

Financial behaviour of Dutch households: analysis of the DNB Household Survey 2003

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1. Introduction

As a result of the economic downturn, the financial position of Dutch households has deteriorated. Disposable incomes are depressed by rising pension and healthcare premiums, wage moderation and increasing unemployment. The stock market crisis has also affected the financial position of households. Net wealth (including pension savings) as a percentage of GDP fell from 208 in 2000 to 145 in 2002. Combined with the uncertain economic prospects, consumer confidence has dropped to the lowest level since 1983. This has not stopped households from borrowing more. These past few years, Dutch households' indebtedness, incurred by mortgage loans in particular, has continuously increased.

The first part of this paper looks at the financial balance sheet of Dutch households from an international perspective, on the basis of macro data. The second part deals with the principal items of the financial balance sheet from the point of view of the households themselves. The focus will be on the rising mortgage debt of households, and on the related risks. The fact is that the household sector has grown more susceptible to developments in asset prices and mortgage interest rates. The survey makes it clear how households have cashed in on the steady fall of mortgage interest rates seen in the past decade or so. This outcome offers several points of departure for an analysis of the financial stability risks that may ensue from the recent rapid rise in interest rates. Furthermore, this paper investigates the effects of expenditures out of mortgage equity withdrawal, while quantifying the macroeconomic consequences thereof. Also, the role of tenants is considered. With house prices rising, tenants eager to buy a house must consider whether they should cut down on their expenditure in favour of savings. In addition, the equity holdings as well as the post-stock market crisis behaviour of Dutch households are highlighted. Special attention is paid to the attitude and expectations of the Dutch public as regards their old age pensions, which are in the spotlight these days owing to the dwindled pension savings and the ageing of the population. On the basis of the survey, the pensions issue is viewed from the households' angle. The paper concludes by looking into two recent phenomena that are relevant to households' saving behaviour: deflation (expectations) and the unfreezing of company saving scheme balances. In a sense, the present survey is a follow-up to the Bank-commissioned surveys conducted by the market research company NIPO in the spring of 2000 and 2002, and reported in the Quarterly Bulletins of June 2000 and June 2002.² The Bank intends to report annually on the financial behaviour of Dutch households, drawing on the DNB Household Survey (see Box).

2. The household balance sheet in a macro perspective

2.1 The balance sheet of Dutch households internationally compared

Table 1 presents an overview of the financial balance sheets of households in the Netherlands as compared with those in the euro area, the United Kingdom and the United States, taking the situation in 2001 as gauging point, this being the last year for which comparable data for all countries

¹ We would like to thank G Gajapersad and R B M Vet for excellent statistical support. Views expressed are those of the individual authors and do not necessarily reflect official positions of De Nederlandsche Bank (DNB - the Netherlands Bank).

² See DNB (2000, 2002).

are available. For maximum comparability, the balance sheet items are expressed in terms of GDP. Dutch and UK households have accumulated comparatively large pension savings, especially when compared with the euro area. US households, on the other hand, invest substantially more in equities than is the case in Europe. Conversely, compared to their US and euro area counterparts, Dutch and UK households have smaller bond portfolios. On the liability side, Dutch households stand out for having run up relatively high debts. Besides, the rise of 32 percentage points in loans taken out by Dutch households in the period 1995-2001 is considerably higher than in the euro area (+6 percentage points), the United Kingdom (+12 percentage points) and the United States (+10 percentage points). This is related to the soaring increase in the value of Dutch owner-occupied homes, from 123% of GDP in 1995 to 202% of GDP in 2001, a rise that was much stronger than in the other regions under consideration. This development reflects the sharp increase in house prices. Compared to Europe, the value of owner-occupied homes in the United States is considerably lower. Balance sheet data covering 2002 show that due to the stock market crisis, Dutch pension savings have declined to 138% of GDP and equity wealth to less than 30% of GDP.

Box

DNB Household Survey

Surveys constitute a valuable instrument in analysing the financial behaviour and vulnerability of households. For this reason, De Nederlandsche Bank has entered into a sponsoring agreement with CentERdata, a unit of CentER Group, which is closely linked to Tilburg University. Specialising in internet surveys, CentERdata annually questions approximately 1,500 households (over 2,500 persons) about their financial characteristics and behaviour (eg their saving and investment behaviour, their housing wealth, mortgage and other debts, accrued pension rights etc). These data are made available, free of charge, for scientific research. This research contributes significantly to the insight into the financial behaviour of Dutch households and the underlying motives. Questionnaires are extremely flexible as they permit introducing topical issues besides the standard elements, such as old age pensions, deflation and the unfreezing of company savings scheme balances.

Over a number of consecutive weekends, the CentER panel members are asked to complete a variety of questionnaires. A well balanced selection of members ensures that the panel is representative of the Dutch population. It is not a prerequisite that a panel member has a computer or internet access at his or her disposal. Besides, the questionnaires are put out several times over in order to maximise response. This being an annually recurring exercise, it permits monitoring developments over time (the database, initially named VSB Panel and later referred to as CSS (CentER Savings Survey), goes back to 1993. This paper proceeds from the results for 2003, which are preliminary to the extent that they draw on the replies to the first questionnaire. This implies that the analyses are derived from roughly 1,200 households and - depending on the questionnaire's subject matter - a maximum of 2,000 persons.

2.2 Persistent debt growth

Also during the recent downturn, the debt of Dutch households continued to increase. In addition to the surge in house prices, the financial behaviour of households was a contributory factor in this trend. In the past two years, the sharp interest rate fall influenced household behaviour significantly. The fall in interest rates made it attractive to take out loans to maintain the level of spending. Hence, Dutch households' debt continued to rise notwithstanding the economic downswing. This development is in contrast with that seen during the downturn in the early 1990s, when the debt level was found to stagnate (Graph 1). In the second quarter of 2003, mortgage debt, which dominates private debt, peaked at 79% of GDP. A persistent increase in debt during a cooling housing market evidences that more is being borrowed than is required to finance owner-occupied homes, among others, by refinancings and second mortgages. With interest rates being low, refinancing is attractive as it helps reduce monthly expenses. By raising the loan amount, households broaden their financial flexibility even more. While constituting a macroeconomic impulse, the persistent increase in debt is not without risks. On the basis of the survey results, both these aspects of mortgage loans are examined further.

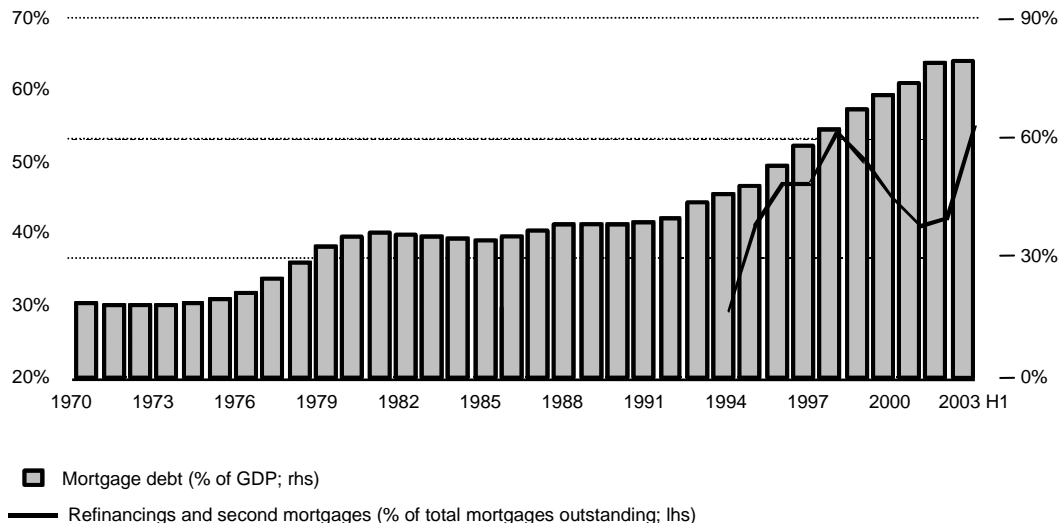
Table 1
**Composition of household balance sheets in
 1995 and 2001 (% GDP)**

	Netherlands		Euro area ¹		United Kingdom		United States	
	1995	2001	1995	2001	1995	2001	1995	2001
Financial assets								
M3	55	56	66	61	64	71	45	48
Bonds	9	8	24	19	6	5	26	19
Equities	47	51	40	66	49	55	133	149
Pension reserves ²	128	153	36	50	137	152	84	95
Others	5	6	3	3	9	9	4	4
Total financial assets	243	274	169	199	266	292	292	314
Financial liabilities								
Loans	63	95	45	51	66	78	66	76
Others	0	0	3	5	7	6	3	4
Net financial wealth	181	178	121	143	193	208	223	234
Value of owner-occupied homes	123	202	194	214	146	198	114	130

¹ All euro area countries, with the exception of Greece, Ireland and Luxembourg. ² Including life insurances and other insurance technical reserves.

Sources: Statistics Netherlands; Eurostat for EU countries; Flow of Funds Accounts for the United States (website Board of Governors of the Federal Reserve System). The value of owner-occupied homes reflects own calculations on the basis of data from the Netherlands Bureau for Economic Policy Analysis and national central banks.

Graph 1
Development of household mortgage debt



Sources: DNB; Statistics Netherlands.

3. Mortgage loans

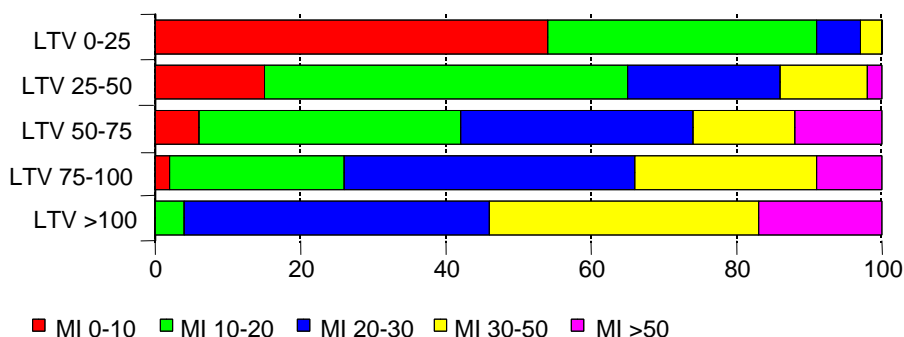
3.1 Risks entailed by mortgage debt

Households can afford higher mortgage debt as the lower mortgage interest rates keep housing costs low. This is corroborated by the survey results. While the share of top-up mortgages (mortgage higher than the property's purchase value) increased from circa 60% in the previous years to over 75% in the period from 2001 onwards, households substantially reduced the interest due on their mortgage loans. Around mid-2003, the average mortgage interest rate was 5.6%, 60 basis points down from the rate that households paid in 2000, according to the survey conducted that year. This development masks that the gross housing costs of some households with top-up mortgages are quite high (Graph 2). One in six households with loan-to-value ratios (LTV, or the ratio between mortgage and the market value of the owner-occupied home) in excess of 100% spends more than half its net disposable income on mortgage debt service (ie a debt service to income ratio >50%). This category of households is vulnerable to financial setbacks. In a scenario of falling house prices, households with top-up mortgages are the first to be confronted with a residual debt in the event they have to move house. Besides, if the debt service to income ratio is high, any loss of income may soon make it impossible to pay the monthly housing charges. The risks that payment problems of the most vulnerable households carry for the financial system as a whole, however, are limited (Van Rooij (2002)). Households with LTVs over 100% and mortgage debt service to income ratios over 50% represent approximately 0.4% of the population. A breakdown of the LTV by age group shows which households are the most vulnerable (see Graph 3). Top-up mortgages are concentrated in the 25-34 age bracket. People in that category, usually being starters on the housing market, are compelled to go to the limits of their finance potential to be able to buy a home.

Graph 2

Mortgage debt service to income ratio (MI) per LTV category

MI and LTV in percentages

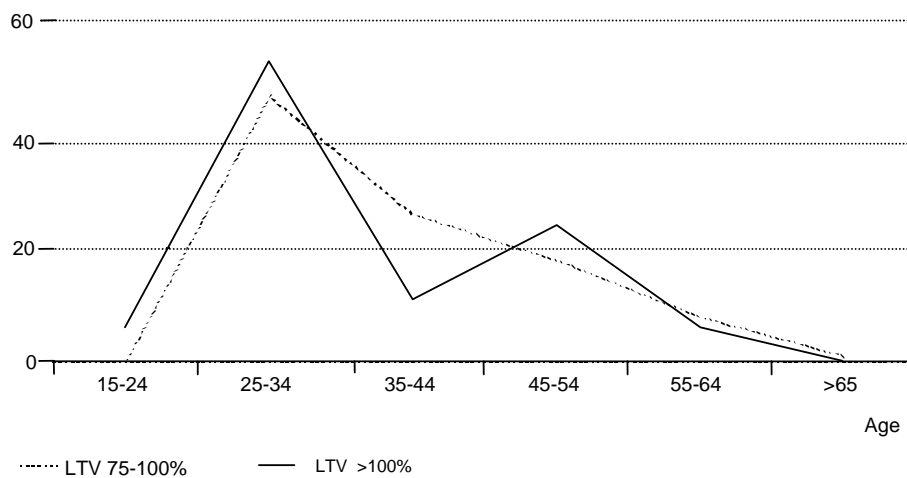


Source: DNB Household Survey, June 2003.

One significant risk for homeowners is entailed by interest rate movements. A rising mortgage interest rate would lead to higher housing costs if, at the time of renewal of a fixed rate contract, the prevailing rate is clearly higher. For variable rate contracts, a higher mortgage interest rate automatically leads to higher mortgage payments. The most common fixed interest period is still 10 years. This is the term agreed for 32% of the mortgages outstanding, while the rate is fixed for five years in 23% of the cases, and variable for 15%. For the interest rate related risks incurred by households, it is not the term of the contracted interest period that is relevant though, but the expiry date. Graph 4 shows that about half the outstanding mortgage loans have a remaining term to maturity of four years or less (even while only 20% opt for a variable or fixed interest period of less than five years). For over one quarter of mortgage contracts the rates will be adjusted before the end of 2004. The rates contracted for a significant number of these mortgage loans are a great deal higher than the prevailing rates. However, a large group of households stand to be facing higher housing charges in the near future, should mortgage interest rates begin to surge.

Graph 3

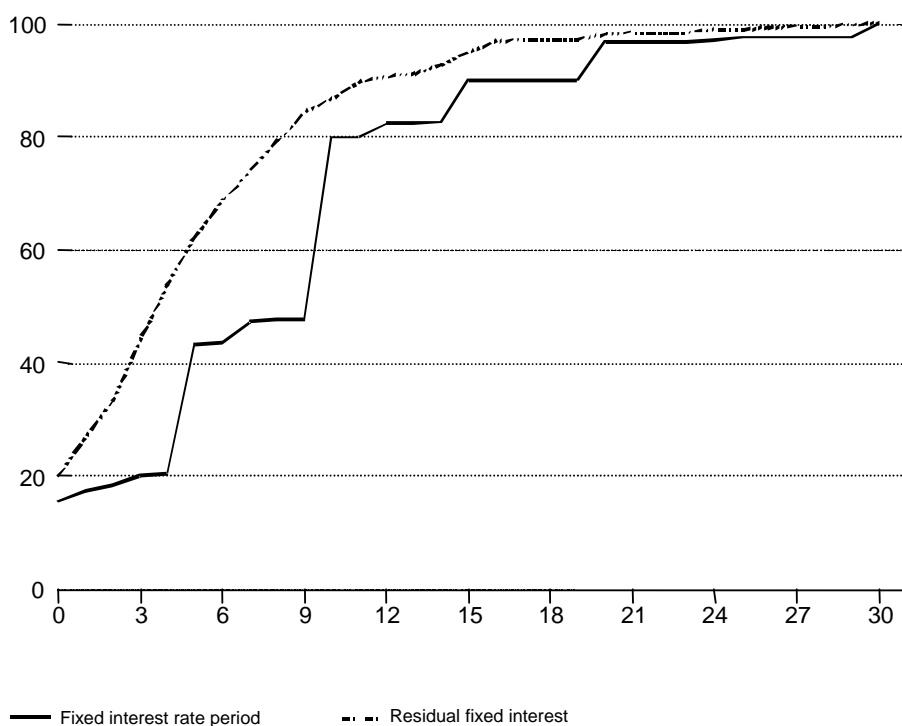
Distribution of age per LTV group
Percentage of households in mentioned LTV group



Source: DNB Household Survey, June 2003.

Graph 4

Cumulative distribution of interest rate period and years until rate adjustment
Percentage of the number of mortgages outstanding



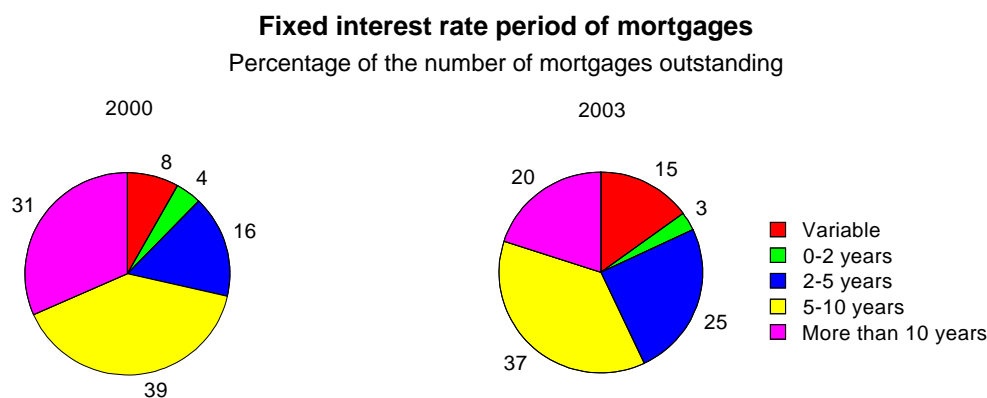
Source: DNB Household Survey, June 2003.

3.2 Mortgage loans for balance sheet restructuring

Although at first sight household balance sheets have become more imbalanced owing to the persistent debt rise, the ample availability of mortgage loans also offers opportunities to improve liquidity or reorganise the financial position by restructuring the various assets and liabilities, or extending the contractual interest period. In the United States, balance sheet restructuring is one of the main reasons for cashing out home equity (Federal Reserve (2002)). The most recent DNB Household Survey was designed to examine whether this was also the case in the Netherlands.

The survey first sought to assess how households had responded to the fallen interest rates. In a climate of declining mortgage interest rates, two considerations may play a role in setting the interest rate terms in the mortgage loan. On the one hand, it is possible that further interest rate declines are expected and that households speculate on this by opting for a variable rate or a brief fixed interest period. This is exactly what happened in recent years, causing the percentage of mortgage loans with a variable interest rate to rise. At present, 15% of all mortgage loans outstanding were contracted at variable rates, against 8% according to the survey commissioned by the Bank in 2000. This increase has made Dutch homeowners more vulnerable to interest rate movements. On the other hand, the interest rate decline may be expected to have bottomed out and prompt households to fix interest rates. This expectation may have been fuelled by the fact that in July 2003 mortgage interest rates reached the lowest level in over 40 years. Rather than inducing households to opt for a longer fixed interest period, however, the percentage of mortgage loans with a fixed period of 10 years or longer dropped compared to three years earlier in favour of mortgage loans with a term to maturity of five years or less (Graph 5). In other words, Dutch households have not profited from the fallen rates by reducing their interest rate vulnerability. This may be related to the steepening of the interest rate curve seen since 2000, as a result of which rates for short-term loans fell relatively more than those for long-term loans. There is a risk that households fixing mortgage interest periods for a short term are underestimating the odds of an interest rate rise. According to the survey, only 3% of households regard a sizeable rate hike as a source of mortgage payment problems. Unexpected personal circumstances are considered as having a greater impact on a household's capacity to defray housing costs. As principal factors in payment problems, 50% of households name unemployment or disability, and 18% divorce.

Graph 5



Sources: DNB Survey of March 2000; DNB Household Survey of June 2003.

Also, a mortgage loan top-up (by way of an equity withdrawal) may be used to release funds for reorganising the financial balance sheet, eg by redeeming other, often more expensive loans. About a quarter of the surplus value realised in the United States has been parlayed for paying off relatively expensive consumer credit and credit card debts. In the Netherlands, this practice is relatively less common. Of the home equity cashed out since 1998, just 6% was used to repay other loans. By using equity withdrawal for investment or portfolio investments, rather than to restructure debt, households are rendering themselves more vulnerable to financial setbacks. After all, they secure a (higher) mortgage loan with financial assets of fluctuating value. An important drive behind taking out mortgage loans for the purpose of portfolio investments is interest arbitrage. Interest arbitrage is lucrative as long as the effective yield on investments (minus any capital yield tax) is higher than the effective mortgage interest rate (interest rate after possible taxes). Driven by the declining mortgage rate, this

circumstance has in recent years increasingly influenced the borrowing behaviour of homeowners. It is, in part, due to this behaviour that in the past five years about 10% of cashed-out home equity was turned into financial assets, almost two thirds of which consisting of equities and other portfolio investments. Expenditure on non-financial assets mainly concerns investment in owner-occupied homes by way of home improvements. While, as a rule, such investment enhances the value of the owner-occupied home, just as with financial investments it holds that households investing on the housing market with borrowed money make themselves more vulnerable to movements in asset prices and interest rates. Indeed, being disadvantageous for the value of houses and equity wealth, (in the course of time) a higher rate will lead to higher mortgage payments.

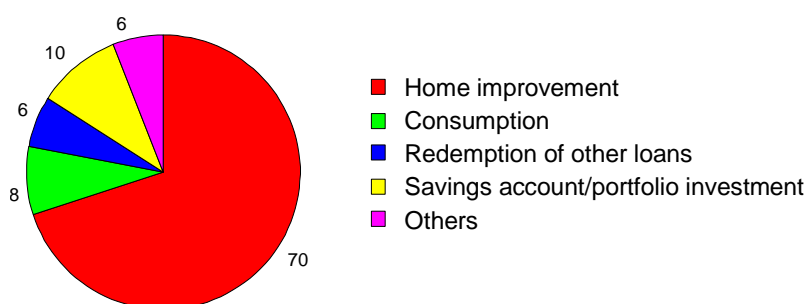
3.3 Effects of home equity withdrawal on expenditure

Withdrawing home equity has partly been permitted and encouraged (feel-good factor) by the sharp price rises on the housing market in the period around the turn of the century. Indeed, becoming, and often feeling, more affluent, homeowners tend to adjust their consumption patterns. Besides for investment in owner-occupied homes, equity withdrawal is spent on durable consumer goods, electronics and holidays (Graph 6). Former calculations using the macroeconomic mode I MORKMON showed that these expenditures could exert a considerable effect on the economic development of the Netherlands, with contributions to economic growth varying from roughly 1 percentage point in 1999 and 2000 to -0.5 percentage points in 2001 (DNB 2002).

Graph 6

Expenditure out of home equity withdrawal

Percentage of surplus value realised



Source: DNB Household Survey, June 2003.

The present data are used to extend the analyses of the macroeconomic effects with the years 2002 and 2003 (Table 2). Rather surprisingly, the survey results indicate that equity withdrawal related expenditure in 2002 equalled or even slightly exceeded the previous year's level. This notwithstanding, the model calculations show a negative contribution to growth in 2002 and 2003, by about 0.5 percentage points and 0.25 percentage points, respectively. This negative growth contribution reflects the sharp fall in equity withdrawal related spending after 2000.

The continuation of the level of home equity cash out of 2001 into 2002 is surprising against the background of the declining consumer confidence and house price rises. It is worth noting that it looks as if equity withdrawal related expenditure in 2003 will again turn out to be at least on a par with the preceding year's level. This trend is not only indicated by the survey data for the first six months, but also confirmed by the increase in refinancing and second mortgages registered by Statistics Netherlands. By all appearances, the mortgage rate fall by almost 2 percentage points since the second quarter of 2002 has promoted the mortgage-related finance of specific expenses. Indeed, a low interest rate also means low finance charges. Consequently, interest rate movements may have a considerable bearing on (the timing of) such expenses. Graph 7 in any case shows that there is a clear relation between the interest rate movements, on the one hand, and refinancing and second mortgages, on the other hand.

Table 2

**Effects of spending impulse from
mortgage equity withdrawal**

In percentage points, unless stated otherwise

	1998	1999	2000	2001	2002	2003
<i>Assumptions</i>						
Domestic expenditure impulse (level, EUR billions) ¹	3.1	6.8	9.9	4.5	4.7	5.0
<i>Results according to MORKMON</i>						
Volume growth of domestic expenditure	1.0	2.0	2.2	-1.1	-0.9	-0.4
– of which directly from expenditure impulse	0.6	1.0	0.7	-1.4	0.0	0.0
GDP volume growth	0.5	1.0	1.1	-0.5	-0.5	-0.3
Development of remuneration per employee	0.1	0.2	0.4	0.5	0.7	0.5
Inflation	0.0	0.1	0.2	0.3	0.8	0.5
Private employment growth	0.1	0.3	0.5	0.5	0.1	-0.1

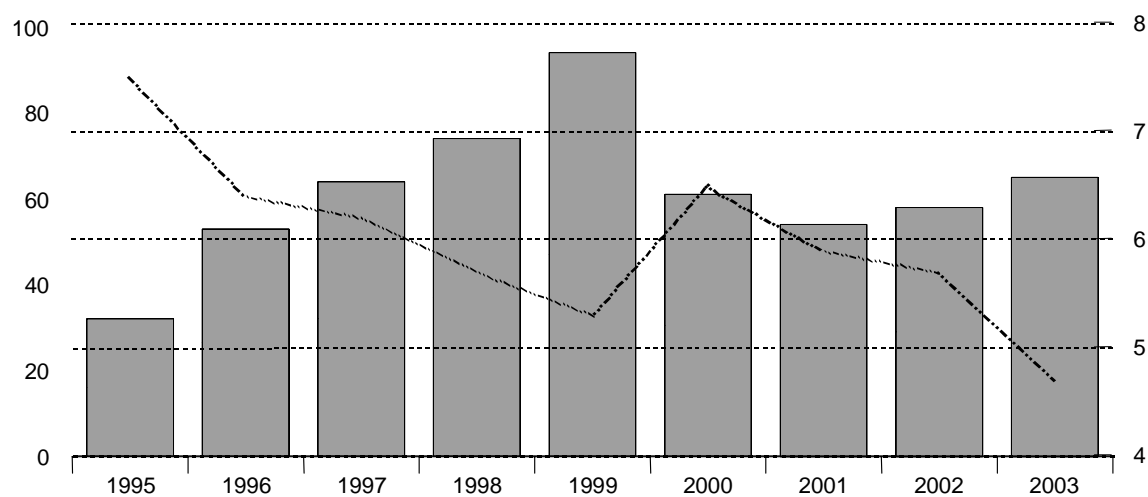
¹ For an accurate estimation of the effects for 1998, the calculation was based on equity withdrawal related spending impulses of EUR 1.2 billion and EUR 0.9 billion in 1996 and 1997, respectively. The figure for 2003 is an estimation based on the first six months of that year.

Sources: DNB surveys (March 2002 and June 2003).

Graph 7

**Mortgage interest rate and
refinancings/second mortgages**

Quarterly averages



----- Mortgage interest rate (in percentages)

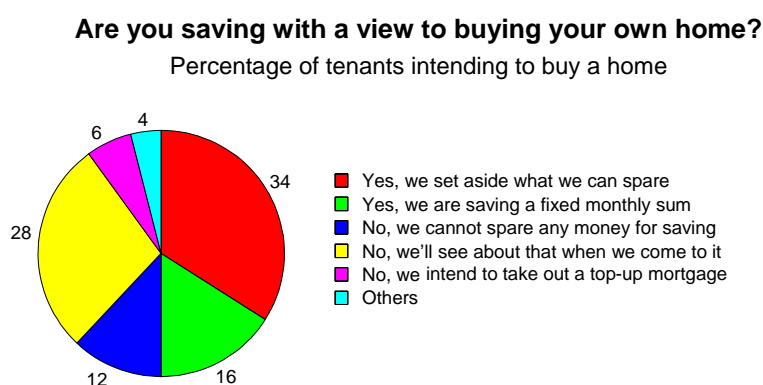
■ Refinancings/second mortgages (lhs, in thousands)

Sources: DNB; Statistics Netherlands.

3.4 Expenditure effects: homeowners versus tenants

A few brief comments on the above analysis seem in order. Firstly, it is not clear how high expenses would have been, had they needed to be financed in ways other than mortgage loans. Secondly, as is inherent in a survey, the reliability of the results depends on the accuracy of the respondents' replies. Thirdly, tenants may have stepped up their saving as, owing to the price rises, the type of dwelling they have in mind is increasingly moving beyond their reach. This dampens the expenditure effects of equity withdrawal by homeowners. Recent empirical research even arrives at the conclusion that, on balance, the effect of higher house prices on the economy will be limited (Alessi and Kapteyn (2002)). This conclusion is not supported by the survey results. Over a quarter of households living in rented accommodation would like to purchase a home. A large part of this category, however, states that they do not specifically save towards this goal (Graph 8). It is not very likely that rising house prices will have an effect on the saving behaviour of this category of tenants. However, more than half of those intending to buy a home - in the shorter or longer term - put aside money for this purpose, the majority saving what money they can spare. In this case, too, the house price movement does not affect their saving behaviour either. In reply to the direct question whether higher house prices lead to additional saving, only 9% of renting households that are saving in order to be able to buy a house reply in the affirmative.

Graph 8



Source: DNB Household Survey, June 2003.

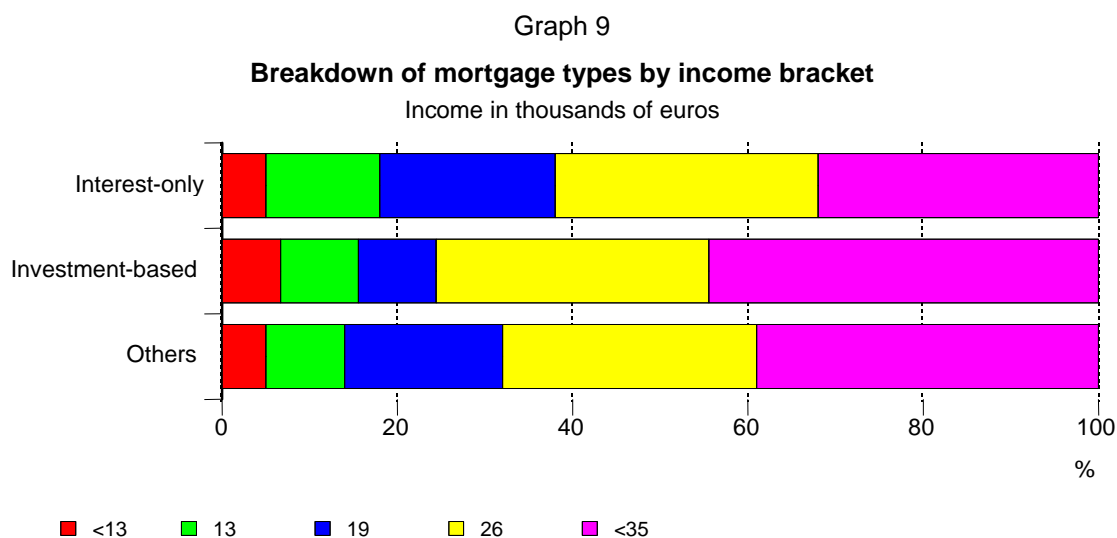
4. Equity holdings and the stock market crisis

4.1 The effects of the stock market crisis on financial behaviour

Besides the development of the prices of dwellings, the stock market crisis has also influenced Dutch households' financial behaviour. Two per cent of the respondents who owned equities or trust fund units indicate that they made a profit (EUR 2,000 on average) on their equity portfolio. They succeeded in doing so despite the fact that share prices are now substantially lower than the peak values they reached in the bullish period three years ago. More than three quarters of private investors state they have sustained evident losses (EUR 20,000 on average). Nonetheless, private investors have not turned their backs on the stock market in droves. According to the survey, since the onset of the crisis, some 10% of investing households have largely or wholly disposed of their equities, while roughly 10% have reduced their equity portfolios. The latter category were also asked in what year they shed most of their equities. It turns out that most did not sell until long after the stock market slump set in; 19% disposed of the largest block of shares in 2000, 33% in 2001, 38% in 2002, and 10% in 2003. Against the group of investors that reduced their equity portfolios (20% of those holding shares) is a small part (4%) that increased theirs, and a large group (more than 60% of equity holders) who held on to most of their portfolios, hardly extending their holdings, if at all. Apparently, a great many are able and willing to absorb the decline in their equities' value. This is probably accounted for by the fact that equity holdings are concentrated in the wealthiest households (DNB 2002)). This group has relatively large capital buffers to be able to absorb asset price shocks. Nonetheless, it is

conceivable that the drop in share prices has also altered the financial behaviour of households that left their equity holdings intact. The survey reveals that the stock market crisis has made investing households more risk-averse. One third has changed to investing less or saving more, whereas another 10% indicate that they have adopted a more conservative spending pattern. Households have not proceeded to borrow less, though. This is confirmed by the macroeconomic trend of a persistent rise in household debt.

The effect of the stock market crises may also make itself felt through mortgages. Households investing in equities by monthly contributions towards investment-based or endowment mortgages have been confronted with a drop in the value of their investment trust. An undervalue usually needs to be supplemented when the mortgage matures, or when the contract is prematurely cancelled. It is also conceivable that a bank will require additional contributions when the mortgage is renewed. According to the survey, by mid-2003 19% of the mortgages outstanding consisted of investment-based or endowment mortgages. Graph 9 shows that the higher income categories exceed the lower income categories as to number of investment-based mortgages. Mortgage owners in the low income brackets are the most vulnerable to disappointing yields on their investment trust, as they have fewer buffers to cushion any residual debt or a rise in monthly costs. Such risks rarely manifested themselves in the previous two years. According to the survey, in a mere 1% of the cases an additional payment or higher contribution was required as a result of the fall in share prices. This is related to the fact that, generally, investment-based mortgages do not involve a contractual obligation to make additional deposits. This is why homeowners do not regard the stock market crisis as a potential source of payment problems. Only 3% of households indicate that in the event of a further sharp fall in share prices they would start having difficulty meeting their mortgage payment obligations.



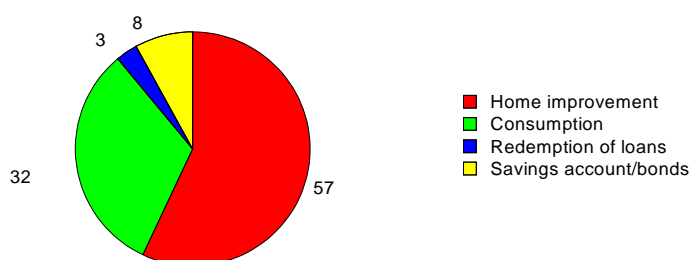
4.2 Expenditure effects of equities sales

Private investors who had disposed of (part of) their equity holdings were asked what they had done with the proceeds. The respondents stated they had used a large share for expenditures and only a smaller share to redeem debts or invest more safely (Graph 10). Compared to the home equity withdrawal related expenditures, a larger share is used purely for consumption (eg the purchase of furniture, electronics and vacations). The economic interest of home equity withdrawal related spending is many times larger than that of spending related to equities sales. On the one hand, the number of households with owner-occupied homes is more than twice as high as the number of households with equity (or unit trust) holdings (52% against 23%) and, on the other hand, the amount involved by home equity withdrawal is considerably higher than that realised in equities sales (on average, more than EUR 30,000 against EUR 10,000).

Graph 10

Expenditure from equities sales

Percentage of total proceeds



Source: DNB Household Survey, June 2003.

4.3 Consumer credit

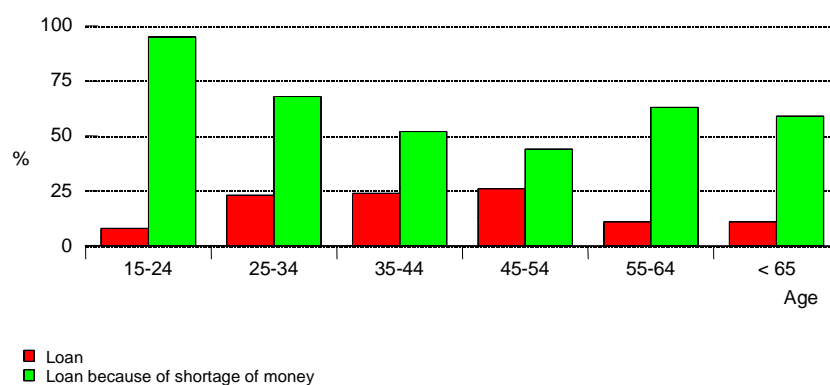
The ascent of the stockholding culture is sometimes related to the exuberant borrowing behaviour of households (Haliassos and Hassapis (2002)). One of the underlying causes of this development is that the equity risk premium has led households to cherish higher expectations of the growth of their wealth than households that do not hold equities. This equals out the additional risk on equities, making the first group of households more strongly inclined to step up spending and borrowing. This theory would appear to hold true for Dutch households, too. According to the DNB Household Survey, the percentage of personal loans, continuous personal loans or credit card debt is higher among households that invest in equities than among households that do not (27% against 19%). Having a mortgage debt also appears to be a factor in taking out consumer credit. Of mortgage-burdened households, 18% have consumer credit and of households without mortgage loans, 21%. This indicates that homeowners sometimes use their mortgage as an alternative to consumer credit.

In the majority of cases (56%), households resort to borrowing on account of a (temporary) lack of money. Not surprisingly, this motive is stronger for the low income brackets (72% of households with a disposable income up to EUR 19,000) than for the high income bracket (45% of households with a disposable income over EUR 35,000). The difference in motive for borrowing widens if also the age of households is taken into account (Graph 11). Young people (age 15-24) practically always borrow because they are short of money, whereas the over-50s do so in less than half of the cases. It is no coincidence that the fewest borrowing restrictions apply to the middle age group. According to the DNB Household Survey, 30% of total consumer credit is outstanding at households in the 45-54 age bracket.

Graph 11

Breakdown of non-mortgage loans by age category

Percentage of households with loans and of households in age categories with loans respectively



Source: DNB Household Survey, June 2003.

5. Pensions

From the balance sheet of Dutch households it appears that pension rights are a sizeable wealth component. The declines in the stock market have decreased the assets of pension funds by EUR 33 billion since the end of March 2000, putting the second pillar pension schemes under pressure. Practically all pension funds have taken measures towards improving their solvency position. Also, measures concerning first pillar pensions (public pension scheme) cannot be precluded against the background of the ageing population. In the survey, Dutch residents were asked to give their opinion of these measures and indicate what they had noticed so far in this context. Furthermore, the survey inquired after the respondents' insight into their own pension situation, their expectations for the future and their preferences regarding old age provisions.

5.1 Awareness

It turns out that only 13% are aware of measures related to eroded pension savings, such as raising pension contributions for employees (8%), for employers (3%), and the partial execution of the customary indexing (2%). Although it may well be that a number of respondents have hardly noticed anything of any measures by pension funds, eg when measures taken are of little financial consequence or - as in the case of a non-contributory pension - that only the employers' contributions to social insurance have increased, this percentage suggests that people give their pension arrangements relatively little thought (Table 3). In addition, 44% do not know whether their pension schemes are final or average pay based, or whether they depend on the yields on the contributions deposited; 45% cannot tell if their pension rights are indexed; while as many as 61% have no idea how much they have accrued, despite the pension overviews they have received. Finally, 65% have no idea as to what they may expect to receive on turning 65. Insight into the individual pension arrangement improves with age, though. This points to an increasing interest in the pensions arrangement as the retirement age gets closer.

Table 3
Awareness of own pension provisions
 Percentages

Age (in years)	Number of respondents aware of: ¹			
	Type of pension scheme	Indexing	Current pension rights	Eventual pension rights
16-24 ²	25	11	0	18
25-34	35	36	21	29
35-44	52	57	34	35
45-54	64	58	48	39
55-64	65	57	67	42
65 and older	77	79	na	na
Total	56	55	39	35

¹ Those that have not ticked "don't know/no reply" in reply to the following questions: (1) How are your pension rights built up (based on final pay/average pay/available contributions/other system/don't know)?, (2) Is your pension indexed (yes/no/don't know)?, (3) What pension rights do you estimate you have accrued at your current/previous employer (... euros per year/don't know)?, (4) How high do you estimate will your net pension be as a percentage of your last net income prior to your retirement (... %, don't know)? ² The percentages in this age bracket are based on a few observations, as the labour participation rate in this category is relatively low and many companies do not permit pension accrual before the age of 25.

Source: DNB Household Survey, June 2003.

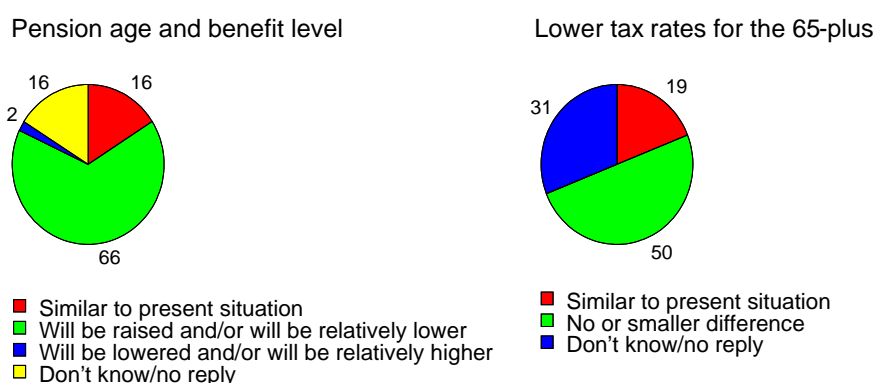
5.2 Concern about pension income

The fact that employees are familiar with their own pension rights to a certain extent only does not mean that the Dutch public are not well aware of the more general developments. The national discussion of the sustainability of the current pension arrangements against the background of an ageing population has in any case not escaped their notice (Graph 12). At least, a majority expect that the public pension scheme will be cut down in about 10 years from now. Two thirds foresee that the pensionable age will be raised and/or the benefits will represent less purchasing power, while only one in six respondents expect the situation to be similar to today's. This suggests that, compared to last year's survey, worries about the public pension scheme have increased, since according to that survey half of the respondents expected later and/or lower benefits in the future. Moreover, many people expect that in due course the difference in tax rates in favour of the 65-plus (as this age group no longer pays state pension contributions) will narrow, if not disappear.

Graph 12

Expectations regarding the public pension scheme 10 years ahead

Percentage of respondents



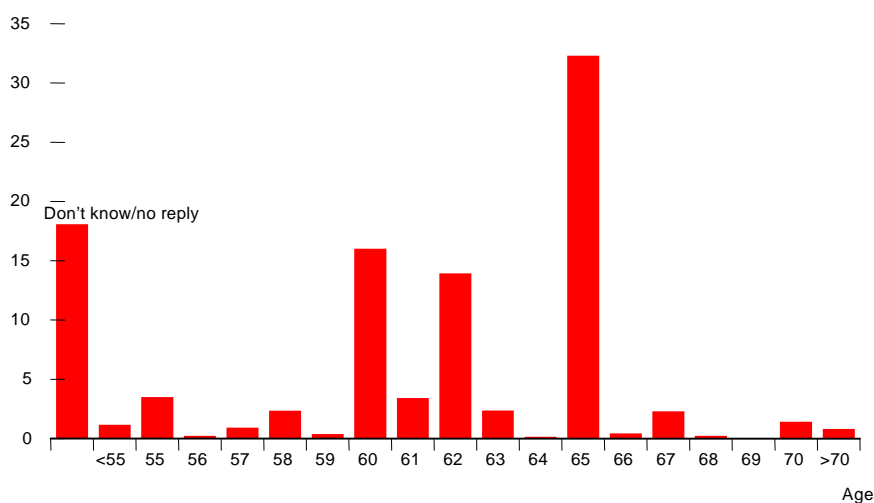
Source: DNB Household Survey, June 2003.

5.3 Retirement

That said, over 40% of employed people under the age of 65 expect to go on (early) retirement at the age of 62 at the latest, while just under 40% reckon to do so at the age of 65 or later (Graph 13). One third of the people in work have made other pension arrangements besides the regular pension scheme they participate in through their employer; in most cases, by way of annuity and single premium insurance policies. These may serve, on the one hand, to bridge the gap between the date of early retirement and the date on which the pension becomes payable, and on the other hand, to supplement their pension rights. Obviously, for a great many workers the pension build-up falls short of 40 years. A part of this category are single income household members keeping house. Roughly 15% of those interviewed state they will not be able to get by on just the (expected) income after their retirement (Graph 14). It turns out that half of the remaining percentage will just about manage to make ends meet and that the other half expects also to succeed in saving some money. Strikingly enough, those that claim still to be able to lay money by make up the majority in the 65-plus bracket, while most of those barely expecting to make ends meet are in the 65-minus category. The survey provides no answer to the question whether the 65-minus perhaps set higher demands on their lifestyle, whether they are cautious in their expectations, or whether they factor in a less favourable income pattern following measures designed to ensure that the ageing wave remains affordable. Another striking outcome is that those who do not get by on their income are eating into their savings, while the others largely manage on their partner's income.

Graph 13

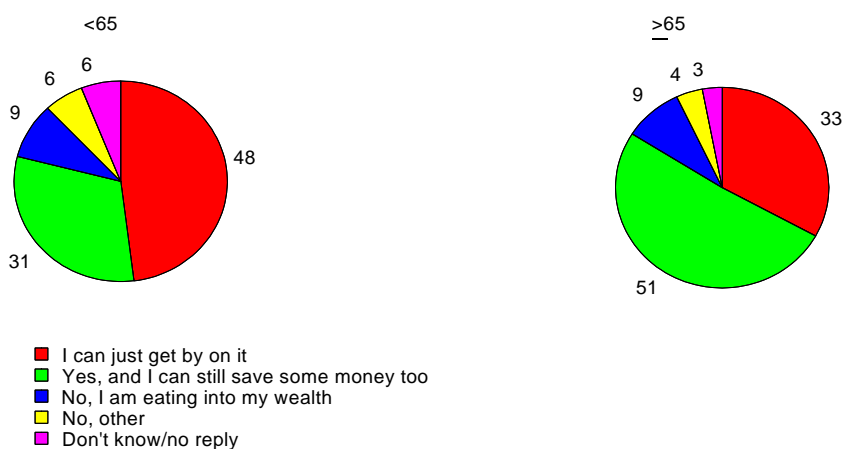
Expected age of retirement
Percentage of respondents



Source: DNB Household Survey, June 2003.

Graph 14

Can you get by on your (expected) income after 65
Percentage of respondents



Source: DNB Household Survey, June 2003.

5.4 Measures to keep the public pension scheme affordable

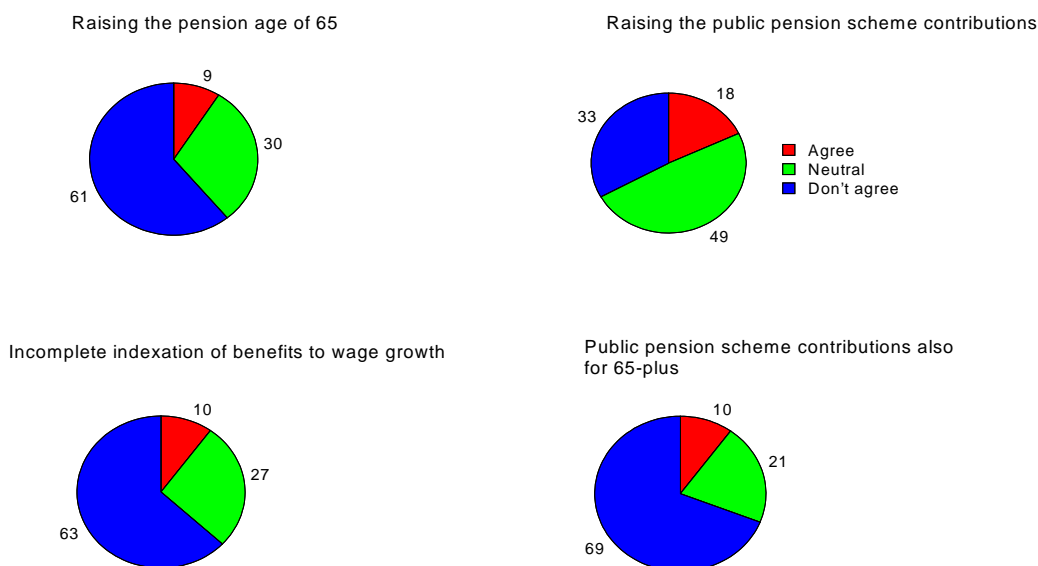
From the foregoing it appears that the Dutch public are aware of the discussions about the increasing burden of the public pension scheme on public finance and about such measures as may be required to keep the first pillar pension scheme affordable. The panel members of DHS were asked for their opinion regarding four much suggested measures. From their replies it emerged that, without exception, these measures meet with much resistance (Graph 15). Notably, especially those three measures cutting down on the existing regulations (raising the age of retirement; incomplete indexation of benefits to wage increases; and levying old-age pension contributions on the 65-plus) are not much favoured. Two thirds are flatly opposed, while only one in 10 cannot see anything wrong in them. The least opposition is met by the option to impose a higher contribution on persons under the age of 65. It should be noted here that no amounts were specified in the questions regarding the

higher contribution and other related measures. If the amounts realistically involved by the measures concerned were specified, though, and the respondents were confronted with a compulsory choice, the outcome might turn out differently. For example, if it appears that the public pension scheme contributions would need to rise more than is being envisaged, the replies might perhaps be coloured by self-interest. Even in the current replies a vague pattern can already be discerned reflecting this tendency, old-age pensioners or those nearing the age of retirement being sooner inclined to oppose measures they regard as an encroachment on acquired rights. Young people, on the other hand, are more inclined to support cutting down on these rights, and would rather not see the public pension contribution raised for the 65-minus. Self-evidently, what may come into play here is that the young are better able to absorb a retrenchment of these rights. Also, the “we’ll deal with that when we come to it” attitude that many appear to have with regard to pension provisions may be playing a role here. For example, one third of the respondents, in their reply to the question whether they would adjust their saving behaviour if the existing pension scheme were retrenched, display such an attitude (Graph 16).

Graph 15

Opinions about possible measures towards ensuring the affordability of the public pension scheme

Percentage of respondents

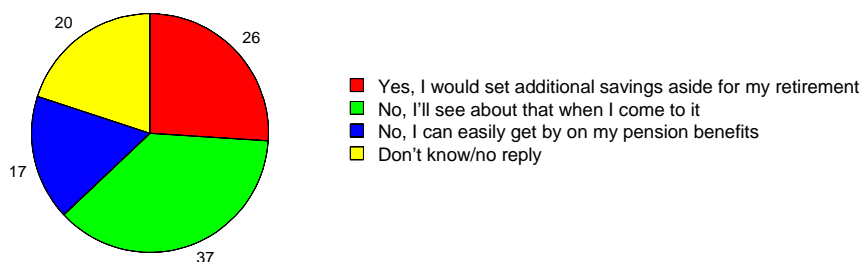


Source: DNB Household Survey, June 2003.

Graph 16

Would you adjust your saving behaviour if pension schemes were retrenched?

Percentage of respondents



Source: DNB Household Survey, June 2003.

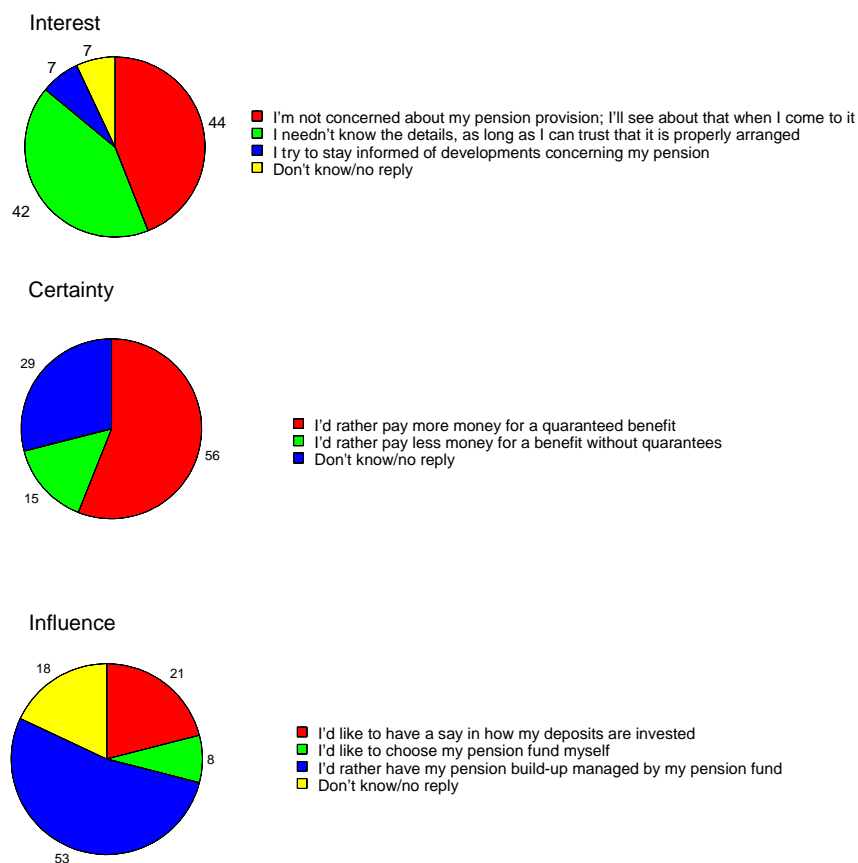
5.5 Preferences

The persons interviewed were requested to comment on three terms reflecting attitudes towards second pillar pension arrangements and thus to provide an insight into their preferences in this context (Graph 17). From this it emerged that the majority prefer having their pension build-up managed by their pension fund. Approximately 85% of the respondents would rather not go too deeply into the details of their pension schemes, half of this group taking the “we’ll deal with that when we come to it” position. Nevertheless, three out of 10 respondents would prefer having more freedom of choice than they have now. One in 10 would like to be free to choose a pension fund that manages their pension contributions. Besides, two in 10 feel the need to exert influence on the way in which their deposits are being managed, making the eventual benefits dependent on their own decisions. The latter very much resembles a defined contribution pension scheme, where only the deposit is fixed, without there being any guarantee of the amount of the eventual benefit. Most pension contracts in the Netherlands, however, are defined benefit-based, with the pension funds making conditional or unconditional pledges as to the height of the pension benefit of the average pay or final pay pension system. The majority of the population feels rather comfortable with the defined benefit system. The survey results show that people would rather pay a higher contribution for a guaranteed pension than a lower contribution in exchange for greater uncertainty about the eventual benefit. Note that households were not asked how much extra contribution they would like to pay in this respect.

Graph 17

Attitude towards own pension arrangements

Percentage of respondents



Source: DNB Household Survey, June 2003.

6. Saving behaviour

This section focuses on two recent developments that have an effect on people's saving behaviour. Firstly, it deals with the expectations regarding deflation, which may lead to a postponement of expenditures. Secondly, it goes on to discuss the consequences of the recent retrenchment of company saving schemes and the related additional unfreezing of earlier saving deposits.

6.1 Deflation

Besides the developments in the mortgage market and on stock markets, the financial behaviour of households depends on specific macroeconomic developments and risks. In a period of stock market declines, overcapacity at companies and historically low yields, one realistic risk being feared by financial market participants is deflation. Also among policymakers, deflation is a frequent discussion item (IMF (2003)). In this context, a drop in asset prices (asset price deflation) should be distinguished from general price deflation (goods deflation). The first form of deflation was seen in the stock markets in 2000-02. Deflation in the commodities sector is taking place in Japan, where consumer prices have been falling in recent years. Both forms of deflation affect the household sector. Goods deflation, notably the expectation thereof, is decisive for consumers' spending and saving behaviour. Indeed, deflation is attended by uncertainty about economic prospects, inducing households to step up saving. Also the expectation that consumer durables will become cheaper in time is a saving incentive. Asset price deflation undermines the financial positions of households, as it diminishes the value of their assets, such as their equities and homes. As a consequence, the value of collateral will drop, making creditors more cautious. While assets are decreasing in value, the level of the outstanding debt will remain the same, causing the balance sheet position of the household sector to deteriorate. If asset price deflation is followed by goods deflation, the debt level will even rise in real terms, while the same will hold for interest charges.

Against this background, Dutch households have been polled for their deflation expectations. According to the outcome of the DNB Household Survey, the chance of the general price index falling in the next two years is estimated to be relatively low (16% on a scale of 0-100%). One third of households rule out the possibility of deflation altogether. This explains why, according to the survey, their spending and saving behaviour is hardly affected by deflation expectations. Of the households proceeding from a more than 50% chance of deflation, only 5% are in effect adapting their spending and saving pattern. Households appear to factor in deflation more in their borrowing behaviour (12% of the overall population). Three quarters of these households own their own home. This category is probably more aware of the consequences of borrowing and more anticipatory in their financial planning than are tenants. With regard to borrowing, households take deflation risks into account by not taking out new loans. According to the survey, deflation risks barely prevent households from taking out interest-only loans. At times of deflation, such loans are disadvantageous as due to the declining price level the outstanding nominal debt will mount in real terms in the course of time. However, interest-only mortgages are very popular with Dutch households (according to the survey results, 41% of outstanding mortgages are interest-only); this carries a measure of susceptibility to deflation risks.

6.2 Company saving schemes

As of 1 January of 2003, the premium savings scheme was abolished and the salary savings plan was made less generous. By way of compensation, part of the savings - which initially were to be blocked on the savings account for four years - were prematurely released. One third of the respondents - representative of the Dutch population aged 16 and older - participate in one or more salary savings schemes and/or premium savings schemes. This amounts to roughly 4 1/2 million participants. For over 60% of this group, at least part of the savings were released. The others had not participated long enough, had withdrawn their money at an earlier date for specific expenditures, or just did not know whether their savings have been unfrozen. The average amount released is estimated at more than EUR 1,500. On a macro level, this amounts to roughly EUR 4-5 billion. It turns out that two thirds of this amount was transferred to other savings accounts (Graph 18). Only one fifth thereof went into expenditures, such as daily errands and (durable) consumer goods, or home improvement. The amount spent towards these ends comes to between 0.3 and 0.4% of the annual total of consumer

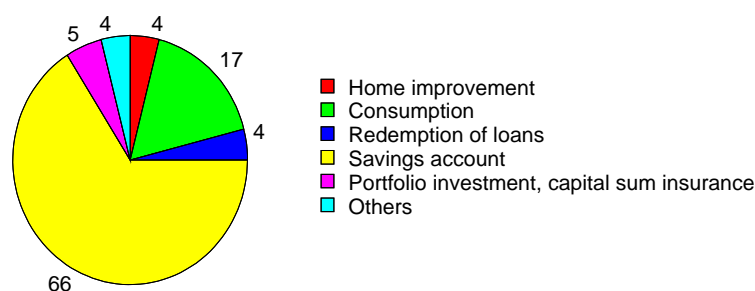
expenditure and investment in owner-occupied homes (approximately EUR 250 billion). Hence, the macroeconomic effects are limited.

Nevertheless, about half of the company saving scheme participants indicate they intend to set less money aside, adducing as the main reason that saving has now become less attractive. Other reasons are that savings are more easily spent if they are not frozen and that the loss of income entailed by the retrenchment measures reduces the opportunities for saving. From last year's household survey it emerged that many people set aside the money released from their company savings schemes for the benefit of their own pension plans. From the present survey it appears that no fewer than one third of all respondents automatically transferred their deposits to annuity or single premium policies. Of this group, 70% indicate they intend to continue channelling deposits to the said policies, while a quarter have ceased making deposits or have agreed lower amounts.

Graph 18

Expenditure of released company saving scheme balances

Percentage of total amount released



Source: DNB Household Survey, June 2003.

7. Conclusions

From an international perspective, the debt of Dutch households is extraordinarily high. And it is still rising. Due in part to the low interest rate, second mortgage loans are raised or existing mortgage loans are renegotiated on a massive scale for the purpose of withdrawing equity. Unlike in the United States, the Dutch seldom do so to repay more expensive (consumer) loans. Often, funds from equity withdrawal are invested in owner-occupied homes. While this implies that the rising debt is attended by a higher property value, it also increases dependence on asset price fluctuations. Besides, homeowners more and more opt for a variable interest rate, rendering themselves increasingly susceptible to rate changes. At the moment, 15% of the mortgages outstanding have variable rates. Although the fixed interest periods of five and 10 years (accounting for 23% and 32%, respectively) are still the most popular, potentially, over a quarter of mortgages may be hit by an interest rate increase before the end of 2004.

On a macroeconomic level, mortgage equity withdrawal represents large amounts. While equity withdrawals appear to be on the rise again, their volume is evidently still below the level recorded for 1999 and 2000. At EUR 5 billion, released equity-related spending is estimated to make up half of that realised in 2000. Account being taken of carry-over effects, this will on balance reduce economic growth by more than 0.25 percentage points this year. Incidentally, it turns out that tenants, even those indicating they would like to buy a home, barely adjust their saving behaviour in response to the price movements on the housing market.

The stock market decline did not prompt investors to divest their stock holdings in droves, but it has made them more cautious. The vast majority have hardly bought additional equities, while a proportion of the investors indicate they have stepped up saving. Only 20% have substantially reduced their portfolios in recent years. Most did not do so until the crisis had lasted several years. While the proceeds from these transfers largely went into expenditures, this did not produce any major macroeconomic effects as the group concerned is relatively small.

The Dutch public are well aware of the discussions about the sustainability of the present pension system. Two thirds expect the public pension scheme to be retrenched within 10 years from now, ie in that it will become payable at a later age and/or represent less purchasing power. However, the public find it hard to reconcile themselves to measures that infringe on what they regard as acquired rights. They would rather pay higher contributions until the age of 65 and start enjoying today's level of benefits from then onwards. Although it remains to be seen if this will still hold once it is clear how much more will need to be contributed in such a situation, it is typical of the general attitude towards pension provisions. The public like to have the build-up of their pension rights managed by pension funds and would accept having to pay higher contributions in exchange for guaranteed benefits. Incidentally, a substantial minority (circa 30% of respondents) advocates a greater freedom of choice. Many, however, are as yet not concerned about their pension rights, adopting a "we'll see about that when we come to it" attitude. This is evidenced, among other things, by the lack of insight into the individual pension situation. It should not be ruled out, though, that this is not only caused by a lack of interest among the interviewed, but also by the information supplied regarding this subject. Here, a role may be reserved for pension funds and national authorities. It is in everybody's interest that people have a realistic image of what they may be expecting to receive on turning 65.

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