

MARCH 2005

EURO AREA ACCOUNTS FOR HOUSEHOLDS

1. Introduction

This paper explains the background to the study that has been undertaken by the Observatoire de l'Epargne Européenne (OEE) on behalf of the European Central Bank (ECB) in the analysis of euro area accounts for households¹. The paper also informs upon the background to this study, the current availability of data for the household sector in the euro area countries, the uses that ECB makes of these data, and makes a short comparison with U.S. data. Finally, the paper looks ahead to the future plans that the ECB's Directorate General Statistics has for the further development of euro area sector accounts as a whole.

2. Background to the Study of the Household Accounts

In 2003, the ECB commissioned the OEE to make an analysis of the structural developments that had taken place as reflected in the non-financial and financial accounts of households (and of non-profit institutions serving households (NPISH)) and to compare these developments between the euro area countries. For that purpose, the analysis concentrated on questions such as how far differences in the data could be explained by country-specific developments, by distinct data collection and compilation systems, or by other structural peculiarities. This comparison, for instance, applied to various macroeconomic variables like households' wealth, debt, or saving. The OEE was asked to examine whether the apparent heterogeneity across countries might have emerged due to the relative importance of the housing market in the various countries, the different structure of the taxation imposed on households' income or wealth or even due to the country-specific delimitation of the sector itself.

¹ The Household sector includes Non-Profit Institutions Serving Households (NPISH).

The country data sets for households were provided to the OEE for nine euro area countries as reflected in the Tables 6, 7 and 8 of the ESA 95 Transmission Programme². These nine countries were Belgium, Germany, Spain, France, Italy, Netherlands, Austria, Portugal and Finland. The ESA 95 Transmission Programme provides a framework for a harmonised classification for economic data which is necessary for structural and country comparisons. Since for the time being, the remaining three euro area countries; Greece, Ireland, and Luxembourg do not compile full annual non-financial and financial accounts for the ESA 95 Transmission Programme, they were not included in the analysis. The country data sets covered annual time series taken from the production, the income and the accumulation accounts (capital and financial transaction accounts) as well as from the financial balance sheet and the 'other (financial) flow' accounts (as a residual) of households as available by the end of March 2003. Therefore, the data set ranged from 1995 to 2001.

From the end of 2003 until the middle of 2004, the OEE conducted detailed interviews with statisticians responsible for producing the accounts, which are, in most cases, the National Statistical Institute for the non-financial accounts and the National Central Bank for the financial accounts. The main objective of these meetings was to obtain a better understanding of the sources and methods used in each country to compile household accounts. At the end of these visits, the OEE produced a final report summarising the findings of the country visits, which has been made available to all the participating countries.

3. The current availability of data for the household sector

The international comparability of financial indicators benefits from the System of National Accounts (SNA 93). The euro area countries compile financial accounts in accordance with the European System of National and Regional Accounts (ESA 95), which is broadly consistent with the SNA 93. National financial accounts are compiled annually, in most, and quarterly in some euro area countries. The ECB currently compiles quarterly Monetary Union financial accounts (MUFA) for the euro area non-financial sectors and insurance corporations and pension funds with data starting in 1997Q4 (currently up to 2004Q3).

Household sector accounts for the euro area follow closely an integrated approach and as reflected in the System of National Accounts (SNA 93)³ as well as in the European system of national and regional accounts in the Community (ESA 95). At present, they are only available annually. However, the ECB and the

_

² European Council Regulation (EC) of 25 June 1996 on the European system of national and regional accounts in the Community

³ United Nations: System of National Accounts 1993 (SNA 93).

European Statistical Office (Eurostat) are working towards compiling quarterly euro area non-financial accounts. Unlike most institutional sectors, direct source information for the household sector is very scarce. This is due to the difficulty of obtaining personal data from individuals. Therefore, information on the household sector has to be derived from source data from the other sectors that are its counterparts.

The quarterly non-financial sector accounts have been defined in terms of sector and transaction coverage. They consist of five sectors (including the household sector) and twenty five transactions. European Union legislation is expected to be passed by the European Parliament in the immediate future. Once enacted the first data deliveries of data under this legislation are expected in early 2006, although member states can apply for delays of up to 3 years. These data should be delivered after 90 days, although a transition period for three years to implement this requirement applies here as well.

The compilation of the quarterly non-financial accounts needs to specifically take into account the issue of completeness, because of the differentiated reporting obligations specified in the forthcoming legislation and the stated adjustment period. It also needs to take into account the compilation of a quarterly euro area rest of world account, and the resolution of asymmetries, as well as the consistency with the annual non-financial sector accounts.

A set of quarterly euro area financial accounts data is published in the ECB's Monthly Bulletin in the Tables on Financing and Investment (TFI) for the non-financial sectors and ICPFs. In addition they are also published monthly in the ECB's Statistical Pocket Book. Financial assets are not broken down by sector and only market and intermediated instruments are covered (deposits and loans vis-à-vis financial institutions, securities other than shares, quoted shares, mutual fund shares and insurance technical reserves). Transactions and positions vis-à-vis non-residents are not completely covered.

The tables are compiled using Monetary Financial Institutions (MFI) balance-sheet data on counterparts for deposits and loans vis-à-vis MFIs, security issues statistics for issuances of securities and national quarterly financial accounts for all other instruments transmitted to the ECB by the euro area countries. The data are currently delivered with data starting the last quarter of 1997 and after 140 days from the end of the last quarter they are published.

The development of the tables takes place in the already established framework of the seven sector approach, according to which the tables are incrementally enhanced to cover all resident sectors (non-financial corporations, MFIs, Other Financial Institutions (OFI), Insurance Corporations and Pension Funds (ICPF), non-financial corporations, households (including NPISH) and the rest of the world. In later stages of the approach, the tables are extended to cover all financial instruments and integrated with capital accounts.

Drawing on relevant euro area statistics – money and banking, balance of payments, securities issues – and, as far as possible, on national financial accounts, the ECB is preparing to compile quarterly sector accounts for the euro area, to complement monetary analysis and economic research. The time series derived from this framework provide a consistent system for recording the economic relationships that the household sector has with institutional sectors.

4. The ECB uses of household sector data

From the users' perspective, quarterly non-financial and financial accounts for the euro area offer a wide range of financial information, as follows:

- a) To enable analysis of monetary policy and the transmission mechanism of policy decisions: quarterly financial accounts for the euro area provide a wide financial context for monetary aggregates and credit, which are essentially derived from MFI statistics. While households continuously take decisions on which types of assets they invest in and how they finance their investments, the sectoral framework leads to an extended monetary analysis covering monetary aggregates vis-à-vis short-term financial investment as well as other investment and financing. For example, investment in long-term securities and shares reflects predominantly long-term financial investment decisions;
- b) To make comparisons between the economic behaviour of euro area households with households in the U.S. and other major world economies e.g. savings ratios, debt to income ratios, portfolio compositions;
- c) Provide information on household wealth, including the relationship between household net wealth relative to personal disposable income;
- d) Provide information about the composition of wealth, and consider how the composition is likely to change and the implications of those changes may have e.g. household debt;
- e) To assist forecasting procedures related to households as well as the other institutional sectors;
- f) The household balance sheet changes shown in the financial accounts may also be used for a better understanding (and forecasting) money growth.
- g) To monitor the development of cross-border financial transactions (e.g. loans, insurance and pensions schemes) and positions within euro area by households as a consequence of monetary union;
- h) As the quarterly financial (transactions) account and the capital account for the euro area are linked to each other they offer amended by components of the production and income accounts, information that complements statistics on developments in the real economy. The link with real variables allows studying the

interrelation between financial and real variables, which also covers part of the monetary policy transmission process, as reflected in income and wealth effects.

5. Comparisons between the economic behaviour of households in the euro area and households in the U.S.

5.1 Data availability and comparability

Whilst making a comparison between the US and euro area data it is important to consider certain conceptual differences. One of the main difference between the US Flow of Funds Accounts (FoF) and euro area is the sector delimitation of households and non-financial corporations. According to the SNA 93 and the ESA 95, the economic activities of entrepreneurs who do not have independent legal status, should not be separated from households. Sole proprietorships and most of the partnerships without independent legal status are thus contained in the household sector in the euro area. This explains inter alia the existence of some non-residential investment and its financing in the household sector.

In the US FoF both sole proprietorships and all partnerships, with or without independent legal status, are excluded from the household sector and included in the non-corporate business sector. Furthermore, in the US, individuals in their capacity as receivers of rental income are also excluded from the household sector and included in the non-corporate business sector. The narrower sector delimitation due to the exclusion of these units cannot be estimated due to missing underlying data. Thus, there remains a downward bias on debt liabilities of households and an upward bias on debt liabilities of non-financial corporations. The exclusion of these units from the household sector in the FoF has no effect on the income of households because the income generated by these units is attributed to households in the US FoF.

The close monitoring of households' indebtedness is part of the monetary, economic and financial stability analysis of the ECB. On the one hand, an increase in debt may be a source of higher aggregate demand and contribute to inflationary pressure in the medium term. On the other hand, high indebtedness levels generally increase the financing costs of the borrower, deteriorate balance sheet positions and may restrict access to new financing as well as increase the sensitiveness to changes in interest rates, which could have negative implications for future consumption and investment spending and consequently economic activity. Excessive indebtedness may in part also have an impact on financial stability via an increase in bad loans and consequently on the soundness of the financial system.

In the euro area, the indicators usually used to quantify indebtedness are ratios that relate broad measures of debt to income. In general, these are the ratio of households' debt to gross disposable income and the ratio of

non-financial corporations' debt to GDP. Both ratios for the euro area are regularly compared with those for the United States on an annual basis.

In the United States, The Federal Reserve Board gives a prominent role to the analysis of debt outstanding by sector in its 'Flows of funds' publication. The semi-annual 'Monetary Policy Report to the Congress' of the 'Board of Governors of the Federal Reserve System', as well as the respective testimony of the Chairman of the Board to the Congress, always make a reference to indebtedness. The US emphasises the analysis of debt service burden of households.

5.2 Household debt

Household debt is defined as the outstanding amount of loans granted to households. The coverage of loans seems comparable across the considered economic areas. In particular, loans granted by non-financial sectors and non-residents, which are not covered in the quarterly euro area data, appear not to be significant in the euro area, and the US. The US headline figure on household debt is adjusted to the concept of loan liabilities by excluding debt securities issued by non-profit organisations and by including loans granted by security dealers. The net effect of these two adjustments is however very small (0.1% of loans). As the sector discrepancy cannot be estimated due to missing underlying data there remains a downward bias on debt liabilities. Nevertheless, the US household debt-to-GDI ratio is higher than in the euro area and, due to a strong increase in the past decade.

5.3 Household debt to income ratio

Substantial adjustments are necessary for the derivation of disposable income of US households in line with international standards. In the US household accounts interest and current transfers received are treated as income in line with SNA principles, but interest paid and current transfers paid are treated as uses of income (similarly to consumption and saving). In order to increase the comparability, interest paid and current transfers paid can be deducted from the published US disposable income. These corrections decrease US households' gross disposable income by about 5%. This lower denominator leads to a correspondingly higher debt-to-income ratio for US households when compared with the euro area.

6. Future developments in euro area accounts

6.1 Quarterly sector accounts

Quarterly sector accounts for the euro area have to be implemented as a step-by-step approach based on the availability of timely non-financial and financial statistics for the euro area.

For reconciliation purposes, the financial transaction account may be extended by combining it with the capital account. The capital account comprises the (net) acquisition of non-financial assets as well as the "internal" sources of financing (mainly net saving). The acquisition of non-financial assets is, for each sector, the gross capital formation (excluding consumption of fixed capital). Saving and capital transfer receipts excluding payments appear as net amounts available from the capital account for investment purposes. They represent the internal sources of finance. Financial instruments are shown in the financial account as net acquisition of financial assets or as net incurrence of liabilities by each sector. The net incurrence of liabilities comprises the "external" sources of finance. Saving, net capital transfers, and net incurrence of liabilities are the various sources, which could be used to acquire non-financial and financial assets.

All financial transactions of a sector are combined into net lending or net borrowing that is either the excess of the sector's financial investment over its external financing or, vice versa, the excess of the sector's internal financing over its non-financial investment. Consequently, two basic constraints apply: Firstly, for each sector, total investment is the sum of non-financial investment and financial investment, which is by definition equal to finance shown for each sector. Secondly, the sum of all investments of the sectors is equal to the sum of all sources of financing used by the sectors.

For a fully integrated system of accounts for the euro area, the other non-financial accounts (production and income account), the other flow accounts (other changes in the volume of assets account and revaluation account) and full balance sheets will have to be developed.

An overall aim is to apply the integrated system in a way that it allows the identification of variables and indicators which are of specific analytical and political interest. This includes monetary aggregates, private, government or external debt, net lending/net borrowing or deficit/surplus by sector, GDP, disposable income, consumption and saving, gross capital formation, net acquisition of financial assets, net incurrence of liabilities, or holding gains or losses.

6.2 Quarterly financial accounts

For the financial accounts, work is nearly complete on the Table on Financing and Investment (TFI) of non-financial sectors (non-financial corporations, general government, households) and insurance corporations and pension funds sector in the euro area. A further step will be to expand the accounts to seven sectors covering the whole euro area as well as the euro area rest of the world. Further consecutive steps will be to

cover the full set of instruments, the non-financial accounts (as much as possible) and who-to-whom information.

Nevertheless, basic principles as described in ESA 95 have to be followed in implementing a step-by-step approach. These are the selection of the instrument and account categories as well as the institutional sectors. Others are implicitly covered by selecting ESA 95 as the basic methodological framework such as for market valuation, time of recording, and residency.

To be of more benefit to users, the euro area financial accounts coverage needs to be enhanced in two directions:

- a) The financial accounts will have to be linked to non-financial accounts to reflect a comprehensive picture of financial and non-financial flows within the euro area, and a frequent snapshot of outstanding amounts of assets (financial and non-financial) and liabilities, enabling monetary developments to be seen within a broad accounting framework.
- b) Who-to-whom information will have to be integrated as much as possible into the framework to comply with statistical as well as analytical requirements.⁴ Therefore, additional information has to be integrated on the participating sectors as debtors and creditors, i.e., who-to-whom information.

⁴ For further information see International Monetary Fund, Quarterly National Accounts Manual, Washington DC 2001.

References

Banco de España (2004): cuentas financieras de la economía española 1995 - 2003, Madrid

Bank of Japan (November 1999): Guide to Japan's Flow of Funds Accounts, Tokyo

Board of Governors of the Federal Reserve System (2000): *Guide to the Flow of Funds Accounts, Volume 1 and 2,* Washington, D.C.

Board of Governors of the Federal Reserve System (July 2001): *The U.S. Flow of Funds Accounts and Their Uses, Federal Reserve Bulletin,* Washington, D.C.

Commission of the European Communities – Eurostat, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank (1993): *System of National Accounts 1993 (SNA 93)*, Brussels, Luxembourg, New York, Paris, Washington, D.C.

European Commission (1996): Council Regulation (EC) No 2223/96 of 25 June 1996 on the European System of national and regional accounts in the Community (ESA 95), Brussels

European Central Bank (October 2000): The Table on Financing and Investment of Euro area Non-financial Sectors, Frankfurt am Main

European Central Bank (February 2004): Developments in private sector balance sheets in the Euro area and the United States, Monthly Bulletin, Frankfurt am Main

European Central Bank (March 2005): Financing and financial investment of the non-financial sectors in the euro area, Monthly Bulletin, Frankfurt am Main

European Central Bank (March 2005): The Table on Financing and Investment, Statistical Pocket Book, Frankfurt am Main

International Monetary Fund (1995): Balance of Payments Manual, Washington, D.C.

International Monetary Fund (2000): Monetary and Financial Statistics Manual, Washington, D.C.

International Monetary Fund (2001): Quarterly National Accounts Manual, Washington, D.C.

International Monetary Fund (2001): Government Finance Statistics Manual, Washington, D.C.

Organisation for Economic Co-operation and Development (2004): Comparison of Household Savings: Euro area/US/Japan, Statistics Brief No.8, Paris