

Financial Capability of Austrian Households

Pirmin Fessler,
Martin Schürz,
Karin Wagner,
Beat Weber

Based on a survey by the Oesterreichische Nationalbank (OeNB) in 2004, this paper aims to assess Austrian households' financial capability with respect to managing money, planning ahead financially, making financial choices and staying informed.

People's attitudes about money often depend on their education, income and age. A higher level of education, income and age tends to go hand in hand with a more positive financial attitude. The OeNB's survey, however, revealed that, in the case of Austria, there is generally no relationship between a household's financial behavior and the education level of its members. Moreover, half of the respondents seldom shop around for financial services and are thus not knowledgeable enough to make informed financial decisions.

JEL classification: D14, D18, D80, E21, G11, G14, G28

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1 Introduction

As financial provisions for old age are increasingly being turned into each and everyone's individual responsibility, consumers are faced with the challenge of choosing suitable saving instruments from an ever-growing range of investment possibilities. With the growing need for individuals to play a more active role in the market for financial services, financial capability as a broad life skill is increasingly considered important. In this context, the following questions arise: Are Austrian households in the position to make adequate old-age provisions and to accumulate savings? Do Austrians have sufficient knowledge about the risks involved in investment? Do they adequately react to changing conditions?

This paper aims to provide answers to these questions by presenting empirical data on the Austrian population's financial capability based on a 2004 survey by the Oesterreichische Nationalbank.¹

First, we provide a brief overview of the terms used in international

financial education discourse in section 2, while section 3 will present the financial capability concept of the British Financial Services Authority (FSA). Section 4 contains an evaluation of the Austrian survey results based on the subcategories of financial capability identified by the FSA (managing money, planning ahead, making choices/choosing products and getting help/staying informed). Section 5 provides the results of a cluster analysis conducted to cross-check the results and section 6 concludes.

2 Financial Education

In the 1990s a number of private and public organizations in the U.S.A. launched initiatives to improve the financial literacy of specific population groups (Vitt et al., 2005).

The U.K. has likewise been active in promoting financial education for some time now (England and Chatterjee, 2005). On an international scale, the OECD embraced this topic and drew up related recommendations in 2004, which were endorsed

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Institut für
Finanzdienstleistungen,
Hamburg.

¹ An analysis of the survey results on Austrian households' financial wealth is presented in Beer et al. (2006).

by the OECD Council in 2005 (OECD, 2005). The G8 nations expressed their support for the OECD's financial education activities in 2006 and organized conferences on related topics (G8, 2006). In 2007, the European Commission initiated a study on financial literacy schemes within the EU (European Commission, 2007).

To date, financial education discourse has lacked an appropriate theoretical framework (for an overview see Schürz and Weber, 2005). Different organizations have very different ideas about the concept of financial education, as is reflected in the terminological variety in related discourse. The most common terms used are *financial awareness* (Mason and Wilson, 2000), *financial literacy* (G8, 2006), *financial education* (OECD, 2005), *financial capability* (Atkinson et al., 2006) and *financial citizenship* (Citizenship Foundation, 2002):

This conceptual and terminological variety points to the fact that institutions involved in financial education have different objectives, as is reflected in their education programs. According to the Hamburg-based Institute for Financial Services (iff), there are five basic approaches toward enhancing financial education (Institut für Finanzdienstleistungen, 2007):

- 1 Providing professional training: Teaching course participants to think and act like financial service providers.
- 2 Providing money saving and debt prevention advice: Encouraging consumers to save and helping consumers to avoid falling into debt.
- 3 Developing basic economic literacy: Promoting a general understanding of fundamental economic terms and processes.

4 Explaining products: Familiarizing bank customers with the product range of financial service providers.

5 Empowering consumers to use financial services productively.

The policy debate on national and international financial education initiatives (G8, 2006; OECD, 2005; U.S. National Strategy, 2006) primarily focuses on the need to change consumer behavior to remedy problems such as overindebtedness, financial exclusion (i.e. no access to financial services) and insufficient old-age provisions. From this perspective, financial education is thus mainly understood to include measures to promote saving, discourage excessive borrowing and enhance product knowledge. The extent to which financial education can contribute to tackling the said problems is, however, subject to debate (Schürz and Weber, 2005).

By comparison, the debate among education professionals and researchers is characterized by a more strongly customer-oriented perspective, in particular in the German-speaking world. Financial educators' vision is to raise individuals' capability to make productive use of financial services. According to this concept, financial decisions are embedded in the economy of everyday life. Therefore, they have to be seen and made in the context of individual situations and objectives (Piorkowsky, 2003; Reifner, 2003; Schlegel-Matthies, 2002).

3 The Concept behind "Financial Capability"

"Building Financial Capability in the U.K.," the campaign led by the U.K.'s Financial Services Authority (FSA) aimed at improving the nation's knowledge and understanding of personal finance, is the most compre-

hensive financial education project launched in Europe so far. The aim of the FSA, which developed the concept of “financial capability,” is to fundamentally change consumer behavior. Financial capability is a broader term than “financial literacy,” which dominates discourse in the U.S.A. While “financial literacy” emphasizes knowledge, understanding and awareness, “financial capability” stresses the relevance of consumer behavior, decision-making and practical abilities as well as the importance of outside help to achieve sustainable change in financial behavior.

In its empirical evaluations of financial capability, the FSA focuses on respondents’ attitudes (toward risks, the future, specific financial operations, etc.) and their behavior (financial habits) rather than on knowledge (e.g. understanding economic relationships, knowing about the characteristics of financial products, etc.).

In a representative survey of the British population based on elaborate preliminary studies and discussions in focus groups, the FSA, established a baseline measure of financial capability – in terms of how well people manage money; plan ahead; choose financial products; and stay informed about financial matters (FSA, 2006):

3.1 Managing Money

The two basic components of managing money, as defined by the FSA, are making ends meet and keeping track of one’s finances. In assessing these abilities, the FSA examined e.g. in how far respondents prepare for upcoming expenditure and how actively they are involved in financial household decisions. Moreover, it analyzed respondents’ general attitudes about money (spending and saving).

3.2 Planning Ahead

Financially capable consumers will anticipate future needs and act accordingly. To gain insights into this component of financial capability, the FSA’s survey explored the frequency and impact of unexpected financial setbacks or expenses people have experienced and how well they prepare for anticipated major purchases. Moreover, the questionnaire was designed to reveal the degree of additional retirement provision and people’s propensity to plan ahead in general.

3.3 Making Choices/Choosing Products

Taking adequate steps to choose financial products that meet one’s needs is another basic component of financial capability. This includes taking the initiative to shop around, an understanding of risk and product detail as well as the propensity to consider switching service providers. The section of the questionnaire devoted to establishing the corresponding capability levels collected information on financial products currently held by respondents, their experiences with mortgage payments as well as their ability to recall details about their life insurance or other insurance products, personal savings, credit cards and loans.

3.4 Getting Help/Staying Informed

Finally, financial capability is also about people’s knowledge of financial matters and their ability to keep abreast of financial developments.

Questions asked in this context in the FSA’s baseline survey related to respondents’ subjective assessment of how important it is to stay informed; the number of sources they check and how often they do so; or what kind of

fraud incidents, problems and disputes with financial service providers they have experienced. Other questions were designed to document respondents' basic financial skills (ability to read bank statements and to understand percentage calculations; an understanding of the impact of inflation on savings; the ability to anticipate future returns based on charts; basic mathematical operations); knowledge about specific financial products; respondents' own assessment of how informed they are.

The 2005 FSA survey, which involved 5,328 respondents, showed financial capability deficits in the following areas (Atkinson et al., 2006):

- The extent to which respondents make provisions for the future/plan ahead is generally limited.
- For a small population group, overindebtedness is a major problem.
- Product choices are generally rather unreflected and risk awareness is low.
- Respondents below the age of 40 generally have a lower level of financial capability than older respondents.

4 OeNB Survey on Financial Capability in Austria

In 2004, the OeNB commissioned a survey of Austrian households' financial wealth. (For a presentation and analysis of the survey results on households' financial assets and asset structure see Beer et al., 2006; for an analysis of household debt in Austria see Beer and Schürz, 2007; for information on the distribution of financial wealth in Austria see Mooslechner

et al., 2007). This survey also contained a series of questions on respondents' outlook on financial issues and related behavior. The content of these questions basically reflected the FSA's financial capability concept.

The data derived from the OeNB's survey for the first time provided detailed information on the Austrian population's financial capability, with the added benefit that these data are fit for international comparison.

The descriptive presentation of these results which follows analyzes links between certain behavioral patterns and socioeconomic characteristics like age, education, income and professional background.² This analysis is designed to produce insights on possible causes for problematic financial behavior, from which policy conclusions may be drawn.

4.1 Managing Money

To test Austrians' money management behavior, the OeNB's survey assessed respondents' knowledge about their finances, their payment behavior and their account management and saving behavior.

More than 90% of respondents stated that they were meticulously keeping track of their finances. As can be seen from chart 1, the propensity to keep track of one's finances slightly increases with age whereas there is hardly any correlation with income and education.

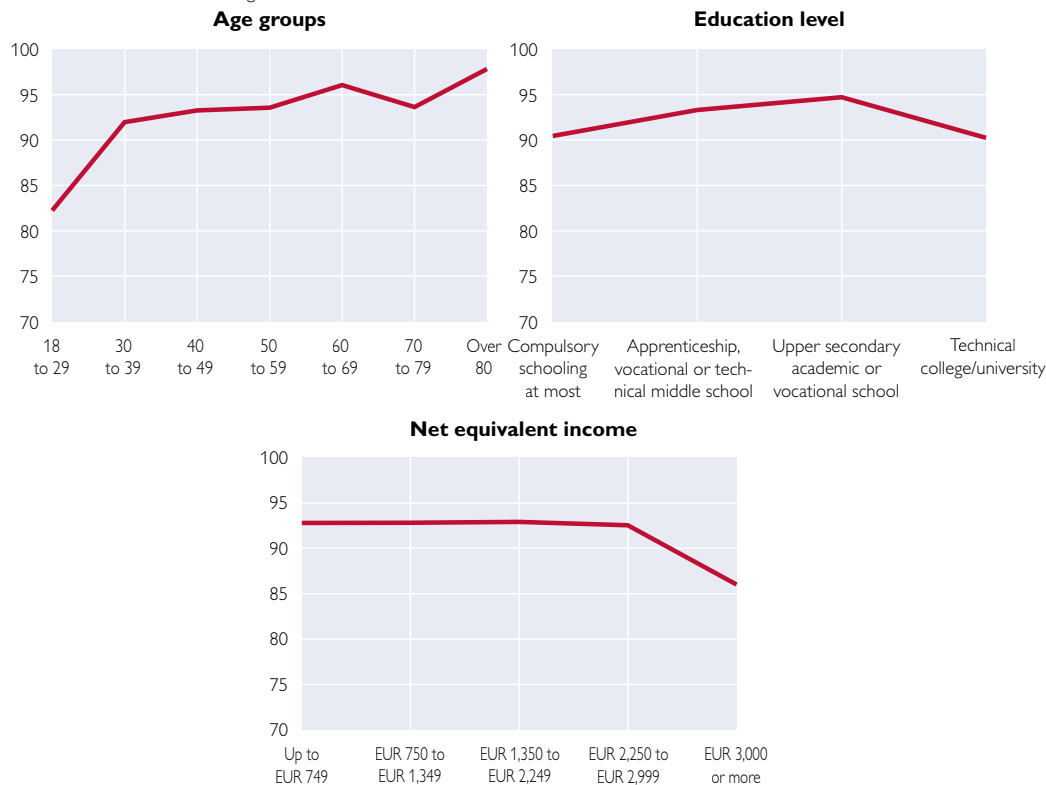
45% of households keep records of their finances, a habit which is more frequent in higher age classes. Also in this respect, income and education play only a subordinate role. More than 66% of the respondents

² In our calculations we have aggregated the response categories which apply to most of the questions ("completely applicable," "applicable," "and not very applicable," "completely inapplicable"). The analysis of income is based on net equivalent income. Details on the survey are presented in the annex.

Chart 1

I have a good overview of my finances

Share of household heads that agree with this statement in %



Source: OeNB 2004 survey on households' financial wealth.

said that they always read all the information materials sent to them by their bank; the frequency of this behavior increases steadily with age/ slightly with income (but only up to the medium income group; members of the highest income group have less of a tendency to display this behavior). The reason why wealthier respondents more often ignore such information may be that they are able to resort to alternatives, like private financial consulting, or that the opportunity costs tied up with reading all information materials provided by banks are simply too high. In other words, one might say that higher income groups can “afford” to lack knowledge.

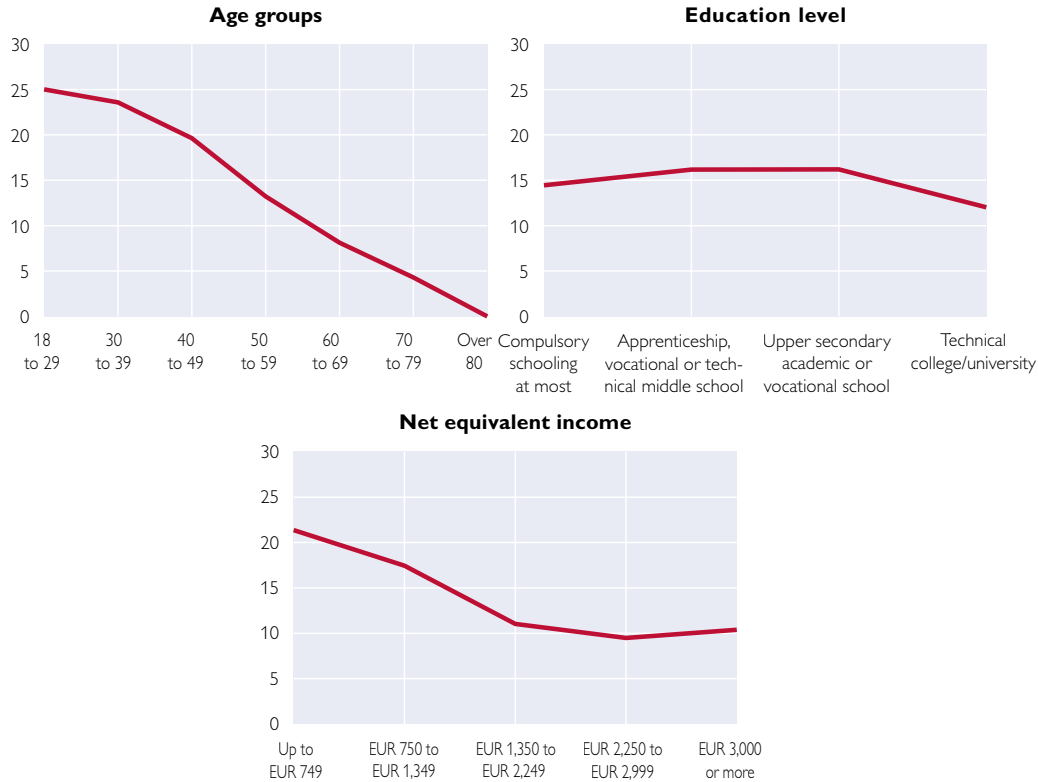
About 80% of respondents claim to usually pay bills immediately, which shows that Austrians' payment behavior in general is remarkable. It moreover improves with age and slightly increases with income, but only to a certain degree: In the highest income class, payment behavior is actually the poorest. The survey did not establish any relationship between payment behavior and education.

In terms of interest, overdrawing one's account is a suboptimal form of credit (depending on the duration of the overdraft), which is why overdrafts can be interpreted as indicative of problematic financial behavior. Chart 2 presents the related survey results. Of all respondents, 15% tend

Chart 2

I tend to overdraw my account

Share of household heads that agree with this statement in %



Source: OeNB 2004 survey on households' financial wealth.

to overdraw their accounts. Members of higher income and age groups are less likely to display this tendency. With respect to different levels of education, only small fluctuations are observable regarding overdrafts.

Around 43% of Austrians put savings aside on a regular basis, a share which increases with both income and education. Older respondents save on a more regular basis than their younger counterparts. 9% of the respondents make deposits under a savings plan, 19% put aside whatever income is left at the end of the month and 25% save at irregular intervals. Significant shares of households which are unable to set aside funds are only found in the low income group (net

equivalent income under EUR 749) and in the group of under 30-year-olds (12%). Also the group of respondents with the lowest level of education includes households unable to save (10%). In all other groups, the share of these households ranges at the one-digit level and almost invariably below 5%.

15% of the respondents stated that, if they wished to buy something, they preferred taking out a loan to saving up money over an extended period of time. This attitude is most common in the age group of 50- to 59-year-olds (22%) and among members of the two highest income groups. Its frequency is broadly similar across the various education levels.

Summary

By and large, respondents indicated that they handle their finances very carefully, though this tendency decreases in higher income classes.

How meticulously respondents keep track of their finances seems to primarily depend on age and hardly on education or income.

Whether respondents pay their bills on time or not, however, is not only a question of age but also of affordability. The share of respondents who take their time paying bills increases in parallel with education level, maybe because better educated persons consider themselves to be in a strong negotiation position or actively seek to optimize their finances.

Spending in excess of personal budgets is more frequent among members of groups with a lower level of income or education. This seems to be attributable to these groups' financial limitations rather than to irresponsible spending (for an analysis of the situation in the U.S.A see Schürz, 2006). An attitude toward debt which might be described as careless is more likely to be found among older and wealthier respondents; those respondents most inclined to overdraw their accounts can be found in "middle-aged" households of various income levels. This result might be explained through the life cycle hypothesis: Households can smooth their consumption over time, i.e. take out loans they plan to pay back later on the assumption of rising incomes.

4.2 Planning Ahead

The OeNB's survey was also designed to reveal in how far Austrian households plan ahead. The share of households stating that they were putting

money aside "for a rainy day" turned out to be roughly 85%. The tendency to save is more frequent among members of groups with higher age and income, and again is found to be weakly correlated with education. The group with the highest income and that with the lowest level of education, however, do not follow this pattern; in these two groups the tendency to save is low by comparison.

Of all the households covered by the survey, 82% consider individual saving for retirement important. It comes as no great surprise that the importance attributed to private pension savings declines with increasing age. More striking is the empirical result that private retirement provision is considered more important among respondents with higher income and education level.

More than half of the respondents indicated that their financial portfolios include a private pension product either acquired by themselves or by someone else for them. As can be seen from chart 3, about two-thirds of the respondents aged 30 to 60 stated that they had private pension savings, while in other age groups this applies to less than half of the respondents. The tendency to make private retirement provisions is more common among higher income and higher education groups.

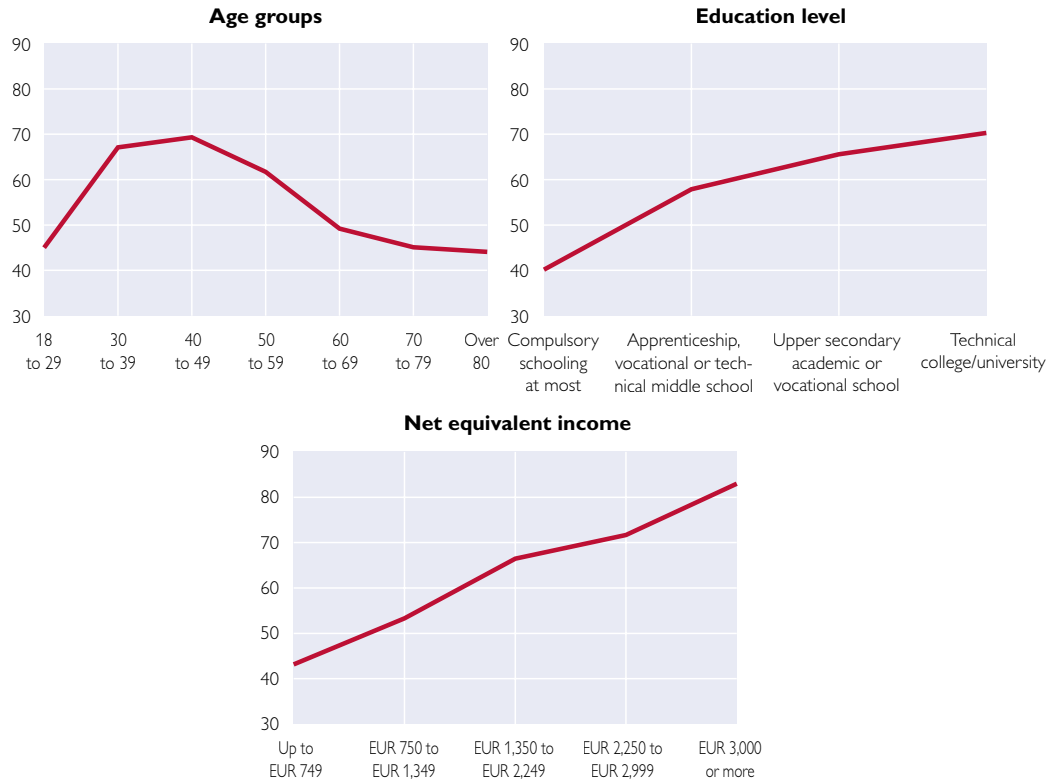
A breakdown by occupational background only shows a few significant differences in saving motivation. The share of old-age provision as a motivation for saving is more or less constant across all occupational groups. Especially employees and self-employed respondents consider it important to save "for a rainy day" and for the event of disease or unemployment.

Chart 3

I have made private provisions for old age

(or someone else has made them for me)

Share of household heads that agree with this statement in %



Source: OeNB 2004 survey on households' financial wealth.

Summary

Most households tend to save up money for emergencies. This tendency is correlated with income and age, but not with education. The majority of Austrians is convinced that private saving for retirement is a necessity. This conviction increases with income and education and, as can be expected, declines with growing age.

Austrian households' tendency to plan ahead has only recently manifested itself in measures directed at individual old-age provision, whose necessity is embraced as a "fact of life" only by the younger generations so far.

4.3 Making Choices/Choosing Products

The OeNB's survey collected information on households' decision-making behavior with respect to saving instruments chosen, risk orientation, factors which influence investment decisions and whether they shop around for financial products.

Almost all households covered by the survey save up money in one way or the other (97%). Of these, 85% have a passbook savings account, 71% a building loan contract, 27% a capital savings account, 16% a savings account and another 16% a premium-aided savings account.

About 54% of all households hold a life insurance policy, 11% bonds, 16% stocks, 11% mutual fund shares and 3% participating interests in enterprises (for details see Beer et al., 2006). There is a strong preference for traditional passbook savings accounts. About 90% of respondents prefer low-risk saving instruments, a preference which increases with age, is relatively constant across income groups and slightly declines in groups with a higher level of education. People with a high risk approach toward saving are a small minority and, in direct contradiction to theoretical literature, are more likely to be found in those groups with the lowest age, income and education level.

As only a small number of respondents own stocks, we did not evaluate this group's reasons for purchasing stocks. Respondents who do not own stocks, on the other hand, stated that they could not afford them (48%), because they thought risk was too high (43%), because they did not have enough information (19%), because they considered related costs/fees too high (8%), because their bank or friends had advised them against buying stocks (3%) or because they lacked interest (3%). This seems to indicate that many Austrians still see stocks as an investment instrument reserved to the wealthy. This perception is consistent with the overall finding of the survey that respondents are, as a rule, more likely to diversify their investments the higher their income. At the same time, low-risk saving instruments like passbook savings accounts and building loan contracts decline in importance vis-à-vis higher risk in-

vestments, although still being the most important savings instrument. While low-income respondents name non-affordability as the main reason for deciding against stock market investment, high-income respondents are more likely to be put off by the risk involved. However, also the lack of competent advice discourages members of the group with the highest income. In spite of an extended capital market media campaign in Austria, skepticism against stock market investment is still rather strong. About one-third (31%) of respondents who do not hold stocks consider it possible to acquire stocks in the future; for those aged below 50 this is true for approximately 40%, even. The likelihood of investing in stocks in the future rises with higher education and income, but remains below 50% in all income classes.

Chart 4 illustrates how actively Austrian households seek out financial information. Overall, 48% of respondents generally check out various banks' offers to find the best product. The tendency to shop around increases in parallel with education level, drops with increasing age and grows with income up to a medium level of income, then declines again in higher income groups. The correlation between the wish to keep track of one's finances and the habit of comparing offers before deciding on a financial product is very weak.³

Summary

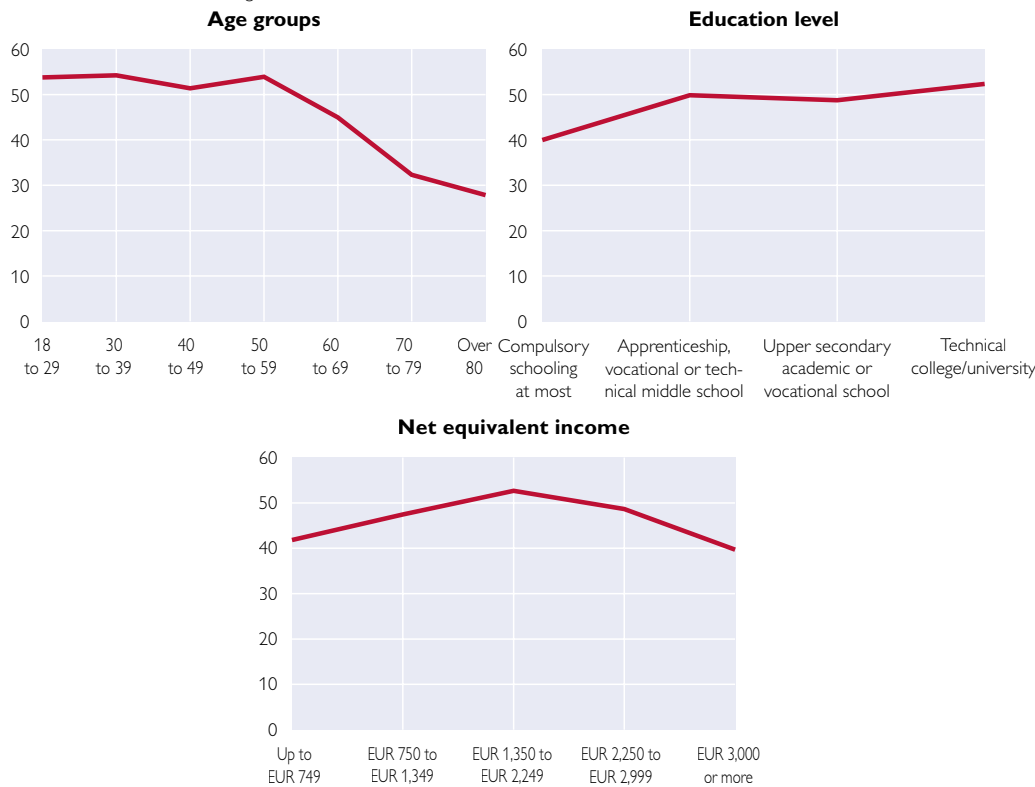
Almost all respondents put aside money in one way or the other. The most widespread saving instruments are passbook savings accounts, build-

³ Pearson correlation coefficient: 0.045; significance: 0.089. The weak correlation may be attributable to the fact that offers are only compared in the case of current financial decisions.

Chart 4

I always compare different banks' offers to find the best product

Share of household heads that agree with this statement in %



Source: OeNB 2004 survey on households' financial wealth.

ing loan contracts and life insurance policies. Only a small minority holds more risky assets.

Professional groups with stable incomes (civil servants) tend to have more strongly diversified portfolios, while respondents with more insecure income prospects (workers) do not invest in many different instruments.

Respondents who do not own stocks name various reasons for not investing in the stock market, most importantly non-affordability, high risk and lack of information. Generally, respondents rate the importance of financial advice through banks high, in particular when it concerns risky investments. Older people and

high income respondents tend to be more loyal vis-à-vis their banks than other respondents. Educated and medium income respondents are most likely to look into various offers, maybe because wealthier respondents are in a stronger negotiation position vis-à-vis financial service providers. Half of the respondents do not usually compare different providers of financial services.

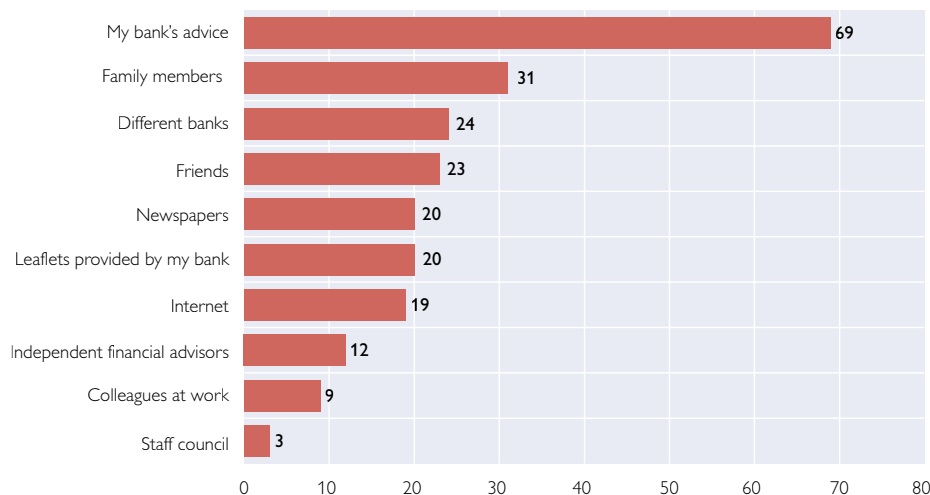
4.4 Getting Help/Staying Informed

This competence area was assessed through questions on the sources from which consumers seek information, on confidence issues and on respondents' information wishes and needs.

Chart 5

Which sources do you use if are looking for information on financial issues**(saving, investments, loans, etc.)?¹**

Share of household heads that agree with this statement in %



Source: OeNB 2004 survey on households' financial wealth.

¹ Multiple responses were possible.

As can be seen from chart 5, the by far most frequently used source of financial information is individual advice provided by respondents' "own" banks (69%), followed by advice by family members (31%), information provided by different banks (24%), advice by friends (23%), leaflets provided by banks (20%), information from newspapers (20%) and the Internet (19%). On average, households rely on 2.3 information sources. The number of information sources used declines with increasing age and rises in parallel with income and education level.

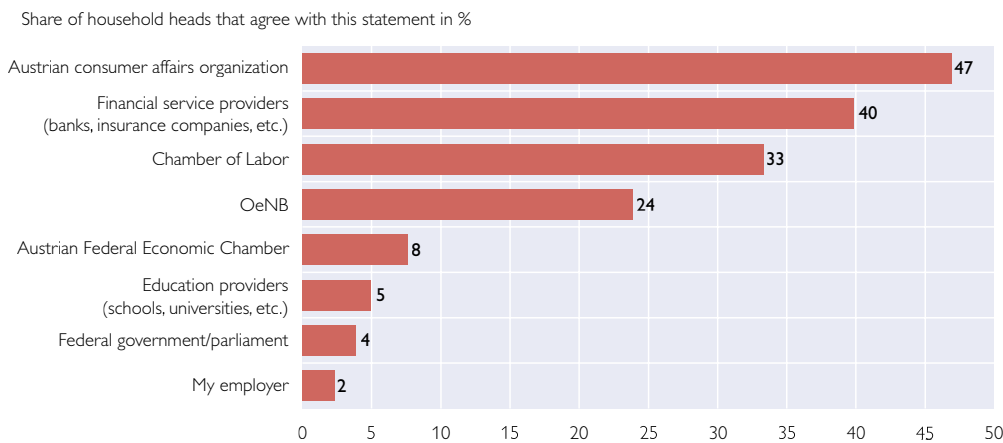
Chart 6 shows Austrian households' confidence in different sources of information. Based on multiple choice questions (multiple answers possible), the questionnaire revealed that respondents place most confidence in the Austrian consumer affairs organization (Verein für Konsumenteninformation, 47%), financial service providers like banks or insur-

ance companies (40%), the Chamber of Labor (33%), the OeNB (24%), the Federal Economic Chamber (8%) and the federal government, education providers and employers (each below 5%). Confidence in financial service providers and the OeNB tends to rise with income.

In finance matters, 56% would rather rely on individual advice from their bank than on their own judgment. The older respondents are, the higher is their trust in individual advice from their bank, which is probably attributable to long-standing customer relationships. Respondents with a higher level of income and education have greater confidence in their own financial knowledge and skills.

At the same time there is a general skepticism toward banks. 63% of respondents agreed with the statement that "ordinary bank customers get ripped off." Interestingly, this view is especially common among

Chart 6

Which sources of financial information do you trust the most?¹

Source: OeNB 2004 survey on households' financial wealth.

¹ Multiple responses were possible.

respondents with very low or very high incomes, and there seems to be no strong correlation with education or age. It is possible that this negative perception corresponds to the personal experiences of low income respondents. Respondents with the highest incomes, on the other hand, may not have felt that “ordinary bank customers” included them.

59% of respondents enjoy dealing with financial issues, while only 10% dislike dealing with them. Especially very young and very old people tend to have negative sentiments about financial issues, a tendency which declines with increasing income and which is lowest among respondents who have graduated from upper secondary academic or vocational schools.

47% consider their knowledge about financial issues as mediocre. Self-assessment becomes more positive with higher income and slightly more positive with a higher level of education. Of all respondents, 66% would like to have more information

about financial issues. Around 56% stated that they wanted to keep abreast of new financing opportunities, a desire which is less widespread in higher age groups. While there is no clear income-related trend, respondents who did not progress beyond compulsory education, members of the lowest income group and of the highest age groups (retirement age) are most strongly opposed to this attitude.

Around 90% of respondents thought that financial education in Austria should be improved. This share is fairly constant across all age, education and income groups. This broad consensus may be attributable to the generally positive connotations of education in Austrian society. The fact that respondents generally agree with a notion, however, is not necessarily reflected in their own personal behavior. Respondents' assessment that they are not well-informed in financial matters, for instance, is not positively correlated with the desire

for more information.⁴ This lack of demand for financial education needs to be taken into account by economic policymakers interested in improving financial literacy (Schürz and Weber, 2005).

67% of respondents would welcome government measures improving the comparability of financial products, a wish which is slightly less frequent among members of groups with a high level of education. This result points to the fact that respondents' trust in market mechanisms is relatively low.

Summary

Confidence in one's own financial capability grows with education and income.

According to respondents' statements, banks dominate financial consulting; however, respondents' trust in banks is limited, as both low and high income respondents seem to have had some bad experiences with banks or are prejudiced against financial institutions.

The share of respondents who use the Internet as an alternative source of financial information is highest among well-paid employees between the age of 30 and 49. However, the invested assets of this group, on average, are not very substantial.

The wish to be better informed about financial issues is generally strong, and two-thirds of respondents would welcome public sector measures designed to improve the structure of the information offer in the financial services sector.

5 Cluster Analysis

We conducted a cluster analysis of the survey data in order to cross-check our statistical results and the derived relationships.

Cluster analysis classifies households based on their responses to questions. To analyze the four components in terms of which we measure financial capability – managing money, planning ahead, making choices/choosing products and getting help/staying informed – we selected several relevant questions from the questionnaire which we considered as characteristic of these four topics (see annex). Based on their responses, households were thus grouped into four statistically most homogeneous groups, each containing respondents with similar attitudes or behavior patterns.

The advantage of cluster analysis is that it groups households into clusters using a range of variables. This approach is opposed to a purely descriptive analysis, in which households can be characterized by just one or two variables (e.g. how well people keep track of their finances in correlation to their age or education level). Cluster analysis, by contrast, makes it possible to analyze the groups (the clusters) based on their diverse socio-demographic characteristics. To evaluate people's "planning ahead" capability, we calculated a cluster which encompasses all households which have made financial provisions for the future and another cluster in which the majority of households have not made provisions. Hence, cluster analysis allows for a more accurate char-

⁴ The correlation established is not only weak but also negative (Pearson correlation coefficient: -0.077 ; significance: 0.003).

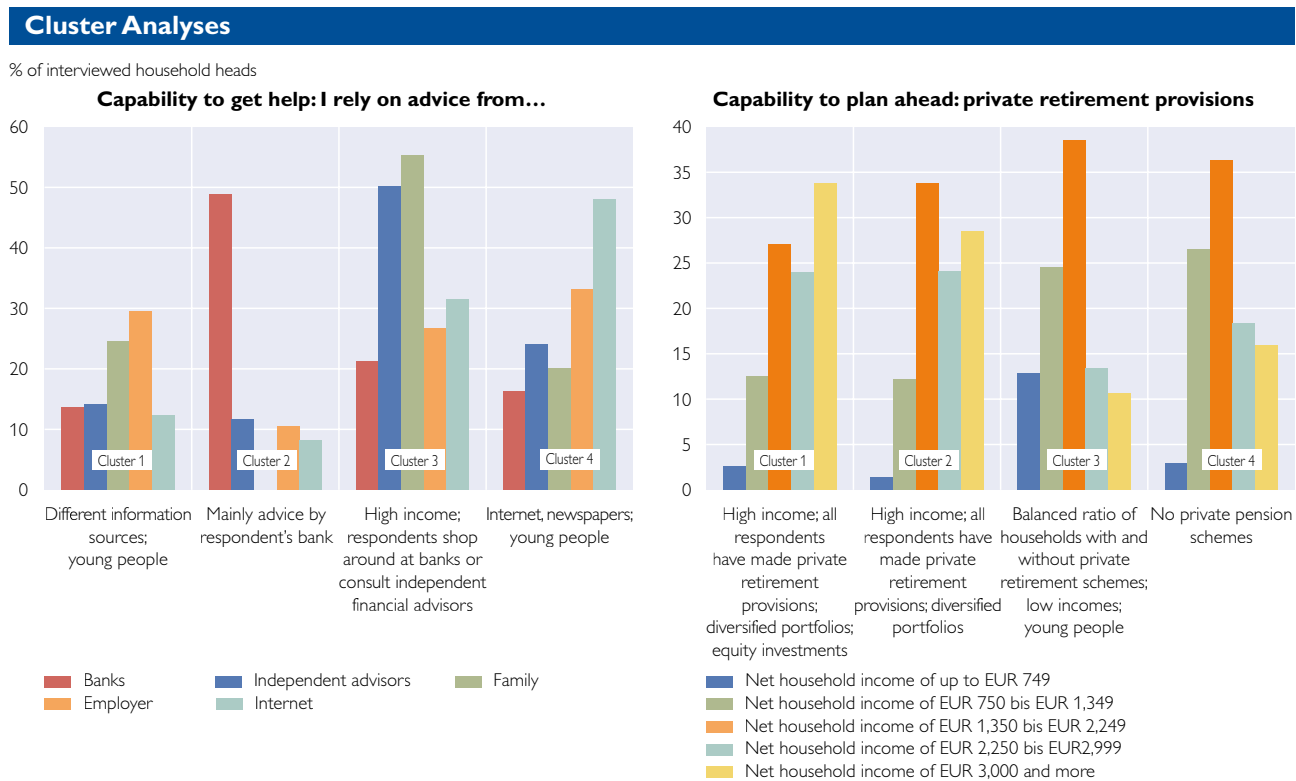
acterization of private households' behavior and financial capability.

5.1 Managing Money

The cluster analysis of people's money management capability relied on responses to the question how well respondents keep track of their finances, whether they prefer low-risk saving instruments and whether they tend to overdraw their checking accounts. The related responses yielded four primary clusters: two groups of respondents with generally positive bank account balances, one cluster with basically balanced accounts and a fourth cluster – containing 15% of all respondents – with those people whose accounts are usually overdrawn. The households in this last cluster have the lowest financial wealth, the least diversified investment portfolios (primarily passbook savings accounts; 61% hold life insurance policies) and the largest overall volume of consumer loans. Though this cluster includes the largest share of low-income recipients, it also shows a higher total share of high income households than those clusters which group together respondents with balanced accounts or positive balances. This pattern shows that the capability to keep track of one's finances is not dependent on income. Moreover, the households grouped in this cluster do not differ broadly across education levels. They do, however, differ in terms of age – the older households get, the better they keep track of their finances and the more scarcely they are hence represented in this cluster. Thus, cluster analysis confirms that the capability to make sure not to overdraw one's accounts and to keep track of one's finances is correlated with age and not with education or income (chart 7).

5.2 Planning Ahead

We also conducted a cluster analysis on households' capability to plan ahead based on questions looking into their financial provisions for the future. The indicators on which this analysis was based were answers to the questions whether respondents put aside money for emergencies, whether they have made individual retirement provisions and whether they would like to be better informed about financial issues. Prior to the analysis we removed data derived from the group of respondents aged over 60 from the dataset. Again, the analysis yielded four clusters. The first two clusters are characterized by the fact that about 93% of respondents have made private old-age provisions, have a high income and strongly diversified portfolios, which makes the detailed analysis of these two portfolios particularly interesting. Moreover, the respondents in these two clusters on average have a relatively high level of education, which again confirms the observation that private retirement provisions are more common among respondents with higher income and education levels, as was pointed out in the corresponding descriptive analysis above. The second cluster also includes respondents which have made considerable equity investments. The third cluster, which encompasses households without private pension schemes (about one quarter of respondents), is also very interesting. If one neglects checking accounts, respondents in this cluster have invested lower amounts in all investment categories than respondents in the first two clusters. The third cluster has the highest share of 50- to 59-year-olds and a share of 20- to 29-year-olds that is twice as high as in the first and sec-



ond clusters. In line with chart 3 in the descriptive part of this study, these results underline that very young respondents do not yet see the rationale for making individual pension provisions whereas respondents over 50 have already passed that point.

5.3 Making Choices/Choosing Products

In order to classify households based on how they make financial decisions, we used questions on the ownership of different investment instruments (passbook savings account, bonds, stocks, etc.) and the question whether respondents compare offers provided by different banks. Households in the high income cluster have clearly more diversified portfolios. Two clusters encompass medium-income respondents with moderately diversified

portfolios. The fourth cluster includes (low income) households with a low level of investment activity (16% of respondents).

5.4 Getting Help/Staying Informed

An indicator for responsible financial behavior is whether respondents rely on more than one information source in financial matters. The cluster analysis of responses concerning access to financial information produced four clusters.

In the second cluster, almost one-third of respondents consider advice by their own bank reliable. Of all clusters in this area, this cluster has the lowest share of under-40-year-olds and the highest share of over-70-year-olds. Cluster analysis thus confirms that loyalty vis-à-vis one's bank is particularly strong among older people. The third cluster (34.6%),

which contains households with high income and wealth, groups together respondents who preferably take advice from their family and seek out information provided by various advisors. Hence, cluster analysis confirmed once more that respondents with a higher level of education and income tend to shop around, not least because wealthier respondents are in a stronger negotiation position. Those households which primarily rely on the Internet and their employer as an information source are to be found in cluster 4 (19.2%), which has the highest share of respondents aged between 30 and 49 and the lowest share of over-50-year-olds. This cluster, which is primarily made up of salaried employees, contains more households that have made private retirement provisions than the other clusters (chart 7).

6 Summary

Based on a representative survey this paper analyzed Austrian households' financial capability in the following areas: managing money, planning ahead financially, making financial choices and staying informed.

One of the main findings of this study is that future efforts directed toward improving financial literacy should pay special attention to the differences between financial attitudes and actual financial behavior. Personal attitudes toward financial issues (e.g. risk orientation, propensity to invest in complex financial products and to shop around, self-confi-

dence in financial matters) are often linked with the level of education, income or age. Respondents with a higher level of income and education tend to have greater confidence in their own financial knowledge and skills.

Interestingly enough, Austrian households' payment and saving behavior or how well they keep track of their finances generally is not linked with education. In contrast, differences in income or age are often correlated with differences in behavior. The correlation between age and behavior points to the relevance of experience for financial behavior.

The results of the OeNB's financial wealth survey in Austria are broadly comparable to the findings of the FSA's financial capability survey (Atkinson et al., 2006). For a small group, overindebtedness is a major problem (Beer and Schürz, 2007). Most respondents choose financial products rather carelessly. According to the OeNB's survey, younger people tend to have a lower financial capability than older people. Not many households own risky financial products, and even these households usually rely on advice by their respective banks.

One striking result of the survey is that half of the respondents seldom compare financial services offers. As shopping around allows consumers to get better deals, encouraging consumers to do so would improve their basis for sound financial decision-making.

References

- Atkinson, A., S. McKay, E. Kempson and S. Collard. 2006.** Levels of Financial Capability in the UK: Results of a Baseline Survey. Prepared for the Financial Services Authority by Personal Finance Research Centre University of Bristol. Financial Services Authority Consumer Research 47. March.
- Beer, C., P. Mooslechner, M. Schürz and K. Wagner. 2006.** Austrian Households' Financial Wealth: An Analysis Based on Microeconomic Data. In: Monetary Policy & the Economy Q2/06. OeNB. 94–110.
- Beer, C. and M. Schürz. 2007.** Characteristics of Household Debt in Austria. Does Household Debt Pose a Threat to Financial Stability? In: Monetary Policy & the Economy Q2/07. OeNB. 58–79.
- Citizenship Foundation. 2002.** Money, Money, Money: Citizenship Education and Financial Literacy Organised by Citizenship Foundation. First Friday Seminar. December 6. www.citizenshipfoundation.org.uk/main/resource.php?s154
- England, J. and P. Chatterjee. 2005.** Financial Education: A Review of Existing Provision in the UK. Department for Work and Pensions Research Report 275. www.dwp.gov.uk/asd/asd5/rports2005-2006/rrep275.pdf
- European Commission. 2007.** Green Paper on Retail Financial Services in the Single Market. COM(2007)226 final. Brussels.
- FSA. 2006.** Financial Capability in the UK. www.fsa.gov.uk/pubs/other/fincap_baseline.pdf
- G8. 2006.** Improving Financial Literacy. Chair's Summary. November 29–30. Moscow. www.oecd.org/dataoecd/50/11/37785720.pdf
- Institut für Finanzdienstleistungen. 2007.** Fünf Konzepte der Finanziellen Allgemeinbildung in der Schule. www.verantwortliche-kreditvergabe.net/media.php?t=media&f=file&id=2543
- Mason, C. L. J. and R. M. S. Wilson. 2000.** Conceptualising Financial Literacy. Loughborough University Business School. Research Series Paper 2000(7).
- Mooslechner, P., M. Schürz and K. Wagner 2007.** The Distribution of Financial Wealth in Austria. Conference Paper: ECINEQ Conference at the DIW in Berlin.
- OECD. 2005.** Recommendation on Principles and Good Practices for Financial Education and Awareness. Recommendation of the Council. www.oecd.org/dataoecd/7/17/35108560.pdf
- Piorkowsky, M.-B. 2003.** Neue Hauswirtschaft für die postmoderne Gesellschaft. Zum Wandel der Ökonomie des Alltags. In: Aus Politik und Zeitgeschichte 9. 7–13.
- Reifner, U. 2003.** Finanzielle Allgemeinbildung. Bildung als Mittel der Armutsprävention in der Kreditgesellschaft. Baden-Baden: NOMOS-Verlag.
- Schlegel-Matthies, K. 2002.** Didaktische Orientierung und Hintergrund der Arbeitshilfe zur Schuldenprävention für den schulischen Unterricht. www.unterrichtshilfe-finanzkompetenz.de/Lehrer/Schuldenpraevention-an-Schulen.pdf
- Schürz, M. and B. Weber. 2005.** Finanzielle Allgemeinbildung – ein Lösungsansatz für Probleme im Finanzsektor? In: Kurswechsel 3. 55–69.
- Schürz, M. 2006.** Financial Education for the Poor in the United States. In: Mooslechner, P., H. Schuberth and B. Weber (eds.). The Political Economy of Financial Market Regulation: The Dynamics of Inclusion and Exclusion. Edward Elgar. 140–168.
- U.S. National Strategy for Financial Literacy. 2006.** Taking Ownership of the Future. www.mymoney.gov/pdfs/ownership.pdf
- Vitt, L. A., G. M. Reichbach, J. L. Kent and J. K. Siegenthaler. 2005.** Goodbye to Complacency. Financial Literacy Education in the U.S. 2000–2005. AARP Research Report. www.aarp.org/research/financial/investing/sep_05_financial_literacy_education.htm

Annex

The OeNB's 2004 Survey on Households' Financial Wealth

The survey was conducted by FESSEL-GfK (now GfK Austria) in summer and fall 2004 based on face-to-face and written interviews. FESSEL-GfK used multistage stratified clustered address random sampling to conduct representative surveys. A total of 2,556 analyzable data sets were compiled. Within Austria, households were stratified at the province level, and in Vienna, households were stratified by the 23 political districts. Within the districts, the prospective respondents were selected at random. For further details see Beer et al. (2006).

Equivalent Net Income

To measure a household's income level, households' income levels are weighted based on an equivalent income scale. Net equivalent income allows us to compare the level of wealth of households with different sizes and structures. The OECD scale we used here assigns a weight of 1.0 to the household head, a weight of 0.5 to all other members of the house-

hold who are older than 14 years and a weight of 0.3 to all younger children. For those households which indicated that they fell into the highest net income class (which had no upper limit in the questionnaire) it is not possible to assign any meaningful weights. This reduced the number of usable data sets from 2,556 households to 2,403 households, i.e. by the 153 households with the highest net incomes, for analyses concerning net equivalent income. Moreover, as a result of the weighting, many households are shifted into lower net equivalent income classes. The highest net equivalent income class is consequently largely composed of singles with high incomes and of couples without children.

Cluster Analysis

To cross-check clustering results, we used Ward's method to establish a hierarchy among respondents and the K-means procedure to partition respondents. First, the number of clusters was determined with Ward's hierarchical clustering method; then this number was confirmed by applying the K-means algorithm.

List of Variables Used in the Cluster Analysis

Issue in question	Variables
Managing money	<ul style="list-style-type: none"> * respondent pays bills immediately * respondent records income and expenditure * respondent reads all information materials sent to him/her by his/her bank * respondent keeps close track of his/her finances * respondent checks bank statements to make sure transfers have been effected * respondent prefers low-risk saving instruments * respondent has a checking account (overdrawn or not) * respondent prefers taking out a loan to saving up money for a long time
Planning ahead	<ul style="list-style-type: none"> * respondent has put aside money for emergencies * respondent has made individual provisions for old age * respondent would like to be more informed about financial issues
Making choices/choosing products	<ul style="list-style-type: none"> * respondent holds an investment product (passbook savings account, savings account, capital savings account, premium-aided savings, building loan contract, life insurance policy, bonds, stocks, mutual fund shares or equity investments) * respondent looks into and compares different banks' offers
Getting help/staying informed	<ul style="list-style-type: none"> * respondent relies on different sources of information on financial issues (banks, leaflets, friends, family, employer, Internet)