

Estimation of euro area balance of payments and international investment positions

- extending the BPM6 series -

1. Introduction

The International Monetary Fund's Balance of Payments and International Investment Position Manual – 6th Edition (BPM6) introduced some relevant changes to the previous methodology (BPM5 standard).¹ These meant that a direct conversion of BPM5 data into BPM6 data was not possible and a more sound estimation method was needed, particularly for the period 1999–2007.

The first full-length backdata estimates (i.e. going back to 1999) of euro area current account series were released by the European Central Bank (ECB) in April 2015. Following this first exercise, and in the context of increasing the availability of historical BPM6 balance of payments (b.o.p.) and international investment position (i.i.p.) data for the euro area, a project was launched to estimate backdata for the euro area b.o.p. financial and capital accounts and i.i.p. The objective was to produce and release a comprehensive presentation of euro area b.o.p. and i.i.p. aggregates stretching back to 1999.

The following sections provide a brief presentation of the methodology used to estimate BPM6 data for the period 1999–2007.²

2. Availability of national BPM6 backdata

Since the introduction of the BPM6 methodology in the euro area (in June 2014), countries have made significant efforts to provide quality data in line with the new methodology. Despite this, BPM6 data for periods prior to 2008 are still missing for many countries. For this reason, it was not statistically possible to estimate euro area backdata aggregates by simply adding together individual euro area countries' contributions. In particular, complete quarterly country (b.o.p. and i.i.p.) information with the necessary geographical detail (i.e. data vis-à-vis the “extra-euro area”) for the

¹ For a detailed list of methodological changes between BPM5 and BPM6, please consult [2015 Quality Report of the euro area balance of payments and international investment position statistics \(Box\); IMF Balance of Payments and International Investment Position Manual \(BPM6\) - Appendix 8; Implementation of the Balance of Payments and International Investment Position Manual \(BPM6\)](#).

² In this note, the estimation of euro area aggregates for the 1999 to 2008 period is commonly referred to as the estimation of “euro area BPM6 backdata”.

period 1999–2007 is only available for a small group of countries. In this context, it was decided to take, as much as possible, advantage of the existing BPM5 euro area aggregate series to estimate complete BPM6 information after correcting for the relevant methodological differences.

3. Estimation methodology

Euro area BPM6 backdata aggregates were computed using several approaches, but always with the objective of minimising the number and magnitude of the underlying estimation assumptions.

The euro area current account items were primarily estimated using available BPM6 country data to better capture the reclassifications between different components of the current account triggered by the new statistical standards. However, BPM5 data was occasionally used as the best proxy when the BPM6 data was too scarce or the quality of the available data was not sufficient.

The methodological changes were less relevant for the financial account, meaning that the backdata estimations were primarily based on BPM5 data. A “top-down” approach was used, i.e. main aggregates were estimated first. These were portfolio investment, foreign direct investment, other investment, net financial derivatives and reserve assets (“anchor series”). This was followed by an estimate of the instrument and sector breakdowns. When methodologically possible, series were simply mapped from BPM5. A major exception was the estimation of foreign direct investment (FDI), particularly because of the change from the directional to the asset/liability principle.

As mentioned above, for the anchor series (with the exception of FDI), a direct mapping of BPM5 data was deemed to be the most convenient approach. Portfolio investment liabilities and other investment assets were estimated using BPM5 data adjusted for errors and omissions. This approach was also used to facilitate consistency between the backdata and the existing BPM6 data from 2008 (inclusive) onwards, which already incorporate the enhanced euro area compilation methodology to address errors and omissions.³ The quarterly FDI assets and liabilities were estimated using the available BPM5 breakdown of “claims/liabilities on affiliated enterprises” and “claims/liabilities on direct investors”. These series were used to calculate a ratio to gross up net FDI stocks for debt instruments.

The following additional constraints were respected during the estimation process:

- the sum of the breakdowns by sector and instrument were made equal to the estimated total;
- stocks and flows were reconciled to assure meaningful “other flows”;
- monthly series were made consistent with the estimated quarterly data.

For monthly data, the consistency with quarterly series was ensured by applying the proportional Denton method. The Denton method preserved the change pattern of BPM5 monthly data, which was used as an indicator without altering the corresponding quarterly series.⁴

³ For more information on the enhanced euro area methodology used to address euro area errors and omissions, please consult the “Sources and Methods” section of the ECB website http://www.ecb.europa.eu/stats/balance_of_payments_and_external/balance_of_payments/html/index.en.html.

⁴ The basic version of the proportional Denton benchmarking technique used in this exercise kept the BPM6 monthly estimates as proportional as possible to the BPM5 monthly series by minimising (in a least squares sense) the difference in the relative adjustment to neighbouring months, subject to the constraints provided by

The most detailed information by counterpart geography could not be estimated using the methodology described above because of the difficulties in carrying over FDI information from BPM5 to BPM6. Another attempt will be made at a later stage.

4. Results

A graphical representation of the main results is shown in the charts below and in Charts 1A and 2A in the Annex. The charts show the estimated BPM6 series in red and the unadjusted BPM6 series in blue.

Chart 1: Euro area net financial transactions
(EUR billions)

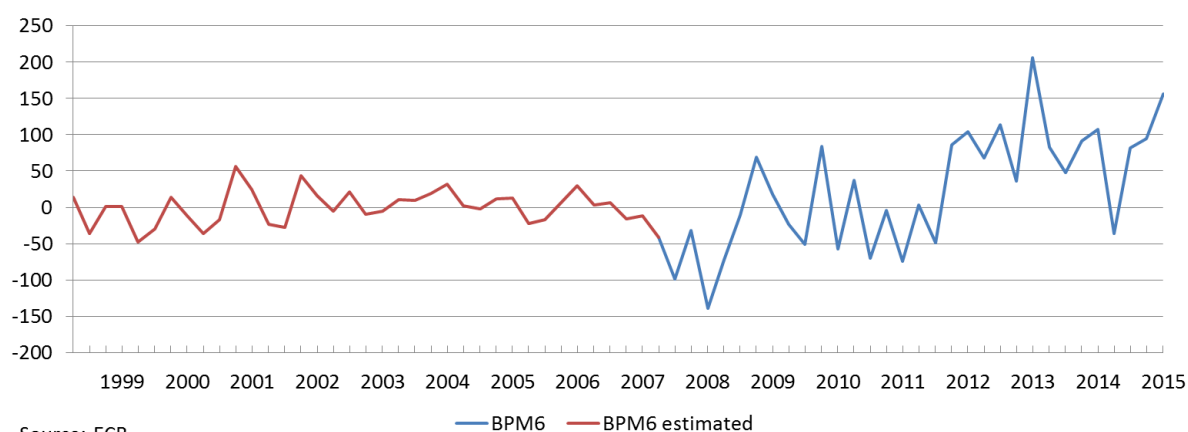
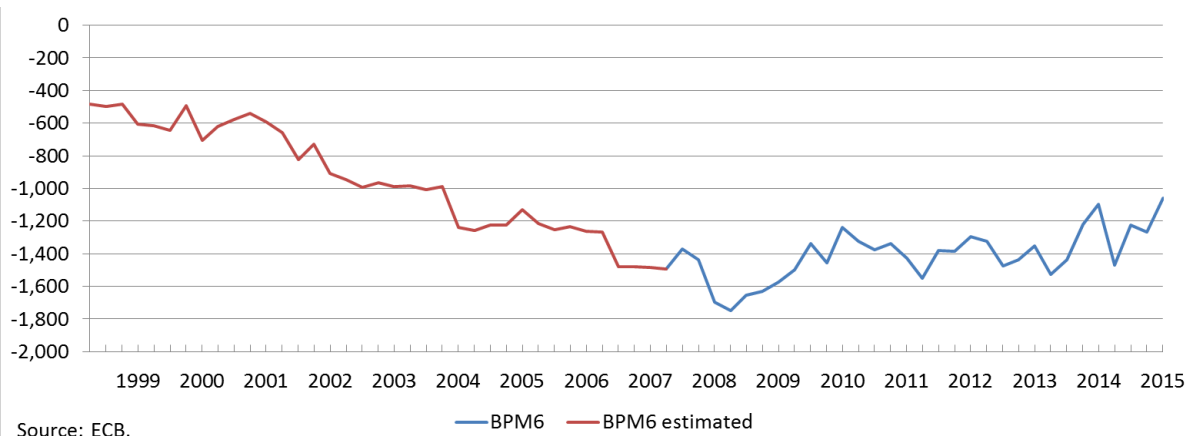


Chart 2: Euro area net international investment position
(EUR billions)



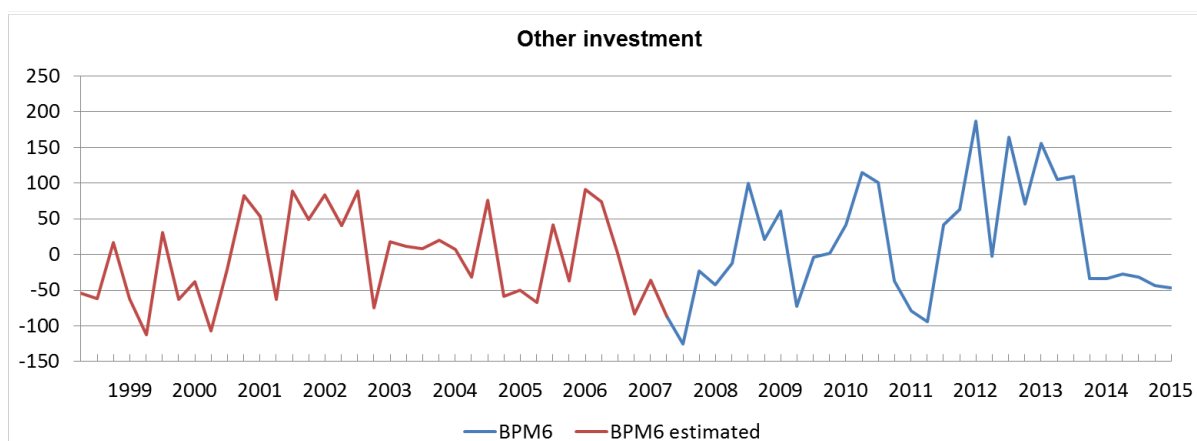
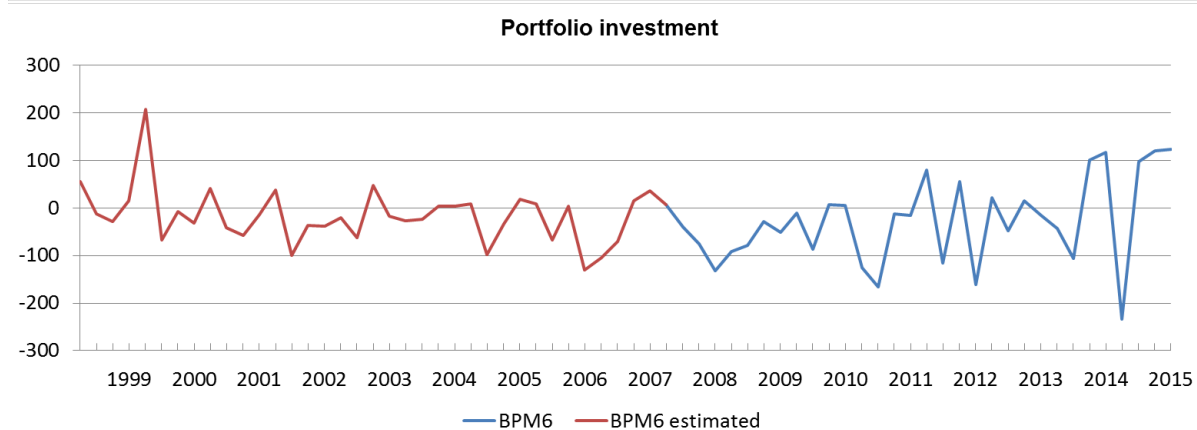
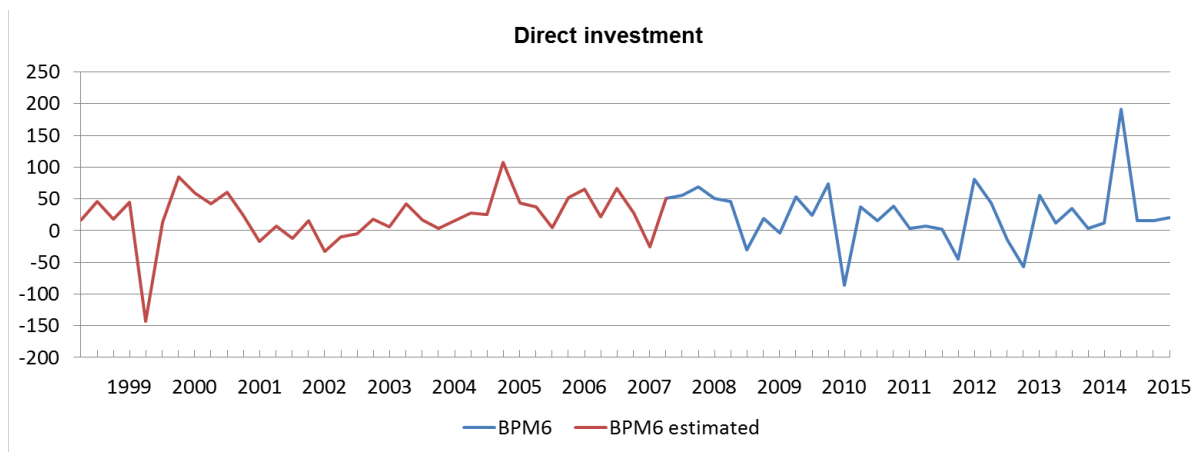
As can be seen in Charts 1 and 1A (Annex), for financial transactions, the transition between estimated and actual BPM6 data is in general smooth, including for the anchor series. The trend in net i.i.p., both at the total and anchor series level, is quite similar before and after 2008, as shown in Charts 2 and 2A (Annex).

the quarterly estimates used as benchmarks. For more information on the Denton benchmarking technique, please consult [Quarterly National Accounts Manual – Concepts, Data Sources, and Compilation – Chapter 6.](#)

The estimates presented in this document are the best results possible using the available data and estimation methods tailored to each individual item of the financial account and i.i.p. If data allows, an estimate of the detailed geographical counterpart will be attempted.

Annex: Detailed euro area aggregates for the entire period 1999–2015

Chart 1A: Euro area net financial transactions – anchor series
(EUR billions)



Source: ECB.

Chart 2A: Euro area net international investment positions – anchor series
(EUR billions)

