

Household indebtedness

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In Finland, household indebtedness became more widespread after the Second World War, with changes in housing policy increasing the popularity of owner-occupied housing. The current decade has witnessed rapid growth in the indebtedness of Finnish households.

The situation in Finland is, however, not unique by international comparison: in several industrialised countries, household debt has grown faster than household income already for some years. The phenomenon has raised questions not only on the reasons for indebtedness, but also on its consequences for economic policy. The key question is whether household indebtedness will endanger the stable development of the economy as interest rates rise.

In economic theory debt is regarded mainly as a useful phenomenon. By borrowing non-financial corporations can fix temporary cash deficits or finance investments. For households, borrowing is a means of financing large purchases, for example, houses or cars. Moreover, smaller everyday purchases are also often paid for with a credit card. Debt can support economic growth and promote households' welfare.

However, the decision to borrow requires due consideration. Moreover, it is not easy to control the factors that affect the resulting situation. It may even be difficult for households to identify the key factors affecting the situation, such as risks. Some recent academic studies on household indebtedness have questioned households' ability to carry out adequate debt planning (Miles 2005).

Traditionally, central banks have actively monitored the household sector's indebtedness based on credit and interest rate statistics. However, these statistics give an inadequate picture of indebtedness for the economic policy debate. In recent years, a number of central banks have published studies on household indebtedness based on micro-data. Because micro-data include information on individual households, they enable us to determine which types of households take on debt and the magnitudes of risks incurred.

This article examines the indebtedness of Finnish households based on one set of micro-data, ie the service data on income distribution.¹ The mainly-descriptive approach introduces key topics, the objective being to describe the current state and trends of indebtedness and to compare household indebtedness in Finland to that in other countries.

The service data on income distribution currently available to the Bank of Finland covers the years 1989 – 2003. The data provides an interesting perspective on the indebtedness of Finnish households in the period following liberalisation of the financial markets in the 1980s. The picture provided by the data of the current state of indebtedness is somewhat outdated. It is particularly noteworthy that household indebtedness has grown strongly since 2003.

¹ Service data on income distribution are compiled by Statistics Finland. They include annual data on socio-economic status, income and debt of some 25,000–30,000 persons.

Finnish household indebtedness in 2003

In 2003, about a half of Finnish households had debt (Table 1). Of all the households, 28% had housing debt, 11% study debt, and 29% other debt.

Household median debt amounted to EUR 20,000 ie, approximately two-thirds of their disposable income. For the median household, the ratio of debt interest and principle payments to disposable income (debt service ratio)

Table 1.

Household indebtedness, 2003						
	Proportion of households with debt, %	Median debt, EUR	Debt ratio, median, %	Debt service ratio, median, %	Debt payments, median, EUR	Proportion of overindebted, %
<i>All households</i>	51.2	500	2.3			3.1
<i>Indebted households</i>						
<i>Total sample</i>		20,000	65.9	7.1	2,400	5.9
<i>Head of family's age, years</i>						
<i>Below 35</i>	69.8	16,000	69.6	5.6	1,200	5.4
<i>35-44</i>	75.6	39,100	101.4	11.8	4,440	6.2
<i>45-54</i>	63.1	22,000	58.0	6.8	2,725	7.3
<i>55-64</i>	38.6	12,800	40.3	3.9	1,457	3.2
<i>Over 65</i>	10.8	6,500	30.0	2.2	499	8.3
<i>Income decile</i>						
<i>Less than 20%</i>	28.0	4,000	41.8	1.2	125	19.8
<i>20-39.9</i>	40.6	8,000	42.9	3.3	600	9.0
<i>40-59.9</i>	51.4	18,000	66.6	6.8	1,747	6.3
<i>60-79.9</i>	65.1	33,642	88.7	10.4	4,000	2.9
<i>80-89.9</i>	73.2	38,000	78.8	10.1	4,810	1.6
<i>90-100</i>	68.2	50,000	72.4	8.4	5,760	0.9
<i>Major region</i>						
<i>Helsinki</i>	51.5	14,783	45.9	5.4	1,497	8.0
<i>Helsinki commuter area</i>	58.2	23,525	68.3	7.3	2,520	5.7
<i>Other major municipalities with university</i>	50.9	12,321	55.3	4.3	1,100	6.7
<i>Other major municipalities</i>	45.4	20,000	65.8	8.2	2,422	5.0
<i>Other</i>	51.2	25,700	76.9	8.4	3,000	5.5
<i>Type of household</i>						
<i>Single household</i>	49.7	9,907	57.7	4.4	758	10.2
<i>Couples with no children</i>	59.0	20,000	53.4	5.3	1,996	2.6
<i>Single parents</i>	68.5	11,000	52.5	6.5	1,600	16.3
<i>Couples with children</i>	80.0	45,000	100.4	11.5	5,000	3.6
<i>Seniors</i>	9.8	5,046	23.6	1.8	420	7.3
<i>Not disclosed</i>	48.9	20,000	47.3	4.2	1,800	5.6
<i>Head of family's level of education</i>						
<i>No degree</i>	57.2	19,000	64.4	6.5	1,908	6.5
<i>Upper secondary</i>	62.3	29,000	73.7	9.5	3,500	4.0
<i>Lower degree</i>	64.8	30 417	86.6	9.0	3,600	3.3
<i>Higher degree</i>	66.2	40,000	80.7	9.9	4,500	2.8
<i>Postgraduate degree</i>	67.0	32,000	71.7	10.8	5,531	0.0
<i>Not disclosed</i>	32.3	11,000	46.8	3.8	998	9.3

Source: Statistics Finland, service data in income distribution.

was less than 10%. About 6% of indebted households (ie some 3% of all households) reported that they were overburdened by debt.²

A breakdown by age of family head reveals that both the proportion of indebted households and the amount of debt of the median household were highest for the group of early middle-aged (35–44) households. The debt service-to-income ratio was also higher for this age group than for other age groups. The proportion of households overburdened by debt was highest in the oldest age group (over 65).

A breakdown by household type reveals that the median debt and the median debt service-to-income ratio were highest for indebted families with children. Overindebtedness is most common for single-parent families. Of this group, almost one-sixth of households were overburdened by debt.

Indebtedness does not affect only the largest growth centres. The roughest breakdown, ie, by major population centres, shows that the proportion of indebted households was highest in Helsinki and the Greater Helsinki area. In Helsinki, the proportion of indebted households that were overindebted was higher than in the other major population centres. The median debt of indebted households was however highest in the smallest municipalities located outside regional centres. The ten largest and smallest sub-regional units, in terms of debt ratio³ and overindebt-

edness, are shown in Table 2. In small rural municipalities, the level of indebtedness was highest in the group of managers and small-scale entrepreneurs.

A country-level examination based on occupational classification of head of family shows that managers, with typically relatively high incomes, have the highest median debt ratio. The proportion of overindebted of the indebted is highest for the low-wage occupational group. An examination based on level of education shows that the highest median debt ratios are found in households whose family head is highly educated.

In summary it can be said that household indebtedness does not affect only families with children in the Helsinki area. The second major geographical category for indebted households is sub-regional units. An examination based on age group shows that early middle-aged families (35–44) are the most indebted.

Another new finding is that the proportion of indebted households that are overindebted is highest in the group of senior households. In this age group, however, only a few households (10%) have incurred debt. The phenomenon may be explained by the fact that Finns traditionally aim at paying off their debt before retirement. Of the indebted senior households, a relatively high proportion has been unable to pay off their debts at an earlier stage of life.

Indebtedness trends

The data enable examination of indebtedness trends between 1989 and 2003.

² Overindebtedness is a situation in which the household views its debt as too big to manage.

³ In this study, debt ratio is the household's total debt divided by its disposable income.

Table 2.

Median debt ratio and proportion of overindebted households of indebted households, by sub-regional unit and occupation*			
	Debt ratio, %		Proportion of over- indebted,%
Largest 10 sub-regional units			
Lake district	152	Siikalatva	19.3
Forssa	139	Kehys-Kaimuu	17.9
Hämeenlinna	134	Northern Lapland	16.4
Kyrönmaa	131	Fell Lapland	14.9
Southern neighbouring sub-regional unit**	130	Southern Pirkanmaa	14.6
Jakobstad region	128	Imatra	13.5
Keuruu	126	Kyrönmaa	13.1
Turunmaa	117	Savonlinna	12.4
Åland rural area	115	Suupohja	12.3
South Ostrobothnia, coastal region	115	Åland archipelago	11.8
Smallest 10 sub-regional units			
Viitasaari	44	Äänekoski	0.0
Mariehamn	42	Pieksämäki	0.0
Nivala-Haapajärvi	41	Kaustinen	0.0
Northern Satakunta	41	Northwest Pirkanmaa	0.0
Suupohja	40	Härmänmaa	0.0
Rauma	40	Outokumpu	0.0
Kehys-Kaimuu	40	Viitasaari	0.0
Pielisen Karjala	38	Mariehamns stad	0.0
Loviisa	38	Northern Satakunta	0.0
Ålands skärgård	2	Loviisa	0.0
By occupation			
Senior officials and senior officials of special-interest organisations	208.6	Agricultural, fishery and related labourers	16.1
Managers of small enterprises	128.6	Not professionally active	16.0
Traffic instructors and other teaching associate professionals	91.9	Models, salespersons and demonstrators	9.6
Armed forces	90.6	Skilled agricultural and fishery workers	8.5
Other personal services workers	89.6	Managers of small enterprises	6.5
Physical, mathematical and engineering science professionals	89.2	Stationary plant and related operators	6.0
Extraction and building trades workers	88.7	Senior officials and senior officials of special-interest organisations	5.7
Personal and protective services workers	86.1	Precision, handicraft, craft printing and related trades workers	5.6
Corporate managers	85.6	Physical and engineering science associate professionals	5.5
Teaching professionals	84.0	Office clerks	4.9
Metal, machinery and related trades workers	81.5	Extraction and building trades workers	4.6
Stationary plant and related operators	80.0	Labourers in manufacturing and construction	3.9
Machine operators and assemblers	78.8	Other personal services workers	3.7
Other professionals	78.5	Traffic instructors and other teaching associate professionals	3.6
Office clerks	77.8	Customer services clerks	3.4
Physical and engineering science associate professionals	75.2	Drivers and related water traffic operators	2.9
Precision, handicraft, craft printing and related trades workers	66.3	Other professionals	2.3
Customer services clerks	62.9	Metal, machinery and related trades workers	2.0
Models, salespersons and demonstrators	59.6	Life science and health professionals	1.8
Life science and health professionals	57.0	Other craft and related trades workers	1.7
Drivers and related water traffic operators	53.5	Machine operators and assemblers	1.5
Skilled agricultural and fishery workers	51.9	Corporate managers	1.5
Agricultural, fishery and related labourers	49.4	Physical, mathematical and engineering science professionals	1.1
Other craft and related trades workers	46.6	Teaching professionals	0.8
Labourers in manufacturing and construction	46.0	Armed forces	0.0
Not professionally active	35.2	Personal and protective services workers	0.0

* The calculations for sub-regional units may be biased due to the small sample size.

** Ilmajoki, Jalasjärvi, Kurikka, Nurmo, Peräseinäjoki, Seinäjoki and Ylistaro.

Source: Statistics Finland, service data on income distribution.

Attention is drawn to the following four trends:

- growth in indebtedness
- increasing proportion of indebted households middle aged, with children, and with high incomes
- debt service-to-income ratio decreasing
- lessening of overindebtedness (since 1998).

The growth of indebtedness is reflected in the growth of indebted households' median debt from approximately EUR 10,000 to EUR 20,000 between 1989 and 2003. In the same period, the median debt ratio of indebted households increased from 50 to 60%. For indebted households, the ratio of average debt to average income increased from approximately 90 to 120% (Chart 1).

An examination of growth in the amounts of debt and debt ratios during the period after the banking crisis of the 1990s shows that in 1998 only 3% of indebted households had loans of over EUR 100,000, whereas in 2003, the proportion had increased to 10% (Table 3). In the same period, the proportion of indebted households whose loans exceeded their annual disposable income had grown from 35 to 38%. The proportion with debts exceeding EUR 300,000 has increased from zero to over 10%.

The fact that debtors are increasingly middle-aged, with children, and with high incomes is clearly evident in the service data on income distribution. Since 1989, the debt ratio has risen for all age groups, excluding the youngest,

Chart 1.

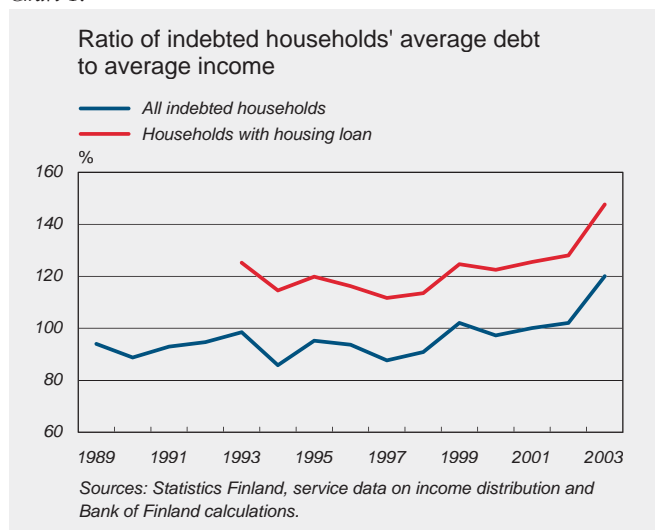
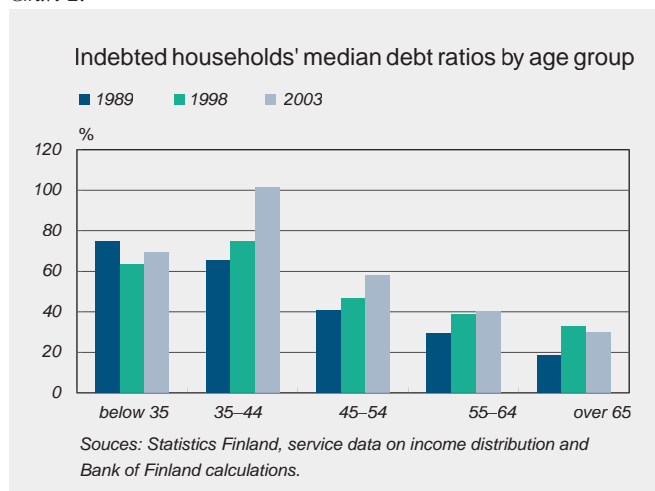


Chart 2.



ie those under 35 (Chart 2). Growth in indebtedness has been most pronounced in the group of early middle-aged (35–44) households, as well as in the higher income brackets and in families with children.

Despite the growth in indebtedness, the debt service-to-income ratios for indebted households have typically decreased. In 1989, (median) debt service relative to income of an indebted household was 11%, whereas

in 2003 it was only 7%. The relative decline in debt service is partly due to falling interest rates and longer loan periods, which reduce the annual amounts of loan payments. In 2003, the debt service-to-disposable income ratio was in all age groups smaller than in 1989 (Chart 3). The decrease in the debt service-to-income ratio has been most pronounced in the group of youngest households. This is partly explained by the reform of the student loan system in the early 1990s, after which the number of new student loans has fallen significantly. The debt

service-to-income ratio has decreased especially for the lower income brackets.⁴

There are observations on the development of overindebtedness for the period after the banking crisis. In 1998–2003, the number of households considering themselves overindebted fell in all age groups, particularly in the group of households close to retirement

⁴ Since 2003 household indebtedness has increased markedly and the debt service-to-income ratio may have started to rise. In 2005, the debt service-to-income ratio of households with housing loans was higher than in 1998 (Hyytinen, Johansson and Määttänen 2006).

Table 3.

Distribution of indebted households and debt based on debt ratio and amount of debt in 1998 and 2003, %									
Percentage of indebted households									
	Alle 20,000	20,000 60,000	60,000 100,000	100,000 150,000	150,000 200,000	200,000 300,000	300,000 400,000	Over 400,000	Total
1998									
Less than 100	55	12	0	0	0	0	0	0	67
100–199	3	14	4	0	0	0	0	0	21
200–299	0	3	4	1	0	0	0	0	8
300–	0	1	1	1	0	0	0	0	5
Total	58	31	9	2	1	0	0	0	100
2003									
Less than 100	46	14	1	0	0	0	0	0	61
100–199	1	11	7	1	0	0	0	0	20
200–299	0	2	5	3	1	0	0	0	10
300–	0	1	2	3	1	1	0	0	8
Total	48	28	14	7	2	1	0	0	100
Percentage of debt									
1998									
Less than 100	14	14	1	0	0	0	0	0	29
100–199	1	21	10	1	0	0	0	0	34
200–299	0	5	10	3	1	0	0	0	20
300–	0	3	4	5	3	2	1	1	17
Total	16	43	25	9	4	2	1	1	100
2003									
Less than 100	7	10	1	0	0	0	0	0	19
100–199	0	10	12	3	1	0	0	0	27
200–299	0	2	9	7	2	1	0	0	22
300–	0	1	4	7	4	5	2	9	32
Total	8	24	26	18	7	6	2	9	100

Sources: Statistics Finland, service data on income distribution and Bank of Finland calculations.

age (Chart 4). The baby boom generation has managed its finances well. Overindebtedness has decreased for all income brackets, household types and major population areas.

International comparison

In recent years, several central banks of Mediterranean and Anglo-Saxon countries have published studies on household indebtedness based on micro-data.⁵ The quality and concepts of samples for the various countries may differ. Nevertheless, the results of these studies can be used for indicative comparisons with the situation in Finland.

The proportion of households with debts in Finland equalled the average for the sample countries (Chart 5). The proportion of indebted households was highest in Anglo-Saxon countries (United Kingdom, United States, Australia) and smallest in Mediterranean countries (Italy, Portugal, Spain). In the data on Finland, attention is drawn to the fact that the proportion of indebted households decreases sharply for the older age groups. In Finland, indebtedness was rare for senior households compared to the other countries. This confirms the general view that Finnish households traditionally pay up their debts within a short time.

The median debt ratios for indebted households by age group in Finland and four other countries are

⁵ Studies on household indebtedness include: Bower, Martinez, Carrascal and Velilla (2005), Farinha (2004), May, Tudela and Young (2004), Cava and Simon (2003), Aizcorbe, Kennickell Moore (2003), and Magri (2002). The data on Australia and Portugal presented in this study is indicative.

Chart 3.

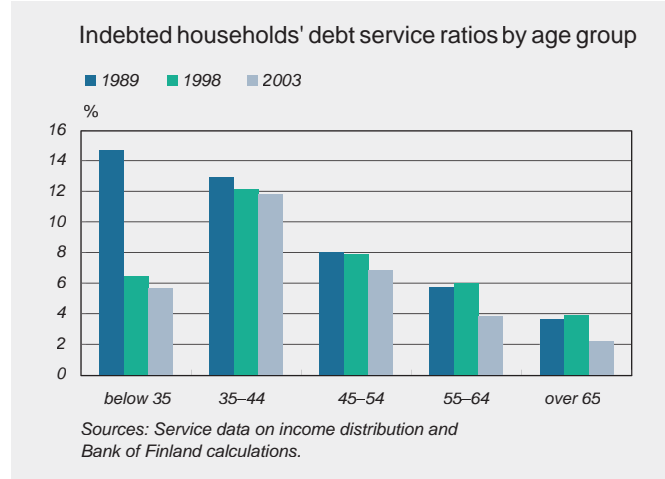


Chart 4.

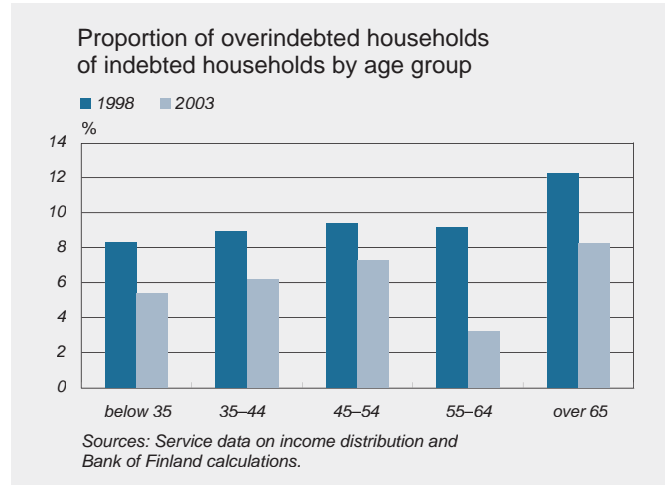


Chart 5.

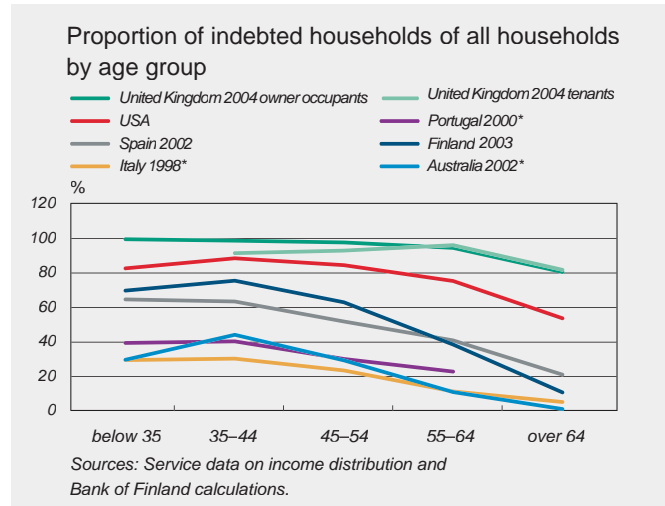


Chart 6.

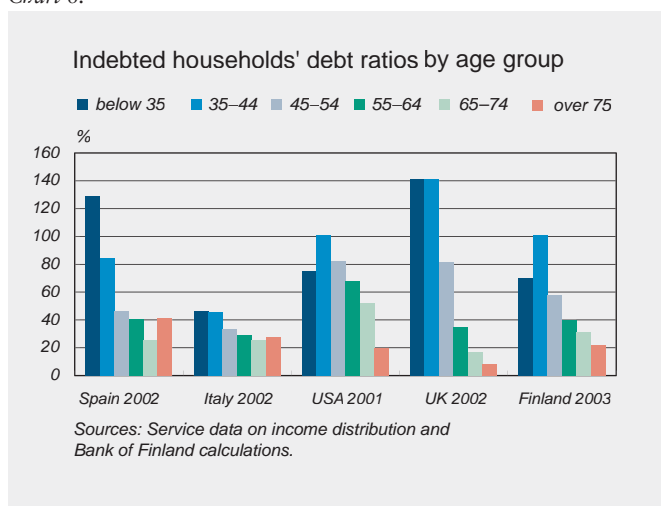
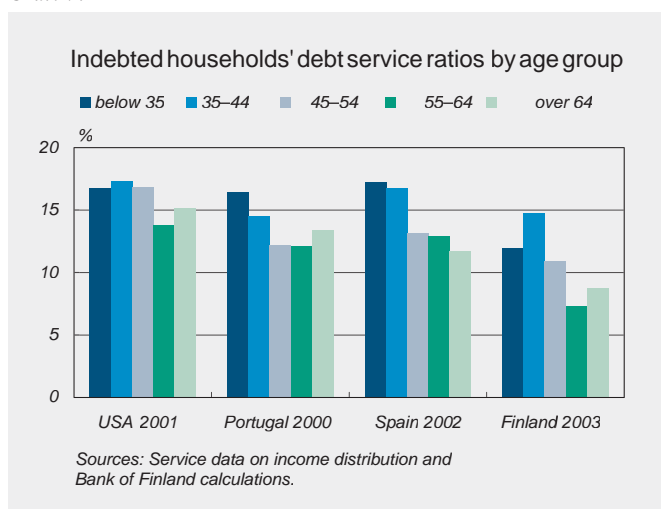


Chart 7.



shown in Chart 6. The debt ratio for Finnish indebted households was lower than that for households in the United Kingdom, whereas for most age groups it was higher than that for households in Mediterranean countries. The debt profile of indebted Finnish households was similar to that of US households.

In Finland household debt service ratios were lower than in the four other countries (Chart 7). Particularly for the older age groups, the ratios were low in Finland. Only for the group of early middle-aged households (35–44), was the debt service ratio in Finland equal to the average for the sample countries. It should however be noted that the sample period differs across countries. The Finnish data reflects the situation in 2003 when euro area interest rates were lower than in 2001–2002. This may partly explain Finland’s relative situation. Comparable data on differences in loan periods, which could also partly explain the results, is not available.

The use of micro-data in the study of indebtedness

The service data on income distribution complements the picture of indebtedness trends presented by financial market statistics and other sources. In this study, the data is used to give an overall picture of indebtedness in 2003, to examine the trends of indebtedness, and for international comparison.

The service data on income distribution also allows for a more in-depth analysis of factors underlying indebtedness. Some international studies have already been done using micro-data. The data can be used to calculate eg the impact of interest rate changes on the position and overindebtedness of households. Thus there is ample scope for further studies.

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