Asset formation by households during the financial crisis

Philip Du Caju

Introduction

The financial crisis which erupted in 2008, in the aftermath of the mid-September bankruptcy of American bank Lehman Brothers, is still affecting the world economy today. The resultant market turmoil caused investors to take refuge in assets regarded as safe. Governments had to take exceptional measures to help the banking sector, because the vulnerability of the banks was a threat to the financial system as a whole.

This turbulence naturally also affected Belgian households. The impact on household finances was manifold, affecting the savings ratio, asset values, portfolio decisions, etc. This article takes a close look at that last element. Traditionally, economists analyse the allocation of savings to the various investment instruments on the basis of macroeconomic statistics from the financial accounts. However, the Bank now also interviews households about their financial behaviour, using a survey specially devised for that purpose. This means that microeconomic data on household finances are now also available. The first wave of this survey took place in 2010. The questionnaire included a set of questions on the impact of the financial crisis on household wealth. The answers to these specific questions are now available and are analysed in this article.

The first section of this article explains the information used at household level, as these data – which are still partial and provisional – are being used for the first time. It gives a brief outline of the organisation and operation of the survey on the financial behaviour of households, and describes the composition of the household sample and the content of the questionnaire, including specific *ad-hoc* questions about the financial crisis.

The second section of the article focuses on the structure of household assets. That structure will be illustrated on the basis of microeconomic data from the household survey. Here, the survey data mainly concern the period prior to the crisis. In the case of decisions concerning assets, and more particularly the response in the context of the financial crisis, the willingness of households to take risks plays an important role. This is therefore examined as well.

The third section deals with changes in household assets since the start of the financial market turbulence. As far as possible, it looks at the period before, during and after the financial crisis. After that, the article analyses whether, how and to what extent households switched resources between different asset components in the context of the financial crisis. It also examines which assets households want to avoid in future, after the turbulence.

1. Information on the financial situation of households

The financial accounts are the classic macroeconomic data source most commonly used for the purpose of analysing the financial situation, and more specifically the assets, of households. The financial accounts offer a detailed overview of the trend in the claims and financial debts of the national institutional sectors – non-financial corporations, financial corporations, government and households – in relation to one another and of the national economy in relation to the rest of the world. Those accounts form an integral part of the system of national accounts, comprising a coherent series of continuous, coordinated accounts. In contrast, until recently there was little or no

microeconomic information available in Belgium at the level of individual households. That has changed now that the Bank conducts a survey on this subject covering a sample of Belgian households. That survey is explained below.

1.1 Organisation of a survey on the financial behaviour of households

Since there is no general asset register in Belgium, and since such registers in other countries never offer a full picture of all types of asset components, survey data are vital to gain an idea of the distribution of assets between households and the asset structure of individual households.

Some countries, such as France, Italy, the Netherlands and Spain, but also the United States, have for some time had surveys which inquire into the assets of households and their financial behaviour. The aim of such surveys is to supplement the existing macroeconomic data from the financial accounts with microeconomic information at the level of individual households, in order to permit specific scientific research and policy-relevant analysis, and to gain an insight into aspects concerning the breakdown of assets and liabilities. Furthermore, the individual data can be used to improve the financial accounts. The National Bank therefore decided to organise a household asset survey in Belgium, too. The plan is to conduct such surveys every three years. For the first wave, interviews were carried out in Belgium from April to September 2010. The Bank is currently processing the raw data obtained. For this article we used partial, provisional results of the survey.

The sample of Belgian households was composed on the basis of three regional strata (the Regions) with the aim of making the survey results representative. It was also intended to obtain the best possible estimate of total household wealth. The aim was therefore to interview relatively larger numbers of affluent households than the less well-off. Since there are no usable register data on the level of the assets of individual households, the approach was to interview relatively more households with higher incomes. However, individual income data cannot be used to select households. The population was therefore divided into eight income strata (from the lowest to the highest income band) on the basis of the average taxable income of the statistical sector (a district in a municipality) in which they live.

Altogether, 2 364 households were interviewed, covering the three regional strata and the eight income strata. More than 11 000 households had to be contacted for this purpose; the response rate was 21 %. If we look at the share of various household types (size) and household members (age group) in the total population and in the interviewed survey sample, there will of course be differences. However, those differences are not all that big. Single-person households and households comprising persons over 65 years of age are relatively under-represented in the survey sample.

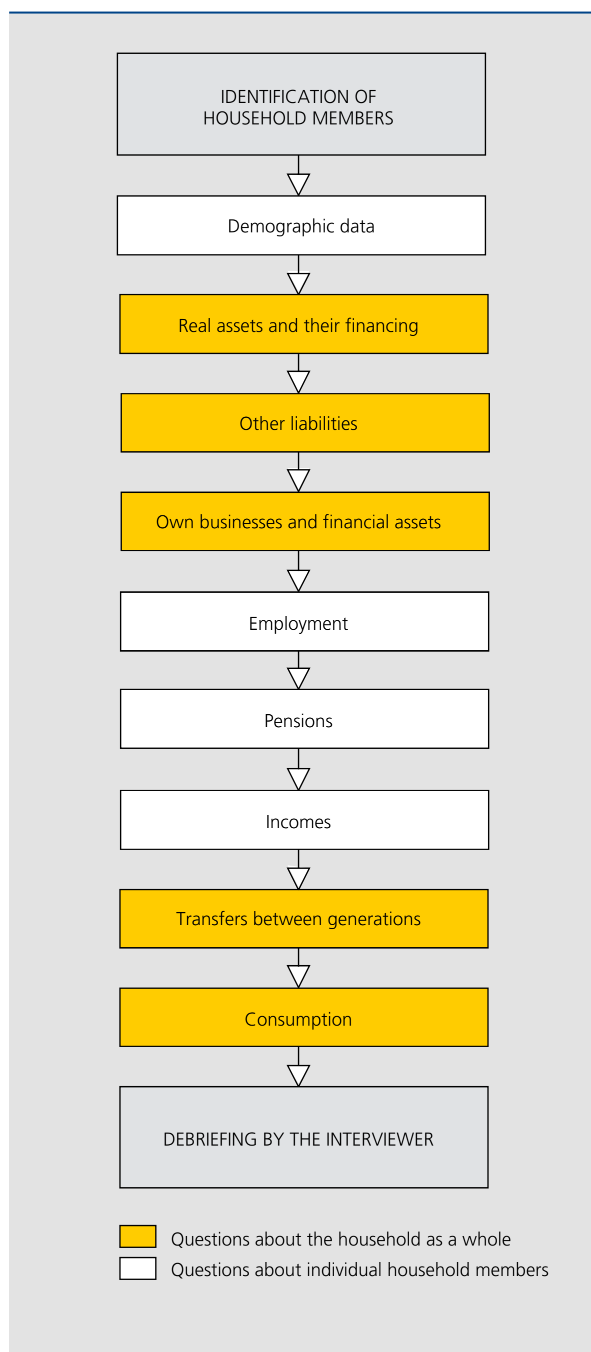
1.2 Content of the household survey

The questionnaire for the survey of the financial behaviour of households is fairly long. For households which have many different assets and financial resources, the interviews could take over an hour, and sometimes much longer. When answering the questions, respondents were able to use documentation such as statements of account, pay slips, etc. Naturally, this enhances the completeness and accuracy of the data collected. Some of the questions concern individual household members, while others concern the household as a whole.

The questionnaire is in nine sections:

- the first section contains questions on the household's demographic data. For example, this section gives information on the size and type of household, and on the age, sex and level of education of the household members;
- the second section deals with real assets and their financing. This mainly concerns real estate (primarily the household's own residence) and the associated mortgage loans. In addition, there is information on other real possessions, principally vehicles;
- the third section supplements this with the other liabilities, such as consumer credit. Specific attention also focuses on any credit constraints which households have recently experienced;
- the fourth section covers own businesses and financial assets. As well as own businesses (including self-employed occupations) and shares in unlisted companies, this concerns all the financial instruments which households may use;
- the fifth section concerns employment. It looks at the labour market situation of the household members, namely their status (working, retired, etc.), occupation, type of contract, etc.

CHART 1 STRUCTURE OF THE QUESTIONNAIRE FOR THE SURVEY OF THE FINANCIAL BEHAVIOUR OF HOUSEHOLDS



Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

- the sixth section covers pensions. This section is intended to ascertain the degree to which household members are covered by statutory or supplementary pension systems;
- the seventh section on household incomes is interested in all income sources, ranging from earned income and benefits of all kinds to other income sources (such as investments);
- the eighth section concerns transfers between the generations, covering both inheritances and gifts;
- the ninth section on consumption is reasonably short. This section contains quantitative questions on consumption of food and drink and more qualitative questions about expenditure in general, and its relationship to income.

The questions were answered by the person most familiar with the household finances. Normally, i.e. if that person is a member of the household (and not an external bookkeeper or guardian, for example), that individual is also the household's reference person for the study. Certain individual characteristics used to divide households into categories then concern that person (e.g. age and education).

This article uses partial and provisional results for the second and third sections of the questionnaire, particularly household assets, both real and financial. More especially, it analyses the households' answers to a number of specific *ad-hoc* questions about the impact of the financial crisis on asset decisions (e.g. on the asset structure before the crisis, shifts during the crisis, and changed behaviour as a result of the crisis). Information from the first and fifth sections (household characteristics, demographic data and information on the labour market position) is used to analyse differences between households in regard to real and financial assets.

2. Risk willingness and asset structure

This section analyses the asset structure of households. First, it focuses on the willingness of households to run risks when taking financial decisions, because that willingness influences the structure of their assets.

2.1 Willingness to take risks in financial decisions

Willingness to take risks when making financial decisions plays a crucial role in all theoretical models of financial markets, and is a key explanatory factor for interpreting empirical findings concerning the financial behaviour of households.

TABLE 1 HOUSEHOLDS' WILLINGNESS TO TAKE FINANCIAL RISKS IN DECISIONS ON SAVINGS AND INVESTMENTS

(in % of all participating households which answered the question)

	In %	Number
Take substantial financial risks and expect to earn substantial returns	0.8	19
Take above-average financial risks and expect to earn above-average returns	4.7	109
Take average financial risks and expect to earn average returns	23.9	559
Unwilling to take any financial risk	70.7	1 656
Total	**100.0**	**2 343**

Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

The survey therefore explicitly asks households about their risk willingness when inquiring about their financial behaviour. More specifically, they are asked: "*Which of the following attitudes best describes the financial risks that you are willing to take in decisions on savings and investments?*". The households taking part had to choose from the following possible answers:

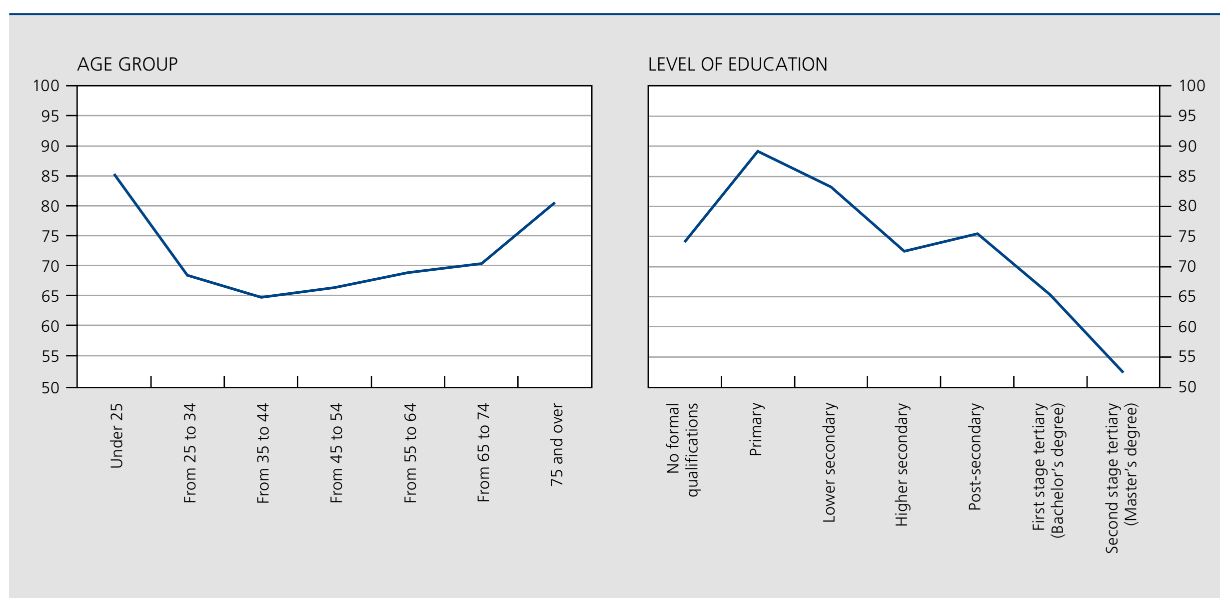
- *I take substantial financial risks and expect to earn substantial returns*
- *I take above-average financial risks and expect to earn above-average returns*
- *I take average financial risks and expect to earn average returns*
- *I am not willing to take any financial risk.*

Of the 2 343 households which answered this question, the great majority (70.7 %) stated that they were unwilling to take any risks. Another 23.9 % take average financial risks, while 4.7 % say that they are wiling to take above-average risks. Only 0.8 % (19 households) claim to take substantial financial risks. Since the category unwilling to take any risks is so large and the other three are a lot smaller, we shall compare this large category of risk-averse households with the other three smaller categories combined in some parts of the subsequent analysis in this article.

Willingness to run risks when taking financial decisions is connected with (almost) totally exogenous factors such as age and level of education. That willingness is also determined partly by socio-economic circumstances, such as whether or not the household owns its home, and also by the household situation (the reference person of the household is single or one of a couple, and with or without other dependent household members).

CHART 2 HOUSEHOLDS WHICH ARE NOT WILLING TO TAKE FINANCIAL RISKS IN DECISIONS ON SAVINGS AND INVESTMENTS

(in % of the households concerned which answered the question)



Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

In most cases, the youngest households (age of the reference person) are not willing to take financial risks ; their resources and income sources are still very limited. Willingness to take financial risks is greater in the broad intermediate age group (25 to 64 years), or the age at which most people are able to work. Risk willingness declines after the age of 65, when some income sources may be lost and the time perspective is shorter.

Apart from households in which the reference person has no formal qualifications (this concerns a small number of households in the survey), the proportion of households unwilling to take any risks declines as the level of education rises. The better educated have a relatively clearer understanding of the link between risk and expected return, and have relatively more resources from income at their disposal, enabling them to invest part of it with some risk.

The socio-economic circumstances, illustrated here by whether or not the household needs to rent (and therefore does not own) its home, also have an influence. Households which do not need to rent their home because they own it or because they can live there free of charge are relatively less common in the category unwilling to take any risks, and relatively more common in each of the three categories willing to take average or greater risks.

Finally, the household situation is one of the determinants of risk willingness. Couples who can share household tasks and often also have multiple income sources are relatively more willing to take financial risks than single persons. Apart from the household situation, households in which the reference person has a job are more inclined to take risks.

TABLE 2 HOUSEHOLDS' WILLINGNESS TO TAKE FINANCIAL RISKS IN DECISIONS ON SAVINGS AND INVESTMENTS

(broken down according to whether or not they rent their home, in % of the households concerned which answered the question)

	Do not need to rent their home	Rent their home	**Total**
Take substantial financial risks . . .	0.8	0.7	**0.8**
Take above-average financial risks	5.1	3.3	**4.7**
Take average financial risks	27.2	12.9	**23.9**
Unwilling to take any financial risk	66.9	83.1	**70.7**
p.m. Number of households . . .	*1 792*	*551*	***2 343***

Source : NBB, Survey of the financial behaviour of households (2010), provisional data.

2.2 Structure of household assets

This section looks at the structure of household assets. Households' willingness to take risks when making financial decisions will play a role here, alongside other demographic characteristics of the households. In the household survey, household asset components are divided into seven categories :

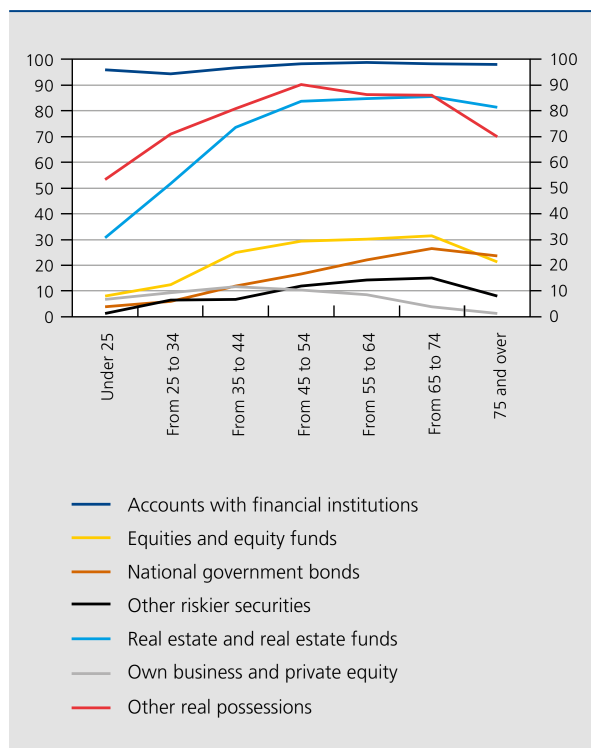
- the first category 'accounts with financial institutions' covers accounts, bank deposits, life insurance contracts and private pension insurance contracts ;
- the second category 'equities and equity funds' covers individual shares and equity investment funds ;
- the third category 'national government bonds' covers bonds issued by the national government and non-speculative bond investment funds ;
- the fourth category 'other riskier securities' covers corporate bonds, risky (foreign) government bonds, hedge funds, etc.
- the fifth category 'real estate and real estate funds' covers the household's principal residence (if owned), other properties owned, and real estate investment funds ;
- the sixth category 'own business and private equity' covers own businesses and investments in unlisted companies ;
- the seventh category 'other real possessions' covers cars and other vehicles, valuables (such as works of art and jewellery), etc.

We start with a summary of the proportion of households owning a particular asset component, broken down by household type. A distinction is made according to the marital status of the household's reference person, distinguishing between single persons (the reference person is unmarried, divorced, a widow or widower) and couples (the reference person is married or cohabiting). Another aspect considered is whether there are other persons (dependants) in the interviewed household, in addition to the single person or couple.

Almost all the households interviewed which answered the question have assets on accounts with financial institutions (97.6 %). More than three-quarters of the participating households (77.3 %) own real estate or amounts in real estate funds ; this is relatively more common for couples (married or cohabiting), regardless of whether there are other dependent household members. The great majority (81.3 %) of responding households also have other real possessions. Since this mainly concerns vehicles, couples are relatively more strongly represented here, but so are single persons with dependants. A quarter (25.6 %) of participating households own equities or units in equity funds. Here, too, there are relatively more couples than single persons. That also applies to government bonds, which are held by 18 % of these households. One-tenth (10.6 %) of the households own other riskier securities, and it is noticeable that both single persons and couples are more likely to hold such securities if they have no dependants, and can therefore afford to take more risks. In the survey sample, 7.7 % of households own a business or a business investment. Here we find relatively more families, where there are other household members in addition to the single person or couple.

CHART 3 COMPONENTS OF THE ASSETS OF HOUSEHOLDS IN THE SURVEY

(in % of households answering the question, broken down by age group of the reference person)



Source : NBB, Survey of the financial behaviour of households (2010), provisional data.

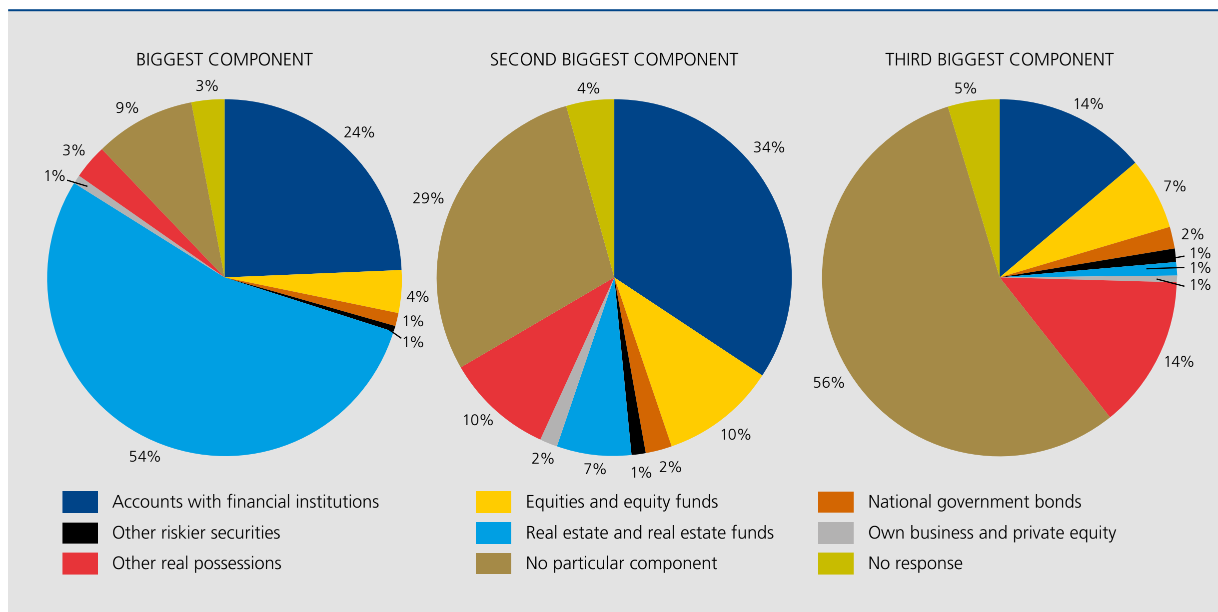
If we break down the households according to the age group of the reference person, we find that all age groups maintain accounts with financial institutions to roughly the same extent.

Real estate exhibits a definite age-related pattern. Young households are less likely to own real estate. Fewer than half of the participating households under the age of 35 (reference person) own real estate, compared to more than 80 % of households over the age of 45. Overall, real estate ownership rises steadily with age up to 75 years, after which it declines slightly. In fact, all asset categories decline after that age. There is little or no further asset building, and the existing assets are reduced to provide for personal maintenance or to make gifts. The age profile of other real possessions is similar to that of real estate, except that these other real possessions are already present to a greater extent at an earlier age, and do not increase so much as people get older.

Younger households hold few equities and equity funds, which are more common among households between the ages of 35 and 64, i.e. at a stage in life when most people work, income is generated and assets are built up. Moreover, these households still have a long-term perspective, which justifies the risk associated with equities. After the age of 75, there is therefore a dramatic fall in equity holding. The holding of national government bonds rises in line with age. These bonds are most popular among investors aged between 65 and 74. Here, too, there is a decline in the oldest age group (75 and over). Own businesses and private equity are found primarily among households aged from 35 to 44, probably the age when entrepreneurship is relatively greatest and the resources may be available for such investments. From the age of 45, investment in this asset component is already declining. The holding of other riskier securities also rises slightly with age, and again falls sharply from the age of 75.

Households were asked which was the biggest, second biggest and third biggest component of their assets two years before the interview, i.e. around the start of the financial turbulence. For 54 % of participating households, the biggest asset component was real estate (including their own home) or real estate funds. Of course, this is due to the large number of owner-occupiers in Belgium. For 24 % of the households, assets consisted mainly of amounts held on accounts with financial institutions, and 9 % of households could not indicate any particular component as the biggest. These two categories, and primarily the last one, probably consist mainly of the less well-off households. Households for which other real possessions are the biggest asset category (3 % of

CHART 4 BIGGEST ASSET COMPONENTS OF HOUSEHOLDS IN THE SURVEY
(in % of all participating households)



Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

participants) probably have relatively small assets. For 4 % of households, assets consist mainly of equities and equity funds; they probably belong to the wealthier population group. Small groups of households (in each case around 1 % of all participants) hold their assets mainly in the form of either their own business or private equity, or national government bonds, or other riskier securities. The last 3 % of households interviewed did not answer the question. While 9 % of households could not indicate any specific largest component, that figure increased to 29 % and 56 % for the second and third largest component. Real estate is seldom the second biggest (7 %) or third biggest (1 %) component. Conversely, equities and equity funds (10 % and 7 %), and other real possessions (10 % and 14 %), are more important as the second and third biggest component.

A look at the combinations of biggest and second biggest asset components offers a bit more insight into the overall structure of household assets. The largest group of households (33.7 % of those answering the question) holds assets primarily in the form of real estate and real estate funds, and secondly on accounts with financial institutions. There are relatively few single persons with no family in this group. Conversely, they are over-represented in the second group covering 12.2 % of all responding households, which have assets consisting primarily of accounts with financial institutions and are unable to indicate any specific second biggest component. Single persons with or without a family are also over-represented in the group of households unable to indicate any specific biggest asset component, still less any specific second biggest component. This group totals 9.9 % of households. As expected, there are relatively many single persons among the households which are presumably less well-off. For 8 % of respondents, the major part of their assets consists of real estate and real estate funds, supplemented in second place by equities and equity funds. Among these probably wealthier households we find mainly couples, with or without other household members. A fifth group of households (7.3 % of participants) holds assets mainly in the form of real estate and other real possessions. Here we find relatively more families with dependants, both couples and single persons. They have a relatively greater need for vehicles, which form the main component of their other real possessions. All other possible combinations of biggest and second biggest asset components represent less than 5 % of households in each case. Altogether, they account for 28.9 % of the responding households. More than two-thirds of households therefore belong to one of the five categories mentioned above.

An earlier section described the risk behaviour of households. The attitude towards risk has an impact on the composition of the households' asset portfolio. It is not surprising that households which are willing to run some

TABLE 3 COMMONEST COMBINATIONS OF BIGGEST AND SECOND BIGGEST ASSET COMPONENTS

(in % of households concerned who answered the question)

	All households	Single persons		Couples	
		with no dependants	with dependants	with no dependants	with dependants
Real estate / Bank accounts	33.7	24.4	33.7	40.5	37.5
Bank accounts / No other specific	12.2	18.6	11.0	8.4	9.6
No specific / No other specific	9.9	14.0	15.6	5.0	6.2
Real estate / Equities	8.0	5.8	4.4	11.0	10.2
Real estate / Other real assets	7.3	4.3	9.0	5.2	11.4
Other combinations	28.9	33.0	26.3	30.0	25.1

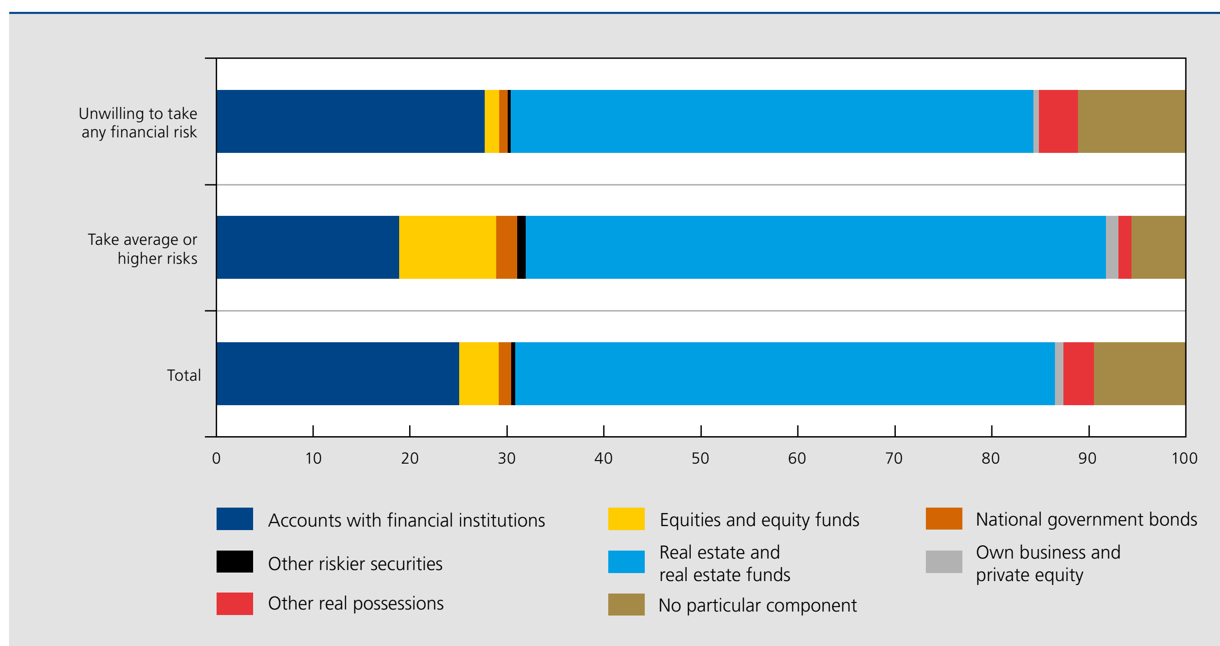
Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

risk when taking financial decisions invest more in equities and equity funds. For 10 % of those households, this is the principal form of assets, while that applies to only 1.5 % of households unwilling to take any risks. The latter hold more assets in the form of accounts with financial institutions. For 27.7 % of them, this is the principal component, compared to 18.9 % of households which do not avoid all risks.

The answer to the question about the biggest asset component can be broken down by age group of the reference person of the household. We find that more than one-third (36.2 % of respondents) of the youngest households (under 25 years) hold assets mainly in the form of accounts with financial institutions. Another 14.5 % of these young households primarily hold other real assets. The significance of these asset forms declines with age. Households of

CHART 5 BIGGEST ASSET COMPONENTS OF HOUSEHOLDS, BROKEN DOWN BY RISK WILLINGNESS

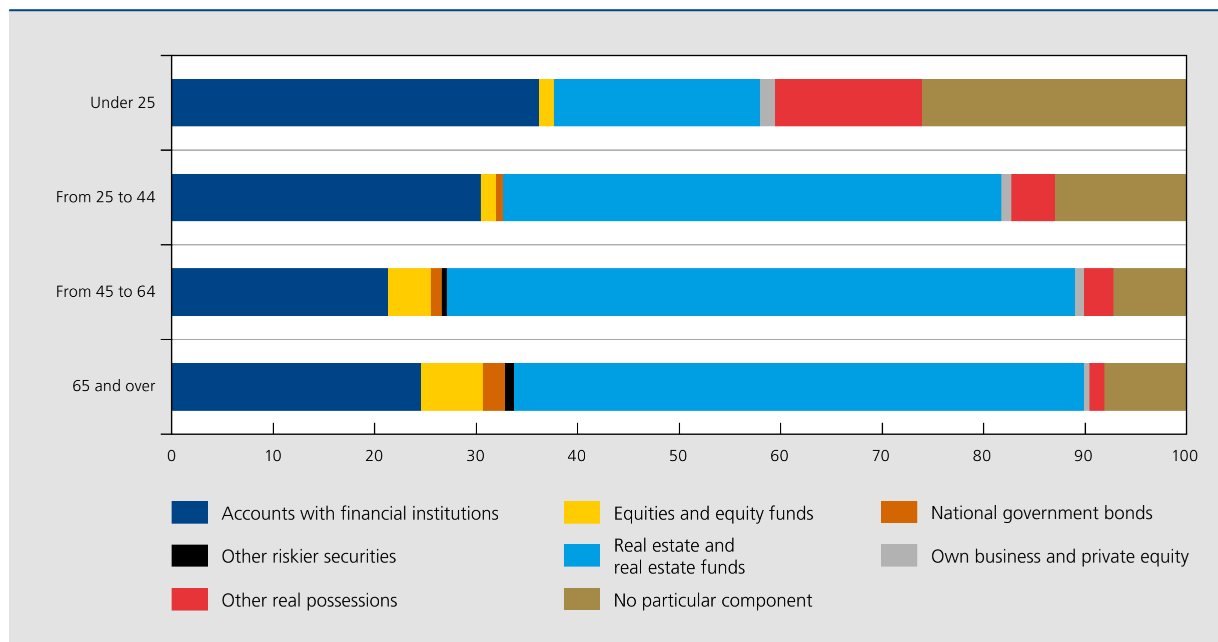
(in % of the households concerned which answered the question)



Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

CHART 6 BIGGEST ASSET COMPONENTS OF HOUSEHOLDS, BROKEN DOWN BY AGE GROUP

(in % of participating households answering the question)



Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

working age (reference person) put more of their assets in real estate, and to a slightly greater extent also in equities and bonds or funds with these underlying assets. These households have income sources and a long-term perspective, and are building up their assets. For the oldest age group (65 or over), the importance of real estate declines and the share of accounts with financial institutions increases. These households have a less long-term perspective.

Leaving aside households which do not answer the question and households which indicate other real possessions or no specific asset component as the biggest, the breakdown of the biggest components can be compared with the share of these asset forms in the aggregate figures from the financial accounts and the estimates of real estate wealth. These macroeconomic figures relate to 30 June 2008, since the question concerns the position two years before the interview, and the interviews were conducted in the second and third quarter of 2010. For example, for 64 % of the households concerned, assets consist primarily of real estate and real estate funds, and real estate and real estate funds accounted for 58 % of the total assets of Belgian households as at 30 June 2008 (€ 1 680 billion). For another 29 % of the households taking part in the survey, the biggest asset component consists of accounts with financial institutions. On 30 June 2008, such accounts represented 28 % of the total assets of households. A similar correlation was also found for the other asset groups. Although these two yardsticks are obviously not directly comparable, this finding nevertheless indicates that at first sight there is no discrepancy between the financial accounts and the (partial and provisional) data from the household survey. The microeconomic survey data therefore provide a meaningful addition to the macroeconomic financial accounts.

3. Changes in household assets

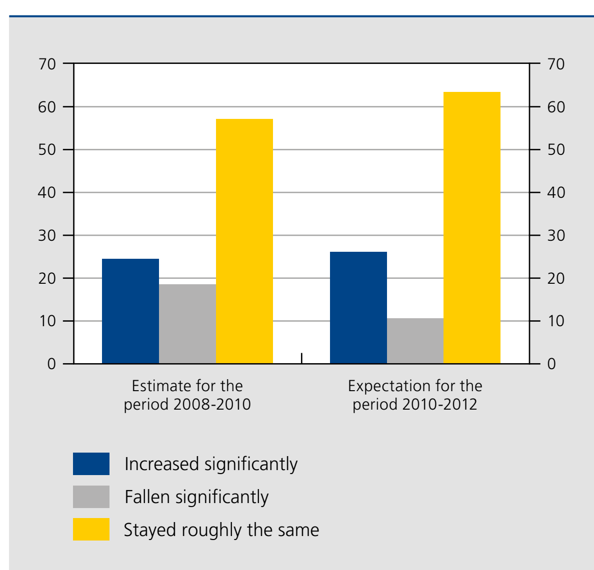
Following the analysis of the structure of household assets and the determinants of variations between households, this section discusses changes in those assets. Those changes will be illustrated by the survey results. Although the survey has only been conducted once, so that no comparisons can be made with other waves, it does contain information that is relevant here. During the interviews conducted from April to September 2010, households were asked how they thought their assets had changed in the two years preceding the interview. For simplicity, we shall call this the period 2008-2010. Here we see the possible impact of the financial crisis. In addition, households were also asked about their expectations for the two years following the interview, and their planned financial behaviour. For simplicity, we call this the period 2010-2012. Here we see possible changes in behaviour due to the financial crisis.

3.1 Overall changes in household wealth

One of the *ad-hoc* questions put to households in order to analyse the impact of the financial crisis was : "*Looking at the net value of the household's possessions, namely everything that the household owns less the money which the household owes, has that net value risen significantly, fallen significantly or stayed roughly the same in comparison with two years ago ?*". The answer to this question gives an idea of how households view the impact of the financial crisis on their overall wealth.

The survey results reveal that the net wealth of around 57 % of the participating households remained roughly the same between 2008 and 2010. Nevertheless, for a significant number of households, the asset picture was different. A quarter of respondent households stated that their wealth had risen significantly during that period. Conversely, 18 % of households saw a significant decline in their wealth. Although this figure cannot be compared with results for another period, the percentage seems relatively large. In fact, it is not much smaller than the percentage with a strong increase in their wealth, for a variable which (in normal circumstances) exhibits a clear upward trend. It is evident from the estimates for the period 2010-2012 that only around a tenth of households expect a significant decline in their net wealth, whereas more than a quarter of households assume that their wealth will increase significantly. In all, it is evident that aggregate macroeconomic time series concerning movements in wealth may mask considerable variations between individual households.

CHART 7 **CHANGE IN THE NET WEALTH OF HOUSEHOLDS**
(in % of all participating households answering the question)



Source : NBB, Survey of the financial behaviour of households (2010), provisional data.

First, let us look at how households estimated the change in their assets during the period 2008-2010, and more specifically, how the change in their total net worth varies according to the principal component of those assets. Whereas, out of the 2 248 households which answered the question, 57 % said that their net worth remained roughly the same, it is to be expected that the figure was higher (62.9 %) for households which hold the bulk of their assets in the form of accounts with financial institutions. The value of those assets does not generally fluctuate very much. It is also normal that, in the case of households which invest most of their assets in their own business or private equity or in other risky securities, there were fewer than average reporting that those assets have remained roughly the same. Such assets display more idiosyncratic and volatile movements. The categories of households which are probably less well-off, with assets held mainly in other real possessions or with no specific biggest component, feel that they became poorer to an above-average extent during the crisis. Such a lack of financial reserves could be a socio-economic policy issue. However, the most striking thing is that almost one-third (31.2 %) of households which hold their assets mainly in the form of equities and equity funds saw their wealth decline significantly between 2008 and 2010. That is, of course, connected with the movement in share prices during that period.

It appears that these households, with the biggest percentage of their assets in equities or equity funds, are again more optimistic about the situation following the interview (2010-2012). Their expectations regarding the movement in their net worth does not really differ from the average for all households taken together : roughly two-thirds expect their net worth to remain broadly the same, around a quarter expect a significant rise, and roughly 10 % predict a significant fall. Households with the bulk of their assets in their own business and private equity or in other risky securities appeared to become more optimistic at the time of the interview about the future changes in their assets : more than average numbers predicted a significant rise.

3.2 Transfers between household asset components

The household asset structure is influenced not only by the allocation of (additional) savings and the change in the value of the various assets, but also by any transfers which households make between and within the various

TABLE 4 CHANGE IN THE NET WORTH OF HOUSEHOLDS: ESTIMATE FOR THE PERIOD 2008-2010

(broken down according to the household's biggest asset component, in % of households concerned which answered the question)

	Risen significantly	Fallen significantly	Stayed roughly the same	*p.m.* *Number of households*
Accounts with financial institutions	18.1	19.0	62.9	*564*
Equities and equity funds	15.1	31.2	53.8	*93*
National government bonds	24.1	24.1	51.7	*29*
Other riskier securities	27.3	27.3	45.5	*11*
Real estate and real estate funds	29.9	14.7	55.4	*1 264*
Own business and private equity	36.8	31.6	31.6	*19*
Other real possessions	20.6	24.7	54.8	*73*
No specific component	14.4	27.2	58.5	*195*
Total	**24.6**	**18.2**	**57.2**	***2 248***

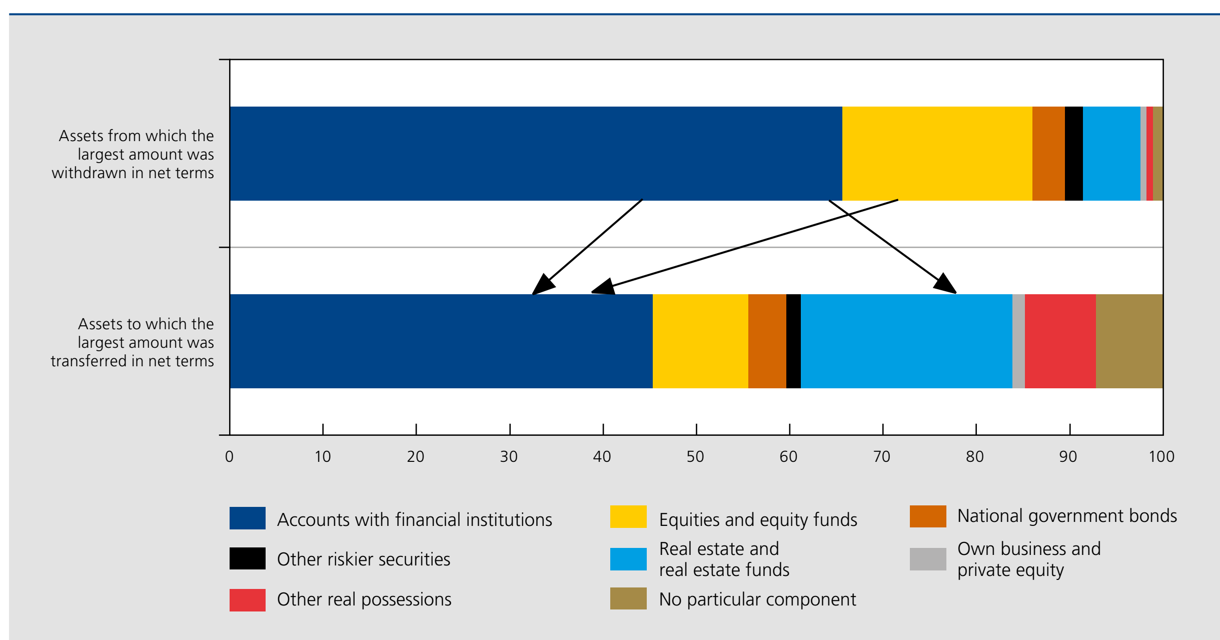
Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

components of their assets. Such transfers are determined partly by estimates of the expected return on those assets and by the risk assessment.

The survey of financial behaviour examines asset transfers on the basis of a number of *ad-hoc* questions. For instance, during the interview households were asked: "*Has anyone in the household made a net transfer of money from one asset component to another in the past two years?*". Of the 2 171 households which have savings and which answered this question, 78.7 % answered no and 21.3 % answered yes. If the reference person of

CHART 8 TRANSFERS BETWEEN HOUSEHOLD ASSET COMPONENTS

(in % of households concerned which answered the question)



Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

the household has a job, the proportion making a transfer between assets increases to just over a quarter. Such transfers may indicate active asset management, which is more commonly associated with people who are willing to take a risk when making financial decisions. Indeed, we find that households which are willing to take an average or higher risk have made relatively more asset transfers, namely 30.2 % of those households, compared to just 17.4 % of participating households which are unwilling to take any financial risks. For this last category of households, the motive was probably a switch to greater security (see below).

If we examine the asset components from which households have made withdrawals, then the survey shows that, for most households, this concerns accounts with financial institutions. The role of these accounts as a 'waiting room' pending the acquisition of other assets is a factor here, but probably so is the uncertainty over these accounts that prevailed at certain points during the financial crisis. In addition, a significant proportion of households made their largest withdrawals from their equities and equity funds. They were clearly taking flight from risky assets.

When households were asked about the asset component to which they had transferred the largest amount, it emerged that this mainly concerned less risky assets, primarily accounts with financial institutions and secondly real estate and real estate funds. The commonest transfers took place between accounts with financial institutions, from such accounts into real estate and real estate funds, and from equities and equity funds into accounts with financial institutions.

That is evident from the cross table showing the asset components from which resources were withdrawn and the components to which resources were added. The table shows that over a quarter of respondent households (27.2 % of households which made a transfer) withdrew the largest amount from accounts with financial institutions and transferred it to other accounts with financial institutions. Among these households we find a relatively large number that are averse to financial risk. This illustrates the crisis of confidence and the uncertainty over the security of such accounts, particularly with some banks which appeared in a bad light. The stronger competition between banks and the rise of new, small players on this market may also have been a factor. Moreover, a number of households evidently spread their savings among banks to a greater extent than before. The maximum limit on savings protected by the deposit guarantee scheme probably had an impact here.

Many households (13.4 % of those answering this question, with households which are willing to take average or above-average risks being over-represented) switched out of equities and equity funds and transferred the corresponding resources to accounts with financial institutions. This clearly illustrates the flight to greater security during the financial crisis.

However, even more households (21 % of respondents) transferred resources from accounts with financial institutions into real estate or real estate funds. The extent of this movement was similar in relative terms for both risk-averse households and those willing to take average or above-average risks. One factor, of course, is the role of bank accounts as a 'waiting room' pending investment

TABLE 5 TRANSFERS BETWEEN HOUSEHOLD ASSET COMPONENTS
(in % of households concerned which answered the question)

In / Out	Accounts with financial institutions	Equities and equity funds	National government bonds	Other riskier securities	Real estate and real estate funds	Own business and private equity	Other real possessions
Accounts with financial institutions	27.2	13.4	2.7	1.0	3.0	0.2	0.2
Equities and equity funds	8.2	1.7	0.0	0.2	1.2	0.0	0.0
National government bonds	3.0	1.0	0.0	0.2	0.2	0.0	0.0
Other riskier securities	0.5	0.7	0.0	0.5	0.0	0.0	0.0
Real estate and real estate funds	21.0	3.0	0.2	0.0	0.5	0.2	0.0
Own business and private equity	1.0	0.0	0.0	0.0	0.2	0.2	0.0
Other real possessions	6.4	1.0	0.5	0.0	0.2	0.0	0.0

Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

in other assets, including real estate. On the other hand, the large number of households also indicates that real estate was seen as one of the last safe havens, including in relation to bank accounts.

There was therefore a two-fold flight to greater security: from equities into bank accounts and from bank accounts into real estate.

Most other movements between different asset components are far less frequent. Among these atypical movements there are two which still occur to some extent. Some households (8.2 % of respondents) mainly transferred resources from accounts with financial institutions to equities and equity funds; for those prepared to take risks, that is a rational decision when share prices are low. Other households (6.4 %) mainly tapped their bank accounts to buy other real assets. This category primarily concerns vehicles, for which very attractive terms were available at certain points. In addition, some people may use other real assets such as gold, jewellery and art as a safe haven.

To examine whether the financial crisis influences the future investment behaviour of households, the survey includes some *ad-hoc* questions. One question is: "*In the case of the asset components which the household owned two years ago, are there components in which you would not invest any more under the current circumstances?*". Of the 2 295 households which have savings and which answered this question, 87 % said no and 13 % said yes. Here, it was mainly households in which the reference person is retired that answered this question in the affirmative (15 %). Once again, we find that households which are willing to take average or above-average risks and which are more active in managing their assets are relatively more likely to want to avoid certain asset components, namely 20.6 % of those households compared to only 9.8 % of households which are not willing to take any financial risk. For this last category of households in the sample, a general mistrust of all forms of investment is probably a factor.

When the households which had answered that they would no longer make certain investments in future (13 %) were asked which asset components they would no longer invest in at all (for which purpose they could indicate more than one component simultaneously), 70.8 % of these households (i.e. 9.2 % of all households) answered that they would avoid equities and equity funds. Some (12 % of 13 % = 1.6 %) of households would avoid accounts with financial institutions.

Households willing to take a financial risk and wishing to avoid certain assets seemed to be wary of equities and

TABLE 6 ASSET COMPONENTS IN WHICH HOUSEHOLDS DID NOT WISH TO INVEST ANY ADDITIONAL AMOUNTS

(in % of the 13 % of households wishing to avoid certain assets, multiple components possible per household)

	All households	Households not willing to take any risk	Households willing to take risks
Accounts with financial institutions	12.0	13.9	10.0
Equities and equity funds	70.8	70.9	70.7
National government bonds	7.2	7.3	7.1
Other riskier securities	10.7	12.6	8.6
Real estate and real estate funds	6.2	7.3	5.0
Own business and private equity	1.0	2.0	0.0
Other real possessions	3.1	4.6	1.4

Source: NBB, Survey of the financial behaviour of households (2010), provisional data.

bonds to the same extent as households which are totally risk averse. The other asset components are avoided to a relatively greater extent by households which are not willing to take any risk.

Overall, it is noticeable that very few households withdrew assets from real estate during the crisis, and that few households want to avoid real estate as an investment vehicle in the future. Although real estate is, of course, generally an asset which does not change hands so readily or so frequently, this shows that Belgian households still regard bricks and mortar as a safe haven and an attractive investment.

To what extent are the changes that the financial crisis caused in the investment behaviour of some households visible in the macroeconomic statistics on the aggregate wealth of Belgian households? The total value of the outstanding assets increased from € 1 680 billion on 30 June 2008 to almost € 1 900 billion on 30 September 2011. In that period, the asset value therefore rose by 13 %. Despite the shifts described above within the assets of individual households, there was little change in the structure of the total assets of households according to the financial accounts and macroeconomic estimates. The share of real estate in the total assets of Belgian households increased from 58 % to 59 %, whereas that of equities and equity funds declined from 4 % to 2 %. The microeconomic analysis in this article shows that there

were also substantial shifts within some groups of asset components, particularly accounts with financial institutions. Those transactions are not reflected in the macroeconomic statistics. In all, the financial crisis did alter the investment behaviour of part of the population, at least temporarily. If that change of behaviour were to continue, then – slowly but surely – the structure of household assets could change.

Conclusion

This article presented a microeconomic analysis of asset formation by households and the impact which the financial crisis has had on that. Here, data from a survey of households' financial behaviour were used for the first time. The partial, provisional results of that survey constitute plausible findings. An – albeit limited – comparison with the aggregate figures from the financial accounts and macroeconomic estimates does not reveal any discrepancy. The survey data are a useful addition to the existing macroeconomic information, both statistically and from the point of view of economics and policy. They shed light on the breakdown of assets and liabilities between households, and they permit examination of the determinants of that breakdown and of the financial behaviour of households.

The willingness of households to take risks has an impact on their financial decisions. The survey offers direct information on households' attitudes to financial risk, and the impact of that on their financial behaviour. The household's demographic and socio-economic characteristics are also a factor. Thus, the survey tells us something about the age at which households invest in the various asset components and the impact on that of such factors as the household's composition and the labour market position of its members.

The overall picture of the asset position of households provided by the financial accounts and the macroeconomic estimates masks wide variations between individual households and groups of households. This may have major economic implications and be relevant for both social and financial/economic policy.

The known macroeconomic picture that households invested relatively more in assets regarded as safer during the crisis can be refined on the basis of the survey data. During the crisis, many households deserted equities in favour of bank accounts, and bank accounts in favour of real estate. On the other hand, there were some households which actually invested more in equities during this period. Many households also made transfers between various bank accounts, and some households avoided particular assets. Risk willingness and other household characteristics play a role in these movements.

Some specific portfolio choices which households have made since the beginning of the financial crisis can be indicated as follows. First, there were noticeably large numbers of transfers between accounts with financial institutions. Positions in equities and equity funds were reduced in many cases, whereas there were still some households wanting to invest more in these assets. Therefore, not all Belgian investors were averse to (calculated) financial risks. Finally, real estate continues to play a clear role as a safe haven. Many households withdrew cash from bank accounts in order to invest in real estate, and it seems that few households intend to retreat from it.