

Household wealth in Finland

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This article examines household wealth in Finland. The main source of data is a survey of household wealth published by Statistics Finland in 2007 and recognised as the most comprehensive source of data on household wealth and its distribution in Finland.¹ Its publication lag is rather long, with the most recent data at present covering the year 2004. The picture provided by this study is augmented with the help of financial accounts data published by Statistics Finland and the Bank of Finland.² Finnish household wealth is compared with households in other countries with the help of research published in December 2006 by the WIDER Institute.³

The points to emerge include:

1. The value of Finnish households' net wealth (ie the difference between total gross financial and fixed assets and total liabilities) is low in comparison to reference countries with corresponding income levels. The difference cannot be explained entirely by differences in data sources or, for example, the structure of pension systems.

2. The recession of the early 1990s and the accompanying banking crisis had a significant impact on the net wealth of households in Finland. According to the

above-mentioned wealth study, the impact was not the result of increased indebtedness so much as changes in the value of gross assets. Since the recession, asset values have once again begun to rise. A comparison between generations indicates that the value of assets held by those born in the 1940s would appear to have recovered least since the recession.

3. Compared with the reference countries, a large part of Finnish household wealth is tied to the value of housing. This means that, relative to households in the reference countries, the balance of risk is weighted more towards trends in the housing market and less towards the financial market.

4. Wealth distribution has become more unequal between 1987 and 2004. Even so, in international comparison Finland remains one of the countries with the most equal wealth distribution.

5. Approximately 9% of Finnish households have negative net assets. Calculations suggest the credit risk these households pose to the banks is fairly low.

6. Approximately 7% of households that participated in the 2004 study on household wealth stated they used their home as guarantee on credit other than a housing loan. Hence, as well as the effect on the housing market, house prices also have implications for both consumer durables and financial markets.

Value of Finnish household wealth

In comparative international studies (incl. the aforementioned WIDER study), a generally used measure of the value of household wealth is the per capita value of net household assets.

¹ Statistics Finland (2007) 'Kotitalouksien varallisuus 1988–2004' (Household wealth 1988–2004), Finland's official statistics.

² The quarterly financial accounts statistics published by the Bank of Finland provide a sectoral breakdown of financial assets and liabilities in the Finnish economy. Financial accounts statistics are available on a quarterly basis on the Bank of Finland website (<http://www.bof.fi/en/tilastot/rahoitustilinpito/index.htm>) and annually from Statistics Finland (http://www.stat.fi/til/index_en.html). The Federation of Finnish Financial Services also regularly publishes data on the financial assets and liabilities of Finnish households based on its own surveys (<http://www.fkl.fi>).

³ Davies J, Sandström S, Shorrocks A and Wolf, E (2006), *The World Distribution of Household Wealth*. WIDER Institute, <http://www.wider.unu.edu/research>.

Calculation of this indicator can be illustrated by the following example.

According to the Statistics Finland survey, the gross per capita wealth of Finnish households in 2004 was EUR 68,000. Gross wealth covers the main forms of fixed assets such as apartments, summer cottages and vehicles plus investments in financial assets. The same source put the per capita liabilities of the household sector at around EUR 9,000. Net per capita wealth, EUR 59,000, is arrived at by subtracting liabilities from gross wealth.

Chart 1 shows the net per capita wealth of Finnish households in 2000 and 2004, and for comparison the median net per capita wealth in 2000 in the reference countries, ie the ‘high income countries’, based on the WIDER study.⁴ The values are presented at current prices. The data on Finland in the WIDER study

⁴ The high income countries included in the analysis are Australia, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Korea, New Zealand, Norway, Spain, Switzerland, the United Kingdom and the United States.

are estimated based on Statistics Finland’s wealth survey for 1998.

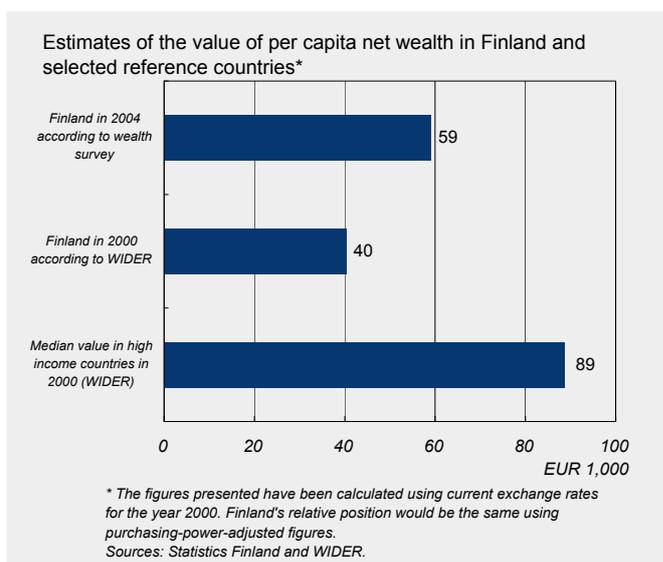
As the chart shows, the value of Finnish households’ net wealth in 2000 was approximately EUR 40,000, or only just under half the international reference level. In 2004, the per capita value of Finnish households’ net wealth at current prices was still well below the median value of the reference countries at the turn of the millennium.

The difference between Finland and the reference countries is partly explained by the data sources used. Calculations based on the data for the WIDER wealth study for the year 2000 put per capita household financial assets in Finland at approximately EUR 7,000. According to the published financial accounts data, however, the per capita value of Finnish households’ financial assets in 2000 was approximately EUR 22,000, or EUR 15,000 more than the estimate used in the WIDER study. However, even such a large adjustment in the charts would not be enough to bring Finland up to the level of the reference countries.⁵

It would therefore seem there are factors other than simply the choice of statistical source underlying the relatively low net wealth of households in Finland. One possible explanatory

⁵ There are many reasons for the differences between the wealth survey and financial accounts data. The former is based on interviews, which means the results are affected by ignorance, forgetfulness or unwillingness to provide information. Sampling errors could also influence the outcome of the wealth survey, as the distribution of wealth is skew. Taken together, these factors mean that the wealth survey could underestimate households’ financial assets. On the other hand, financial accounts data could exaggerate them somewhat, as, in addition to households, they also include non-profit institutions. See Hamunen, E and Säylä, M (2007) ‘Suomiko varallisuuden häntäpäätä?’ (Is Finland really bottom of the wealth table?), Tieto & Trendit 11 (2007/1), Statistics Finland.

Chart 1.



model is provided by the debt neutrality hypothesis presented in Barro (1974).⁶ Barro believes households take the state of public finances into account when accumulating wealth. According to the hypothesis, public savings displace household savings.

It is, therefore, possible that household decisions on savings take account of the state of public finances and the funds set aside to cover future pension liabilities. Viewed internationally, Finland's general government debt is small and the earnings-related pension funds have accumulated considerable assets. This could partly explain the comparatively low level of household savings and net household wealth in Finland.

There is no available international comparison of household wealth that takes account of the state of public finances in accordance with the debt neutrality hypothesis. In respect of Finland, however, we can make the following observation: even the transfer to households of all the assets accumulated in compulsory earnings-related pension funds in the year 2000 would not have raised Finnish households' net wealth to the median level of the reference countries. In 2000, per capita assets in the earnings-related pension funds totalled slightly over EUR 10,000.⁷

To sum up, we can say that the per capita net wealth of Finnish households is small relative to the reference countries, for reasons that are not entirely clear. Next, with the help of

earlier wealth surveys, we shall examine the historical developments that have led to the present situation.

Accumulation of wealth 1987–2004

Economists traditionally believe that people accumulate wealth as a buffer against unexpected drops in income and fluctuations in income related to the different phases of life. According to the permanent income hypothesis proposed by Milton Friedman (1957), households accumulate wealth when their current income exceeds the level of their 'permanent income', and correspondingly they consume wealth when their current income falls below this level. In Modigliani and Brumberg's life-cycle model (1954 and 1990), working-age households at the height of their lifetime earnings cycle save for old age, when their income will be below their life-cycle average.⁸

Table 1 presents the net wealth of households in Finland according to the

⁸ Friedman, M (1957) A Theory of the Consumption Function. MIT Press; Modigliani, F and Brumberg, R (1954), 'Utility Analysis and the Consumption Function: an Interpretation of Cross Section Data', in Kurihara, K (ed.) Post Keynesian Economics. Rutgers University Press, New Brunswick; Modigliani F and Brumberg, R (1990), 'Utility Analysis and Aggregate Consumption Function: an Attempt at Integration', in Abel, A and Johnson, S (eds.) The Collected Papers of Franco Modigliani, Vol. 2: The Life Cycle Hypothesis of Saving. MIT Press, Cambridge.

Table 1.

| Net wealth 1987–2004* | | |
|-----------------------|---|---------------------------------------|
| | <i>Per capita net wealth (in euro at 2004 prices)</i> | <i>Net wealth relative to GDP</i> |
| 1987 | 28,513 | 140 |
| 1988 | 29,517 | 135 |
| 1994 | 27,147 | 137 |
| 1998 | 35,518 | 142 |
| 2004 | 51,414 | 177 |

*To facilitate comparison, a narrow definition of wealth has been employed for all the years presented in the table, excluding eg holiday homes and insurance-related savings. The estimated per capita wealth for 2004 is therefore smaller than the figure presented in Chart 1.
Source: Statistics Finland.

⁶ Barro, R (1974) 'Are Government Bonds Net Wealth?', Journal of Political Economy, Vol. 82, No. 6, 1095–1117.

⁷ Data from the Finnish Pension Alliance (TELA) website (<http://www.tela.fi>).

wealth surveys for 1987, 1988, 1994, 1998 and 2004 at 2004 prices and relative to GDP. It is clear from the table that, during the years of recession and banking crisis in the early 1990s, when both GDP and real household incomes declined, the net wealth of Finnish households at fixed prices also declined in line with the permanent income hypothesis. The value of net wealth did

not climb back to the level of 1987 until the second half of the 1990s. Since the recession, the net wealth of Finnish households has been growing.

We can see from Chart 2 that growth in net wealth has varied considerably depending on the life phase of households. Contrary to the life-cycle hypothesis, the real value of wealth has risen during the period under review across all age groups. If we examine the charts across the generations, the impact of the recession and the banking crisis stands out. It would seem that there was no increase in net wealth in any of the generations during the recession years. According to the wealth survey, the decline in the value of net wealth (at 2004 prices) is not due to an increase in debt so much as a change in the value of gross wealth.

The value of both fixed assets and financial assets (at 2004 prices) declined during the recession. The age group that would appear to have suffered most from the recession is those born in the 1940s, who were then in their prime wealth accumulation years. The net wealth of this generation has recovered only slightly since the recession.

Chart 2.

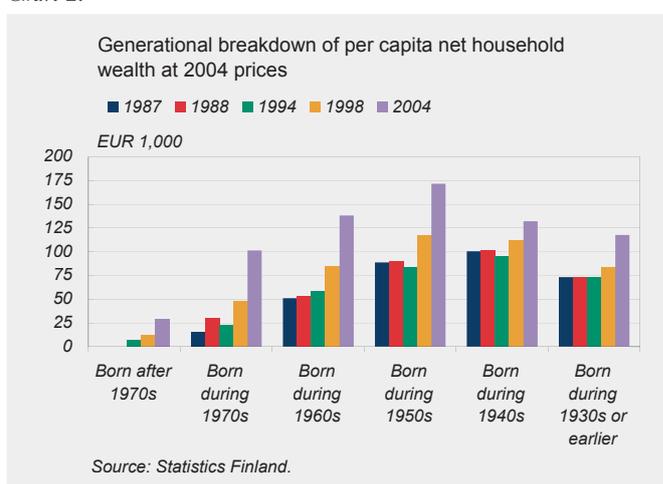
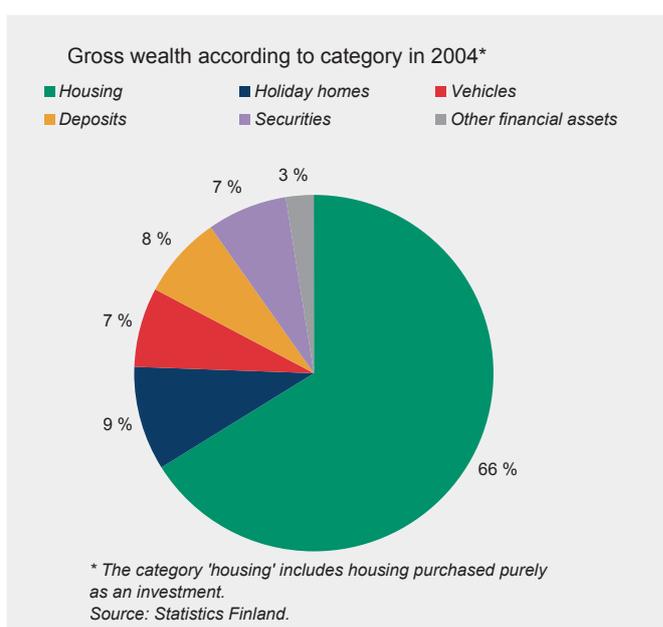


Chart 3.



Categories of wealth

When discussing the distribution of wealth across different categories, the general practice is to indicate each category's share of gross wealth (ie before subtraction of liabilities). Chart 3 shows that in 2004 the family house was the largest category of wealth, with a weighting of around two thirds. Holiday homes and vehicles accounted for around 16%, and various types of

financial assets around 17% of gross household wealth.

Modern financial theory sees the distribution of wealth as indicating households' vulnerability to different sorts of risk.⁹ Based on the data produced by the wealth survey, it would appear that Finnish households are particularly vulnerable to housing market risks. Fluctuation in housing values (ie, in the short term, house prices) does not as such reduce the benefits of home ownership, but it does make it harder to use one's home as security on a loan. The housing market risks facing households are realised in a situation where the value of a property declines to close to or below the value of the household's outstanding loans. In such a situation, the household could be unable to get additional credit and thus purchase consumer durables or move to a larger house, or even be forced to offer its creditors additional security to guarantee its existing loans.

We can use the WIDER study to make a rough comparison between the structure of Finnish households' wealth and the situation prevailing in other countries. The comparison on the distribution of wealth includes only those countries for which the data on household wealth has been gathered through research based on interviews.

Chart 4 shows that a relatively large proportion of household wealth in Finland is in fixed assets and only a small proportion in financial assets. Of the reference countries, only in Spain was the

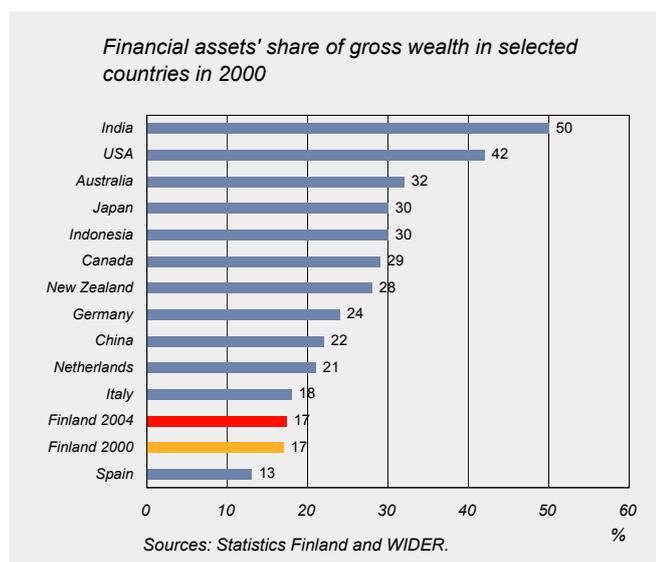
share of total wealth taken by financial assets smaller than in Finland in the year 2000. This means that Finnish households are more exposed to housing market risks and less exposed to risks from the prevailing financial situation (eg changes in share prices or interest rates on deposits) than most of the reference countries. The study does not, however, explain why the share of financial assets is so small in Finland. A partial explanation could lie in the fact that in Finland the assets saved in pension funds are primarily classified as public sector assets – not household assets.

Even distribution of wealth

The evenness of wealth distribution is often measured using the Gini coefficient.¹⁰ At the extremes, the Gini coefficient has the value 'zero' when wealth is completely equally distributed across a population,

¹⁰ Calculations using the Gini coefficient and interpretation of the results are discussed in Lambert, P (1993) *The Distribution and Redistribution of Income. A Mathematical Analysis*. 2nd edition. Manchester University Press.

Chart 4.



⁹ A review of the literature is provided in Campbell, J (2006) 'Household Finance', *The Journal of Finance*, Vol. XLI, No. 4, 1553–1604.

and the value ‘one’ when distribution is at the unequal extreme. Growth in the Gini coefficient means increasing inequality in the distribution of wealth.

Table 2 reveals that at the beginning of the period under review in 1987 and 1988 the Gini coefficient of net wealth stood at approximately 0.50, while at the end of the period in 1998 and 2004 it was 0.56. Thus, net wealth was less equally distributed at the end of the period than at the beginning. The table also shows that the distribution of wealth is more unequal than the distribution of disposable income.

Although the degree of inequality in the distribution of wealth has increased, viewed internationally Finland remains one of the most equal countries in respect of wealth distribution. Of the industrial countries whose wealth distribution was assessed in the WIDER study, only in Japan and Spain was wealth distribution in 2000 as even as in Finland. The least equal countries in the study in terms of wealth distribution were the United States and Switzerland, where the Gini coefficient in 2000 was approximately 0.80.

Besides the issue of equality, the distribution of wealth is also important from the perspective of financial system

stability. The wealth survey does not provide sufficient evidence to form a precise picture of the credit risks banks face on their lending to households: for instance, the data on loan guarantees and household expenditure is not comprehensive. It is, however, possible to make a rough estimate of the proportion of loans held by the most vulnerable households. From the perspective of financial stability, the most at risk are households whose net wealth is negative and whose income is insufficient to service their debts and cover their normal consumption expenditure.

Of the households covered by the data in the wealth survey, an estimated 16% were budget constrained in 2004 in the sense that their disposable income was insufficient to cover interest payments and capital instalments on their housing loan and what the household itself assessed to be its ‘normal consumption expenditure’. Of these budget constrained households, 16% had negative net wealth, ie their wealth was insufficient to repay their loan or to guarantee it. The negative net wealth of budget constrained households – ie the stock of loans that households could not guarantee against assets – was EUR 330 million in 2004. According to this rough calculation, the negative net wealth of budget constrained households in 2004 was small relative to banks’ risk tolerance. This reinforces the view that the credit risks banks faced on their lending to households were at that time fairly negligible.¹¹

Table 2.

| Population distribution of net wealth and disposable income between households as measured by the Gini coefficient | | |
|--|-------------------|--------------------------|
| | <i>Net wealth</i> | <i>Disposable income</i> |
| 1987 | 0.50 | 0.30 |
| 1988 | 0.49 | 0.30 |
| 1994 | 0.51 | 0.31 |
| 1998 | 0.56 | 0.35 |
| 2004 | 0.56 | 0.37 |

Sources: Statistics Finland and Bank of Finland calculations.

¹¹ For more details see the assessment provided in the Bank of Finland publication Financial Stability (http://www.bof.fi/en/julkaisut/financial_stability/index.htm).

Use of wealth as security on consumer or investment credit

The impact on consumption and other expenditure of changes in the value of wealth is referred to in the economic literature as 'the wealth effect'. From the perspective of the traditional life-cycle theory, changes in the value of wealth have an impact on life-cycle/permanent income and hence consumption.

One way in which an increase in the value of wealth can funnel through into consumption is the use of wealth as security on consumer credit ('housing equity withdrawal' or 'mortgage equity withdrawal').¹² The extent to which housing equity is being used to finance consumption or other expenditure is hard to gauge, and estimates of the extent of the practice vary greatly between countries.

Of the households covered by the 2004 wealth survey, approximately 7% indicated they had used their house as security on a loan for consumption or investment. In 2004, approximately two thirds of Finns lived in owner-occupied housing, which means an estimated one in ten of these households have used the equity on their present dwelling to take out a loan other than a housing loan.

According to the wealth survey, housing equity plays an important role specifically in the case of larger

consumption and investment loans, the average size of such loans where housing equity was used as security being approximately EUR 40,000. The total sum involved was around EUR 6.6 billion. This corresponds to approximately one third of household borrowing exclusive of housing loans.

Comparing the situation in Finland with other countries is somewhat problematical due to the different definitions used in different countries. Schwartz et al reported that in Australia 12% of households in 2004 used their housing equity to finance spending. Benito and Powell reported that 4.1% of British households used their housing equity in the same way in 2002. The use of housing equity to finance spending was particularly widespread in the Netherlands during the years of strongly rising property prices towards the end of the 1990s. In 1999, according to the Dutch central bank, 56% of loans secured against housing equity were taken out for purposes other than the purchase of housing.

The data on the use of housing equity supports the view that housing wealth is important to households not only in providing somewhere to live. Housing is also used to some extent as security on credit other than housing loans. Fluctuations in house prices can therefore have implications for consumer goods markets (especially durables) and for households' investment behaviour on the financial markets.

¹² For an examination of this topic see eg Schwartz, C, Hampton, T, Lewis, C and Norman, D (2006), A Survey of Housing Equity Withdrawal and Injection in Australia. Reserve Bank of Australia Discussion Papers 8/2006; Benito, A and Powell, J (2004) 'Housing Equity and Consumption: Insights from the Survey of English Housing', Bank of England Quarterly Bulletin 3/2004; De Nederlandsche Bank (2000) 'Survey among Dutch Mortgage Holders on the Use of Mortgage Credit', Quarterly Bulletin June 2000.