

Framework for aggregate securities issues statistics in the euro area

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The euro area securities issues statistics are used for the monetary and financial analysis of the euro area. The statistics cover debt securities and quoted shares issued by euro area residents, as well as euro-denominated debt securities issued worldwide. The document outlines the scope of the current statistics, the underlying methodology, data quality assessment and production processes and dissemination channels to the public.

Methodology

Securities issues statistics are used to monitor the role of capital market activity in the context of the transmission of monetary policy. Holders of financial assets view securities issued by “non-banks” as partial substitutes for bank deposits and negotiable instruments issued by banks. For issuers of securities, debt and equity issuance constitutes an alternative to traditional bank loans. Over time, shifts between direct financing (through securities markets) and indirect financing (through the banking system) may affect the transmission mechanism of monetary policy, and such shifts may change the financial structure in the euro area. The outstanding amounts and flows (gross issues, redemptions and net issues) of securities are also monitored in order to analyse the depth and liquidity of the financial markets for capital market instruments. Information on securities issued in euro (by euro area residents and by non-residents) is also used to assess the role of the euro in international financial markets.

The national central banks (NCBs) of the euro area countries collectively cover all issues of securities by euro area residents. This is in accordance with the commonly agreed framework for producing statistics. As per December 2006, the outstanding debt securities issued by euro area residents accounted for 22% of the outstanding debt securities issued worldwide.³

The euro area statistics are estimated to cover approximately 95% of total issues by euro area residents.

Breakdowns

Securities issues currently cover two broad groupings: debt securities, ie securities other than shares, excluding financial derivatives, and quoted shares, excluding investment fund shares/units. Debt securities issues are broken down further by the sector of the issuer, the

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³ Debt securities issued by euro area residents accounted for €11 trillion of total issues of approximately €50 trillion worldwide, as estimated from the euro area securities issues data, the BIS database and securities data collected by the NCBs of non-euro area Member States.

currency of issue (“euro” and “other currencies”), the original maturity (short and long-term), and the type of coupon (fixed or variable). Quoted shares are broken down by the sector of the issuer (excluding the government sector that does not, in practice, issue quoted shares).

The euro area securities issues statistics cover all securities issued by euro area residents, as collected by the euro area NCBs. The statistics are broken down by euro area country on the basis of the residency principle but are not broken down into international/domestic market types. In addition, monthly data on euro-denominated debt securities issued by non-residents of the euro area are collected and transmitted to the ECB by the Bank for International Settlements (BIS).

Breakdowns by sector

A breakdown of the issuance by sector of the issuer is used to analyse the relative importance of the demand by the government and non-government sectors on capital markets and helps to account for movements in market interest rates, in particular in the case of medium to long-term issues.

The sectors below constitute the most granular level of the sectoral breakdowns transmitted by the euro area NCBs and the BIS. The sector classification follows the international standards laid out in the European System of Accounts 1995 (ESA 95), which is also compliant with the System of National Accounts 1993 (SNA 93). These sectors are thereafter aggregated at various levels by the ECB in its publications and internal briefing notes. Data on the “general government” sector are published in the ECB’s press release on the securities issues statistics and constitute an aggregation of the subsectors “central government” (S.1311), “state government” (S.1312), “local government” (S.1313) and “social security funds” (S.1314). The non-government sectors comprise “central banks” (S.121), “other monetary financial institutions” (S.122), “non-financial corporations” (S.11), “other financial intermediaries” (S.123), which also include “financial auxiliaries” (S.124), and “insurance corporations and pension funds” (S.125).

Breakdown by currency

Euro area securities issues statistics cover securities denominated in euro⁴ and in other currencies, with it having to be noted that derivatives such as swaps and the resulting changes to net currency exposures are excluded.

Quoted shares are typically denominated in euro, as they are issued in the currency of the country of residence of the corporation; issues of shares in other currencies are negligible or non-existent. Hence, the data on quoted shares refer to all issues by euro area residents that are listed in the euro area.

⁴ These issues also cover issues originally denominated in the national currencies of those EU Member States that have subsequently adopted the euro or the ECU.

Breakdown by original maturity

Short-term debt securities comprise securities that normally have an original maturity of one year or less, even if they are issued under longer-term facilities.⁵ Long-term debt securities comprise securities that have an original maturity of more than one year. Issues with optional maturity dates, the latest of which is more than one year away, and issues with an indefinite maturity, are classified as long-term.

Long-term debt securities are broken down further into fixed and variable rate issues. Fixed rate issues constitute bonds with a nominal coupon payment that does not change during the life of the issue, while variable rate issues constitute bonds that have a coupon rate or an underlying principal that is linked to an interest rate or some other index resulting in a variable nominal coupon payment over the life of the issue. Data on long-term zero-coupon issues are also collected, but are not currently published as a separate breakdown. Such issues, however, constitute a very small proportion of all long-term bonds.

Type of data: outstanding amounts, gross issuance, redemptions, net issuance

Outstanding amounts cover all securities outstanding, including issues that have been assumed or taken over by the reporting entity, as well as securities resulting from the conversion of loans. Such conversions, however, are not recorded as gross or net issues as they are not effected against cash. Other changes in the outstanding amounts that are due to instrument or issuer reclassifications or to valuation changes on account of exchange rate movements are not collected separately, given the focus of the dataset on measuring the changes in the outstanding amounts from gross issues and redemptions.

The outstanding amounts of quoted shares represent the full market value of all quoted shares of resident entities. If a company is privatised and the government keeps part of the shares, but the other part is quoted on a regulated market, the entire value of the company's capital is recorded under outstanding amounts of quoted shares, since all shares could potentially be traded at market value at any time. The same applies if part of the shares is sold to major investors and only the remaining part (free float) is traded on the stock exchange.

Gross issues include all primary market issues of debt securities and quoted shares where the issuer sells newly created securities against cash. Private placements covering non-public issues of securities or quoted shares for cash are included. Gross issues of quoted shares cover the newly created shares that are issued against cash by corporations quoted on a stock exchange. Gross issuance is considered to have been effected when the issuer receives payment (payment date), and not when the issuer counterparty or syndicate takes up the commitment (trade date).

Redemptions cover all repurchases of debt securities and quoted shares by the issuer where the investor receives cash for the securities. Redemptions concern the regular deletion of instruments and exclude repurchase agreements. They cover all debt securities that reach their maturity date, as well as early redemptions. Company share buybacks are covered if the company repurchases all shares against cash prior to a change in its legal form, or part

⁵ In some exceptional cases, instruments with maturities in excess of one calendar year are included in the short-term maturity bracket (ESA 95, paragraph 5.22). A breakdown by residual maturity would provide additional information on outstanding amounts, but requires the ready availability of security-by-security data.

of its shares against cash if these shares are then cancelled, thereby leading to a reduction of the company's capital. Company share buybacks are not covered if they are investments in own shares. Redemptions are not reported in the event of a sole delisting from a stock exchange.

Net issues are the balance of all gross issues minus all redemptions that have occurred during the reference period.

Valuation

Quoted shares are reported at market value. ESA 95 stipulates that debt securities should be valued using market values. However, the euro area debt securities are reported at nominal value. A market valuation of debt securities is relevant for a fair representation of the holdings of an investor, while – in some cases for the same instruments (such as for subprime bonds) – the fair value of the issuers' debt service commitments on the liability side of the balance sheet may be more adequately represented using nominal values. The measurement of debt securities using nominal valuation is consistent with the international debt securities statistics of the BIS, and thus makes a consistent calculation possible of total euro-denominated debt securities issued by the rest of the world. In principle, the nominal valuation of the debt securities also allows monthly reconciliations between the outstanding amounts at the end of each reference period and the transactions within the period.

The growth rates in the outstanding amounts are calculated from transactions in securities issues, excluding reclassifications, revaluations, exchange rate variations and any other changes except transactions. An index series is first calculated that is based on the net issues in relation to the outstanding amounts. As a base, the index is set equal to 100 in December 2001. If N_t^M represents the net issues in month t and L_t the outstanding amounts at the end of the month t , the index I_t in month t is defined as:

$$I_t = I_{t-1} \times \left(1 + \frac{N_t}{L_{t-1}} \right)$$

The growth rate a_t for month t , corresponding to the change in the index in the 12 months ending in month t , may be calculated using either of the following two formulae:

optional formula (a)

$$a_t = \left[\prod_{i=0}^{11} \left(1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

optional formula (b)

$$a_t = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, although it should be noted that net issues for securities issues statistics are calculated from collected data on gross issues and redemptions, while the monetary aggregates are based directly on (net) transactions.

Seasonal adjustment

The general principles followed by the ECB in the seasonal adjustment of time series are laid down in the ECB's publication "Seasonal adjustment of monetary aggregates and HICP for the euro area". The approach to seasonally adjusted securities issues statistics is a multiplicative decomposition using the Census X-12-ARIMA method, Version 0.2.10. Outliers are taken into consideration in order to minimise distortions to the estimated seasonal components.

Seasonally adjusted data for outstanding amounts, net issues and growth rates of securities issues are based on seasonal adjustments to indices that reflect the changes in outstanding amounts caused by transactions (ie net issues). This approach is consistent with the current procedures for seasonally adjusting monetary aggregates. To ensure the additivity of the seasonally adjusted components to the seasonally adjusted aggregates, the seasonally adjusted series for the total securities issues are derived indirectly from the breakdowns by sector and maturity. A direct adjustment of the total is regularly carried out for monitoring purposes. The difference between direct and indirect estimates is generally negligible. The seasonal factors are re-estimated annually. No seasonal adjustments are undertaken for data on quoted shares as no significant seasonal variation exists for these series. The growth rates and seasonally adjusted statistics for debt securities are available for the individual breakdowns where relevant (please see the Seasonal adjustment section on the Securities Issues Statistics webpage.)

Production process

The NCBs report national securities issues data on a monthly basis in accordance with Part 12 of the Guideline of the European Central Bank of 1 August 2007 on monetary, financial institutions and markets statistics (recast) (ECB/2007/9).⁶ The NCB send the most granular national time series to the ECB, which subsequently aggregates these for all feasible breakdowns. This building-block approach allows a high level of consistency and depth in the aggregated dataset. When compiling their national contributions, the NCBs use multiple data sources to maximise their coverage by sector and instrument, including data from the national debt agency or ministry of finance, national financial supervisory authorities, commercial data providers, national stock exchanges, settlement systems and direct reporting by issuers. Finally, the NCBs ensure correct statistical classifications of all issues as per Guideline ECB/2007/9 prior to transmitting the data to the ECB.

The monthly national contributions are transmitted using a common reporting scheme and harmonised code list, which minimises the need for transmissions of metadata within the regular data transmissions. The metadata pertain to specific attributes of the time series, whereas national methodological notes are collected and maintained separately outside the technical framework of regular data transmissions. The monthly transmissions to the ECB take place in the 5th week after the reference month via a secure transmission channel network encompassing the whole European System of Central Banks (the ESCB-net) according to an agreed transmission calendar that is reviewed annually. The BIS provides quarterly updates consisting of monthly data for euro-denominated debt securities issued by non-residents of the euro area.

Any missing data are automatically flagged to ensure that the transmission is complete and covers all the series that are supposed to be transmitted by the NCB concerned. Revisions to

⁶ *Official Journal of the European Union*, L 341, 21.12.2007, pp 1 ff.

national data are automatically flagged for checking when the revisions exceed €100 million or result in a change of 5% or more of a previously reported value within a national series. The national data are checked for internal consistency, and the changes in the national stocks are checked against the national flow data over multiple time periods. The pattern of each national series is furthermore checked for any outliers or for breaks in the series. The national series for outstanding amounts of quoted shares are also compared to national stock market indices. The national data are thereafter aggregated to euro area series using a bottom-up building-block approach. The euro area growth rates for transactions are thereafter calculated and seasonally adjusted data for the aggregate euro area series are produced (see previous sections).

Dissemination channels

The securities issues statistics produced are published at monthly intervals via the euro area securities issues statistics press release, the ECB's Monthly Bulletin, the Statistics Pocket Book, and in the ECB's Statistical Data Warehouse (SDW). The euro area securities issues statistics presented in the ECB publications relate to all current euro area countries for all reference months, including historical periods prior to January 1999 (the fixed composition). The euro area series relating to the changing composition of the euro area over time are also disseminated in the SDW. The time series starts in December 1989 (January 1990 for flows). Moreover, euro area aggregates and their national contributions are part of the euro area joint dissemination framework, which presents a cross-sectional view and time series of selected euro area and national aggregates on the websites of the ECB and the NCBs, using a single data source while applying the typical national "look and feel".

Future output

The securities issues statistics dataset will continue to be enhanced. Furthermore, the feasibility of further subsectoral breakdowns based on the activity of the issuer is currently under examination.

A breakdown envisaged in the medium term is for instrument types such as covered bonds, inflation-linked securities and mortgage-backed or asset-backed securities. The quoted shares statistics may also be further enhanced with separate breakdowns for initial public offering volumes, secondary public offering volumes and privatisation volumes.

References

ECB Guideline 2007/9:

http://www.ecb.europa.eu/ecb/legal/pdf/l_34120071227en00010232.pdf

ECB Monthly Bulletin:

<http://www.ecb.europa.eu/pub/mb/html/index.en.html> (Statistical Tables 4.1–4.4)

<http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html> (Chapter 4 Financial Markets)

<http://www.ecb.europa.eu/pub/mb/html/index.en.html> (Technical Notes)

ECB Securities Issues Statistics monthly release calendar:

<http://www.ecb.europa.eu/events/calendar/statscal/mfm/html/stprsi.en.html>

ECB Securities Issues Statistics Press release:

<http://www.ecb.europa.eu/press/pr/stats/sis/html/index.en.html>

ECB Securities Issues Statistics webpage:

<http://www.ecb.europa.eu/stats/money/securities/html/index.en.html>

ECB Statistical Data Warehouse:

<http://sdw.ecb.europa.eu/browse.do?node=2018780>

ECB Statistical Pocketbook:

<http://www.ecb.europa.eu/pub/spb/html/index.en.html> (Tables 9.1–9.4)

European System of Accounts 1995:

<http://circa.europa.eu/irc/dsis/nfaccount/info/data/esa95/esa95-new.htm>

Selected euro area statistics and national breakdowns (euro area joint dissemination framework):

<http://www.ecb.europa.eu/stats/services/escb/html/index.en.html>

http://www.ecb.europa.eu/stats/money/securities/debt/html/debt_securities_latest.en.html

http://www.ecb.europa.eu/stats/money/securities/quoted/html/quoted_shares_latest.en.html