Sectoral Accounts for the Euro Area
Improving contents and communication[1]

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Abstract

In spring 2007, the European Central Bank, in close cooperation with Eurostat, released the quarterly integrated accounts by institutional sector for the euro area (the EAA), covering both financial and non-financial accounts. In 2014/15, the EAA are not only being aligned with the new international statistical standards (SNA08, ESA 2010), but also improved and extended in order to meet developing user demands. The paper summarises the main changes in the financial accounts, namely improved timeliness, the who-to-whom presentation for securities, and distinguishing revaluations and other changes in volume from financial transactions. Furthermore, given the objective to produce integrated financial and non-financial accounts, work to improve the vertical consistency of the accounts is explained. Finally, reasons and efforts to better communicate the EAA are discussed, with emphasis on the results for the non-financial corporations and the household sectors.

Keywords: Euro area accounts; Financial accounts; Household sector.

1. Introduction

The European Central Bank (ECB) and Eurostat have jointly compiled the quarterly EAA since 2007, i.e. the integrated financial and non-financial accounts by institutional sector for the euro area as a whole (which now comprises 19 EU countries). This paper focusses on recent and ongoing developments in the quarterly financial accounts, which not only result from the implementation of the new statistical standards (SNA08/ESA2010), but also from measures to improve their usefulness. While the paper concentrates on results for the euro area, it should be noted that euro area statistics are based on input provided by national central banks and national statistical institutes. Most of the enhancements to euro area statistics discussed here are therefore also reflected in similar initiatives by euro area countries. The presently nine EU countries which are not members of the euro area have in most cases adopted the same objectives. The production and publication of a comparable set of quarterly financial accounts by up to 28 EU countries, together with quarterly non-financial accounts by sector for all countries, has been a major achievement of the European Statistics over the last 10 years.[2]

The second part of this paper discusses communication aspects of the EAA. The production of more timely and detailed statistics does not automatically imply more use of and benefit from the statistics. Additional efforts are needed to reach the users, in particular users beyond the core group of highly experienced analysts. This applies particularly for the EAA, as its complexity – multiple dimensions (sectors, instruments, stocks, transactions, countries etc.) – can be perceived as too high for certain uses. The paper informs about measures taken by the ECB to address this issue.

In October 2014, the EAA changed to the new European System of Accounts 2010 (ESA 2010), the European version of the SNA 2008, which is also reflected in the respective ECB Guideline (ECB, 2013). These changes are not further discussed in this paper.[3]

2. Improvements of the Euro Area Accounts
2.1 Timeliness

Until 2014 the EAA were published with a delay of four months after the reference quarter. ECB users expressed strong concerns about this long publication delay, and thus the improvement of timeliness of the EAA became a strategic objective. It was agreed that a release of the EAA one month earlier (t+90 days) could be achieved by the combination of (a) an earlier transmission of national non-financial accounts to Eurostat and of the national financial accounts to the ECB, (b) the intensive use of euro area results from primary ECB statistics (such as euro area banking statistics compiled by the ECB), and (c) a shortening of the production timetable for the EAA on the ECB and Eurostat side by several days.

Chart 1 shows the main inputs to the EAA and their current time of availability. Given that a number of statistical sources are completed only at around t+90/100, another change introduced is that the earlier publication of euro area results is followed by a second release at t+120, which does not only include updated and completed results for the euro area, but also the full set of accounts for all EU countries.

Chart 1. Overview EAA data sources and timeliness
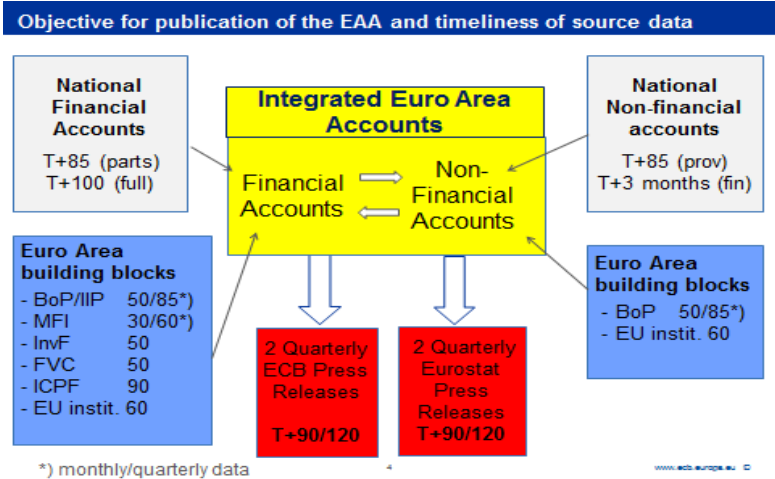
Implementing the publication of the EAA at t+90 will be done in several steps. An early and partial EAA release shortly after t+100 has been implemented in 2015. The move to a publication at t+94 is envisaged for 2016. This is done in close cooperation with Eurostat.

2.2 Who-to-whom information

A second enhancement concerns the reporting of 'from whom-to-whom' matrices. These show financial positions and transactions with a breakdown by counterpart sector in the integrated framework of the EAA. Such information is not only very useful for monetary and financial analysis of the flows between sectors of financing and investment, but also for financial stability analysis showing interconnectedness between sectors, and the potential development of imbalances and risks.

Who-to-whom information is not covered in detail in the SNA 2008 and the ESA 2010. Both manuals focus on the recording of financial stocks and flows *by institutional sector*, rather than *by counterpart*

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[3] For more detail see ECB (2014).

sector. The SNA mentions the matrices as part of a "detailed flow of funds" (see SNA 2008, chapter 27.C and para 2.150-53). The ESA cover them in two paragraphs (19.26-27). More guidance is provided in the Handbook on Securities Statistics (BIS, ECB, IMF, 2010). Recommendation 15 of the G-20 Data Gap Initiative has certainly helped to promote the development of full financial sector accounts and who-to-whom tables (FSB, IMF 2014). Moreover, adding who-to-whom information for stocks of debt securities as one of the SDDS Plus criteria has given new impetus to establish who-to-whom data as a regular output of the financial accounts (IMF, 2014).

In the euro area, and in response to the financial crisis, reporting of quarterly who-to-whom tables for securities, listed shares and investment fund shares/units to the ECB will begin as of October 2015. All euro area countries currently develop or have already released this information for their own country.

Developing who-to-whom for the financial accounts requires appropriate source statistics. Who-to-whom data for deposits are in this respect the least difficult case: as deposits are issued almost exclusively by Monetary Financial Institutions (MFIs, i.e. Deposit taking corporations plus Money Market Funds), MFI statistics which includes counterpart information provides most the information required (MFIs account for 98.5% of the deposit liabilities the euro area). Additional sources are required for who-to-whom for loans, as non-bank sectors account for an important share in all loans granted (about 40% of the loans granted by euro area residents). Due to the lack of timely and complete sources, loans granted between non-financial corporations (NFCs, mostly intra-group loans) as well as by certain other financial intermediaries ("shadow banking") are most difficult to capture.

Statistical sources for who-to-whom for securities have been developed in the euro area and EU over the last 10 years. The main lines of development have been: first, the institutional sector coverage has been enlarged by covering financial sub-sectors other than MFIs in the statistical surveys (full coverage of investment funds from 2009, of securitisation vehicles from 2011, as well as first data for insurance and pension funds from 2011). Second, by introducing more granular or even security-by-security reporting, the coverage and quality of the reporting on issuing sectors was enhanced. However, for developing symmetric who-to-whom data an important data gap had remained: information on the holding sector of securities was incomplete. This gap has been largely closed recently by the introduction of new ESCB statistics on securities holdings, collected on a security-by-security basis from custodians and financial institutions. A comparison showed that the new securities holdings statistics cover around 83% of the EAA aggregate, which underlines its potential role for the EAA (see also ECB 2015).

EU countries use these sources to meet the ECB's reporting requirements for financial accounts, which include who-to-whom matrices with a breakdown into eight resident creditor and debtor sectors and non-residents (the latter without breakdown) for all instruments mentioned. For the national reporting a distinction of positions and flows with other euro area countries from those with non euro area countries is necessary for deriving proper euro area "domestic" who-to-whom tables, and a rest-of-the world sector from the euro area perspective. Table 1 summarises the reporting.

Table 1. Generalised ECB scheme for EAA sectoral who-to-whom reporting

| - Debt securities
- Listed shares
- Investment fund shares/units
- Deposits
- Loans | | **Resident Creditors** (Holdings) | | | | | | | |
		1	2	3	4	5	6	7	8
		NFCs	MFIs	Inv. Funds	OFIs	Insurance	Pension funds	General Government	Households incl. NPISH
Resident Debtors (Issuance)	Sector 1, 2 ... 8								
Non-residents Debtors (Issuance)	Other euro area countries	Sector 1, 2 .. 8								
	Non-euro area (total)									

Note: Due to the nature of the instrument, the reporting for deposits and investment fund shares/units is simplified.

While euro area who-to-whom for deposits and loans has been published already for several years, the publication of euro area who-to-whom tables for securities is planned for 2016.

2.3 Revaluations and other changes in volume

An additional improvement concerns information that enables to separate the non-transaction related flows into "other changes in volumes" (OCV) and revaluations (holding gains and losses). For analysis in particular data on revaluation of financial assets and liabilities are important. Data on OCV may reflect the outcome of various other effects of economic nature (e.g. write-off of financial assets) and non-economic nature (e.g. statistical changes, or revisions to stock data that have no impact on transactions). OCVs – at the aggregated level of the published accounts – are therefore usually difficult to interpret, and their main purpose is to derive good data for revaluations. For practical reasons it was decided to limit the transmission of data to the ECB to OCVs, while revaluations are derived by the ECB by difference (change in stocks minus OCV). Chart 2 shows two examples, which illustrate the importance of revaluations and the usefulness of distinguishing between revaluations and OCVs.

Chart 2. Example for euro area revaluations and other changes in volume
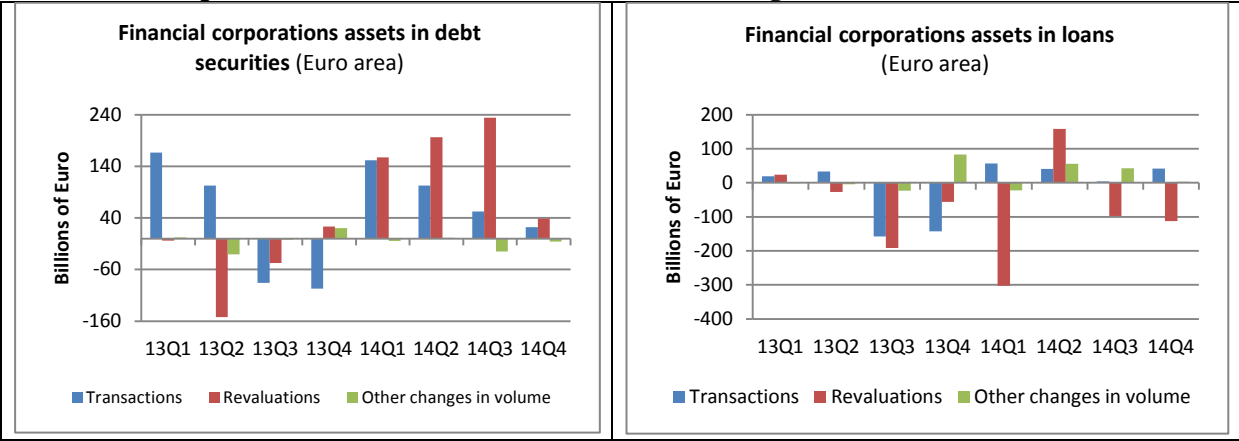
## 2.4 Vertical consistency of the Euro Area Accounts

The internal consistency of the system of national accounts is one of its main advantages. The EAA therefore strive for high consistency between the financial and non-financial accounts. The net lending/net borrowing of a sector is one of the main results of the financial and non-financial accounts, and large discrepancies do not only confront users with a difficult choice, but high discrepancies, if they are persistent, also indicate data quality issues.

Through the integration and reconciliation of different statistical sources a large degree of consistency is achieved for euro area aggregates. In particular, in the published accounts, full "vertical" consistency is achieved for the financial and the government sectors. This, however, requires in many periods substantial reconciliation corrections of, mainly, the financial accounts. Discrepancies are only partly corrected for in the NFC and the Household/NPISH sectors, i.e. the euro area net lending/net borrowing compiled from the non-financial and financial side is not identical. The reasons for not reconciling these discrepancies are the lack of sufficient reliable source statistics.

Whether or not full vertical consistency should be enforced depends on the size of the discrepancy, on the available information that can be used for reconciliation and, last but not least, preferences of statisticians and users. A general recommendation is difficult to make. However, given the observed sizeable discrepancies, the ECB and Eurostat, national central banks and national statistical offices in the European Union have started an initiative to exchange information on sources of discrepancies and measures undertaken to increase consistency.

Chart 3 shows recent (absolute) vertical discrepancies in absolute and relative terms, before final reconciliation. It should be noted, however, that some of them cancel out over successive quarters, seemingly due to timing differences between the financial and non-financial accounts.

Chart 3. Vertical discrepancies in the Euro Area Accounts
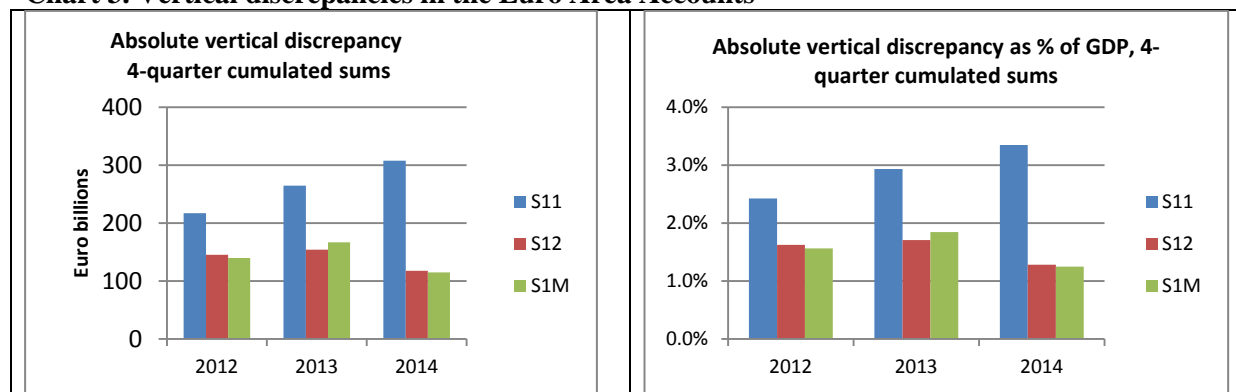
Note: Vertical discrepancy calculated as sum of available national data before reconciliation

3. Dissemination and Communication of the Euro Area Accounts

The dissemination of the EAA is done through the standard channel for ECB statistics, i.e. through press releases and the ECB's Statistical Data Warehouse. The ECB also has arrangements with other international organisations for the transmission of EAA and national financial accounts.

However, contrary to most statistics, EAA is a particular complex statistical product that is difficult to understand in many details even by economists. For this reason there is a particular effort to establish ways for communicating and explaining the details of the EAA to targeted user-groups, with different needs and preferences.

Another key consideration in the communication of EAA is that, as derived statistics, it incorporates some primary statistics which have normally been disseminated before. In the case of statistics on the financial sector and sub-sectors they are disseminated one to two months before. In the case of the Rest of the World sector, dissemination and press releases of the euro area and national balance of payments happen about the same time or shortly before. The General Government sector, in particular in Europe, receives a lot of attention with dedicated communication of quarterly and annual data, the latter being part of the Excessive Deficit Procedure, underpinning the Stability and Growth Pact. The consequence of this situation is that the communication concentrates in "the other two sectors", i.e. households and non-financial corporations.

In fact, when reflecting on the communication of EAA it is very important to keep in mind that its main value added comes from the following statistical information the EAA generate: a) the presentation of a comprehensive framework for the economy, b) the interaction among sectors and sub-sectors, mainly through each sector's net lending/borrowing, c) the household sector, d) the non-financial corporations sector. It is in these four areas where the statistical value added of EAA concentrates. Hence, the communication strategy for EAA should focus in these four areas.

At the same time, different users have different needs and preferences. Hence, the dissemination and communication of EAA implicitly caters for these differences, drawing from the experience gathered since the publication started, in 2007. In fact, during several years there was no distinction among user-groups; there was also the ambition to emphasize the uniqueness of EAA as a comprehensive statistical framework, compared to the standard dissemination of specific statistics which cover only one or few economic, monetary or financial indicators. The experience gathered in those years was, however, not entirely satisfactory as often users found that the information was too much, too detailed, and in the case of the financial, government and rest of the world sectors, the most relevant data had already been or were about being published. In this light the following changes were introduced.

On one hand the dissemination of the comprehensive framework, i.e. the fully integrated financial and non-financial accounts for all sectors and sub-sectors continued to be done through the ECB website and transmitted to other organisations as agreed through the arranged data exchanges. On the other hand, however, the communication has increasingly focused in the last years on the households and non-financial corporations sectors, as they are the two sectors in which the primary statistics provide little information, making EAA a key statistical source for both institutional sectors.

In the ECB EAA quarterly press release[4], some few selected highly relevant policy indicators on households and non-financial corporations are communicated. For households, mainly: financial and non-financial investment, financing to other institutional sectors, saving and changes in net worth and debt. For non-financial corporations, mainly: net entrepreneurial income (as a measure of profits), non-financial investment, financing to and from other institutional sectors, saving and debt. Examples are shown in the graph and table below.
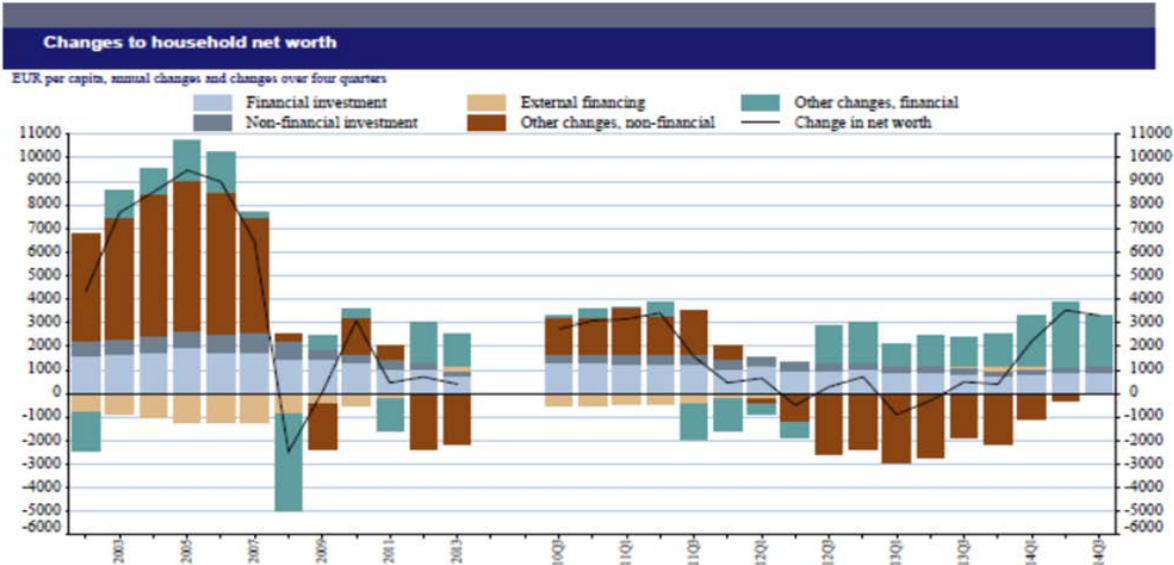
Chart 4. Euro area household changes in net worth

Table 2. Euro area non-financial corporations

Non-financial corporations							
(percentages of value added (net), based on four-quarter cumulated flows)							
	2013Q1	2013Q2	2013Q3	2013Q4	2014Q1	2014Q2	2014Q3	2014Q4
Entrepreneurial income*, net (current profits)	31.4	31.3	31.3	31.0	31.3	31.3	31.5	32.3
Saving, net (retained earnings)	2.1	2.3	2.4	1.8	2.3	1.9	2.1	2.9
Non-financial investment, net	2.4	2.0	2.1	2.1	2.2	2.2	2.3	2.4
Financial investment	7.3	7.8	10.1	9.9	10.0	9.5	8.2	9.5
Net incurrence of liabilities	6.5	6.8	8.9	9.1	8.5	8.5	7.3	7.6
Debt (outstanding amount to GDP)	134.9	134.7	134.0	132.8	131.5	134.0	132.3	132.7

* ECB estimate.

The extraction of policy relevant information on households and non-financial corporations is further being deepened and widened by the parallel development of reports on both sectors comparing the developments across EU countries. For the household sectors where the development work is more advanced, the main indicators chosen are the following:

- Household disposable income and components

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[4] http://www.ecb.europa.eu/press/pdf/ffi/eaefd_4q2014_early.pdf

- Household nominal disposable income and its uses
- Compensation of employees and components
- Labour market participation, employment and unemployment
- Household financing and investment per capita
- Household investments in financial assets and contributions by components
- Household saving, non-financial investment, external financing and debt
- Changes to household net worth

In the Annex some charts for the euro area are shown. The preparation for the publication of corresponding graphs for all EU countries is not yet finished. The preparation of selected indicators on non-financial corporations will start after the finalisation of the work being carried on households.
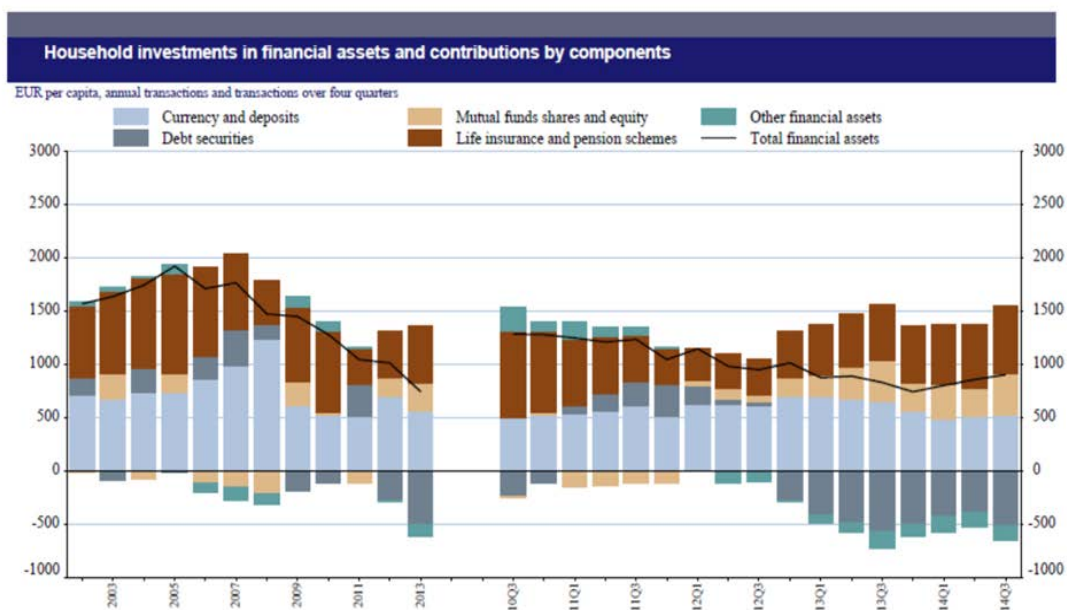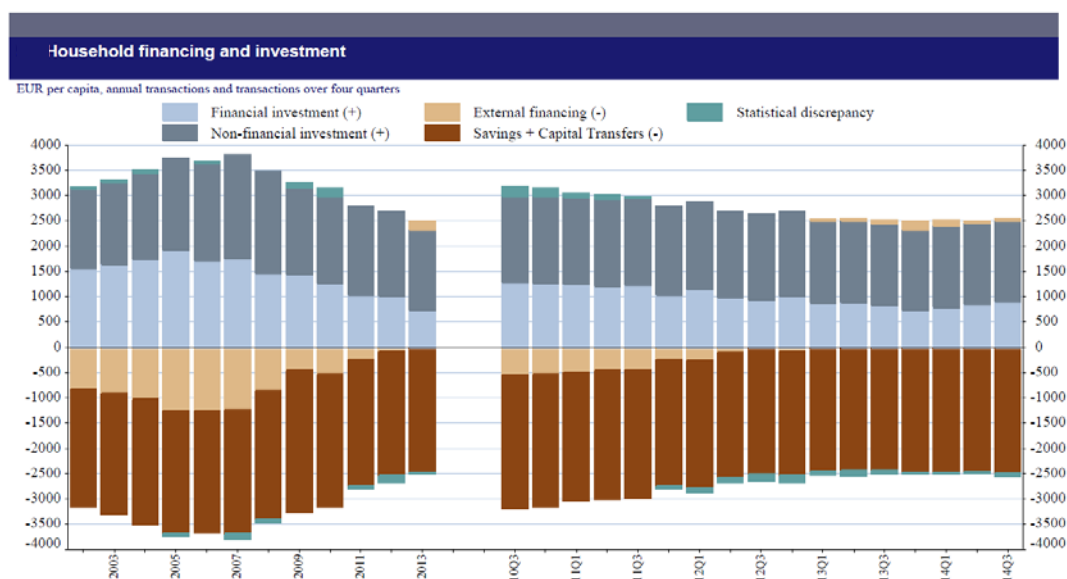

5. Conclusions

This paper has shown that implementation of the new statistical standards and other improvements of the integrated accounts in the euro area go hand in hand. Substantial changes of the accounts are being worked on and it will take some years until the objectives are being achieved. At the same time new challenges arise (more detail, more data for the household and NFC sectors, financial innovation, better accessibility of the results for users) which are likely to determine the agenda of the financial accounts in the next years. A distinction between dissemination and communication is necessary, whereby the former should preserve the comprehensiveness and the richness of the integrated financial and non-financial sector accounts, the communication should focused on the specific value added produced by EAA, which concentrates on households, non-financial corporation and net lending/borrowing by institutional sector to and from the rest of the sectors.

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ANNEX: Selected indicators for the euro area household sector

Household financing and investment

EUR per capita, annual transactions and transactions over four quarters

- Financial investment (+)
- Non-financial investment (+)
- External financing (-)
- Savings + Capital Transfers (-)
- Statistical discrepancy

Household investments in financial assets and contributions by components

EUR per capita, annual transactions and transactions over four quarters

- Currency and deposits
- Debt securities
- Mutual funds shares and equity
- Life insurance and pension schemes
- Other financial assets
- Total financial assets

Household saving, change in net worth and debt
(percentages of adjusted gross disposable income, based on four-quarter cumulated flows)

	2013Q1	2013Q2	2013Q3	2013Q4	2014Q1	2014Q2	2014Q3	2014Q4
Saving rate (gross)	12.8	12.6	12.7	12.9	12.8	12.7	12.7	12.8
Change in net worth	-4.3	-1.0	3.2	3.1	12.3	19.8	18.1	15.8
Non-financial investment (net)	1.5	1.5	1.4	1.3	1.3	1.3	1.2	1.2
Financial investment	4.7	4.7	4.4	4.1	4.1	4.4	4.6	5.1
Financing (-)	0.0	-0.1	-0.3	-0.9	-0.5	-0.1	-0.1	0.4
Revaluation of assets and other changes	-10.5	-7.4	-3.0	-3.1	6.4	14.1	12.1	9.9
Debt (loans, outstanding amount)	97.3	97.3	96.9	96.3	95.8	95.1	95.1	94.8