Annex: Introduction to the BIS debt securities statistics

This annex provides detailed information on the <u>BIS debt securities statistics</u> and how they appear in statistical tables on the <u>BIS Data Portal</u> (with <u>FAQs</u> and a <u>Glossary</u>). Table A.1 presents an overview of the statistics (with links to published tables) and lists the dimensions and breakdowns available in each.

Reporting basis

All BIS debt securities statistics are compiled on a *residence basis*: they aggregate the issuance of all units with a physical presence under a common jurisdiction (McGuire et al (2024a)). The published tables differ in scope and the breakdowns they report (Table A.1). To align with aggregate statistics received from national authorities, the BIS delineates the *market of issue* (primary market) as follows: *domestic debt securities* (DDS) are those issued by residents in their local market, whereas *international debt securities* (IDS) are issued outside the local market of the country where the borrower resides. In particular, IDS are distinguished from DDS based on three criteria: registration domain (identified by the ISIN number), listing place and governing law. If any one of these criteria differs from the residence of the issuer, the BIS defines the security as international (Gruić and Wooldridge (2012)). Note that the distinction does not depend on the nationality of the issuer or the currency denomination of the security (Box A in Aldasoro et al (2021) provides examples).

Total debt securities (TDS) of a country sum DDS and IDS together, representing *all* debt securities issued by its residents, anywhere. For example, TDS for Ireland comprise issuance by all entities residing in Ireland, whether onshore in the Irish market (DDS) or offshore in markets outside Ireland (IDS). The BIS receives DDS and TDS as aggregates from national sources. Separately, the BIS compiles IDS from commercial data sources (Dealogic, Euroclear, LSEG, Xtrakter) and constructs aggregates from security-level data. This allows the IDS to be reaggregated by *nationality* (McGuire et al (2024a)).

Coverage and valuation

The focus of the statistics is on the issuance and amounts outstanding of individual *issuer countries*, disaggregated by sector. IDS are available for all issuer countries, whereas TDS and DDS statistics have limited coverage (row "Number of countries" in Table A.1), depending on <u>BIS membership</u> or participation in the <u>G20 Data Gaps Initiative</u>.³ They include AEs and EMEs, but do not cover frontier markets and developing economies.

Time series typically go back to 2000 or further, except for more recent holdings statistics. Tables with more granular breakdowns (eg Tables C5 and C6) have a larger

- However, bonds issued by an Irish subsidiary registered in the Cayman Islands are not included in Ireland's TDS. They would be included in the TDS for the Cayman Islands; since the Cayman Islands does not report TDS, this gap can be covered with the IDS available for the Cayman Islands.
- For some countries, national data are available for DDS or TDS but not for both; hence, DDS and TDS are not published for all countries. The BIS does not calculate the missing series, because it cannot control for potential double-counting, eg reported DDS may include securities the BIS classifies as IDS. Differences in valuations also complicate comparisons.
- ³ In addition to G20 members, this includes Chinese Taipei, Cyprus, Lebanon, Malta and Pakistan.

share of missing observations at more granular levels, such as subsectors and maturity buckets in the long-term segment.

Most statistics are available at quarterly frequency, some are available annually. Amounts are expressed in billions of local currency. When expressed in US dollars, the statistics use current end-of-period exchange rates for amounts outstanding and average-of-period exchange rates for net issuance. TDS and DDS outstanding are reported at nominal value – the amount the debtor owes, including accrued interest – or, in the case of IDS, at face value (principal). Net issuance is also reported at face value. Holdings statistics are reported at market value, which are more relevant to creditors.

Dimensions

Table A.1 also sets out the main breakdowns available in the BIS debt securities statistics. They are harmonised with the internationally agreed recommendations in the *Handbook on securities statistics* (BIS, ECB and IMF (2015)). Next to *issuer country*, the most prominent dimensions are the issuer sector and currency of denomination. *Sectors* available across published tables are (i) general government (comprising central and local government, excluding public corporations); (ii) financial corporations (banks, central banks and several types of non-bank financial institutions); and (iii) non-financial corporations. Households and non-profit institutions serving households are separate but usually do not issue bonds.

Most tables distinguish between domestic and foreign *currency* denomination. The distinction is always from the borrower's perspective. Only IDS (Table C3) itemises specific currencies (USD, EUR, CNY, etc). Table A.1 notes which publication tables provide additional information on bond features. *Maturity* is generally reported as original maturity (in buckets for C3, C5, C6; in years for C2). *Interest rate type* distinguishes mainly fixed vs variable interest bonds (C2, C3, C5, C6; C5 provides several variable rate types).

Holdings statistics

The BIS has expanded its offering of debt securities tables in the context of the <u>G20</u> <u>Data Gaps Initiative</u>, yielding tables C5, C6 and C7. Table C5 provides the broadest capture of TDS, by issuer sector and country, with breakdowns by currency, maturity, interest type and valuation basis. To complement the issuer side, tables C6 and C7 focus on holdings of debt securities.

Table C6 provides the most detailed breakdown of holders by sector and subsectors (for residents; foreign holders are treated as a separate sector). Table C7 combines the debtor-creditor perspectives, providing whom-to-whom statistics that link issuers' liabilities with holders' assets on a sector-by-sector basis. It details resident sectors as holders and residents and non-residents as issuers, as well as non-residents as holders and residents as issuers. These two tables allow users to examine the relationship between bond issuers and holders within an economy and across economies. They do not map out the geography of portfolio holdings by country and counterparty country; this is the focus and strength of the IMF's Portfolio Investment Positions by Counterpart Economy (PIP) survey.

Overview of publication tables on the BIS debt securities statistics¹

Table A.1

| Dimensions and breakdowns | Table C1 | | Table C2 | Table C3 | Table C4 | Table C5 | Table C6 | Table C7 |
|----------------------------------|--|--|---|--|----------------------------------|--|--|---|
| | Debt securities (TDS ² , DDS ³ , IDS ⁴) | International debt securities (IDS ⁴) | Central government debt securities ^{5, 6} | International debt securities (IDS ⁴) | Government debt securities | Debt securities issues (TDS ² , DDS ³) | Debt securities holdings (TDS ² , DDS ³) | Debt securities issues and holdings (TDS ²) |
| Issue market | | | | | | | | |
| All markets | ✓ | | | | ✓ | ✓ | ✓ | ✓ |
| Domestic market | ✓ | | ✓ | | | ✓ | ✓ | |
| International market | ✓ | ✓ | | ✓ | | ✓ | ✓ | |
| Issuer residence | | | | | | | | |
| Resident issuers | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Non-resident issuers | | ✓ | | ✓ | | | ✓ | ✓ |
| Reporting basis | | | | | | | | |
| By residence | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| By nationality | | ✓ | | ✓ | | | | |
| Sector | Issuer | Issuer | Issuer | Issuer | Issuer | Issuer | Holder | lssuer/Holder |
| All resident sectors | ✓ | | | | | ✓ | ✓ | ✓ |
| NFC ⁷ | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| Financial corporations | ✓ | √ 8 | | √ 8 | | ✓ | ✓ | ✓ |
| Central bank | | | | | | ✓ | ✓ | |
| OMFI ⁹ | | | | | | ✓ | ✓ | |
| ODC ¹⁰ | | | | | | ✓ | ✓ | |
| MMF ¹¹ | | | | | | | ✓ | |
| OFC ¹² | | | | | | ✓ | ✓ | |
| Of which: sec corp ¹³ | | | | | | ✓ | ✓ | |
| ICPF ¹⁴ | | | | | | ✓ | ✓ | |
| General government | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Of which: cen govt ¹⁵ | | | ✓ | | ✓ | ✓ | ✓ | |
| Memo item: public sector | | | | | | ✓ | ✓ | |
| HH and NPISH ¹⁶ | | | | | | ✓ | ✓ | ✓ |
| Non-residents | | | | | | | ✓ | ✓ |
| All holders | | | | | | | ✓ | ✓ |
| Issue currency type | | | | | | | | |
| All currencies | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| Domestic currency | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Foreign currency | | | ✓ | √ 8 | ✓ | ✓ | ✓ | |
| Original maturity | | | | | | | | |
| All maturities | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ |

See next page for sources and notes.

Overview of publication tables on the BIS debt securities statistics¹

Table A.1

| | Table C1 | | Table C2 | Table C3 | Table C4 | Table C5 | Table C6 | Table C7 |
|--|----------------------------------|--|----------------------------------|--|---|----------------------------------|----------------------------------|----------------------------------|
| Short-term (≤ 1 year) | | | | ✓ | | ✓ | ✓ | |
| Long-term (> 1 year) | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| > 1 year ≤ 2 years | | | | | | ✓ | ✓ | |
| > 2 years ≤ 5 years | | | | | | ✓ | ✓ | |
| > 5 years ≤ 10 years | | | | | | ✓ | ✓ | |
| > 10 years | | | | | | ✓ | ✓ | |
| Long-term at original maturity, with a remaining maturity ≤ 1 year) | | | | | | ✓ | ✓ | |
| Interest rate type | | | | | | | | |
| All interest rates | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Fixed interest rate | | | ✓ | ✓ | | ✓ | ✓ | |
| Variable interest rate | | | | ✓ | | ✓ | ✓ | |
| Inflation-linked | | | ✓ | | | ✓ | | |
| Interest rate-linked | | | | | | ✓ | | |
| Asset price-linked | | | | | | ✓ | | |
| Other | | | √ 8 | | | | | |
| Valuation | Nominal/ face/market | Face | Nominal | Face | Nominal | Nominal/ face/market | Market | Market |
| Position and flows | Position | Position | Position | Position/ net issuance | Position | Position/ net issuance | Position/ net issuance | Position |
| Frequency | Quarterly | Quarterly | Annual | Quarterly | Annual | Quarterly | Quarterly | Quarterly |
| Number of countries | 59 | All | 30 | All | 55 | 59 | 42 | 43 |
| Start ¹⁷ | 2001 | 1965 | 1995 | 1965 | 1995 | 2020 | 2021 | 2021 |
| Source | National data (aggregates) | Commercial data (security-by- security database) | National data (aggregates) | Commercial data (security-by- security database) | National data, commercial data, BIS estimates | National data (aggregates) | National data (aggregates) | National data (aggregates) |

¹ The statistical tables can be found on the BIS Data Portal. Individual country observations may differ from the dimensions listed. The online documentation (metadata and reporting practices) provides further detail. ² Debt securities issued by residents in all markets. ³ Debt securities issued by residents in their respective domestic market. ⁴ Debt securities issued by non-residents in all markets. ⁵ Data collected as part of the survey designed by the Committee on the Global Financial System working group on financial stability and local currency bond markets. ⁶ Average original and remaining maturity in years. ⁷ Non-financial corporations. ⁸ Additional breakdowns available. ⁹ Other monetary financial institutions. ¹⁰ Other deposit-taking corporations. ¹¹ Money market funds ¹² Other financial corporations. ¹³ Securitisation corporation. ¹⁴ Insurance corporations and pension funds. ¹⁵ Central government. ¹⁶ Households and non-profit institutions serving households. ¹⁷ Start date for majority of countries. Individual series may start earlier, or later.

Source: BIS debt securities statistics.