unlimited liability, effectively reduces the moral hazard.[535] The

530 The executive committee's fourth member was J. M. Telders. See annual reports Twentsche Bankvereeniging, 1917.
531 By 1925 the executive committee consisted of J. Th. Blijdenstein, J. M. Telders, E. D. Van Walree, J. G. Schlencker, and P. Bredius. See annual reports Twentsche Bank, 1925; Wijtvliet, *De Overgang*, 51–55.
532 A notable exception is the work by Ribstein, 'An Applied Theory of Limited Partnership,' 837–894. More recently, a growing literature on corporate governance issues in private equity funds is emerging that discusses the advantages and disadvantages of the limited partnership. See, e.g., Harris, 'A Critical Theory of Private Equity,' 259–294. This strand of literature is relevant, because many private equity funds are organized as limited partnerships.
533 Shleifer and Vishny, 'A Survey,' 740–741; Coase, 'The Nature of the Firm,' 386–405; Jensen and Meckling, 'Theory of the Firm,' 305–360.
534 Jelinek and Stuerke, 'The Nonlinear Relation,' 158; Jensen and Meckling, 'Theory of the Firm,' 305–360; Mark, 'The Economics of Moral Hazard,' 531–537.
535 For literature on the effects of increasing managerial equity ownership, see, e.g., Core and Larcker, 'Performance Consequences,' 317–340; Singh and Davidson, 'Agency Costs,' 793–816. For literature on the effects of unlimited liability, see Acheson and Turner, 'The Impact of Limited Liability'; Hickson, Turner et al. 'Much Ado About Nothing';

limited partnership form, in which unlimited liability is imposed on the general partner, achieves just that. It can thus be expected to offer silent partners better protection against this particular agency cost than the corporate form. Anecdotal evidence does indeed suggest that B. W. Blijdenstein (II) was less prone to excessive risk-taking than his managerial counterparts.[536] Furthermore, earlier scholars have pointed out that his prudence might be one reason why TWBv weathered the financial turmoil of the 1880s better than its direct competitors.[537]

Conversely, this advantage vis-à-vis the corporate form does not mean that the limited partnership is exempt from the agency problem. In fact, because it is legally stipulated that the limited partner will lose the limitation of liability if he or she intervenes in management, the general partner has (all things being equal) more discretionary control rights compared with the manager of a corporation.[538] Furthermore, because the limited partners have limited rights to participate in day-to-day operations and challenge and/or approve major decisions, one can expect a higher degree of information asymmetry between the general partner who manages the company and the limited partner who is unable to monitor these decisions properly. This default, one-sided allocation of authority in a limited partnership implies the prospect of agent abuse of discretion not only still exists, but may even be heightened vis-à-vis a corporation.[539]

Such abuse of discretion can take many forms. Given that an inevitable consequence of unlimited liability is that an uninsured loss can amount to the general partner losing a substantial percentage of his personal wealth, a risk-averse general partner may avoid risky projects to prevent such a loss—even those projects that are in the silent partners' best interests. More important, the general partner may also demand financial compensation that would offset the risk of such loss.[540] The latter might then inspire the general partner to preserve the one-sided allocation of authority for as long as possible, or at least keep it in the family. The case of TWBv adds empirical backing to these theoretical views and demonstrates that as the bank grew, the agency problem grew in tandem. It also underlines the importance of social capital as a means to limit this problem—if the social interconnections between the partners fade over time, the agency costs will increase.

TWBv's initial statutes in the 1860s–1870s, reflected the close-knit world of Protestant Twente cotton manufacturers with overlapping family ties and consequently ensured a smooth

Koudijs, Salisbury, and Sran, 'For Richer, for Poorer'; Mitchener and Richardson, 'Skin in the Game'?'; Turner, 'Does Limited Liability Matter?'.

536 Annual reports Twentsche Bankvereeniging, 1861; Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 644–647.

537 Kymmell, *Geschiedenis. Vol. 2*, 310–351.

538 Ribstein, 'An Applied Theory of Limited Partnership,' 861–863.

539 Harris, 'A Critical Theory of Private Equity,' 265.

540 Ribstein, 'An Applied Theory of Limited Partnership,' 860.

running of the limited partnership. Silent partners felt they were fairly rewarded for their investments and perceived the remuneration of 35,000 guilders for Blijdenstein to be fair.

The 1870–1871 lock-in facilitated the partnership's growth, but this came with a price. Silent partners in particular forwent a credible threat of a sudden and untimely dissolution of an otherwise successful business, reducing their ability to indirectly influence the decisions of the general partner.[541] This asymmetry between the general and silent partners was further aggravated by the fact that the existing social ties that existed between B. W. Blijdenstein (II) and his family members and close business associates had eroded over time. Many of the new investors came from outside Twente and were in no way related to Blijdenstein (II) and could not exert any social pressure.[542] Furthermore, as the bank now possessed a firm capital base, Blijdenstein (II) became less concerned with attracting new outside investors and more with assuring his own large profit take.[543] Blijdenstein (II)'s decision to reduce the silent partners guaranteed dividend rate from 7 percent to 4 percent can be seen in the light of his attempts to increase his own compensation at the expense of his investors.

As the bank's constituency grew in the 1880s–1890s as a consequence of its decision to issue tradable shares, so did these agency costs. Having a powerless non-executive board might have sufficed for the closely related Twente crowd, but the rapidly rising number of outside shareholders disagreed and openly began criticizing general partner B. W. Blijdenstein (II)'s methods of conducting of business. The complaints gained all the more traction when Blijdenstein (II) decided to raise the statutory defined lump sum paid to general partners from 35,000 guilders to 50,000 guilders. In accordance with economic theory, Blijdenstein (II) insistently defended this increase by arguing that because he stood to lose everything he was entitled to a proper remuneration, making use of his unlimited liability status to demand compensation that would offset his personal losses.[544]

Clearly, his attempts to increase his remuneration in accordance with the greater exposure to potential losses following the bank's growth were successful. According to van der Werf, Blijdenstein (II)'s yearly income had increased from 110,000 guilders in 1885 to almost 365,000 guilders by 1910. Simultaneously, he managed to grow his personal fortune from

541 This analysis is consistent with earlier claims by Guinnane and colleagues, who argued: 'Because the (limited) partnership form was at least in part effectively at will, partners could either withdraw or force to refund their investment and cause the dissolvement of an otherwise successful business.' See Guinnane, Lamoreaux, and Rosenthal, 'Putting the Corporation in Its Place,' 6–9.

542 By that time, less than 20 percent of silent partners orginated from Enschede. By the early 1900s, this further decreased to less than 12 percent. See annual reports Twentsche Bankvereeniging, 1870–1915.

543 Annual reports Twentsche Bankvereeniging, 1866.

544 Annual reports Twentsche Bankvereeniging, 1861; Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 644–647.

approximately 960,000 guilders to more than 3 million guilders.[545] Understandably, Blijdenstein (II) became increasingly resistant to relinquishing his family's control over a lucrative business. The process to entrench his family's grip over the bank started in 1861, when the Blijdensteins reserved the right to appoint future general partners. It culminated in the decision of B. W. Blijdenstein (II) to favor his younger sons J. T. Blijdenstein (III) and T. W. Blijdenstein (III) as his successors, over the silent partners' preferred candidates. His reluctance to give more voice to the silent partners, despite earlier concessions, added further salt to the wound for the silent partners, who were already frustrated that so much of the bank's profit was extracted by the general partner. The consequence of all of this was that from the perspective of the silent partners, the benefits of the limited partnership as means to reduce monitoring costs no longer outweighed the agency costs resulting from differences in risk preferences. Understandably they increasingly pushed for adopting the corporate form.

The decision to incorporate, however, was not a one-off decision, but the outcome of a long and difficult process centered around the rivalry between Blijdenstein (II) and Roelvink, which embodied the conflicts of interests between the general partners and the silent partners, respectively. Tensions continued to accrue until Blijdenstein (II)'s retirement and subsequent death in 1914.

More or less at the same time, competition in Dutch banking increased as takeovers by the RB triggered a concentration movement and a growing popularity of the German universal banking model.[546] The fact that the governmental procedures concerning incorporation were made more lenient after 1896 further contributed to the increase in corporations, as this made the form more easily accessible, and thus more desirable, even for smaller firms.[547] As a result, the number of corporations soared in the beginning of the twentieth century, reaching almost seven thousand by 1910 and more than fifteen thousand by the 1920s. As the popularity of corporations grew, partnerships became steadily less common, albeit they still accounted for the vast majority of both new and existing firms. In contrast, limited partnerships, already in decline after the introduction of the 1838 Code, all but disappeared. Their numbers fluctuated between fifty and one hundred throughout the entirety of this period.[548]

Throughout these changing socioeconomic circumstances, the TWBv appeared to lose ground compared with its direct rivals, further prompting shareholder calls to push through

[545] Van der Werf, *Van Twentsche Bank naar Algemene Bank*, 644–647.
[546] Jonker, 'Spoilt for Choice', 187–192.
[547] De Jonghe, *Tussen societas en universitas*, 204.
[548] Author's own calculations using CBS, *Jaarcijfers voor het Koninkrijk der Nederlanden* (annual reports for the Netherlands), 1865–1920.

reforms, most notably incorporation. Unlike their by now deceased father, Blijdenstein (II)'s sons were more inclined to support Roelvink's plans to incorporate, willingly abdicating some of their control over the bank to enjoy the protection of limited liability.[549] This was considered necessary to ease the tensions between the sets of partners. To sum up, while voices in favor of incorporation were heard for over a decade, it was this reinforcing combination of endogenous factors related to surmounting agency costs and exogeneous factors related to the death of Blijdenstein (II) and the concentration movement in the Dutch banking sector that finally drove TWBv to incorporate in 1917.

6.7. Conclusion

In many countries, the limited partnership, was seen as a viable alternative to the corporation up until the first half of the nineteenth century. Afterward, the form quickly went into decline, losing out in favor of the corporation. Via an analytic narrative of TWBv founded in 1861, this chapter adds to our understanding of the circumscribed use of the limited partnership in more recent times. By process-tracking the bank's amendments to its company statutes throughout the 1860s–1890s, it was demonstrated how limited partnerships, unlike regular partnerships, could provide the capital lock-in and the liquidity of transferable market shares necessary to prompt large-scale investments.[550] Simply put, the limited partnership form did not inhibit TWBv from competing with rival commercial banks, in particular the AB and the RB, both of which were incorporated. Even so, by illustrating that TWBv and agency costs between general partners on the one side, and silent partners on the other, grew in tandem, this chapter substantiated earlier explorations for the narrower use of the limited partnership as a business form when compared with the corporate form.

The limited partnership form should therefore not be considered to be an inferior substitute for the corporate form, utilized solely to avoid more stringent regulatory requirements, but rather one that offers certain net benefits to specific firms in specific circumstances. As this case demonstrated, the limited partnership reduces the general partner's propensity for moral hazard, while incentivizing self-enrichment vis-à-vis a corporate manager. It follows that the benefits of the limited partnership best materialize for small to medium-sized firms in which both set of partners are personally connected and/or when the firm engages in intrinsically high-risk/high-reward activities. These context-specific benefits explain the form's

[549] Wijtvliet, *De Overgang*, 38–44.
[550] Appendix 2 summarises the most noteworthy amendments to TWBv's corporate form.

temporary success in the early nineteenth century, but also why some current-day enterprises—particularly venture capitalists—choose to adopt this form.[551]

[551] Hilt and O'Banion, 'The Limited Partnership in New York'; Ribstein, 'An Applied Theory of Limited Partnership,' 837.

Chapter 7

Conclusion

In this thesis I have analyzed the dynamics of the Dutch financial system between 1860 and 1940 from a 'functional perspective'.[552] My main focus has been on so-called small and local financial institutions, which, much like microfinance institutions today, provided loans to small businesses and households. I explored the broader sectoral developments in the Netherlands (Chapter 2) and the corresponding changes in the demand side (Chapter 3). I then looked at how these, institutions which were specifically designed to provide small-scale financial solutions, adjusted their lending system, business model and liability regime to changes in socio-economic circumstances (Chapter 4, 5 and 6). The fact that these small and local financial institutions often found innovative solutions to overcome problems of information asymmetry which are inherent to small-scale lending merits further research. In this conclusion I summarize my findings and I explore what lessons present-day microfinance institutions can draw from its historical antecedents in order to best tailor their services to their customers' needs.

7.1. Patterns of Financial Development

This dissertation sets out to continue where earlier research on Dutch banking history left off. Previous scholars, most notably Jonker, asserted that the late appearance and development of joint-stock commercial banks in the Netherlands did not imply a shortage of finance for trade or industry. The supply was ample and adequate in form, ranging from *prolongatie* intermediation to equity participation in companies, the flotation of large loans and the selling of securities.[553] In this thesis I reach the same conclusion for small business and retail finance: the delayed advance of joint-stock commercial banks did not hinder these groups' access to fundamental financial services. I have tried to demonstrate this in two ways.

First, the Dutch banking database compiled in this thesis shows that, especially in the periphery, the Dutch financial system was both more developed and more dynamic between 1860 and 1940 than presumed up to now. Counting and locating all financial institutions that were active throughout this period, and categorizing them by the types services they provided, allowed a reconstruction of the development of the entire banking system, including the more remote regions outside of financial hubs such as Amsterdam, Rotterdam and The Hague.

Between 1880 and 1920, the country's banking system went through a major transformation. While there were only approximately 400 financial institutions in 1860, mostly comprised of banks, stockbrokers and cashiers, these numbers soared quickly in the following

[552] Merton and Bodie, 'A Conceptual Framework', 7-22.
[553] Jonker, *Merchants, Bankers, Middlemen*, 270.

years. By the 1920s, there were more than 100 popular banks, over 1,500 saving banks, almost 1,200 cooperative farmer banks, about 400 cooperative SME banks, more than 70 credit unions, nearly 120 mortgage banks and over 1,300 merchant banks. Finally, there were also nearly 700 stockbrokers, 120 trust offices and 100 cashiers. In other words, in about 60 years the number of financial institutions increased by more than a factor ten. Not all of these new institutions were successful, but a mere 400 financial institutions disappeared between 1860 and 1920, most of them by way of voluntary liquidation or merger and acquisition. Less than 25% of all institutions failed or were declared bankrupt.

By 1920 there were 1,435 banks in the three big cities, 752 institutions in other cities and large towns, and 1,234 institutions in the more rural periphery. As for different types of services, the commercial banks, credit unions, help banks, cashiers and, to a lesser extent, pawn shops were fairly equally spread across the country, while cooperative farmers banks, saving banks and postal saving banks active in smaller municipalities. By contrast, mortgage banks, stockbrokers and trust officers were spread more thinly beyond the big cities and provincial capitals. Everything combined Dutch financial institutions provided saving and borrowing services virtually everywhere in 1920. To put it in laymen's terms, Dutch businessowners and individual households above a certain wealth threshold, especially from the 1920s onwards, had access to a wide variety of financial services no matter where they resided.

Along with the growth of the number of banks their organisational form also changed. Whereas most commercial enterprises in the Netherlands of the nineteenth century were still organised as partnerships, economic growth placed new financial, technological and managerial requirements on traditional businesses. This growth stimulated the employment of more complex business forms than the family firm and the closed partnership. In 1850, there were only approximately 140 corporations for the whole of Netherlands. This amount had increased to approximately 300 by the 1860s, to 550 by the 1880s and to over 3,300 by the early 1900s. These numbers soared in the beginning of the twentieth century, reaching almost 7,000 by 1910 and over 20,000 by the 1920s. It was not solely large enterprises active in the metallurgy, transport and/or insurance sectors which required a large capital basis, but also smaller enterprises incorporated in less capital-intensive sectors. Banking was no exception. The case of the Bank of Twente in particular illustrated that Dutch businessmen were not afraid to experiment with alternative organisational forms, such as the limited partnership with tradeable shares, though the Bank of Twente also realised the limitations of such forms compared to the limited liability corporation in a changing economic environment. In 1917, the Bank finally incorporated, more than six decades after its direct competitors had done so.

Second, by combining the Dutch Banking Database with another newly constructed dataset containing 2,321 individual death duty forms (a full listing of personal assets and liabilities with the goal to levy inheritance taxation), this dissertation established that personal relations continued to play an important part in the organization of credit in the Netherlands in the early twentieth century. Business owners and households complemented bank loans with more traditional forms of finance including notarial loans, trade credit and other forms of peer-to-peer lending. Indeed, the credit operations of the richest quarter of the population in 1921 reveals the use of a variety of lending channels, each with their specific characteristics. Direct peer-to-peer loans, with or without the additional legal security of notarial registration, were the more common form of lending and borrowing. Banks also offered mortgages, but these banks were no match for notaries, who continued to dominate the market outside the big cities. As for payments, Dutch households still lived in a cash economy with providers of goods and services accepting deferred payments without charging interest for small amounts. The result was that less than half of the country's wealth owners had a bank account in 1921, with almost half of these accounts consisting of a simple savings booklet. Commercial banks were primarily used by business owners and very wealthy people for the keeping of current accounts and the borrowing of money against securities.

Together, this dissertation revealed that the Netherlands had a fragmented but at the same time highly complementary financial system, with multiple institutions together providing small businesses and individual households most if not all services that one would typically find with universal banks.

7.2. Lessons from the Past?

At the turn of the twentieth century, the Dutch financial system looked surprisingly modern, offering the broadest possible range of services, including personal savings accounts, various kinds of credit and insurance products, as well as ample investment opportunities. A wide range of small, local and often overlooked intermediaries targeting different market segments played a crucial role in extending these financial services (credit in particular) to the general public. Not only did these lenders differ in loan size and duration, they also differed in the way they securitized their loans. Big commercial banks typically demand good quality bookkeeping information from their borrowers and they rely on high turnover volumes on their accounts to ensure fee income and/or liquidity and tangible collateral for their loans.[554] These methods do

[554] Peeters, 'Solving the Perennial Small Firm Credit Problem', 5.

not work when lending to small firms or sole proprietors. They may not have detailed accounting information and the total volume and value of the bank services they need is very small. This creates greater information asymmetries and it makes lending to small businesses more costly.[555]

The small and local financial institutions discussed in this dissertation (most notably help banks and credit unions) were specifically designed to provide small loans to small business owners. To compensate for the smaller size of loans and the higher information costs incurred when granting them, these institutions found new ways to overcome information asymmetries. The informational and monitoring advantage of credit unions vis-à-vis larger financial institutions originated in their local embeddedness. Because their depositors, borrowers and staff lived within close proximity, they could effectively tap into social relationships, allowing them access to information about their clients which big, commercial banks could not obtain. This information access in turn permitted such institutions to impose social as well as economic sanctions on (overly) opportunistic clientele in a manner that larger institutions at the time could not. Thus, screening costs were reduced and monitoring enhanced.[556]

In addition to this, these local institutions often relied on alternative enforcement mechanisms to facilitate small-scale lending: joint liability and co-signatory lending. Earlier scholars, most notably Guinnane and his various co-authors, have shown that, by relying on joint liability, credit cooperatives can overcome adverse selection. Furthermore, cooperatives can also encourage peer monitoring, that is using informal control and social pressure to enforce repayment of loans and thus reduce moral hazard.[557] Help banks practiced co-signatory lending. They provided small loans to artisans which had to be repaid in weekly instalments within a one-year period and which were backed by at least two co-signers.

These alternative means to monitor and enforce contracts were no panacea. Because of the unpredictability of joint liability in more heterogeneous (i.e., urban) contexts, borrowers would prefer co-signatory lending even if doing so would worsen loan conditions, all things being equal. This preference results from risk-averse individuals only being willing to accept the joint liability risk that comes with membership of a cooperative when they personally know the other members, can assess the nature of the investments they planned and are able to punish bad behaviours.[558] Consequently, joint liability lending in an urban context (where actual and potential members had less knowledge of each other's customs and abilities) was not only less

[555] For a more theoretical explanation of the persistent funding issues in small-scale lending, see Cressy, 'Funding Gaps', 255-304; Beck and Demirgüç-Kunt, 'Small and Medium-Sized Enterprises', 2931-2943. See also Ross, 'The Unsatisfied Fringe', 37-41. For a better understanding of why these issues are so perennial.
[556] Wadhwani, 'Small Credit Institutions', 205.
[557] Ghatak and Guinnane, 'The Economics of Lending', 224-225.
[558] Mushinski and Phillips, 'The Role of Morris Plan Lending Institutions', 132-137.

effective, it was also less desirable.[559] To put it in laymen's terms, urban dwellers typically had too little in common with each other to be willing to rely on mutuality: the risks would exceed the benefits. The empirical evidence provided in chapters four and five shows as much. Credit cooperatives were common in homogeneous, rural environments, while co-signatory lending institutions dominated in heterogeneous, urban environments.

The second, wider applicable contribution of this thesis is thus methodological. By examining how the business model and organizational form of specific institutions develop over time, it is possible to gain a deeper understanding under which conditions specific solutions for small-scale lending work and when they are no longer required. Thus, the co-signatory lending institutions known as 'help banks' (*hulp banken*) only made minor adjustments to their business model. They remained true to their original mission of providing affordable productive credit to the working poor and even though their market was small, they remained relevant up until the 1960s. Dutch credit unions (*credietvereenigingen)* fared differently. When the Schulze-Delitzsch credit cooperatives were first introduced in Germany in the mid-nineteenth century, they found a ready market of small shopkeepers and manufacturers. However, by the time similar credit unions were introduced in the Netherlands, this market segment was already taken, notably by the help banks. Facing competition from these help banks, credit unions targeted the more well-off members of the middle class, leaving the poorer segment to their competitors. Changing their business model allowed the Dutch credit unions to expand their business, especially before 1900, but their success attracted new competitors. Credit unions tried to compete with these new entrants by reaching out to an even higher echelon of customers, adjusting their business form and model accordingly. This is a process commonly referred to as 'mission drift', whereby institutions increasingly reach out to wealthy clients at the expense of poorer ones, in order to raise revenues.

The rise of commercial banks in particular drove this mission drift. From the 1920s onwards, these banks started entering the field of medium-scale lending (targeting the clientele of credit unions) and from the 1950s onwards also small- and micro-scale lending (targeting the clientele of help banks). Since commercial banks offered better return on investments for investors and other stakeholders, small and local institutions were increasingly forced to compete for capital. At the same time, these large commercial banks which were taking full advantage of the advancements in lending technology were also better equipped to provide new services which better fitted the needs of their clients. As rising wages helped banks attract more clients, the creation and storage of financial transaction data increasingly enabled banks to build

559 Guinnane, 'Regional Organizations', 254.

records of the financial behaviour of their clients. This facilitated a shift from relationship-based lending to transaction-based lending, which was further stimulated by the introduction of ICT after World War II. As these technologies were subject to economies of scale, commercial banks gradually obtained further cost advantages over their competitors. These cost advantages in turn enabled large commercial banks to provide new forms of credit, such as the credit card, and to provide some of the loans previously issued by smaller, more specialised institutions.

Small and local financial institutions adapted their services in response. Like the credit unions from a few decades earlier, help banks increasingly abandoned their mission of providing small productive loans in favour of consumer loans, as the post-World War II economic changes (with particular emphasis on the advent of the welfare state) meant that there was hardly a demand for such type of credit. However, these efforts to adjust to changing circumstances did little more than delay the inevitable, as small and local financial institutions gradually disappeared from the small-loan field during the mid-twentieth century, either through voluntarily liquidation or through mergers with other financial institutions.

Present-day microfinance institutions, for instance, could gain from these historical insights. These financial institutions are specialized organizations that offer financial services to low-income individuals or groups who otherwise would have remained 'underbanked', including access to credit and deposits. Research has illustrated that these microfinance institutions often face a trade-off between sustainability and outreach and choose the former over the latter. As such, these institutions abandoned their original mission of serving the working poor and instead increasingly reached out to their wealthier clientele. This dissertation's arguments illustrate that historical small and local financial institutions, which are sometimes considered to be antecedents of contemporary microfinance institutions, faced a similar trade-off.[560] While we should maybe avoid labeling nineteenth and twentieth century popular banks as 'microfinance' institutions, the development of small and local financial institutions in the Netherlands shows patterns that are relevant for today's microcredit sector.[561]

560 See Banerjee et al. 'Thy Neighbor's Keeper'; Ghatak and Guinnane, 'The Economics of Lending'; Guinnane, 'Cooperatives as Information Machines'; Hollis and Sweetman, 'What can we Learn from the Past?'; Hollis and Sweetman, 'Microcredit'; Hollis and Sweetman, 'The Life-cycle of a Microfinance Institution'; Seibel, 'Does History Matter?'; Samy, *The Building Society Promise*; Montserrat, 'Montes de Piedad'.

561 Guinnane himself also warns about the dangers of drawing inaccurate parallels between microcredit institutions today and historical European institutions--and rightfully so, as the historical context in which these institutions operated was notably different than that of today's developing countries. Nevertheless, even Guinnane acknowledges that the underlying economics and institutional features that made some of these institutions capable of serving the needs of the underbanked, as well as the challenges they faced in doing so, are similar. It would, therefore, 'be inappropriate to ignore the valuable knowledge about sustainability that historical microfinance organizations can teach us.' See Guinnane, 'The Early German Credit Cooperatives', 91-92.

For instance, the basic form of Dutch help banks, whereby small loans were backed by co-signers and had to be repaid in weekly instalments, provided an effective mechanism to overcome information asymmetry. It was also flexible and worked in societies characterized by large differences in wealth and economic structure. Furthermore, help banks were able to keep transaction costs low by relying at least in part on voluntary contributions of local elites which were well-connected and had a solid understanding of the local markets. In this respect, help banks differed from present-day microcredit institutions which often rely on external propagators who lack local knowledge. This means that the staff persons running and managing credit allocation of present-day microcredit institutions are comparably less capable of garnering the necessary information on their clientele to reduce information asymmetries. Policy makers attempting to promote a more inclusive financial system should therefore first and foremost have a clear and thorough understanding of the local financial system and be humble about their potential contributions. Existing small and local financial intermediaries, which might be considered inefficient and outdated at first glance, might also appear highly efficient, deeply embedded and well-adjusted to local circumstances once they are properly understood. The relative difficulty of many microcredit institutions to gain market penetration should therefore be attributed to neither a lack of demand for their services nor institutional failure, but simply the presence of more efficient incumbents.[562]

7.3 Limitations and Avenues for Further Research

Despite the apparent success and incidence of microfinance, it is commonly acknowledged that no robust study thus far has shown any strong, positive impact of microfinance.[563] A recent review corroborates that while ample anecdotal evidence exists which illustrates that microfinance can make a real difference in the lives of those within its target group, rigorous quantitative evidence is still scarce and inconclusive.[564] This is despite the fact that there are numerous academic databases available for researchers, allowing for complex modelling techniques, including randomised control trials and instrumental variable regressions, but also more straightforward techniques, such as general purpose surveys, to evaluate microfinance's impact.

Evidently, measuring the positive impact of 'historical' microfinance institutions on income, expenditure, health, education and empowerment is in many ways even more

[562] See Hoffman et al., 'Entry, Information and Financial Development', 16.
[563] Armendariz et al., *The economics of microfinance*, 199-230.
[564] Duvendack et al., *What is the evidence of the impact of microfinance*, 2.

complicated. For example, conducting surveys is simply not possible. In this way, this dissertation shares a fundamental methodological weakness with contemporary microfinance research, as it cannot fully assess the impact of the various small and local financial institutions on the everyday life of its customers. However, uncovering the underlying reasons which motivated actual and potential borrowers of small and local financial institutions to make use of their services is crucial if we are to better develop best practices for contemporary microfinance. Difficult as the limitations may be for historical research, ongoing scholarship relying on financial diaries illustrates that fruitful results can be attainted with this approach.[565] Another possible approach would be to collect data on regional patterns of long-term income and wealth inequality and combine this with the previously discussed database on financial institutions. In this way, history could be used as a 'testing ground' to further gauge the effectiveness of these historic microfinance institutions in combatting poverty on the municipal level and provide more meaningful policy advice.

[565] Boter and Gelderblom, 'The Dynamics of Inclusive Finance'.

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“The scientific proof is not in the pudding, I find;
it’s hiding somewhere in the archives”

Stephen T. Ziliak