

Charting the Development of Wealth Inequality in the Netherlands since 1950: an On-going Quest

Ann Coenen

TSEG 14 (2): 11-28

DOI 10.18352/tseg.915

Abstract

This article assesses the value of the available official data series used to map the evolution of Dutch wealth inequality during the latest six decennia. It inventories the many methodological and heuristic problems that plague the topic. While we observe that the figures have become less reliable from the sixties onwards, there are a number of indications that total private wealth has, since the eighties, increased at a higher rate than GDP, and that the present level of wealth inequality is slightly higher than the level at the beginning of the nineties. The Netherlands thus appear to join in closer with the Piketty thesis than the Dutch ideal of equality would suggest.

Within the on-going flow of innovative work on wealth inequality – boosted forcefully by Thomas Piketty’s voluminous 2014 publication on the topic – the study of the recent evolution of wealth inequality in the Netherlands still remains without a firm conclusion. This is not so much due to a lack of either academic or political attention – both have certainly increased in recent years – as it is to the many heuristic and methodological problems that scourge contemporary debates. Thomas Piketty himself did not include the Dutch case in his voluminous work, mostly because he found the Dutch data to be ‘not completely satisfactory. (...) Many categories of assets are exempt’.¹ In this article I will assess the value of the available official data series, shaped by the Dutch taxation prerequisites and currently collected by the Dutch Central Bureau for Statistics (from here on referred to as CBS). I

¹ Piketty, *Capital in the Twenty-First Century* (Harvard 2014) 642. The original in French was published in August 2013.

will give the background of the official data sets – who collected this data, what was included and how was it measured? – identify the various gaps, make suggestions for improving the comparability between different series and assess to what extent they are comparable to the time series Piketty has collected for other countries. As we will see, the tribulations are manifold.

In a reaction triggered by a report on inequality in the Netherlands, the Dutch Minister of Social Affairs and Employment, Asscher, and the State Secretary of Finances, Wiebes, presented a part of the available data on the Dutch distribution of wealth from 1894 to 2013 in a graph.² The chart suggests that between 1894 and 1980 Dutch wealth inequality has become increasingly smaller and that it has remained nearly stable at a relatively low level in recent decades. Statistics like these, presented in a concise graph, appear exact to a casual reader, but unfortunately they are not. Although the authors themselves explicitly indicate that there is ‘a certain degree of inaccuracy’ in the figures, the publication of the graph still suggests that we are reliably certain of the seemingly diminishing rate of wealth inequality until 1980 and the subsequent stability of the figure.³ The same historical summary was adhered to during a discussion on the wealth distribution of the Netherlands within the Dutch Parliament in November 2014. Alas, both the political statements on Dutch wealth stratification, as the ones made by historians who wish to include the Netherlands in the debate on wealth inequality are unfortunately based on incomplete and inaccurate data series, especially in the most recent decades.

According to Thomas Piketty a trend of decreasing wealth inequality indeed occurred until the 1970s in the Western European countries he investigated, but it was reversed during the eighties. And in the following decennia that increase in inequality even accelerated.⁴ According to Nico Wilterdink – the historian who has done most to chart wealth in the history of the Netherlands – wealth inequality has in any case increased during the years 1980–89.⁵ Most contemporary historians, including Bas van Bavel and

2 L.F. Asscher and E. Wiebes, Ministry of Social Affairs and Employment (SZW), ‘Kamerbrief betreffende de Nederlandse vermogensverdeling’, letter to the parliament, September 16 2014 (Den Haag), www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2014/09/16/kamerbrief-over-de-nederlandse-vermogensverdeling.html (April 5 2016). The ‘kamerbrief’ was a reaction to Bas van Bavel, B.J.P., ‘Vermogensongelijkheid in Nederland. De vergeten dimensie’, in: Monique Kremer and Mark Bovens ed., *Hoe ongelijk is Nederland? Een verkenning van de ontwikkeling en gevolgen van economische ongelijkheid* (WRR Verkenning/ Amsterdam University Press 2014) 79–100.

3 Asscher and Wiebes, ‘Kamerbrief’, 5.

4 Thomas Piketty, *Capital*, 642.

5 Nico Wilterdink, ‘Vermogensverhoudingen in Nederland: Recente Ontwikkelingen’, *Amsterdam Working Papers in Sociology* 91, no. 3 (1991), 12–13; Nico Wilterdink, ‘Lange-Termijnontwikkelingen in de Nederlandse

Ewout Frankema believe he is right, which leads them to assume that the ‘Rhineland welfare states’ – including the Netherlands – are characterized by a paradoxical concurrence of relatively low income inequality and high wealth inequality.⁶ However, without a thorough assessment of the available data series and the estimations based on them, the question remains open whether this was indeed the case and if so, how strong the Dutch increase in wealth inequality has really been compared to the countries for which we possess more robust estimations.

This article is divided into three periods for which different series of government (taxation based) data are available, and focuses on the one hand on the internal gaps within the individual series, and on the other hand on the degree of compatibility between the different sets. The first period leads up to 1989. For this period the Central Bureau for Statistics did not record the distribution of wealth itself, but we can use the calculations made by sociologist Nico Wilterdink based on Dutch wealth tax registers. For the next four years, 1990-1993, there is only some fragmentary information on the wealth of Dutch households. From 1993 onwards, the CBS started to record and publish a more detailed series on the Dutch wealth distribution, albeit not with a continuous methodology over the years.

1 Relative coherence between 1950 and 1989

Historical sources on the wealth of Dutch households have since around 1900 been scarcer than those on income. The Dutch have always prided themselves on their relatively equal society and this is reflected in their fiscal choices, focussing mostly on redistribution and equal wages. In such an economic context, wealth has until recently been of little concern for policymakers. However, the dominant image which arose from the literature on income inequality has been strongly questioned in recent years by Anthony Atkinson, Piketty and other recent scholars of inequality.⁷ A new

Vermogensverhoudingen’, in: Flap, Henk and Marco van Leeuwen, *Op Lange Termijn: Verklaringen en Trends in de Geschiedenis van Samenlevingen* (Hilversum 1994) 2.

6 Bas van Bavel and Ewout Frankema, ‘Wealth inequality in the Netherlands, c. 1950-2015. The paradox of a Northern European welfare state’, this issue. The aforementioned article also includes a comparison between inequality trends in the Netherlands and in several other countries.

7 It was Simon Kuznets who established the view that the level of income inequality was inversely related to the level of economic development in the twentieth century. S. Kuznets, ‘Economic growth and income inequality’, *The American Economic Review* 45 (1955) 1-28. For this debate, see also the ‘Introduction’ and K. Dombrecht and W. Ryckbosch, ‘Wealth inequality in a time of transition: Coastal Flanders in the sixteenth century’, this issue.

light on the history of wealth is thus of great importance. Luckily, for much of the twentieth century, we can draw from the extensive research done by Nico Wilterdink on wealth inequality in the Netherlands.⁸ His calculations are based on the registers from the Dutch wealth tax that was introduced in 1893.⁹ Unfortunately for economic historians, only properties above a certain value were subject to the tax and only these taxed assets were registered. Wilterdink extrapolated total private wealth from the registered amount, based on the assumption that assets are distributed lognormally. This assumption turns out to be accurate for the share of wealth above the registration limit and was therefore also used to calculate an estimate for the total. The registration units for the wealth tax are couples and singles of 20 years or older.¹⁰ The number of registered wealth owners was highest in 1974, with 325,000 registrants.¹¹

Wilterdink himself emphasizes that the data he used has been getting ever more inaccurate throughout the second half of the twentieth century, and especially after 1964. However, this mainly impacts the absolute values and not the trends seen in wealth inequality over time.¹² From 1958 onwards, official estimates were no longer published – possibly under the influence of the Dutch egalitarian ideal – and after 1964, more and more components of household wealth were being omitted from the statistics. He writes:

The amount of exempt annuities has increased dramatically, the definition of pensions has been extended, the undervaluation of estates was reinforced in 1964, it gradually became rule to leave goodwill out of business assets, and to rate personal property according to the inhabited state.¹³

The remainder is thus mainly composed of financial assets, which were mainly owned by the upper layer of wealth owners. The value of the statistics based on the wealth tax has since 1975 become particularly limited, according to Wilterdink's own estimate, because of the repeated increase in the number of exemptions.¹⁴ The registration limit was set on 20,000

8 Wilterdink, *Vermogensverhoudingen in Nederland* (Amsterdam 1984); Idem, 'Vermogensverhoudingen'; Idem, 'Lange-Termijnontwikkelingen'.

9 Wilterdink, *Vermogensverhoudingen*, 11.

10 *Ibidem*, 269.

11 *Ibidem*, 395.

12 *Ibidem*, 402.

13 *Ibidem*, 399.

14 *Ibidem*, 385.

guilders in 1951, on 30,000 in 1955, on 50,000 in 1960, on 100,000 guilders between 1965 and 1974, and on 200,000 from 1982 onwards. On top of this, an exemption for business owners was introduced in 1975 amounting to 521,000 guilders in 1986.¹⁵ The ratio of the value of (estimated) unregistered wealth set against registered wealth thus increases markedly over time (see Table 1). In addition to the impact of amendments to the tax policy, the possibilities of tax evasion also expanded.¹⁶ Based on this combination of fiscal underestimation and the increase in tax evasion possibilities, Wilterdink assumes there is an underestimation of at least twenty per cent of the total wealth that was registered from 1960 onwards.¹⁷

Table 1. Amounts of registered versus unregistered wealth, 1951-1974

	Registered wealth (billion guilders)	Estimated wealth below the registration limit (billion guilders)	Unregistered/ registered
1951	19,6	10,10	0,515
1955	26,5	14,40	0,543
1960	38,4	22,00	0,573
1965	50,4	44,60	0,885
1970	73,3	59,20	0,808
1974	96,8	74,70	0,772

Source: Wilterdink, 1984, p. 110.

As Table 1 shows, the estimated share (the estates that were not registered by the tax authorities) was getting bigger, and the figures have thus, over time, been increasingly based on conjecture.¹⁸ At least with regard to the estimated total private wealth, Wilterdink shows that the data is becoming less representative towards the eighties. Estimates from the Central Planning Bureau (from here on CPB) confirm that the margin of error was probably considerable after 1964. The CPB valued total private wealth in 1970 at 248 billion guilders, almost twice as high as Wilterdink (132.5 billion guilders), and this discrepancy grows during the following years.¹⁹ But what does that underestimation mean for the distribution of wealth? It is very difficult to find out exactly what type of assets or households are

15 Wilterdink, 'Vermogensverhoudingen', 21.

16 According to his thesis, avoidance and evasion of taxes started to occur in more severe forms from the early sixties onwards, for reasons including increased international mobility of money, goods and people, as well as a deterioration of tax morality. Wilterdink, *Vermogensverhoudingen*, 95, 394, 405-406.

17 Wilterdink, *Vermogensverhoudingen*, 402.

18 See Table 1, estimated wealth below the registration limit.

19 B. van Bavel and W. Salverda, 'Vermogensongelijkheid in Nederland', *ESB*, 99:4688 (2014) 3.

among the approximately 300,000 registered wealth owners. The data up to 1970 comes from the old wealth tax, which concerned only very large wealth owners. At the same time, the absolute top of the wealthiest probably remained out of sight, as Wilterdink assumes that more evasion took place among these than within the second tier.²⁰ The increasing underestimation of total wealth thus does not necessarily imply an increasing underestimation of wealth inequality. Sophisticated tax evasion constructions undoubtedly were more common among the wealthiest, but simpler forms of circumvention, evasion or underestimation occurred among all classes. Wilterdink assumes that when we would acquire data based on completely correct registration, the share of the top one per cent wealthiest would decrease by around two percentage points in the period 1951-1974.²¹

On the other hand, if the data from the late sixties onwards indeed leave out a relatively greater share of wealth than the more recent series by the CBS, then possibly the share of the wealthiest one per cent may not have been much higher around 1980 than in recent years. Depending on the exact size of the scale adjustment required for the years 1970-1990, the decrease in wealth inequality might have finished earlier than the available figures suggest. According to Wilterdink's later estimates – based on the same type of data as his original work – wealth inequality has in any case increased again during the years 1980-89.²² He explains this increase among other things by a rise in stock prices, fiscal measures benefitting entrepreneurs and investors, and – more fundamentally – a shift from labour to capital income.²³

2 Incongruities in the data series (and the gap between 1989 and 1993)

While the data from Wilterdink's research is perhaps not very much watertight for the size of total private wealth after 1960 and possibly also to some extent for the share of the top one per cent, his calculations appear sufficiently robust to rely on the downward trend in the top one per cent's share until 1974, followed by an increase in the ratio for the years 1980-1989. In other words, so far it appears to follow the same trend as what Piketty has brought forward for other Western European countries. However,

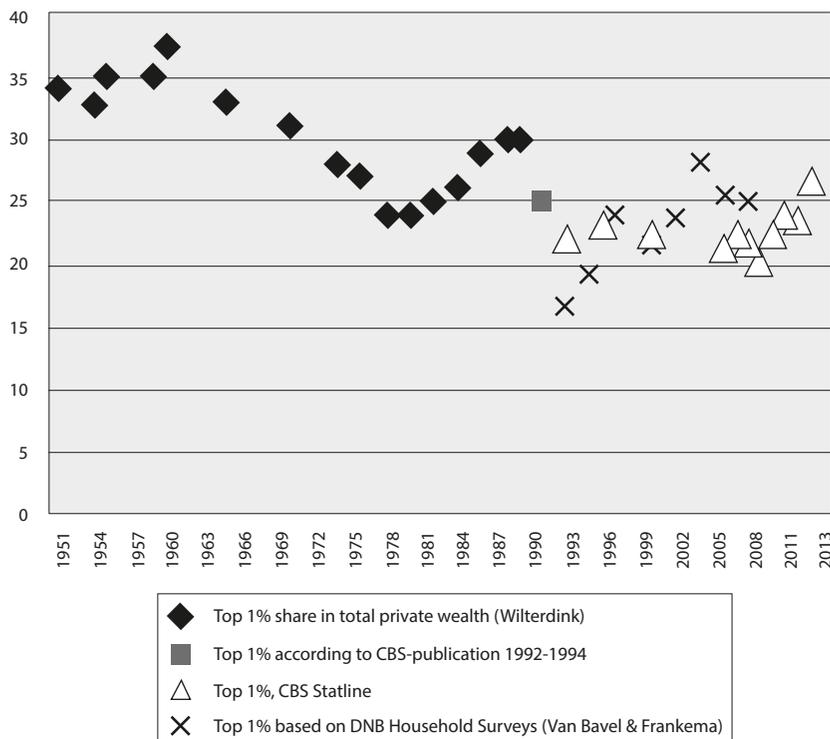
20 Ibidem, 394.

21 Ibidem, 402.

22 Wilterdink, 'Vermogensverhoudingen', 12-13; Idem, 'Lange-Termijnontwikkelingen', 2.

23 Idem, 'Vermogensverhoudingen', 16.

Chart 1. Share of the one per cent wealthiest in total private wealth, 1951-2013



Sources: Wilterdink (1984 and 1994) and CBS Statline.

Dutch policy makers assume that after the eighties wealth inequality has not risen further, what would imply a divergence from the Piketty hypothesis. Unfortunately, while we can rely on relatively continuous data until the eighties, a bigger problem in mapping the history of the wealth distribution in the Netherlands occurs when we try to make the connection between Wilterdink’s calculations and the more recent data on wealth based on CBS Statline (which has made series available for the periods 1993-2000 and 2006-2014). As this data was not collected in the same manner and has a different composition than the older data that Wilterdink has used, it may not be robustly comparable, so we can say even less on the recent evolution in Dutch wealth inequality.

Chart 1 shows the estimated proportion of the one per cent wealthiest since 1951 – at least for the years for which wealth tax data is available. The Wilterdink series up to 1989 and the CBS series from 1993 to 2000 and 2006-2013 (which have also been used by Atkinson and Morelli in their work on



Illustration 1: S.N. 'Rijke stinkerds worden alsmaar rijker', in Ravage webzine (12/11/2013).

wealth inequality) are known.²⁴ Moreover, a CBS paper published in 1995 contains extra data on private wealth for the year 1991 and thus renders the gap between the two series a bit smaller.²⁵ The chart raises the question what has happened around 1990 that explains the sudden drop in the one per cent ratio. It thus suggests that either Wilterdink might have underestimated small and medium wealth, ergo: overestimated the top share. Or vice versa: that the CBS series underestimate the top one per cent. The question we have to answer is thus where the discrepancy originated from and whether the drop between 1989 and 1990 can be repaired.

A first problem when clarifying the mismatch is an incomplete picture of what the series reveal exactly. (Net) wealth consists in theory of savings, equities, shares in companies, private businesses, home ownership, and commercial (im)movable property, minus debts and loans. Wilterdink's books contain an extensive appendix on the actual composition of the assets included, which we could in theory compare to that of the CBS series.²⁶ Unfortunately, the methodological information provided for the CBS

24 A. Atkinson and A. Morelli, *Chartbook of Economic Inequality* (2014) www.chartbookofeconomic-inequality.com/inequality-by-country/Netherlands/ (April 4 2016). For 2014, there is only a CBS-figure for total wealth (see Chart 2) and for the decile distribution.

25 Centraal Bureau voor de Statistiek, *Inkomen en vermogen 1992-1994* (Heerlen 1995).

26 Wilterdink, *Vermogensverhoudingen*, 386.

data is very summary for the period 1993-2000, and we know that methods have changed in 2006 and again in 2012. For the shortest series, '*Vermogensstatistiek 1 januari 1993 tot 1 januari 2000*' (wealth statistics, January 1st 1993 to January 1st 2000), only a very brief methodological note exists. Based on this note, we can confirm that the series are inferred from a sample.²⁷ The main source used is the so-called *Inkomenspanelonderzoek* (panel survey on income) containing around 250,000 respondents. Data on fortunes of over 200,000 guilders were also partly derived from the wealth tax administration. For smaller capitals the income tax administration was consulted. The value of private real estate (houses) during the nineties was deduced from the socio-economic panel survey (SEP)²⁸ – containing around 13,000 respondents – afterwards the WOZ-value from tax registers was used.²⁹ The SEP was especially needed to value the wealth of households that were exempted from providing an income or wealth tax declaration. A longer research description, such as those that are available for most of the CBS-series, likely did exist, but according to CBS the document has never been digitized and remains untraceable.

For the most recent – and on-going – CBS wealth statistic series (*Statistiek vermogens van huishoudens*) we do have an extensive research description.³⁰ The description shows that the records from 1993-2000 are based on the same definition of wealth as the one used from 2006 onwards, but there are many uncertainties about the differences compared to Wilterdink's calculations. However, we are certain of a number of differences in their methodology, so we can build some hypotheses about the influence of these on the construction of a continuous series. First, until the seventies the data was deduced from the old wealth tax registers, which concerned only the wealthiest households. We do not know exactly how large the untaxed proportion of private wealth was, but as indicated above it may have involved up to half of the total (this estimate is based on the ratio of total private wealth to GDP, see below). To render the two series comparable, the per-

27 CBS, *Korte onderzoeksbeschrijving Vermogensstatistiek 1 januari 1993 tot 1 januari 2000* (www.cbs.nl/nl-NL/menu/themas/inkomen-bestedingen/methoden/dataverzameling/korte-onderzoeksbeschrijvingen/2005-vermogensstatistiek-ob.htm).

28 *Sociaal-economisch panelonderzoek*.

29 Municipalities determine the value of properties based on the Property Valuation Act (WOZ). The WOZ-value determines the height of a number of national and local taxes, such as property tax and sewerage charges. (www.kadaster.nl/web/Themas/Wonen/WOZ-waarde.htm)

30 The 2010 edition is the most comprehensive one. However, for details on the transition to integral observation, the more recent edition must be consulted. J. Claessen, *Procesbeschrijving Vermogens van huishoudens* (Heerlen 2010); N. Pouwels-Urlings, *Uitgebreide onderzoeksbeschrijving statistiek vermogens van huishoudens* (Heerlen 2014).

centages calculated by Wilterdink would possibly have to be set somewhat lower. This could possibly imply that wealth inequality is now at a higher level than at the lowest point in the range of Wilterdink's series. In other words, that a reversal of the earlier trend – a long period of decreasing wealth concentration up to 1980 – is still taking place. Unfortunately, such claims cannot be falsified yet on the basis of the non-coherent data sets.

A point where the figures of Wilterdink and the CBS show a pretty good match are the units they used. Both the CBS sample as the historical tax registers look in practice at households (either couples or singles are used as the unit of measurement, as children rarely owned sufficient capital to be taxed). Because the wealth distribution is measured as a ratio, the influence of the dilution of households over time is largely eliminated. Before 1970, wealth was of course shared with more members of a household than now, but as that dilution has taken place in all types of households (both the wealthy and the more impecunious) this only exercises a minor impact on the charts.

All periods studied in this article moreover have to deal with three shared problems that weigh heavily on a correct registration of the top estates: tax avoidance, an increase in illegal forms of tax evasion and discrepancies in response rates. Wilterdink estimated the rate of tax evasion at at least ten to twenty per cent and he assumed that before 1974 especially smaller estates were underestimated because of it.³¹ Geerten Michielse, professor in taxation law, believes that evasion of wealth taxes is nowadays mainly a problem among the richest, and that avoidance through multinational constructions grew since the eighties and has increased exponentially after 2003.³² Moreover, the top wealth owners presumably have a higher non-response rate in household surveys.³³ This implies that a relatively larger share of the largest estates has remained hidden from sight during the last 20 years than in the years for which Wilterdink has collected data. Bas van Bavel and Wiemer Salverda share this view:

In addition, some of the top estates are likely missing. Anything that falls outside the income tax – because it is not attributed to individuals but for example, is placed in a private limited liability company or another corporation, or is taxed in another way – is difficult for the CBS to detect and is therefore to

31 Wilterdink, *Vermogensverhoudingen*, 405-6.

32 P. Groenewegen, *Eerlijke Belasting, Gelijke Kansen: Een internationaal perspectief op ongelijkheid en belastingen in Nederland*, Oxfam Novib media briefing (2014).

33 B. van Bavel and E. Frankema, 'Low Income Inequality, High Wealth Inequality. The Puzzle of the Rhineland Welfare States', *CGEH Working Paper Series* (2013) 8.

some extent left out of the figures. This is probably also true for the very substantial amounts in approximately 150,000 pension-BVs of directors and major shareholders. Research that attempts to calculate the wealth of the richest directly results in much higher figures.³⁴

3 Incongruities in the data after 1990

What is most striking to contemporary scholars is that the problems faced by scholars in this field do not only lie in the frequent methodological changes over time or the inadequacy of the oldest data, but that they have mostly increased in recent decades. It is important to note that the Netherlands are not alone in facing this problem. For example, Koen Dedobbeleer has recently pointed out similar problems in the official data series for Belgium.³⁵ First and foremost, a lot of years are missing in recent censuses (1990, 1992 and 2001-2005). Van Bavel and Frankema rightly state:

What happened after the 1980s with the distribution of wealth is more difficult to determine, because of lacking and incomplete data and of discontinuity in the procedure of record keeping. This is the reason that estimates of the recent developments (described in Wilterdink 1991; Maestri et al 2014) diverge strongly. [...] The most striking desiderata to improve the CBS figures are: bridging the gap in the wealth statistics between 2000 and 2006, repairing the effects of definition and source differences, the inclusion of missing wealth components, and gaining a better understanding of the magnitude of the largest estates.³⁶

The first problem that is mentioned above is the most difficult. For 1990 and 1992, no data seems to have been collected. The missing years 2001-2005 are a result of the change in the tax system in 2001.³⁷ The data are thus not just lying around, waiting to be discovered by a zealous historian. We can, however, try to expose to what extent the series map different segments of the total population, which components of wealth were recorded and how they were calculated.

Until 1999, wealth itself and income from wealth (such as interest) were

34 Van Bavel and Salverda, 'Vermogensongelijkheid', 2.

35 K. Dedobbeleer, *Piketty for Belgium: Onderzoek naar de haalbaarheid en reconstructie van de reeksen van 1970-2013* (Ghent 2016) 49. He writes: "For our country [i.e. Belgium, A.C.] even the most recent 43 years are a puzzle of available data. For now, they could by no means always be collected on a uniform basis."

36 Van Bavel and Salverda, 'Vermogensongelijkheid'.

37 W. Salverda, 'Ongelijkheid in Nederland', *S&D* 71 (2014).

subject to different taxes. The latter category was seen as regular income.³⁸ With the new tax law, both taxes were combined: a fixed profit of four per cent from wealth was assumed, which was subjected to a uniform tax rate of 30 per cent (in other words: a fixed wealth tax of 1.2 per cent). Such an assumption definitely does not hold its own for trends in stock prices in recent years.³⁹ Income from wealth amounting to more than four per cent was thus exempted from taxation. On the other hand, many fiscal units that had not been included in the former separate wealth tax were now also registered. Because every savings account or the value of a modest home was now also recorded (even though an owner-occupied home is not taxed), the registered number of households that enjoy income from wealth increased strongly and total financial wealth doubled (from 5.2 to 10.6 billion). This somewhat made up for the decrease due to the change in rental value.⁴⁰

Nonetheless, the present-day CBS figures are still omitting some important components of private wealth.⁴¹ First, a large share of small debts is missing, such as consumer credit (for example debt to post order companies) and debt to family members. Those are only incorporated for households with an estate value exceeding the exempted sum in box 3, but not for others.⁴² Consumer goods themselves are also not included in the figures (money held in cash, durable consumer goods, jewellery and antiques), so we do not know whether there has been an evolution in their distribution and value over time. The exact worth of many valuable possessions (for example antiques or works

38 W. Salverda, *Extending the top-income shares for the Netherlands from 1999 to 2012: An explanatory note* (Amsterdam 2013) 5.

39 More details on the importance of developments in stock prices for wealth owners can be found in van Bavel and Frankema, this issue.

40 Salverda, *Extending the top-income shares*, 5.

41 Some authors – including the note by Asscher and Wiebes – point to the absence of pension assets in the wealth statistics as an argument that inequality is lower than suggested by the CBS data. Anno 2012, the Dutch pension capital was indeed about as large as the rest of private wealth, and as it is connected to income levels it is distributed more evenly across different types of households (Caminada and Knoef, 2014). On the other hand, retirement benefits are also increasingly flowing in the direction of the higher incomes. Salverda (2014) rightfully states that pensions do not meet the characteristics of freely disposable capital, so that in order to get a clear picture of various forms of inequality it is better not to take pension assets into account. For the purpose of this text, we will disregard them further on.

42 Dutch income taxation differs between three types of income, divided into three groups (or boxes) each with its own rate: box 1 consists of taxable income from employment and dwelling, box 2 is the taxable income from a substantial interest and box 3 contains taxable income from savings and investments (i.e. wealth) which is only taxed when it exceeds a certain amount.

For those households who do not gain income from box 3, debts are not recorded. This is mostly related to short-term loans. In 2008 their estimated amount was 26.3 billion euros (an average of 3,700 euro per household. See: Claessen, *Procesbeschrijving*, 6.

of art) is very difficult to pinpoint, but for a number of other consumer goods – including for example cars, musical instruments, household appliances or caravans – their value can possibly be mapped to some extent by using data from the DNB Household Surveys (DHS).⁴³ This source, composed by the Dutch National Bank, contains not only components of wealth such as shares and immovable property, but also some smaller debts (consumer credit) and even a number of luxury items (but no jewellery or works of art).⁴⁴ However, it is no easy task to connect the possessions from the DHS to the households that are included in the CBS wealth statistics, as only a very limited number of correspondents completes the entire survey (around 1,500 to 2,000 households). Another drawback of the Household Surveys is that the representativeness of the included data seems to have decreased over the years and that it rarely includes the top wealthiest households.⁴⁵ Bas van Bavel and Ewout Frankema did use this data – specifying aforementioned reservations – to calculate an alternative Gini-coefficient that indicates a remarkable increase in wealth inequality between 1993 and 2008.⁴⁶

Thirdly – besides small debts and personal belongings – various more or less private funds are also missing. Accrued pension and annuity entitlements should, in my view, not be included because of the definition of wealth adhered to in this article, but more suitable candidates such as acquired assets in mortgages and lifetime mortgages are also not included. Substantial interest has in recent years only been estimated for the taxable share.⁴⁷ As this estimate is based on the tax value it is probably an underestimation. The value of enterprises is thus certainly problematic. Estates and other inheritances provide yet another interesting track for further research. A CBS series about inheritances covers the years from 2005 to 2011, but has unfortunately not been updated since.⁴⁸ A Gini-coefficient on this basis would thus cover only a very limited period. Moreover, exceptions make this again a difficult source. Finally, we do not know about some components of wealth that do not fall in box 3, particularly options in firms or

43 See van Bavel and Frankema, this issue.

44 B. van Bavel and E. Frankema, *Wealth Inequality in Rhineland Welfare States. The Case of the Netherlands, 1990-2009*, working paper (2010) 9.

45 van Bavel, *Vermogensongelijkheid* (WRR).

46 Ibidem, 10. Idem, this issue.

47 Substantial interest (*aanmerkelijk belang* in Dutch) is a term used in Dutch taxation law. A shareholder has a substantial interest in a company when he holds 5% or more of the issued capital in shares in a company (including the shares of his/her partner).

48 Official data on legacies can be found here: <http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=71815NED&D1=a&D2=0&D3=a&D4=l&VW=T>; for acquisitions see: <http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=80572NED&D1=a&D2=a&D3=0&D4=l&VW=T>.

green investments. The CBS process description does not go into detail in these cases, so we do not know whether they are being recorded or not.

To what extent the aforementioned missing categories are represented in the wealth series covering 1993-2000 can unfortunately not be said on the basis of the limited research description for those years. Both series (1993-2000 and 2006-2012) are thus clearly not easily comparable. Moreover, recently, in 2012, the method of the CBS to calculate private wealth has changed again, from an approach based on a sample to integral observation. The possible impact can be assessed on the basis of the figures for 2011. For that year we have both a figure based on a sample and one on the basis of integral observation. In the second case, the total is somewhat higher (1,191.1 billion euro instead of 1,168.4, a two per cent increase), but remarkably the share of the top ten per cent decreased a little (from 402 billion to 393.8 billion). Based on the percentile distributions, it is clear that in the 2011 case, the majority of the difference compared to integral observation (two thirds) is in the top one per cent: an increase of 15.4 billion (from 268.3 to 283.7 billion) on an overall increase of 22.7 billion. Another very large part of the difference is situated in the lowest income decile (13.9 billion). Both are categories that were under sampled before. The wealth figure for 2012 (based on integral observation) has been linearly adjusted to the previous years (based on a sample of tax records), resulting in a reduction of almost 2 per cent. The difference between the two results for 2011 therefore indicates a likely underestimation of total wealth in the previous years, which would require a small increase of the ratio of total wealth to GDP for 2006-2011 in Chart 2 to remedy the discrepancy.

Besides the issue of missing categories – that affects small and large fortunes alike – there is another problem that specifically concerns the distribution of wealth. Presumably, the real top of the distribution remains more hidden from view than smaller estates. Trade publications on top wealth owners (such as *Quote 500* or the annual *Forbes* list) are an interesting addition to tax data because the compilers have years of experience in calculating private estates, and they sometimes even receive information directly from their research subjects themselves.⁴⁹ Bas van Bavel already mentioned this type of data in his WRR-contribution. Filip Vermeulen of the European Central Bank also gives some suggestions on mapping top estates. He warns of the risks of under registration of the largest wealth owners in surveys. In case of indications of differential non-response problems that cannot be tackled by oversampling the wealthiest, he suggests to

49 Already used tentatively by van Bavel and Frankema, *Wealth inequality*, 10-12; idem, this issue.

combine survey data with the information from these 'rich lists' to check the available estimations of the tail of the wealth distribution.⁵⁰ The Dutch Gini-coefficient for the wealth distribution is already relatively high from an international point of view according to most sources (including the CBS) and it even reaches up to 0.9 if we attach more importance to the data from for example Quote 500 or the Dutch Wealth Report.⁵¹ On the other hand, such lists might also be overestimating other components of wealth (such as the value of enterprises) and underestimating debt. Wilterdink suggests including the evolution of a number of other parameters such as the number of Dutch millionaires, but for these we again need to rely on the fiscal sources, with their abovementioned shortcomings.⁵²

4 Evolutions in total private wealth: looking from a different angle

There remains yet another method that hands us a clue on the evolution of the wealth distribution, without looking at the actual percentile distribution. We can compare total private wealth to GDP over time (see Chart 2). The graph below shows that in the period 1950-2014 the ratio of total private wealth to GDP has increased rather strongly. In broad strokes, Piketty's ' $r > g$ ' law (the long-term returns to capital, ' r ', are higher than the long-term returns to labour, ' g ') seems to be applicable to the Netherlands as well.⁵³ For the graph, figures on total private wealth from three different CBS sources have been used. The first – entitled 'historical series' – exists for the years up to 1996. There is thus an overlap of four years with the already mentioned wealth statistics 1993-2000.⁵⁴ We have two clear indications that the former series is heavily flawed. The abrupt upwards movement in the graph after 1992 illustrates that the values entered for total private wealth before 1993 are likely a strong underestimation of actual wealth; an assumption we already raised in the first paragraphs of this article. The overlapping years reveal that the older data values total wealth at only half of what was reg-

50 F. Vermeulen, *How fat is the top tail of the wealth distribution?* ECB working paper (Brussels 2014).

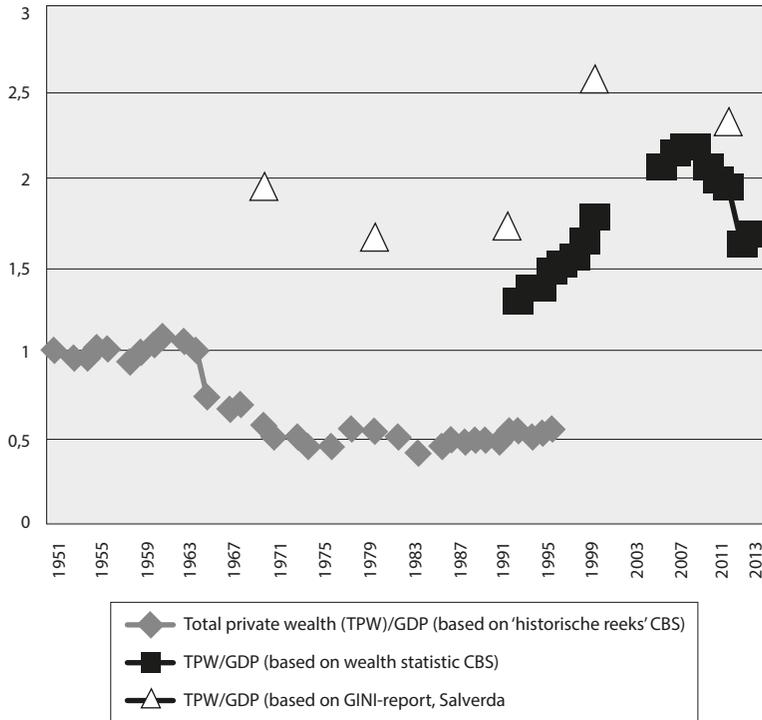
51 For more details on the different Gini-estimations, see Van Bavel, *Vermogensongelijkheid in Nederland*; van Bavel and Frankema, 'Wealth inequality', this issue.

52 Nico Wilterdink, *Ongelijkheid en interdependentie. Ontwikkelingen in welstandsverhoudingen*, Oratie Universiteit Utrecht (Groning 1993) 6.

53 Piketty, *Capital*.

54 'Historische reeks', CBS: <http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=37662&D1=7&D2=77-82&HDR=T&STB=G1&VW=T>.

Chart 2. Total private wealth to GDP ratio, 1951-2014 *



Sources: CBS Statline and Salverda et al., 2013.

* The alternative figures taken from the GINI country report for the Netherlands differ from those in the CBS statistics. They are much higher throughout the entire period, but the discrepancy between the years before 1992 and those after is smaller. Wiemer Salverda et al., *Growing inequalities and their impacts in the Netherlands* (2013) 6-7.

istered in the later CBS statistics. Unfortunately, we know very little about the creation of these 'historical series'. Based on the explanatory notes accompanying the chart we can only be certain that between 1965 and 1983 wealth owners with an estate of less than 45,380 euros were left out of the statistics. In 1984 that minimum was raised to 90,760 euros. The figures after 1984 are thus strongly underestimating total wealth and I believe that a rather strong increase in the total wealth to GDP ratio took place, just like the one in the top one per cent.

While apparently the 'historical series' only included those estates that were subjected to official wealth registration (i.e. wealth that was taxed) without extrapolating as done in Wilterdink's calculations, and while they apparently also left out private dwellings, we cannot be sure of any of this. There is no published research description as there is for other series, and the CBS it-

self could not say who has compiled the historical series or with what sources. In any case, we can conclude that total private wealth was probably much larger in the years before 1993 than the chart below suggests. Based on the CBS publication on wealth in the year 1991 (estimated at 665 billion) the figure may even have to be more than doubled.⁵⁵ It is certainly clear that the official figures are far from robust and that adding alternative sources – for example inheritance data or rich lists – could strongly alter the existing image.

5 Conclusion

While it remains difficult to pinpoint the exact size of Dutch wealth and the share held by the top one per cent during the last five decades, it has proven fruitful to inventorize the many methodological and heuristic problems that plague the topic, and to chart the existing possibilities to shed more light on the development of inequality in the future. A tentative look at this ‘tweaked’ data leads to some cautious conclusions. First, the hypothesis that Dutch wealth inequality decreased until the seventies stands firm, even though the figures have become less reliable from the sixties onwards. Second, we have a number of indications that total private wealth has, since the eighties, increased at a higher rate than GDP; a measure that serves as a proxy to Piketty’s ‘ $r > g$ ’ law. The divergence has shrunk again since 2008, even though most assume that Dutch wealth inequality has increased during the recent financial crisis.⁵⁶ Third, there are many sources that indicate that the present level of wealth inequality is slightly higher than the level at the beginning of the nineties, and that there has possibly even occurred a further increase in inequality in recent years. The alternative methods developed by van Bavel and Frankema in this same issue confirm this view. We may safely agree with Wilterdink’s statement from 2014 that the threat of a further increase in wealth inequality ‘remains all too real’.⁵⁷

In this article I have only briefly considered the explanations for such an alteration in the trend. The Dutch tax system, benefiting entrepreneurs and investors, is certainly a factor. As is the Dutch welfare system, which reduces the need to invest in individual safety nets. However, while economists warn that European pension funds – including the Dutch – would be gravely affected by a financial crunch, we have seen that the highly unequally distributed

55 CBS, *Inkomen en vermogen* (Heerlen 1995).

56 N. Pouwels-Urlings, ‘Vermogensongelijkheid tijdens de crisis’, *ESB* 99:4688 (2014).

57 N. Wilterdink, ‘Ongelijkheid als beleidsvraagstuk’, *S&D* 71:5 (2014) 25.

privately owned wealth has not been heavily afflicted by the 2008 crisis.⁵⁸ This observation definitely requires thorough consideration by policy makers.

Still, due to the remaining gaps and methodological ruptures in the recent data series it remains very difficult to determine exactly when such a change in the trend would have taken place. Has there been an increase in inequality since the eighties or did another trend reversal take place somewhere in between? This would also indicate whether we can expect a further increase in wealth inequality in the future, or whether we have indeed gotten to a more or less stable level – albeit with some bumps in the road. Hard to say, based on the available data. We cannot exclude the possibility that wealth inequality has become relatively stable, but if so it has certainly not stabilised on a historically low plane. However, it remains very difficult to make a reliable assessment about the difference in scale between the different datasets from Wilterdink and the CBS, and thus to tie them together in a long-term series. In any case, it is clearly too early to make statements that raise the suggestion that wealth inequality is under control. Based on a simple chart, people might conclude that concerns about inequality are needless in the Netherlands. But because of the flawed data, such assertions remain very much ideologically laden. At every gap or sudden variation in the data we need to ask whether it was caused by changes in the tax policy, in the counting methods that were used or if it was indeed caused by an actual economic shock. If we can learn one thing from Piketty's volume, it is the importance of detailed datasets, meticulously collected over time, especially when it comes to a trait of society that is as fundamental as the distribution of fortune. By showing that we still do not know very much about the size of private estates, let alone their allocation, this article will hopefully give an impetus to present-day data collectors and further encourage research into this important economic parameter.

About the author

Ann Coenen was born in Herentals (Belgium) in 1986. She studied History and Economics at Ghent University, and wrote a PhD on eighteenth-century international trade at the University of Antwerp (2013). She has been working as researcher and lecturer at the Universities of Utrecht and Antwerp, and is currently working as labor market analyst for the Belgian government.

E-mail: ann.coenen@uantwerpen.be

⁵⁸ G. Bernardino et al., *EIOPA Insurance Stress Test Report* (Frankfurt 2016).

