Financial Behaviour of Households – Evidence from Quarterly Financial Accounts in Austria[1]

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Andreasch Michael[2], Oesterreichische Nationalbank (Austria)

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JEL-Classifications: E21, E44, G20

1. Introduction

The financial behaviour of households was triggered by the financial turmoil in recent quarters. The analysis shows that the reaction was quite different. Households increased their holdings in cash and deposits with banks treating this kind as „safe" financial investment. Households bought bonds issued by domestic banks in the first three quarters but sold them after the fail of Lehman Brothers. In particular in the first weeks of the strengthening of the turmoil they invested in short-term papers issued by the central government. The amount exceeded the value of the purchases of the rest of the whole year. Private investors ordered more quoted shares of corporations after the collapse on the equity market in October than before in 2008. In general households sold investment fund shares regardless of the underlying asset types.

These results are derived from quarterly financial accounts on a who-to-whom basis allowing the analysis of trends in the financial investment and financing of households as an economic sector with a timeliness of three months after the reference period. Additionally both more timely data and structural issues are relevant to monitor the financial behaviour of households in Austria representing the domestic economic sector with a) the highest net financial wealth raising the funds to finance the other sectors (including the rest of the world) and b) the fewest possibilities to hedge the underlying risk of the financial investment and even the risk of financing in foreign currency. Therefore we have incorporated several data sets for an extended version of the analysis of the heterogeneous financial behaviour of households.

To examine these issues, the paper is structured as follows. Section 2 provides an overview of the analysis of the financial behaviour of households based on the core data set of financial accounts. Section 3 illustrates the incorporation of a) structural issues which relate the quantitative and structural changes of the financial behaviour in recent quarters to long-term trends in several business cycles and b) short-term indicators on a monthly basis for the main financial instruments deposits, loans and securities. Section 4 elaborates the link to household survey data to monitor the heterogeneous behaviour of individuals. Finally section 5 shows the overall results analysing the newest developments triggered by changes of interest rates in the new business of banks and by changes on the financial markets.

2. „What determines the Financial Behaviour of Households?"

The analysis shows that the economiy had a downturn in 2008. The real GDP growth (at previous year prices) was 2.0 % in 2008 after 3.5 % in 2007. The forecast by the central bank in June 2009 came to the conclusion that the real GDP will decline by 4.2% in 2009. In the last economic slowdown the real GDP grew +0.5% in 2001 and +0.8% in 2003 respectively. Private consumption growth (at previous

[1] Cutoff date for data: July 24, 2009.
[2] E-Mail: michael.andreasch@oenb.at. The views expressed are those of the author and do not necessarily reflect the views of the Oesterreichische Nationalbank.

year prices) had a low level of 0.8% in 2007 and 2008, but decelerated to a „zero“ in the final three months of 2008 and was even negative in the first quarter 2009 (-1.2%) in spite of the increase of real disposable income.

The labour market benefited significantly from the past economic boom and employment, chalking up the highest employment gains since 1991: 2.3% (as annual change in % in accordance with the Main Association of Austrian Social Security Institutions). The unemployment rate declined during 2008 to 3.6 % (June 2008) but the marked economic slowdown started to leave its mark on the labour market as of November 2008. Registered unemployment increased again for the first time since February 2006. Averaged out over the year, unemployment equalled 3.9%. In May 2009 the unemployment rate was 4.3%. The forecast by the OeNB indicated an increase up to 5.3% on average in 2009.

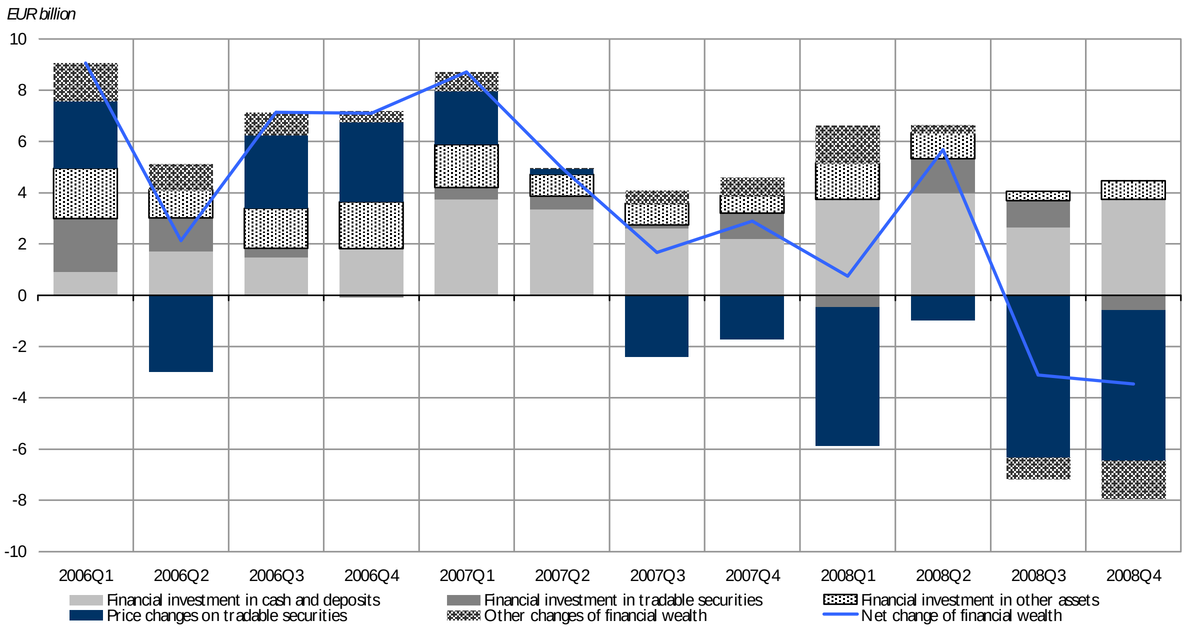
Annual inflation thus averaged 3.2% in 2008, but the peak in June 2008 was 4.0% whereas the HICP was down to 1.5% in December 2008 and even less than “zero” (-0.3 % annual change) in June 2009. According to the last forecast by the OeNB the inflation rate will be 0.4% in 2009.

In addition to the economic background we also take into consideration the consumer confidence although the similarity of the development of “savings” derived from survey data and macro data is not ensured. In line with the data on savings according to national accounts data the consumer confidence signalled a historically high increase of savings in 2008. In fact the net saving ratio amounted to 12.4% (2007: 11.7%) and reached the level recorded for the reference year 1995 for the first time. The ratio was stable in the first quarter 2009. Contrary to this trend the consumer confidence showed a decrease in the willingness of savings since the last quarter 2008 and was even below the average of the last ten years.

BOX:
In national accounts (real economy) the economic sector “households” includes NPISH and a distinction is not possible yet. The introduction of a new reporting system in January 2006 has led to changes in the presentation of the institutional sectors of the economy in the financial accounts. Previously, it had not been possible to separate properly households, as household data on securities investment did not differentiate between households and NPISHs. With the new reporting framework, this type of differentiation has become possible. Moreover, securities investment and investment in other equity than listed shares and mutual funds shares by private foundations as well as other units of NPISHs like trade union or churches are also classified separately now, thanks to a restructuring of banks’ securities holdings reports and the use of credit registers. The restructuring of banks’ securities holdings reports as a central primary source for the financial accounts and a split of other equity means that sectoral information can be presented more accurately for 2006. Of course, this also means that there is a break in the time series between the reporting years 2005 and 2006. If not explained explicitly, the analysis on the financial behaviour is made for households excluding NPISHs in the following chapters .

Against this background households´ financial investment amounted to EUR 19.0 billion in 2008, an increase by 5% compared to 2007 but in terms of net disposable income a slight decrease. As observed in 2007 the preferences for individual financial instruments have changed. Unlike in 2004 to 2006 households increased their investment in cash and deposits with banks by placing EUR 14.1 billion, thus accounting for 75% of the total investment (2007: 64%) and the highest proportion since 1982. The net acquisition in tradable securities decreased in comparison to 2007 and totalled EUR 1.3 billion (2007: EUR 2.1 billion). The financial behaviour was mixed depending on the different types of securities and the request to hold “safe” securities: Households bought debt securities (EUR 4.6 billion), mainly bonds issued by domestic banks and short-term papers issued by the central government and sold mutual fund shares (EUR 4.1 billion). Interestingly private investors bought also quoted shares (EUR 0.8 billion). The increase of insurance technical reserves amounted to EUR 2.9 billion.

Financial Investment of Households



Source: OeNB.

A breakdown of the annual figures into quarterly figures both for financial instruments and counterpart sectors shows that the financial behaviour of the households was as follows:
Apart from the second quarter the financial investment was very stable in each quarter. The spread accounted for EUR 3.9 billion and EUR 4.7 billion (very much in line with the quarterly results in 2006 and 2007). In terms of net disposable income private households increased in the long run both their gross and net financial investment (gross financial investment less financing) since the downturn in mid-2001 in line with the increase of saving.

Bank deposits are likely to have regained attractiveness as MFIs raised their interest rate on new business till September 2008 following a series of upward key rate adjustments by the ECB since December 2005. But even in the fourth quarter 2008, banks offered high nominal interest rates due to the liquidity constraints on the interbank market after the fail of Lehman brothers and the improvement of the deposit guarantee scheme[3] despite the three downward key adjustments by the ECB from 4,25% to 2.5%. Simultaneously the inflation rate declined from the high in June 2008 (4.0 %) to 1.5% in December 2008 and therefore investment was attractive both in nominal and real terms. As a consequence the investment in bank deposits amounted to more than 90% of the total investment in the last quarter. Households were interested in fixing this attractiveness of bank deposits by choosing products with agreed maturities more than one year.

Quarterly financial accounts data indicate that, on balance, private investors bought tradable securities in the second and third quarter 2008 whereas they sold securities in the first and fourth quarter, depending on the volume of the net purchase of bonds and the net sales of mutual fund shares in each quarter. Referring to bonds households invested mainly in bank bonds for two reasons: as long as banks offered new tax-subsidized housing bonds and launched guarantee certificates in the form of bonds private investors were interested in buying bonds issued by banks. Both developments came to a standstill in the fourth quarter and households started to sell their bonds immediately mainly in exchange of bank deposits and – for the first time to a high extent – of government treasury bills. It can be assumed that more and more households were influenced by the ongoing uncertainty on the further development and therefore there was an increase of investment in “safe haven” products like

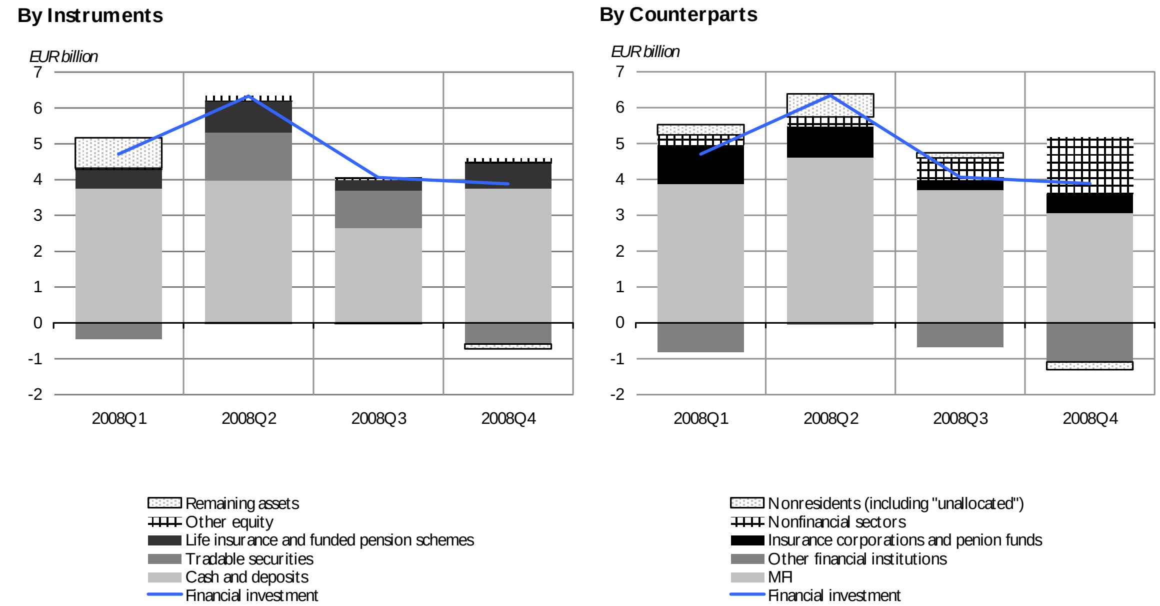
[3] To strengthen confidence in the banking sector, the deposit guarantee scheme was amended to provide unlimited deposit insurance protection on deposits of natural persons until end-2009; from January 1, 2010, on, deposits up to EUR 100,000 will be covered by the scheme. Deposits up to EUR 100,000 represented roughly 99% of all saving deposits with a volume of approximately 80% of all saving deposits at the year end 2008.

bank deposits guaranteed by the government and government bills. Despite the ongoing fall of shares prices in 2008 some private investors bought continuously on a low level quoted shares primarily issued by domestic nonfinancial corporations. This behaviour was in contrast to the overall preference by private investors to offload (all types of) mutual fund shares. They have been sold since the third quarter 2007.

Financial investment in tradable securities can be analysed from the viewpoint of price effects on outstanding amounts held by private investors assuming that price changes affect purchases or sales of securities. Additionally data on price changes explain a huge proportion of other changes in volume. The following facts are used to illustrate the price effects in the previous years: Before the financial turmoil (mid 2007) the portfolio of securities had a market price of EUR 98.8 billion, representing 24% of the financial wealth. At the end of 2008 the market value totalled EUR 79 billion expressing a decline by 20%, affected by price change of 22% (EUR 22.7 billion) and new investment of 2%. Overall negative price effects of tradable securities in 2008 amounted to EUR 18.6 billion and set off the total increase of the financial wealth by new investment. Although the market value of listed shares of households dropped by more than 60% (EUR 14.1 billion) due to negative price changes between mid 2007 and the end of 2008 private investors bought shares (EUR 1 billion, 5% of the stock at June 2007). Contrary to the financial behaviour in the case of shares households sold mutual fund shares in the second half of 2007 and in 2008 influenced by the decrease of the market value. The net sales totalled EUR 5.1 billion and the price changes amounted to EUR 7.7 billion. All in all the market value declined almost 30% from EUR 44.6 billion (mid 2007) to EUR 31.6 billion.

Finally, individual saving for retirement by paying for life insurance coverage and into funded private pension schemes continued with decelerated growth rates against the background of the financial crises as roughly 17% of all life insurance contracts and 73% of all funded pension schemes contracts consist of defined contributions schemes. Nevertheless there were far less fluctuations in different quarters as in the portfolio investment of securities.

Financial Investment of Households in 2008



Source: OeNB.

In additon to the “traditional” view on financial investment with a breakdown on individual instruments we compile simultaneously the capital streams with a breakdown by counterparts analysing the flow of funds on a “who-to-whom” perspective. The results show that – on average - in 2008 MFI absorbed 80% of the financial investment (with a range between 72% and 92% on a quarterly basis), thus accounting for a growth rate of 6.7% of assets issued by MFIs. This is the highest proportion in the period from 1995 to 2008[4] and even 25 percentage points higher than in the last financial crises

[4] This period covers the compliation of financial accounts on a who-to-whom basis.

between 2001 and 2003. 9% of the total investment has been placed with government units (mainly in the fourth quarter 2008) and 6% with nonfinancial corporations, whereas direct investment abroad[5] amounted to 4%. The financial investment in the financial sector excluding MFIs was very different: The disinvestment in the OFI sector (in all quarters, mainly driven by the sales of mutual funds shares) has been compensated by the investment in insurance corporations and pension funds.

The financial wealth of households totalled EUR 416 billion at the end of 2008 (148% of GDP). Due to the huge investment in deposits and the reduction of the market price of tradable securities the structure of the financial wealth changed accordingly:
51% of the total financial assets were held in cash and deposits by households at the end of 2008; since 2007 the long-term trend of the reduction of liquid assets in the portfolio of private investors has been interrupted. On the contrary, the share of tradable securities receded for the second year and amounted to 19% at the end of 2008. The proportion of insurance technical reserves rose constantly in the whole observation period since 1980 and totalled almost 21% of the total financial wealth in 2008. Other equity and remaining assets accounted for 9% in 2008.

At the same time, households raised loans by EUR 3.3 billion net in 2008, which is roughly EUR 2.1 billion less than in 2007; especially the fourth quarter shows a huge reduction in the debt financing by households, although the lending rates of new loans declined smoothly in November and even more accentuately in December 2008. The growing uncertainty on the labour market and certain restrictions of bank lending might hamper the loan financing by households. Above all, households took out loans to the tune of EUR 4.1 billion to finance housing-related needs in 2008, but redeemed loans for consumption and other businesses. According to the available quarterly data housing loans were more or less stable, apart from the fourth quarter, whereas there were redemptions on consumer loans in all quarters 2008.

The liabilities of households totalled EUR 150 billion (53% of GDP) and the net financial position amounted to EUR 266 billion (95% of GDP).

Although the actual structures in financing and wealth have been compared occasionally with developments in the past in this section it seems to be worth to have a closer look on developments from two perspectives a) long-term time series to compare historical financial behaviour of households with recent developments and b) monthly data to analyse very recent developments or structural changes within a quarter.

3. Financial Investment by Households: What and When?

3.1 Financial investment and Financing in the business cycles from 1981 to 2008[6].

Based on the historical time series it should be possible to compare the actual situation with the previous developments in several business cycles, especially with periods of economic slowdown and financial crises.

In general, for the whole observation period we find investment to have been highly correlated with saving, as households tend to invest unconsumed income in financial assets rather than real assets[7]. In line with cyclical developments the saving ratio hovered between 7.7% and 12.4%, as did the growth rate of financial investment. Financial investment growth was a lot more volatile during the

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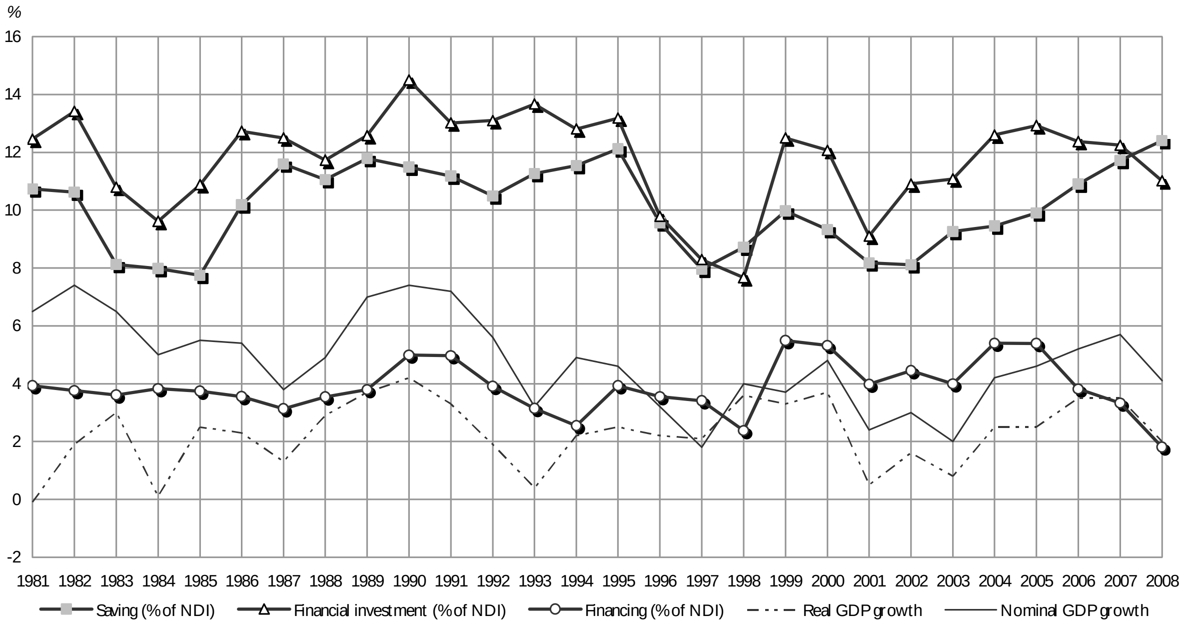
[5] Including "unallocated", mainly allocated in the case of holdings of EURO-currency (2 percentage points).

[6] Fore details on the compilation of financial account for the pre-1995 period see the publication „Austria Financial Accounts 2006" available on internet using http://www.oenb.at/en/stat_melders/statistische_publikationen/gesamtwirtschaftliche_finanzierungsrechnung/publikationen_gfr_uebersichtsseite_-_englisch.jsp#tcm:16-5668. For comparison reason the data on household sector (instead of households) have been used for the whole period.

[7] Capital gains on housing wealth have not been observed in the same intensity as in other countries of Euro Area in the period prior to the sub-prime crises. Although investment in real estate wealth is less pronounced than financial investment the overall stock of real estate wealth is higher than financial wealth. The ratio of real estate wealth to financial wealth at the end of 2007 was approximately 2:1.

period under review than the growth rate of new borrowing. While, in boom periods, both financial investment and new borrowing rose, demand for financial investment instruments was a lot more robust than demand for new loans. The balancing item of financial investment minus loan financing averaged 7.8% of disposable income and 4.8% of gross value added from 1981 to 2008.

Saving, Finanical Investment and Financing of Households[1] in Austria



Source: Statistik Austria, OeNB. 1) including NPISHs.

Households' financial response to economic developments can be divided into boom and bust periods.

3.1.1 Opening-up of Eastern Europe and New Economy

In 1990 nominal GDP rose by 7.4% (and real GDP by 4.2%), thus reaching the highest annual growth rate between 1980 and 2006. The key underlying factors were strong domestic demand and consistently high net exports. At the same time, an inflation rate of 2.8% put Austria among the best-performing OECD countries in terms of price stability. The saving ratio decreased slightly to 11.5%, as the steady flow of income gains from the tax reform pushed up consumption expenditure. Both money market and capital market interest rates rebounded significantly between 1990 and 1992 compared with the late 1980s; at the same time, the yield curve flattened continually so that the overnight interest rate reached 9.32% in 1992 on an annual average, thus lying around 100 basis points above the level of the secondary market yield for long-term Treasury bonds (inverse yield curve).

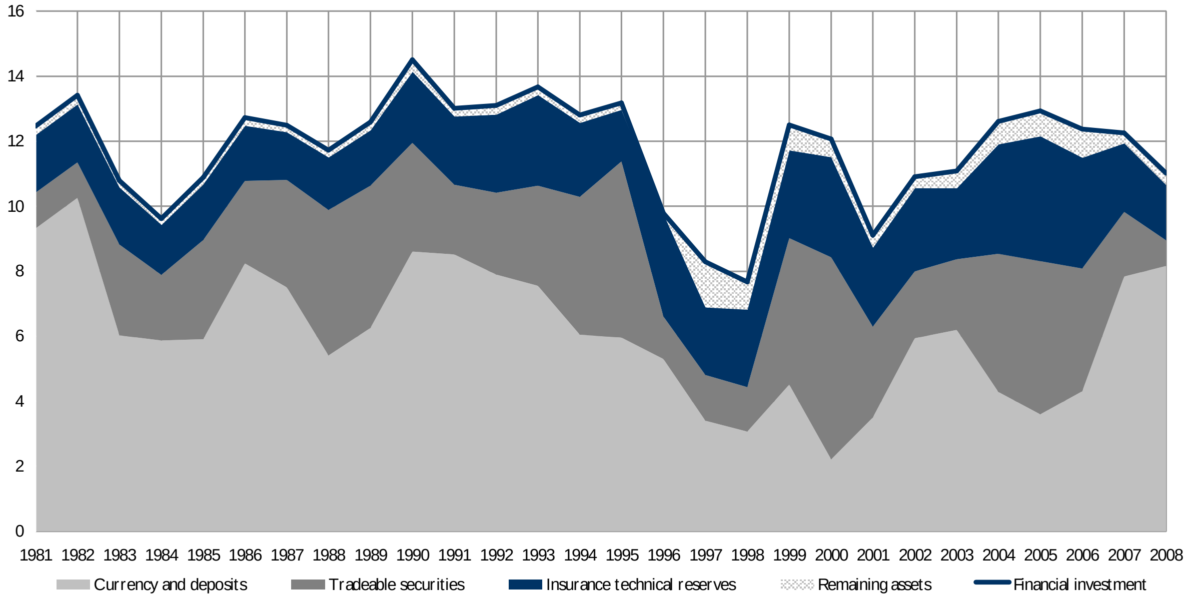
Economic growth revived in the late 1990s after a period of stagnation and peaked with a nominal growth rate of 4.8% at the time of the millennium change. Yet up to the first half of 1999 economic developments were characterized by the weak performance of the international economy, and in the second half of the 1990s by the financial crises of 1997 and 1998, causing both business confidence and consumer confidence to have dampening effects on the economy. Money market rates rose in the euro area, as the ECB started a series of upward key rate adjustments in 1999 – six all in all until October 2000. By the fall of 2000, key rates had reached a level of 4.75%. At the long end of the yield curve, secondary market yields for ten-year government bonds climbed above 5.3%. On the stock markets, rising corporate profits translated into rising stock prices. The momentum of these developments prevailed until the first quarter of 2000. Disposable income and household consumption again rose considerably (above all in 2000), and the saving ratio reached a level of 9.3%.
Like in the early 1980s, financial assets expanded strongly through transactions both around 1990 and around the millennium change. Financial investment in relation to disposable income came to 12% in this period, which is at the upper end of the fluctuation band. A similarly high rate of financial investment in relation to disposable income was observed from 2003 to 2006. While in the early 1980s

bank deposits had been the key underlying factor of growth, the boom period around 1990 saw households diversify on a broader scale for the first time, investing more heavily in debt securities (bank bonds in particular). Demand for listed shares or mutual fund shares was virtually nonexistent until the mid-1990s, given low supply and a series of financial crises from 1987.

Financial asset allocation changed substantially in the second half of the 1990s: For the first time, financial flows reflected a substitution effect in portfolio decisions, highlighting the growing importance of capital market investment. The development of bank deposits and tradable securities turned out to be negatively correlated, which was also in line with current financial market trends: While households' investment in tradable securities climbed permanently between 1996 and 2000 of financial investment, the growth rate of bank deposits dropped almost by the same extent in this period. The share of tradable securities in total financial investment rose to more than one-third as stock prices started to recover in 2004 following a period of stagnation between 2001 and 2003. Moreover, the spectrum of securities in which the household sector invested broadened. On the one hand privatization measures led to a higher supply of quoted shares, on the other hand investors became more interested in mutual fund shares. As a result, the financial accounts show net sales of bank bonds and purchases of mutual fund shares from 1996 to 1998. Following the introduction of the euro, institutional investors such as mutual funds and insurance corporations diversified their products across the euro area, thus causing indirect changes in household asset allocation. Investment in life insurance and pension plans was important for the household sector throughout the period under observation. The contributions to growth from increases in claims against insurance companies and pension funds lay between 0.6 and 1.6 percentage points.

Financial Investment of Households[1] in Austria

% of disposable income, contribution of financial instruments in percentage points



Source: Statistik Austria, OeNB. 1) including NPISHs.

3.1.2 Economic Slowdown and Financial Crises

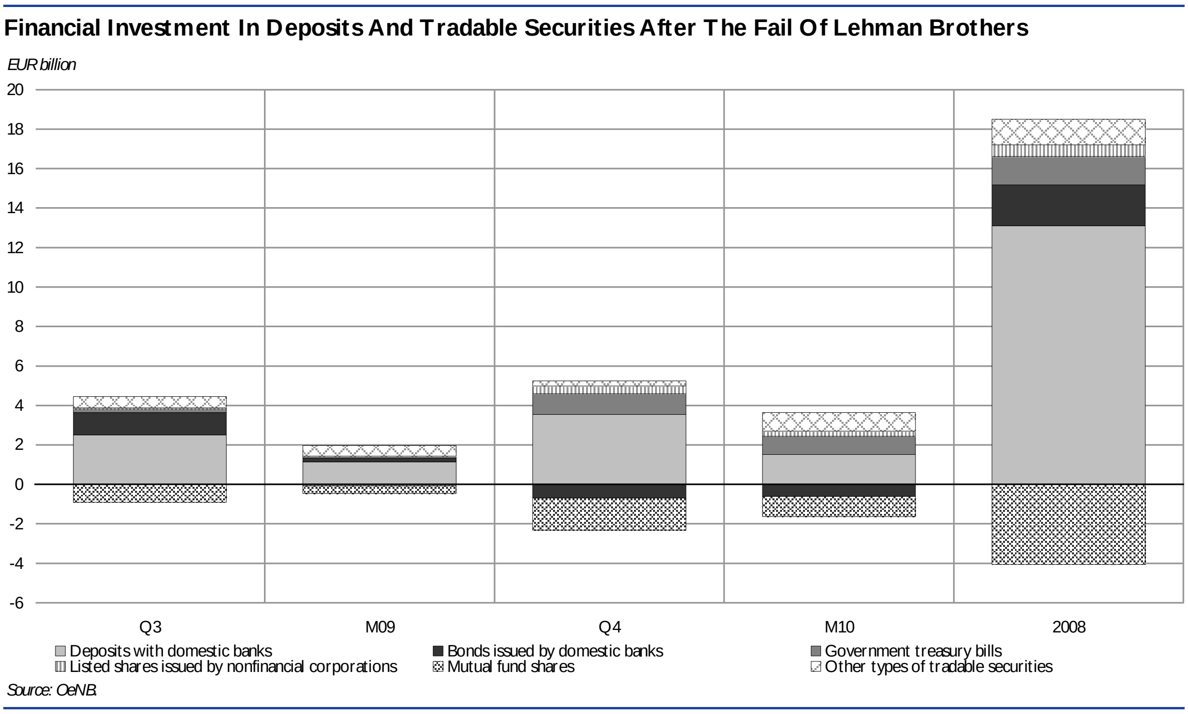
The high nominal output growth observed at the beginning of the 1980s (7.4%) decelerated to 3.8% in 1986, accompanied by high inflation rates and high nominal interest rates on both money and capital markets. Stocks generally traded sideways except for an outlier in 1985. The U.S. dollar peaked against the Austrian schilling in 1985 at an exchange rate of close to ATS/USD 24. The Austrian economy suffered a marked economic setback in 1984, which reflected, among other things, a VAT increase by 2% to 20% in that year. The saving ratio dropped from 12.5% in 1980 to 7.7% in 1985, but rebounded thereafter. The economic slowdown continued until 1987 as both domestic demand and net exports were growing at a weaker rate. The U.S. dollar exchange rate continued to shape world economic growth, and a slump in stock prices hitting the U.S. stock exchanges rippled across stock markets worldwide in 1987. At the same time, that year marked a significant turning point in economic developments.

Following the cyclical peak in 1990, growth of value added decelerated strongly in Austria. By 1993 nominal GDP growth had dropped to 3.2% (while real GDP growth remained just above zero), in no small part because of the anemic growth of Austria's main trading partners. The Anglo-Saxon economies, by contrast, reported real GDP growth rates of between 2% and 3%. Moreover, the currencies participating in the European Monetary System (EMS) suffered severe exchange rate fluctuations in 1992 and 1993. Following this setback, real GDP growth regained a level of between 2% and 3% – up until the Asian financial crisis newly dampened economic growth. Inflation came to a standstill in 1997; interest rates dropped; and the slope of the yield curve, which had been inverse between 1991 and 1993, became steeper again following the marked reduction in money market rates to a level of 3.3%. In 1997 households responded to lower income gains by cutting back saving rather than substantially cutting consumption expenditure.
The slowdown in saving translated into weaker growth of financial investment can be observed in that period, especially in 1997 and 2001.

In 2006, the household sector's financial assets expanded by 4.9% through transactions, which means that households invested 12.4% of their net disposable income in financial assets. Compared with 2005 this is a slight reduction in relation to disposable income, yet in a long-term comparison for the period from 1980 to 2008 this percentage is above average.
At the same time, preferences for individual financial instruments have changed. Unlike in 2004 and 2005, households started to increase their liquid funds in 2006 by placing about one-third of financial assets invested in bank deposits. Rises in MFI interest rates on new deposits following a series of upward key rate adjustments by the ECB are likely to have made bank deposits more attractive for households. Conversely, interest in portfolio investment was highly selective. All in all, private investors bought tradable securities worth just over 30% of total financial investment in 2006, which is less than in 2005.

3.2 Financial investment after the fail of Lehman Brothers.

As outlined on an early stage we started to implement monthly indicators on financial investment supporting the analysis of quarterly data on the financial behaviour. Learning from the past (see section 3.1) our focus is the compilation of monthly data on deposits by domestic banks and tradable securities assuming that portfolio shifts and the level of financial investment are mainly dominated by these instruments.



For an illustrative purpose the period close to the fail of Lehman Brothers has been chosen to demonstrate the additional information derived from monthly data for the analysis of quarterly financial accounts in the second half of 2008: The general uncertainty on the development of the financial markets and the real economy accelerated in the fourth quarter 2008, partly driven by the fail of Lehman Brothers. Monthly data on financial behaviour of households indicate that there was an immediate reaction[8]. Financial investment by households increased significantly in October 2008 compared to September. For the first time in the last three years bonds issued by domestic banks have been sold in the fourth quarter and the sales in October accounted for almost 90% of these sales. Contrary to the huge sales of bonds issued by banks, private investors bought – only – in October government Treasury Bills. The purchases amounted to roughly EUR 0.9 billion in October, a share of 85% of the total purchases in the fourth quarter and 63% of the investment in 2008, respectively. The portfolio shifts towards "safe haven" instruments show that the investment in (secured) bank deposits and Treasury Bills exceeded total investment in deposits and securities in October determining impressively the result of the fourth quarter 2008.

Apart from the analysis of quarterly financial accounts data by using historical monthly data we will incorporate monthly data as a first rough indication for the latest developments of flow of funds as outlined in section 5 of this paper.

4. "Financial Investment by Households: Who Are The Investors?

Financial accounts data allow a split of financial investment of households into instruments and counterpart sectors on a very detailled basis and provide quarterly and even partly monthly time series. Microeconomic data on households are used complementary to analyse the individual behaviour of households. This section presents some results of the survey conducted by the Oesterreichische Nationalbank (OeNB) capturing microdata on households' financial wealth, investment and debt[9].

The survey shows Austrian households' gross financial assets to average EUR 54,666[10] (median: EUR 23,579). Austrian households' gross financial assets were offset by consumer loans averaging EUR 2,876, so that average net assets came to EUR 51,790 (median: EUR 21,855). The median values were far lower than the averages, indicating that both gross and net financial assets are highly unevenly distributed. Considered by socioeconomic criteria, the level of financial assets is shown to depend markedly on household net income. Households with a monthly net income of less than EUR 750, for example, had net financial assets of EUR 6,621 (median: EUR 3,583); the net financial assets of households with incomes in excess of EUR 3,000 averaged EUR 117,779 (median: EUR 53,039). The education level of the household head also accounts for substantial differences in wealth positions. Households headed by persons who had only completed compulsory education disposed of average net financial assets of EUR 19,148 (median: EUR 7,835). The amount of financial assets rises in parallel to the education level of household heads: the households of university and "Fachhochschule" (technical/vocational college) graduates own financial assets had on average EUR 93,586 (median: EUR 41,381). Broken down by the occupational status of household heads, households headed by entrepreneurs had the by far highest net financial assets (average: EUR 189,778; median: EUR 38,372). The large gap between the average and the median in this category is noteworthy. Ranked by the size of average net financial assets, owners of business are followed by civil servants, employees, free professionals and farmers. Households headed by workers had the lowest average level of financial assets at EUR 24,539. At EUR 11,521, the median financial wealth of free professionals was lower than that of workers (EUR 15,528). Broken down by the household head's age, the youngest group in the survey (18 to 29 years) had the lowest average net financial assets, namely EUR 15,816 (median: EUR 5,903). Net household financial wealth rises from category to category, peaking at an average of EUR 79,010 in the group of household heads aged 60 though

[8] Partly supported by the amendment of the deposit guarantee scheme for deposits of natural persons.

[9] The information in this section is derived from results of the survey conducted by the Oesterreichische Nationalbank on Austrian households´ financial wealth and debt in 2004. The complete study is available on internet http://www.oenb.at/en/img/mop_2006_2_05_tcm16-45590.pdf

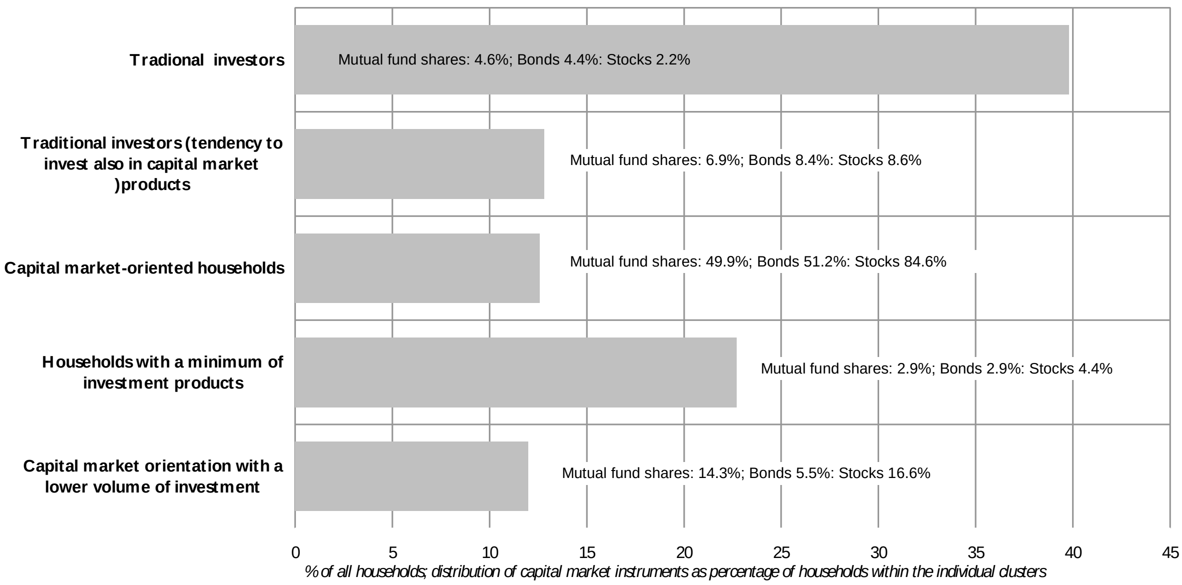
[10] A comparison of these data with financial accounts data shows gross financial assets as calculated on the basis of the survey represent about 50% of the financial assets recorded in the financial accounts. In an international comparison, the degree of consistency between micro- and macrodata is fairly high.

69. The share of households with negative net financial assets was higher than average among 30- to 39-year-old household heads, as especially many households in this category had taken out consumer loans.

Savings deposits remained the main investment choice of Austrian households and account for more than 42% of aggregate gross financial assets. Building loan contracts accounted for an additional 9%. The majority of Austrian households had opted for these two types of investment. 93% of all households owned savings deposits, 71% owned a building loan contract. Life insurance policies represented another popular investment product. 54% of all Austrian households owned a life insurance policy, and 17% of gross financial assets are invested in such policies. 16% of households owned stocks, with 8% of gross financial assets placed therein. Bonds accounted for 6% of gross financial assets, and 11% of households owned such debt securities. Also, 11% of all households owned mutual fund shares, which represent 5% of gross financial assets. 3% of all households owned holdings in enterprises, which represent 10% of the volume of gross financial assets.

A cluster analysis was performed directly on the basis of households' investment strategies rather than on the basis of their socioeconomic characteristics. Households are grouped into clusters that can be considered the statistically most homogeneous groups in terms of investment strategies. The aim is to draw conclusions about demographic characteristics on the basis of the financial products these households have chosen to invest in and in this manner to identify possible determinants of the investment decision. The cluster analysis identifies four clusters; the first cluster may additionally be subdivided into two subclusters (clusters 1a and 1b). Cluster 1 covers "traditional" investors. The financial wealth of households in cluster 1a is limited to deposits, building loan contracts and life insurance policies. The prevalence of building loan contracts and the average share of building loan contracts in gross financial assets are highest in this cluster. Households in cluster 1b invest above all in savings products with a higher return (e.g. a capital savings account, premium-aided savings). Their holdings of capital market instruments are higher than those of cluster 1a households, but the amount invested is fairly low. This cluster also contains some households with high holdings in enterprises. The households subsumed in cluster 2 are capital market oriented. The average share of capital market instruments in these households' financial assets is around 30%. The households in cluster 3 may be defined as those with a minimum of investment products, as all investment products are only represented to a small degree. The households in cluster 4 have a low level of assets, but endeavor to diversify their investment. Therefore, in relative terms, their investment in capital market instruments is high. If the households grouped in these clusters are broken down by socioeconomic characteristics, income and financial assets are above average in cluster 2, where portfolio holdings are strongly diversified. The share of (married) couples is above average in this cluster, and the share of household heads with a university or "Fachhochschule" degree is far higher than in the other clusters. Households in cluster 4, the cluster with diversification and a low level of financial wealth, may be considered a younger variant of the households in cluster 2. The heads of these households also have high income and education levels. This cluster comprises an above-average number of young, unmarried household heads, as well as owners of businesses.

Distribution of households



Source: OeNB (Beer, Mooslechner, Schürz, Wagner) based on FESSEL-GfK survey 2004.

Three of four households are allocated as traditional investors (cluster 1a and cluster 1b) or households with a minimum of investment products account (cluster 3). Their interest in capital market products is partly very low. On the opposite side the cluster named "capital market-oriented households (cluster 2)" represent only 12.6% of all households, but nearly half of them owned mutual fund shares and bonds and almost 85% of households within this cluster owned shares.

5. Financial behaviour of Households in 2009

Real (and nominal) GDP declined significantly in first quarter 2009 as a result of the simultaneous downturn of household consumption, gross capital formation and exports and the downswing will continue in 2009 according to the projections of the central bank in June 2009. The level of the financial investment of households has been determined by the development of their net disposable income and the conditions on the labour market. The ongoing uncertainty on the financial markets, although there was temporarily a boom on the stock markets in the last months, and the further decline of deposit rates in the new business of banks determined the portfolio choice.

Net disposable income (on an annual basis) has decelerated in the first quarter 2009 and stood at 4.4%, whereas labour market indicators signalled an increase of unemployment in the first five months of 2009 up to 4.3%. The annual change of the overall HICP was below zero in June 2009. The index for the Austrian stock market (ATX) rose between December 2008 and June 2009 by almost 20% in line with the boom of other stock markets in the first half of 2009. The deposits rates for contracts with agreed maturity up to 1 year for households on new business by domestic banks declined to 1.45 % in May 2009 in comparison to 4.21% one year before in accordance with the cutback of the key interest rate by the ECB and EURIBOR three months rate. Due to the simultaneous decline in inflation households earned in real terms investment income on deposits. According to latest available figures the consumer confidence signalled that households tend to safe less over the next 12 months but evaluate their current financial situation as „stable", compared to 2008.

Financial investment totalled EUR 4.5 billion in the first quarter 2009 according to the quarterly data on financial accounts. The annual growth rate stood at 4.5% in comparison to 4.6% in the previous quarter and was in a range between 4.2% and 4.6% for the last three years. Although consumer confidence signalled stable levels in terms of the current financial situation and lending rates on new loans for house purchases by banks dropped from 5.17 % in May 2008 to 3.71% in May 2009 financing was negative in the first quarter 2009 and the growth rate decreased to 1.5% accordingly. A further sign for uncertainty was the fact that the share of capital flows in the financial instruments currency and deposits stood at almost 80% of the overall financial investment in the first quarter 2009. Tradable securities have been sold by private investors at the same time. Net sales amounted to EUR 0.8 billion, mainly driven by further sales of bank bonds and mutual fund shares.

Taking into account monthly data the actual picture on the financial behaviour of households can be expanded to the period up to May 2009 for the main financial instruments. Private households continued to invest in deposits with domestic banks on monthly levels (EUR 1.2 billion) as high as observed in the first quarter whereas they sold, on balance, tradable securities in April at a very low level (EUR -0.3 billion) but started to buy them in May 2009 (EUR 0.2 billion), reducing the trend to sell securities. Nevertheless there is clear evidence for the ongoing preference for deposits in 2009.

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Annex 1 - Quarterly financial accounts in Austria

1. Institutional arrangements

The Oesterreichische Nationalbank (OeNB) is responsible for the methodology and the compilation of quarterly financial accounts. The External Statistics and Financial Accounts Division within the Statistics Department is responsible for the compilation of quarterly financial accounts data.

The following organisations are involved in the compilation process as data providers. In the case of the central bank the different divisions are also explained:

Institution	Department	Division	Data
Central bank (OeNB)	Statistics Department	Supervisory and Banking Statistics	MFI *monthly;* OFI-Balance sheets data *quarterly;* profit and loss accounts of banks *quarterly*, Interest rate statistics (MIR) *monthly;* Investment data by pension funds and insurance corporations *quarterly*
		External Statistics and Financial Accounts	External Statistics (including data on FATS, FDI), *monthly, quarterly partly only annually*; securities statistics (security by security) *monthly and quarterly*
		Both division (shared compilation responsibility)	Investment fund statistics *monthly*
		Credit division	Indicators and selected balance sheet data on equity issued by non-financial corporations; *annually*
	Accounting	Financial Statement	Central bank balance sheet data *quarterly*
National Statistics Institute (Statistik Austria)			Government finance statistics *quarterly and annually*; data on joint stock companies (NFC) *annually*
Financial Market Authority			Balance sheet data of insurance corporations and pensions funds; *annually*
ECB			CSDB
Company register			Balance sheet data on nominal capital data (equity); *monthly*
Commercial database			Balance sheet data on nominal capital / own equity ratio; *annually*

2. Publication

The central bank is disseminating the results of the financial accounts. Publication of quarterly data covers stocks and flows from the reference period 2001 Q1 (for households from 2006 Q1) up to now, for all financial instruments and the following sectors at present:

- Non-financial corporations
- General Government
- Households and Non-profit Institutions serving Households (NPISHs)
- Households

Internet: (German and English version) Statistics and Reporting, Statistical Data, Financial Accounts Financial Investment (Financial Assets) and Financing (Financial Liabilities) http://www.oenb.at/en/stat_melders/datenangebot/gesamtwirtschaftliche_finanzierungsrechnung/geldvermoegen/geldvermoegen_und_verpflichtungen.jsp#tcm:16-4964

The central bank is announcing forthcoming updates of financial accounts data (including the quarterly releases) on the OeNB web-site release calendar:
http://www.oenb.at/en/stat_melders/veroeffentlichungskalender/release_calendar.jsp.

3. Production cycle

Quarterly financial accounts are compiled 9 to 10 weeks after the end of the reference period taking into account primary statistics on a quarterly basis. Estimations are made for data which are available on an annual basis. Quarterly financial accounts data are subject to revision when annual financial accounts data are compiled (March and September).