Geographical Patterns of Investment Behavior

Evidence from Dutch Private Estates in 1921

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1. Introduction

The few studies we have on the financial behavior of Dutch people in the past, suggest that the composition of investment portfolios simply depended on the amount of wealth owned. Until the 1960s three quarters of all people never accumulated any wealth at all. The short-term surpluses they did have, were kept liquid, whether cash, short-term advances to relatives, or household items that could easily be converted into cash in times of need (McCants; Maassen; Deneweth et al.). Above this very large group of people without wealth was a much smaller group of skilled workers and self-employed professionals who managed to accumulate modest savings, either held in cash or petty loans to peers, or kept in savings accounts with cooperative or postal banks ('t Hart et al. p. 121; Deneweth et al.). As their savings increased, these people turned to investing in a piece of land, a small house, or a workshop. Less than ten per cent of Dutch people possessed enough money for investment in financial assets, starting with relatively safe government bonds, and then, as their wealth increased, progressing to more diverse portfolios of public and private, domestic or even foreign stocks and bonds (Prak, De Jong, Kooijmans, Wijsenbeek, Van Berckel).

Though this simple connection between wealth levels and investment behaviour looks persuasive, indeed plausible, there are reasons to doubt whether investors behave as they are expected to do under all circumstances and at all times. Take real estate. In big cities like

Rotterdam and Amsterdam residential accommodation was largely owned by big investors, who owned a diverse set of properties ranging from up-market bourgeois mansions, occupied by rich businessmen, to housing estates in the urban slums (Van der Woud). That dominant ownership structure left the middle class of office clerks, shopkeepers, civil servants, and professionals with little choice but to rent, whereas in smaller cities like Zwolle or Breda they would likely buy. Property preferences were different again in the countryside. Cultural historians have argued that, until the early the twentieth century, the dynamics of the real estate market were largely determined less by economic considerations than by social norms, i.e. the political power and social prestige attached to landed estates (Brusse and Mijnhardt).

Market access may also affect investor behavior. Until the mid-nineteenth century the ownership of securities appears to have remained largely limited to the country's western provinces, where investors could follow the Amsterdam market on a daily basis. This began to change when, from the 1860s the Netherlands made rapid strides in modernizing its infrastructure and communications, building roads, railroads, canals, telegraph and telephone networks, and at long last adopting a single time zone for the entire country in 1909 (Knippenberg and De Pater 1986). At the same time the financial sector branched out from its western strongholds in Amsterdam, Rotterdam, and the Hague. The Nederlandsche Bank, the central note-issuing institution, set up branches and agencies in all major towns supplying credit to local businesses. Rapid postal services, the spread of telecoms, and a varied commercial and financial press provided a speedy circulation of information and money and opened access to the stock exchange to investors everywhere (Knippenberg and De Pater 60-74, 109-111; Jonker 1997, 1999). By 1900 all provincial capitals possessed commercial banking firms of one sort or another, one or two stockbrokers, plus a savings bank and a credit cooperative, while smaller towns and many villages would normally have, in addition to a post office, a savings bank and credit cooperative (Colvin 2011*).

Now the question is, whether this integration process also homogenized investors' preferences to the extent that similarly-sized portfolios across the country became more and more alike. Was real estate always the first long-term investment of people with excess wealth, and did these people, as they grew richer, diversify into financial assets? Given the even spread of access to financial services over the entire country, one would expect investors to use them in about equal measure, given certain levels of income and wealth and a similarity of other personal characteristics like age, gender or profession. The question is, did they, and if not, why not? To find an answer, we analyze estates left by people all over the Netherlands who died in 1921.

2. Our Data

To reconstruct the size and composition of Dutch investment portfolios in 1921 we use the *Memories van Successie*, inventories of estates at death drawn up for tax purposes. From the late seventeenth century onwards, levying death duties based on the net value of estates became common in the Netherlands, and from 1818 to 1927 it was a nationwide tax levied on estates with a net worth of 300-1,000 guilders and over (Bos 1989). The *Memories* and the related summary tables (*Tafel Vbis*) give the deceased's name, profession, household composition and the net value of his or her estate. If over the tax threshold, the form details the composition of the estate, including real estate, financial assets, debts and claims, and cash. These *Memories van Successie* are a well-known resource for genealogists, but social and economic historians have used them only sparingly (De Vries 1980; Bos 1989, 1990; Moes 2012; Van der Burg and Rhoen 2005).

For our research we chose 1921 because this followed a national census dated 31 December 1920, so we can link the *Memories* data for each municipality to the census data of the previous year. From national statistics, we know that around 77,000 people died in the

Netherlands in 1921 on a total population of 6.8 million (CBS, 2001, 2017).[1] As further elaborated in de Vicq and Peeters (2017), we used the *"Tafels V-bis"* to locate the *Memorie*s of all the deceased. These tables yield references to *Memories* for approximately one third of the deceased of 1921 or 24,263 individuals. From this group we drew a stratified sample which takes into account both the distribution of *Memories* over the eleven Dutch provinces and the high concentration of wealth at the top end of distribution in each of these provinces. We oversample the richer part of the distribution to ensure that we capture the greater variation on the right end of the distribution. Our sampling strategy is similar to the one applied by Piketty, Postel-Vinay and Rosenthal (2006, 2014) in their research on Parisian death duty forms (cf. de Vicq and Peeters 2017).

Only part of the deceased in the Tables V-Bis ended up paying the succession tax, because almost 8,000 of them left assets of less than 1,000 guilders, including several hundred* who died indebted. Tax returns were nevertheless filed for these individuals and we retain them in our sample as a gauge for the possessions of the less well-to-do in the Netherlands in 1921. Following the rules applied by Piketty et al. we distinguish five additional "wealth classes", based on each person's rank in the wealth distribution of all deceased recorded in the Tables V-bis (Table 1).

Table 1. The Six Wealth Classes in the 1921 Sample of Memories van Successie

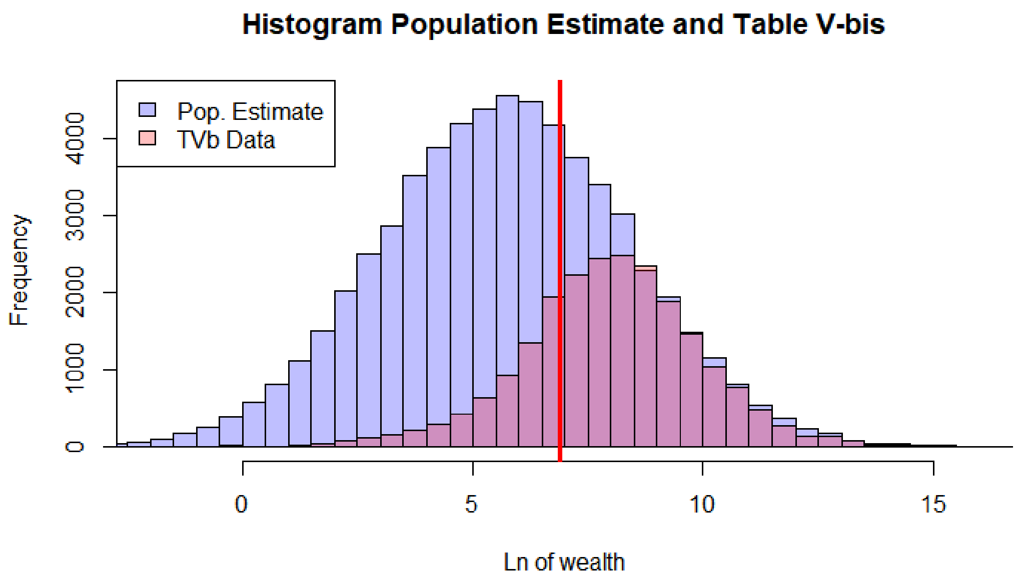
Class	**Wealth**	**Number of deceased**	**Percentage of Table V-bis Sampled**
1	Wealth below 1,000 guilders	801	10
2	0 to 70th percentile	772	6,5
3	70 to 85th percentile	306	12,5
4	85 to 95th percentile	409	25
5	95 to 99th percentile	330	50
6	99 to 100th percentile	169	100
1-6	**Total**	**2,787**	

[1] Without infants and minors we are left with approximately 61,000 deceased in 1921.

The sample we use in this paper is smaller than the planned one, as 413 Memories could not be located in the archives and 141 memories of Zuid-Holland still need to be entered.[2] The total of missing memories in this dataset is 527. Most of these missing memories (444) are from classes 1 to 4; which contain very large numbers of memories Only class 4 of Zeeland misses more than 5% of the planned sample. The 83 memories missing in our sample in classes 5 and 6 may have a bigger influence on our measurement. However, since we already sample 100% of class 6, there are no memories left to replace missing ones.

It is important to note that the Table V-bis dataset only captures a part of the total distribution of wealth in the Netherlands, namely those who possessed, or were believed to possess more than 1,000 guilders at death. In other words, Table V-bis forms the right tail of the lognormal wealth distribution (Wilterdink) and given the painstaking identification of wealthy individuals by the Dutch state, makes it unlikely that we miss people in the right tail end of the wealth distribution. Assuming a lognormal distribution of wealth (cf. Wilterdink 1984), we can extrapolate from the available data, the wealth distribution of the entire population of deceased in 1921, excluding minors (Figure 1) This approximation of the entire distribution suggests that the median wealth at death in 1921 was 300 guilders.[3]

[2] At the time of writing of this first draft (16 April 2018) we are missing a total of 527 memories in the database, while the data of 141 Memories collected for the province of Zuid-Holland still to be entered.
[3] We are currently calculating how our sample relates to the entire Dutch population.



Our approximation of the entire distribution of wealth does suggest our sample (and, for that matter, the Tables V-Bis) underreports a group of individuals owning between 1,000 and 5,000 guilders, shown by the vertical red line indicating the tax threshold of 1,000 guilders. We may assume that their heirs either tried to evade taxes, or, upon registration, found the deceased's net wealth to be below 1,000 guilders. This is consistent with what we know of medical costs and funeral expenses exhausting smaller fortunes at death, and it also explains why the Tables V-bis of many tax offices contained references to people with zero wealth.

We are not the first to use the Memories data to gauge the size and composition of wealth holdings in the Netherlands. Notably Wilterdink (1984, 2015) used the succession tax returns to describe wealth inequality in the Netherlands from the late nineteenth century onwards. He provides a summary table for 1916 with the breakdown of investment portfolios of different size in four main categories: real estate, financial estates, receivables, and other types of assets. In addition he calculated the percentage share of debt outstanding in each of these wealth classes (Table 2, panel B). The data reveal two well known facts about the composition of investment portfolios. First, the relative share of wealth invested in real estate declines as the size of wealth holdings increases. Second, rich people keep a larger share of their wealth in financial assets.

Table 2. The composition of investment portfolios of different wealth classes in the Netherlands in 1916 and 1921.

Asset type	**5-10**	**50-100**	**100-200**	**200-500**	**>500**
Panel A (1916)					
Real Estate	48.4	38.1	29.4	25.4	20.9
Securities	15.3	32.8	40.3	45.4	54.8
Receivables	17.7	16.9	18.7	15.8	13.4
Other	18.7	12.2	11.6	13.4	10.8
Total	**100**	**100**	**100**	**100**	**100**
Debts	-24.9	-11.0	-10.6	-9.5	-5.2
Panel B (1921)					
Real Estate	50.6	38.9	40.5	26.5	21.2
Securities	11.4	30.3	31.6	45.4	52.9
Receivables	16.7	22.8	19.7	20.4	19.5
Other	21.4	8.1	8.3	7.6	6.4
Total	**100**	**100**	**100**	**100**	**100**
Debts	-42.1	-212	-17.4	-15.7	-19.4

Our reconstruction based on the same sources for 1921 (Table 2, panel B) reflects a similar pattern: the relative share of securities (stocks and bonds) increases with the total size of wealth holdings, and the relative share of real estate decreases. The pattern is even more pronounced in the smallest portfolios. Only a very small minority (11 %) of estates worth between 5,000 and 10,000 guilders contained securities, whereas no less than half their wealth was stored in real estate.

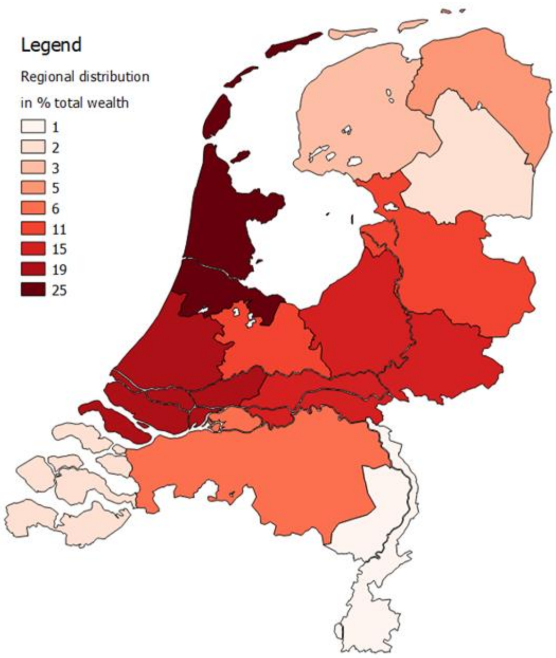
3. Eleven Provinces

The basic empirical goal of this paper is to complement a description of the size and composition of investment portfolios at the national level with a description at the level of the country's eleven provinces. In earlier centuries regional financial development differed markedly. There was the economic core of the premodern Netherlands: the provinces of North and South Holland with Amsterdam as a major and, until the late eighteenth century, leading international financial centre at its core. When industrialization took off during the third quarter of the nineteenth century, the regional economies of Amsterdam and Rotterdam were once again at the heart of economic development. There were other industrial regions, however, in Overijssel (Twente) and Noord-Brabant (Tilburg), while the modernization of agriculture raised the productivity of farms throughout the country.

We can calculate from our sample of Memories the net wealth of all decedents in each of the eleven provinces in 1921. Figure 1 describes the distribution of this wealth. The data shows that Noord-Holland was the richest province owning almost a quarter of the total net wealth in 1921. Zuid-Holland, with the country's major port (Rotterdam) and the government residence (The Hague), came second with almost one fifth of total wealth. Gelderland, the biggest province by size and by population, was the third richest province, but a rural one. Fourth came Utrecht, traditionally a province of rich rentiers. Our data suggests that, together, these four provinces owned more than eighty per cent of the country's wealth. Beyond this economic core was a fringe of seven provinces owning the remaining 18 per cent of the national wealth.

Figure 1. The Provincial Distribution of Wealth of Decedents in the Netherlands in 1921

Province	Recorded Wealth	Share
Noord-Holland	41,373,575	25.0%
Zuid-Holland	31,459,873	19.0%
Gelderland	25,238,256	15.2%
Utrecht	18,553,575	11.2%
Overijssel	17,617,771	10.6%
Noord-Brabant	10,087,064	6.1%
Groningen	7,876,538	4.8%
Friesland	4,392,958	2.7%
Drenthe	3,950,438	2.4%
Zeeland	2,711,984	1.6%
Limburg	2,295,309	1.4%
Total	**165,557,339**	**100%**



Source: Memories 1921 Database

We find similar geographical differences in the average and median wealth of the individuals who paid the inheritance tax of 1921, albeit with two notable exceptions (Table 3). For one, wealth owners in the province of Utrecht were, on average, richer than those living in Noord- and Zuid-Holland. The average and median wealth of death duty payers in the other provinces were substantially lower than those of Holland and Utrecht. Closest to the core provinces were Gelderland, with many large landowners, and Overijssel, home to the most dynamic industrial district in the Netherlands, the Twente textiles and engineering industry. The other outlier would seem to be Drenthe where people, on average, owned about as much as those in Overijssel and Groningen. However, the data show three outliers in Drenthe, very wealthy persons owning 350,000 guilders, 650,000, guilders and 1.16 million guilders, respectively.

Between them they owned almost 20 per cent of the province's entire wealth, compared with, for instance, Groningen where the top-3 in our sample owned only 2 per cent.[4]

Table 3. Descriptive Statistics of the Provincial Wealth Distribution of the Netherlands in 1921, ordered by the average wealth of people.[5]

Province	**Men**	**Women**	**Unkown Gender**	**Average Age**	**Median Age**	**Average Wealth**	**Median Wealth**
Utrecht	79	61	6	62.4	67	32,186	5,341
Zuid-Holland	114	107	6	66.0	69	31,509	4,785
Noord-Holland	165	174	7	64.2	67	26,753	3,443
Gelderland	185	157	5	63.7	67	20,553	2,183
Overijssel	93	85	5	61.9	65	17,066	2,459
Drenthe	42	32	3	68.1	72	15,692	5,171
Groningen	103	59	8	66.4	70	14,221	2,315
Friesland	55	60	3	66.9	69	11,753	2,246
Noord-Brabant	166	176	1	64.3	70	7,827	2,228
Zeeland	56	64	2	63.4	68	7,794	1,94
Limburg	78	68	4	63.3	67	2,021	1,81
Total	**1136**	**1043**	**50**	**64.5**	**69**	**18,362**	**2,968**

The structural differences between the provincial economies are also reflected in the composition of their aggregate investment portfolios, as summarized in Table 4. For instance, the share of real estate is almost twice as high in the rural provinces of Friesland, Limburg and Zeeland as in Zuid-Holland and Noord-Holland. Conversely, financial assets make up

[4] We also compared the wealth distribution of Drenthe with that of Groningen, which has a similar mean value but al lower median portfolio value. After correcting for under-sampling (by duplicating the values of observations in the undersampled, lower wealth classes) we find that the skewness and kurtosis for Drenthe are much, much higher. (Kurtosis of 304 for Drenthe vs 41.6 for Groningen).

[5] The wealth of each individual in our sample is corrected for the deceased's full or partial ownership of the estate. We have calculated median and net wealth taking into account the smaller samples of estates in the lower wealth classes. This gives estimates that are in line with the net wealth reported for all deceased in Table V-bis. The data reported in Table 3 do not take into account differences in the number of people who died but were not taxed (cf. supra).

more than 70 per cent of the portfolios in the latter regions. Note, however, that in every single province stocks and bonds were the most important store of wealth, with shares between 47 and 84 per cent.

Table 4. The Share of Real Estate and Financial Assets in the Total Value of Investment Portfolios in the Eleven Provinces of the Netherlands in 1921

Province (n)	**Real Estate**	**Financial Assets**	**Movables**	**Professional Assets**	**Grand Total**
Friesland (118)	45.7	48.0	4.9	1.5	100
Limburg (150)	44.8	47.8	6.6	0.7	100
Zeeland (122)	42.3	51.3	4.4	2.0	100
Gelderland (346)	37.7	55.2	5.6	1.5	100
Noord-Brabant (343)	35.4	59.5	3.7	1.4	100
Utrecht (145)	33.4	59.7	3.6	3.3	100
Groningen (170)	27.5	65.4	2.9	4.2	100
Overijssel (182)	25.9	71.4	2.7	0.0	100
Zuid-Holland (227)	25.0	72.7	1.9	0.4	100
Noord-Holland (346)	23.7	73.3	2.8	0.1	100
Drenthe (77)	14.7	84.2	1.0	0.0	100
Grand Total (2,226)	**29.2**	**66.4**	**3.3**	**1.1**	**100**

The share of financial assets in investment portfolios was highest in the rural province of Drenthe, a province with very poor sandy soils, where wealthy people put almost all their money in securities. This tendency can also be observed in the other provinces, as a comparison between average and median investment portfolios shows (Table 5). In every province the share of financial assets in median portfolios was higher than in the average portfolio, with the biggest difference in Drenthe and Overijssel: 41 and 22 percentage points, respectively. This suggests that people throughout the Netherlands put more money in stocks and bonds as they grew richer. But we need to find out more about the assets they owned.

Table 5. The Share of Financial Assets in the Average and Median Investment Portfolio in the Eleven Provinces of the Netherlands in 1921

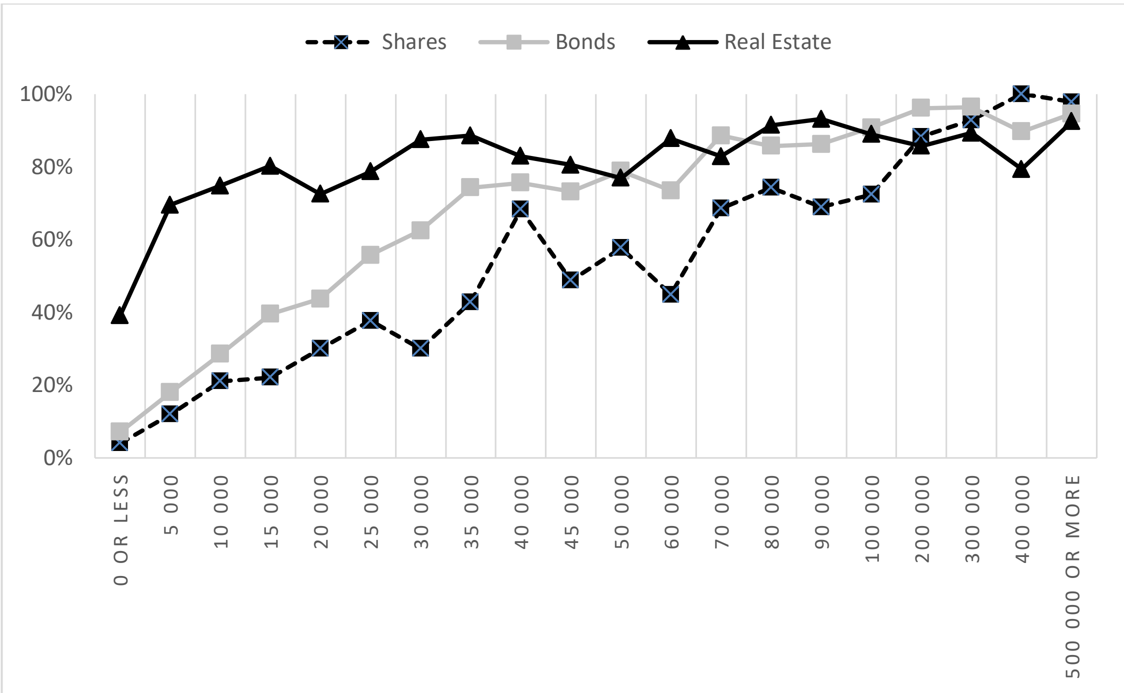
Province	**Median Portfolio**	**Average Portfolio**
Zuid-Holland	62	72.7
Groningen	61	65.4
Noord-Holland	59	73.3
Utrecht	52	59.7
Noord-Brabant	50	59.5
Overijssel	49	71.4
Zeeland	47	51.3
Friesland	45	48.0
Gelderland	45	55.2
Drenthe	43	84.2
Limburg	43	47.8

4. A Closer Look at Asset Types

For every major asset type we want to establish at which level of private wealth it first appears. To do so, we have divided the population into 20 wealth classes: the distribution up to 50,000 guilders in ten brackets of 5,000 guilders each, then up to 100,000 guilders five brackets of 10,000 guilders each, and finally five additional classes for estates worth over 100,000 guilders, the final one including all portfolios worth at least half a million guilders. For each class we looked at the percentage of people that holds one of three asset types: shares, bonds, and real estate. We have used a binary code (0 = absence and 1 = presence) to indicate whether shares were present in individual level portfolios. Then we calculated the percentage of people per wealth bracket who had at least one share or bond in their portfolio, assuming this to be a good proxy for market access since people who can buy shares, could also buy two or more shares. Of course this tells us nothing about the quality of the shares.

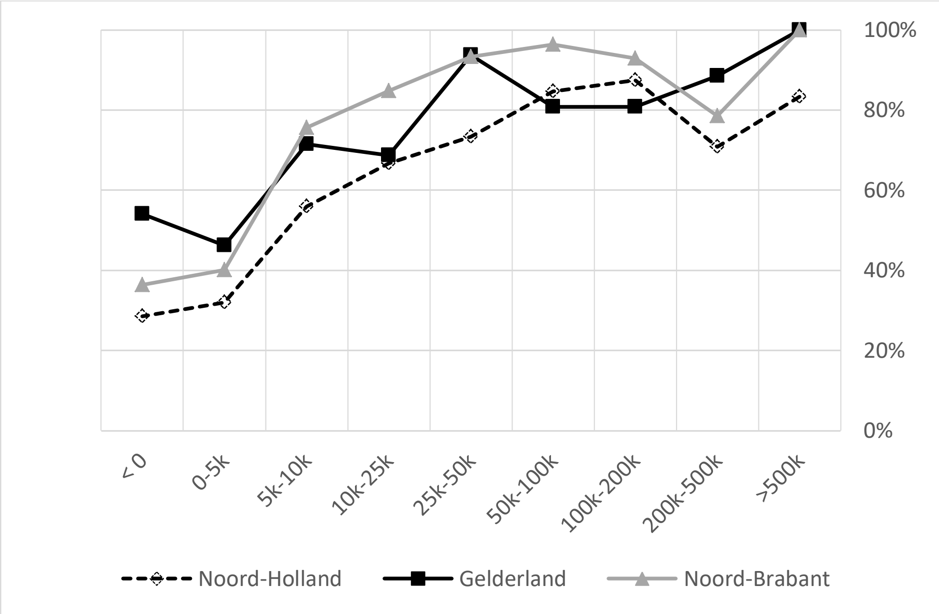
Figure 2 summarizes our findings at the national level. Unsurprisingly it shows that the richest people, those with a net wealth of 100,000 guilders or more, virtually always own all three types of assets. The ownership of each of the three asset types increases as the value of the estate rises, with one exception: the percentage share owning real estate decreases from 90 per cent to 80 per cent of all people as their wealth increases from 100,000 to 400,000 guilders. If we then consider a threshold of 50%, i.e. the wealth bracket in which at least half the people own each of these three types of assets, we see that this value lies somewhere between 40,000 and 45,000 guilders for shares, 20,000 to 25,000 guilders for bonds, and only 5,000 guilders for real estate.

Figure 2. The Share of Dutch people in Different Wealth Brackets Owning Shares, bonds, and Real Estate in 1921.



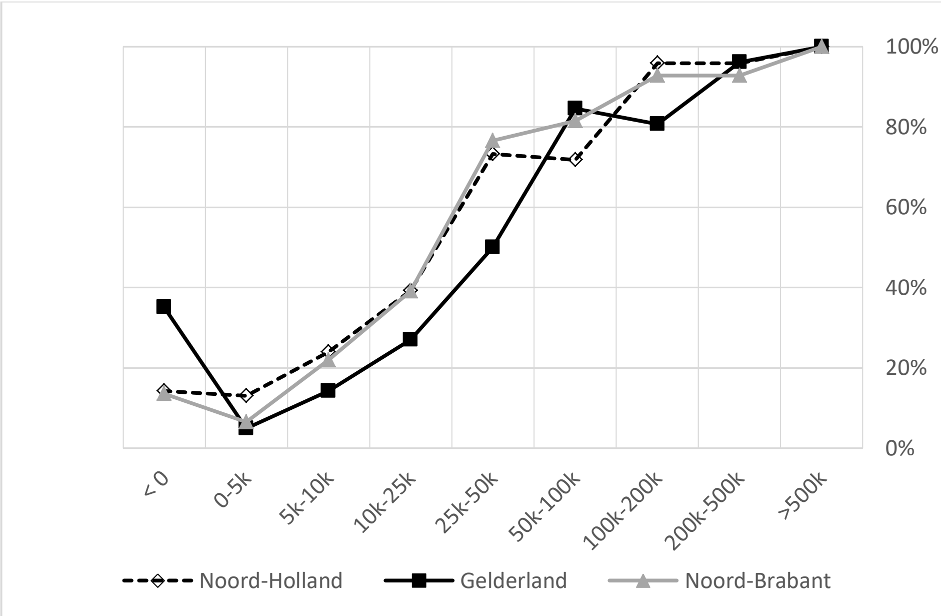
The 1921 *Memories* allow us to analyze these patterns at the provincial level as well. We have less observations per province, however, and therefore we use wider wealth brackets, with five classes for estates worth up to 50,000 guilders, three for estates between 50,000 and 500,000 guilders, and one similar to the top bracket in the national distribution (500,000 guilders and over). Even then we are left in the less populous provinces with less than ten observations in some of these brackets. Therefore, we limit our calculations to portfolios in the three largest provinces, Noord-Holland, Gelderland and Noord-Brabant (w*e will add Zuid-Holland once we have added data from another 80 death duty forms to our dataset*). Figure 3a through 3c report the ownership of real estate, bonds, and shares respectively, for different wealth classes in the three provinces.

Figure 3a. The Share of People in Different Wealth Brackets in Noord-Holland, Gelderland and Noord-Brabant Owning Real Estate in 1921.



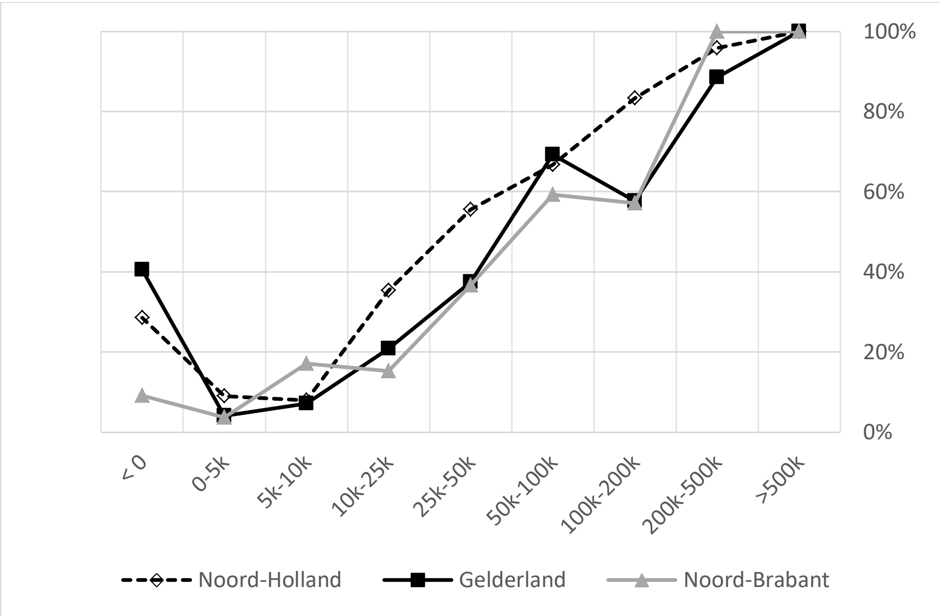
In line with the national distributions, in each of the three provinces real estate is already present at very low levels of wealth, with at least one third of the people with an estate worth less than 5,000 guilders possessing a house or a piece of land. This share rises steeply to 80 per cent or more as wealth rises to 50,000 guilders. Then, at some point in each of the three provinces the share of the population owning real estate drops between 13 and 17 percentage points: in Gelderland for people with a net worth between 50,000 and 100,000 guilders, in Noord-Holland and Noord-Brabant for those who own between 200,000 guilders and 500,000 guilders. Another marked difference in real estate ownership is between the more urban province of Noord-Holland on the one hand and the two rural provinces on the other: in the latter the ownership of real estate is up to 20 per cent higher, especially in the lowest and highest wealth brackets.

Figure 3b. The Share of People in Different Wealth Brackets in Noord-Holland, Gelderland and Noord-Brabant Owning Bonds in 1921.



People in the three provinces also differ with regard to their ownership of bonds and shares. Even though in each province the ownership of bonds rises with the total amount of wealth, bonds were less common in Gelderland in the portfolios of people owning up to 50,000 guilders (Figure 3b). The trend in bond ownership in different wealth brackets is very similar in Noord-Holland and Noord-Brabant, but investment in shares (Figure 3c) was much higher in the former province across a large part of the wealth distribution. Only the very wealthy in each of the three provinces, i.e. people owning 200,000 guilders or more, held very similar portfolios. At that very high level of wealth the composition of investment portfolios no longer seemed to depend on a person's geographical location, contrary to less affluent people where apparently it did.

Figure 3c. The Share of People in Different Wealth Brackets in Noord-Holland, Gelderland and Noord-Brabant Owning Shares in 1921.



5. The Role of Intermediaries

The composition of investment portfolios varies with the value of estates and, at least up to a certain level of wealth, with people's residence. But how exactly does this location influence investment decisions? One possible relationship, particularly for smaller estates, is between rural residency and landownership; another is between urban residency and the possession of financial assets. We can explore these issues through a comparison of the composition of portfolios in places of different population size with and without financial intermediaries. Table 6 summarizes our classification of the municipalities, based on population figures for

1920 and the presence of financial intermediaries in 1900. Our first category contains every city with at least 50,000 inhabitants in 1920. In each of these eleven cities there were multiple banks, cashiers, stock brokers, or commission traders. A second category of municipalities varied in population size from slightly more than 2,000 up to almost 50,000 but they shared the presence in 1900 of at least one financial intermediary capable of buying and selling securities.

Table 6. Classification of Municipalities in the Netherlands According to Population Size in 1920 and the Presence of Financial Intermediaries in 1900.

Category	**Number**	**Total Population**
1. Cities with 50,000 inhabitant or more	11	2,202,835
2. Other municipalities with at least one bank or broker	107	1,154,796
3. Municipalities without known banks or brokers	1,204	2,370,578

We measure the supply of financial services using our Dutch Banking Landscape Database (*in progress*), which uses address books to establish the presence of merchant banks, cashiers, stock brokers, and commission traders in the Netherlands for benchmark years at twenty-years' intervals between 1860 and 1940 (Table 7). We then categorize our Memories data according to the presence of these intermediaries in 1900, i.e. twenty years before we measure portfolio size and composition. We do this not just because portfolios were obviously built up in the years (often decades) before a person died but also to compare our measurement of financial intermediaries with the number of employees in the financial sector in 1900 reported in the population census of that year. Notably for the cities with 50,000 inhabitants or more both our measures point to a similar supply of financial intermediaries.

Table 7. Estimated Number of Banks, Cashiers, and Commission Traders in the Netherlands (1860-1940)

Type of Bank	**1860**	**1880**	**1900**	**1920**	**1940**
Cashiers	103	144	180	97	29
Merchant Banks	44	117	144	134	91
Commission Traders	17	29	39	38	47
General Banks	16	20	53	97	117
Total	**180**	**310**	**416**	**366**	**284**

Source: Dutch Banking Landscape Database

Figure 4 summarizes the composition of portfolios of people in different wealth classes living in each of the three types of municipalities. To be sure, like before, we only measure the absence or presence of specific asset types, a very crude measure which serves to identify access to specific investment opportunities. Some clear patterns can be discerned, however. Generally speaking, individuals living in small places without financial intermediaries (Type 3) owned more real estate and fewer shares and bonds across all wealth classes, compared to those living in municipalities with banks, brokers, or other providers of investment services. The wealthiest individuals, nonetheless, seem to have full access to these asset classes regardless of where they live.

The money stock data underline that the extent to which the Netherlands remained wedded to cash. Only 36 per cent of the richest inhabitants in the big cities with a complete financial infrastructure possessed bank accounts. That percentage drops to only 20 for urban estates worth 100,000-500,000 guilders, 15 per cent for those in the 50,000-100,000 guilder bracket, and half that, only 7-8 per cent, for those up to 10,000 guilders. In smaller towns without specialized intermediaries bank accounts were rarer still, notably for people with less than 100,000 guilders, of whom only 10 per cent had such an account. The absence of bank accounts tallies with other telling items, claims and debts. Estates in all brackets had about 20 per cent of their wealth tied up in claims, balanced by similar amounts of debt, both partly small ones connected to the supply of goods or services, and partly larger private loans. So if cash was king in the Netherlands, postponed payments and private loans were his equally important consorts, testimony to the degree in which economic exchange remained predominantly an affair of fairly short social distances and trust inspired by frequent personal interaction.

Figure 4. The Composition of Investment Portfolios at Different Levels of Wealth For Cities With and Without Financial Intermediaries.

6. Conclusion

We wanted to examine what determined the composition of Dutch investors' portfolios in 1921: wealth levels, access to financial services, place of residence, or social norms. All four factors appear to have had an impact. As one would expect portfolios in the top wealth brackets were very similar across the country, underlining that the rich knew how to balance portfolios and had access to all services needed to achieve that balance. Access was still a factor of importance; having a securities broker close by made people buy securities at lower levels of wealth, even in predominantly rural provinces where real estate remained an important asset for all wealth classes. By contrast, having a credit cooperative or *boerenleenbank* made people less likely to own securities, presumably because they then preferred a savings account or else took a mortgage to buy land. As for residence, people in the big cities tended to rent and not own real estate, whereas those living in smaller cities or the countryside would first buy property. Finally, the data show the continuing importance of close social ties for all wealth groups in the large share of postponed payments and underhand debts.

References

Berckel, J.J.L. van, *De maatschappelijke en economische betekenis van de spreiding van effectenbezit* (Deventer 1969)

Bos, N. (1989), 'De memories van successie. Een veelbelovende bron voor veelsoortig onderzoek', *Spiegel Historiael*, 24 (1989), 120-126

Bos, N.J.P.M., 'Vermogensbezitters en bevoorrechte belastingbetalers in de negentiende eeuw', in: *Bijdragen en mededelingen betreffende de geschiedenis der Nederlan*den 105 (1990) 553-577

Bos, N.J.P.M., 'Belastingstatistieken als bron voor sociaal-economisch onderzoek, met bijzondere aandacht voor Limburg', *Economisch en sociaalhistorisch jaarboek* 94 (1991) 50-101

Brusse, P.G. and W.W. Mijnhardt. 2011. *Towards a new template for Dutch history* (Zwolle: Waanders)

Burg, V.A.M. van der; Rhoen, R.P.M., "Een rondgang door het dorp Zeist, 1805-1850", Seijst : bulletin ter bevordering van de kennis van de geschiedenis van Zeist, jg. 35 (2005), nr. 4, p. 103-122

Colvin, C.L. (2011), 'Religion, Competition and Liability: Dutch Cooperative Banking in Crisis, 1919-1927', *Unpublished PhD Dissertation*, Department of Economic History, London School of Economics and Political Science

Deneweth, H., O.C. Gelderblom en J.P.B. Jonker, 'Microfinance and the decline of poverty, evidence from the nineteenth-century Netherlands', *Journal of economic development* 39 (2014) 79-110

't Hart, M., J.P.B. Jonker, J.L. van Zanden, ed., A financial history of the Netherlands (Cambridge 1997)

Jong, J.J., de. 1985. *Met goed fatsoen. De elite in een Hollandse stad Gouda, 1700-1780* (Amsterdam: Bataafsche Leeuw)

Jonker, J.P.B., 'The alternative road to modernity: banking and currency, 1814-1914', in: M. 't Hart, J.P.B. Jonker, J.L. van Zanden, ed., *A financial history of the Netherlands* (Cambridge University Press: Cambridge 1997) 94-123

Jonker, J.P.B., 'The cradle of modern banking, finance in the Netherlands between the Napoleonic era and the first commercial banks, 1813-1870', in: Joh. de Vries, W. Vroom, T. de Graaf, ed., *World wide banking, ABN AMRO Bank 1824-1999* (Amsterdam 1999) 49-94

Knippenberg, H., B. de Pater, *De eenwording van Nederland, schaalvergroting en integratie sinds 1800* (Nijmegen 1988)

Kooijmans, L. 1985. *Onder regenten. De elite in een Hollandse stad Hoorn, 1700-1780* (Amsterdam: Bataafsche Leeuw)

Maassen, H.A.J., *Tussen commercieel en sociaal krediet, de ontwikkeling van de bank van lening in Nederland van lombard tot gemeentelijke kredietbank 1260-1940* (Hilversum 1994)

McCants, A.E.C. (2007), ‘Goods at Pawn: The Overlapping Worlds of Material Possessions and Family Finance in Early Modern Amsterdam’, *Social Science History*, 31 (2007), 213-238

Moes, J.K.S. 2012. *Onder aristocraten. Over hegemonie, welstand en aanzien van adel, patriciaat en andere notabelen in Nederland, 1848-1914* (Hilversum: Verloren)

Piketty, T., G. Postel-Vinay, and J.L. Rosenthal, 2014,. "Inherited vs self-made wealth: Theory & evidence from a rentier society (Paris 1872–1927)," *Explorations in Economic History* 51, 21-40.

Piketty, T., G. Postel-Vinay, and J.L. Rosenthal. 2006. "Wealth Concentration in a Developing Economy: Paris and France, 1807-1994." *American Economic Review*, 96(1), 236-256

Prak, M., *Gezeten burgers. De elite van een Hollandse stad Leiden 1700-1780* (Amsterdam: Bataafsche Leeuw)

De Vicq, A. and R. Peeters, “The Division of Wealth in the Netherlands: Presentation of the Database”, *unpublished paper*, 2017

Vries, B. de, 'Amsterdamse vermogens en vermogensbezitters 1855-1875', *AAG Bijdragen* 28 (1986) 199-215

Wijsenbeek-Olthuis, T.F., *Achter de gevels van Delft, bezit en bestaan van rijk en arm in een periode van achteruitgang* (Hilversum: Verloren 1987)

Wilterdink, N., *Vermogensverhoudingen in Nederland, ontwikkelingen sinds de negentiende eeuw* (Synopsis: Amsterdam 1984; 2nd edition 2015)

Woud, A. van der, *Koninkrijk vol sloppen. Achterbuurten en vuil in de negentiende eeuw.* (Amsterdam 2010)