Statistics on securities issuance and holdings

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Introduction

Financial intermediaries play a significant role in the financial markets. Direct financing through securities markets is trying to catch up. The aim of this paper is to briefly present recent initiatives in the field of internationally comparable securities statistics and illustrate one possible way for central banks to set up a compilation system for securities statistics.

The paper is organised as follows: first, we describe financial intermediation and the importance of financial markets and direct financing. FSB-IMF Recommendation #7 will be discussed in the following sections, followed by the framework for securities statistics defined in the BIS-ECB-IMF Handbook on Securities Statistics. Both securities issues and holdings statistics will be addressed. Next, we will illustrate the importance of financial innovations and the impact they have on securities statistics. Finally, the compilation of securities statistics is briefly outlined, as well as recent developments in the field of BIS securities statistics.

The basics

Financial intermediation can be defined as the process of managing liquidity in the economy, in such a way that savings from surplus institutions are allocated to those with a deficit. Depending on whether this process involves other specialised institutions called financial intermediaries (ie banks), two major types of financial intermediation are defined: indirect and direct.

Financial intermediaries are major players in the financial markets. They raise funds in the form of deposits or by issuing securities[3] and lend not only to large, well known corporations, but also to small companies. The latter have difficulty in individually accessing financial markets and raising money simply because, in these markets, they do not have a borrowing history (that would enable other market players to assess their risks).

To meet the needs of small companies, banks must rely on information. In effect, financial intermediaries are institutions that can overcome information problems by focusing on the performance history of their clients that is available in their banking books. As long as this information is unavailable to other market players, financial markets cannot be perfect because, without good information, it is hard to make screening decisions about the most profitable, least risky companies. Thus, information asymmetry clearly supports the existence of financial intermediaries, although it is not the only reason for their existence.

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[3] Beside banks, which are the most important players in the financial markets, other financial intermediaries (such as investment companies, insurance companies, and investment or pension funds) can provide similar support to businesses and meet their need for financing.

Payments transmission is a crucial service provided by financial intermediaries. This relies on transaction technology that speeds the processing of payments and the transfer of funds to or from clients' accounts,[4] ultimately contributing to liquidity in the economy. The technology also provides economies of scale as it can be assumed that the existence of financial intermediaries helps to lower the costs of individual transactions.[5]

In essence, banks are responsible not only for providing liquidity to the economy but also for transforming one type of risk or financial instrument (ie short-term deposits) into another (ie long-term loans). This process can and will lead to serious problems if banks are not able to meet their liabilities, which in turn means that state authorities (ie the central bank) must regulate and supervise the business of institutions whose performance can affect the economy's overall health.

Theories of financial intermediation,[6] as briefly presented above, justify the existence of financial intermediaries on the grounds of imperfect markets (information asymmetries), transaction costs (ie for payments) and the need to enable smooth operation of financial markets (regulatory and supervisory authorities). Although indirect financing costs more than direct financing, it is possible to conclude that the modern world still counts on financial intermediation[7] although direct financing is catching up (Graph 1).

In direct financing, surplus and deficit economic units negotiate and provide finance directly, without the involvement of classic financial intermediaries.[8] This also means that, in line with classical theory, markets are able to assess risks of the issuers,[9] and that the costs of financing such operations should be relatively lower than for loans.

In this environment, banks not only receive deposits and extend loans but also arrange securities issues for others or for their own needs. Other intermediaries, such as institutional investors (ie investment funds), are positioned on the other (lender) side of the market, and raise funds (like any other borrower) by issuing units or other forms of obligations; any surplus of the funds thus raised and invested in different financial market products will end up in bank deposits. In that sense, even participants in a mature, well developed financial market will still make use of the classic products offered by financial intermediaries.

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[4] A very good example of complexity and efficiency of these systems is the real-time gross settlement (RTGS) system for large-value interbank funds transfers. CPSS (1997) notes that RTGS systems can offer a powerful mechanism for limiting settlement and systemic risks in the interbank settlement process, because they can effect final settlement of individual funds transfers on a continuous basis during the processing day.

[5] It is worth noting that the same principle can be applied to other services offered by financial intermediaries, ie the cost of valuation of assets that could be used as collateral.

[6] This relates to classical theories. Other theories focus on different factors, eg Hakenes (2002) on risk transformation.

[7] Scholtens (2000) argues that as developments in information technology, deregulation, deepening of financial markets etc tend to reduce transaction costs and informational asymmetries, financial intermediation theory should come to the conclusion that intermediation becomes useless.

[8] There is still a need for specific intermediaries that provide infrastructure, such as stock exchanges and central depository agencies.

[9] Although development of the internet and the amount of freely available information can certainly contribute to the development of different financial products, the recent crisis confirmed that the quality of risk management is not highly correlated with the amount of available information.

Graph 1

**Evolution of international bank claims and
international debt securities**

Amounts outstanding, in billions of US dollars
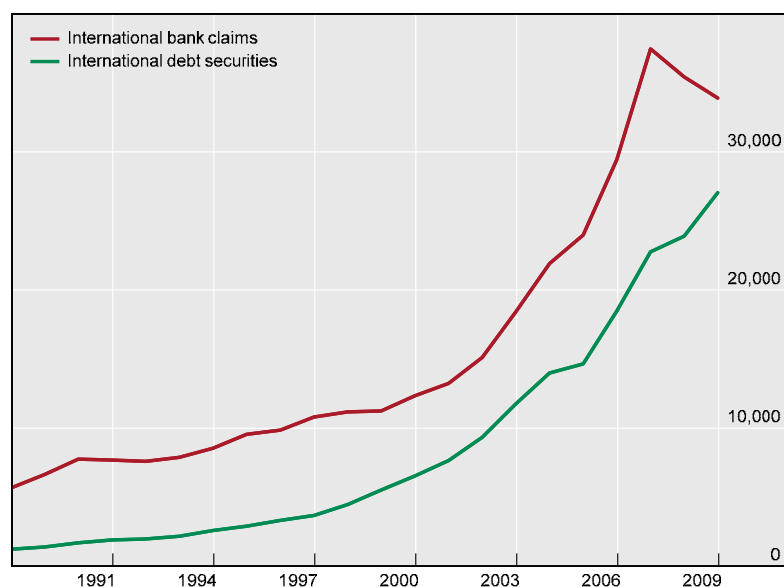
Source: BIS.

Sound data are needed to understand financial markets The BIS international banking statistics[10] provide data on outstanding amounts of cross-border or foreign currencies assets and liabilities of the reporting banks. Another set of statistics compiled by the BIS covers outstanding amounts of securities issued on international markets.[11] The importance of securities issued on international markets as compared to cross-border financing provided by internationally active banks is illustrated in Graph 1.

The information

The central bank regularly monitors developments in banks' balance sheets and accordingly uses monetary instruments to influence or fine-tune the economy. The background information needed for these decisions can be found in statistical data, provided that a sound statistical information system exists. Part of that system must deal with securities statistics.

Securities[12] comprise part of the balance sheets of both issuers (liabilities) and investors (assets). A national numbering agency allocates an International Securities Identification

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[10] Available at http://www.bis.org/statistics/bankstats.htm.

[11] Available at http://www.bis.org/statistics/secstats.htm.

[12] According to the BIS-ECB-IMF *Handbook on Securities Statistics*, securities are negotiable financial instruments. Negotiability means they can be traded on an organised exchanges or over the counter. Debt securities are those for which issuer is obliged to pay a specified amount of principal and interest to the owner. Shares and investment funds units are not debt securities because they represent either claims on the residual value of a corporation after the claims of all creditors have been met or represent a share in an investment portfolio.

Number[13] (ISIN) to each security. The security is also registered with the Central Securities Depository (CSD) and rated by rating agencies. Investors can choose to keep their securities with custodians. All in all, data on securities issued can be found in books and registers of various market players, meaning that the reporting system for securities statistics can grow complex. If it includes different groups of market players, overlaps can result that need to be resolved during the final compilation of sound aggregates. Compilation of statistics is cost-intensive, not least because most data sources are not designed to feed into statistical systems.[14]

Different countries have different regulations for listing, trading and settlement. As local markets have varying degrees of sophistication, international comparisons are far from straightforward. Only a common framework for presenting statistics in a standardised way can improve data comparability. Such a framework must include meaningful breakdowns of data to encourage users to analyse national, regional or global markets, and it must also present in a clear and simple way different financial products, the issuing activity of national sectors and the relative importance of issuance in foreign currencies on local markets.

Recent global financial crises have confirmed the existence of information gaps. The G20 Governors and Ministers of Finance have requested the International Monetary Fund (IMF) and Financial Stability Board (FSB) to make recommendations to address these gaps. This has resulted in 20 recommendations that require either the development of conceptual/statistical frameworks or improvements in the current collection process. Recommendation #7 defined the need for improvement in securities statistics[15] and the further development of the *Handbook for Securities Statistics* (Handbook).[16]

Statistics on issuance and holdings of debt securities

The Handbook is divided into two parts. The first part covers issuance of debt securities,[17] while the second part deals with holdings of securities.[18]

Debt securities issue statistics are classified primarily by issuing sector and market of issue. Standard sectors, such as non-financial corporations, financial corporations, general government, and households,[19] are defined in the system of national accounts (SNA) and additional subsectors can be introduced. The activity of resident issuers is covered in different markets so that the importance of international markets for a given country can be

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[13] The ISO 6166 standard defines the structure of an ISIN. This 12-character alpha-numeric code uniquely identifies a security for trading and settlement.

[14] The best way to obtain securities statistics is to develop a security-by-security system (SBS) that will retain data granularity (issuer, investor, issue currency, nominal amount, market price, discount, coupon rate etc) at the level of each individual security. Such a system should not suffer from the overlaps that are common to aggregated data sources. We will return to the topic of SBS later in this article.

[15] Recommendation #7: Central banks and, where relevant, statistical offices, particularly those of the G20 economies, to participate in the BIS data collection on securities and contribute to the further development of the BIS-ECB-IMF *Handbook on Securities Statistics (Handbook)*. The Working Group on Securities Databases to develop and implement a communications strategy for the *Handbook*.

[16] Developed by the Working Group on Securities Statistics and sponsored by the BIS, ECB and IMF with contributions from central banks.

[17] This part was sponsored by the BIS. It was released in June 2009.

[18] This part was sponsored by the ECB. It was released in May 2010.

[19] The households sector also includes non-profit institutions serving households.

assessed. The same approach exists when it comes to non-resident issuers and their activity on local markets: by extending the sectoral breakdown to the rest of the world, it is possible to arrive at the size of the local market for each country or region.

Further classifications provide additional information that is especially relevant to the analysis of the level of development of national markets. It could be argued that more mature markets provide a greater variety of instruments, or that the same type of instrument could have different properties with respect to eg currency of denomination or type of interest rate. Special consideration can be given to financial innovations, so that users of statistics can track how markets differ in the significance of securitisation. In addition, the classification of securities according to their ratings could potentially also reveal how markets value issuers from one region to another.

The Handbook covers all of these characteristics and sets out a stylised presentation table which is the basis for the compilation of internationally comparable securities issuance statistics (Figure 1).

Figure 1

Standard conceptual framework for debt securities issues

Sectors / Market, currency, maturity and interest rate		Non-financial corporations	Financial corporations	General government	Households and NPISH	Residents	Non-residents	All issuers
Domestic market	Currency							
	Maturity							
	Interest rate							
International market	Currency							
	Maturity							
	Interest rate							
All markets	Currency							
	Maturity							
	Interest rate							
Residence of issuer								

Location of issue (left vertical label)

Source: Handbook, Part 1.

Stocks of outstanding amounts change over time. As it is possible simultaneously to issue securities and to repay existing ones, transaction statistics[20] can contribute significantly to understanding developments on securities markets. Exchange rate changes also affect outstanding amounts when reported in a numeraire currency and should be distinguished from real transaction values. Similar considerations apply to the effect of price changes[21] or other changes in stocks.[22]

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[20] Transactions are just one type of flow. Generally, it is possible to define the transaction as a change in the ownership of the underlying assets. This approach is common in the field of macroeconomic statistics and is further discussed in the SNA and other guidelines (such as the Balance of Payments Manual).

[21] As securities issues statistics are based on the liabilities of issuers, it makes sense to use face values. It is also possible to think in terms of the overall debt of certain sectors, which means that accrued interest should

The above list of security properties is not exhaustive but it can provide a detailed background for better understanding of national markets, their weight in regional or global markets, or the size and importance of the global securities market. In additional to stocks, available flows data can clearly show how the position of a country is changing over time and why. Such data can show whether there is a change in activity on the primary financial market (gross and net issues), or how good was the choice of issue currency (with respect to exchange rate revaluations). Comparison of market and nominal values of outstanding amounts can indicate how investors see the riskiness of a certain country and its economic sectors. Finally, data on accrued interest can help to define the pressure put on issuers by the servicing of issued debt securities.

The second part of the Handbook covers holders of securities, ie investors or lenders. Here too there is an important distinction between residents and non-residents. It also shows how securities statistics can provide a complete picture of a country (or region) by combining issuance and holdings of debt securities. Ultimately, such a framework enables the creation of a "from who to whom" matrix (Figure 2).

Concepts, definitions and classifications in holdings statistics must be identical to those applied to securities issues statistics.[23] While concepts such as residence (of the holder and of the issuer) together with breakdowns by currency of issue, maturity or type of interest rate could be applied, it is not analytically useful to include the market of issue in securities holdings statistics .

Figure 2

Residence of holder approach in debt securities statistics

Holder / Issuer		Residents					Non-residents	All holders
		Non-financial corporations	Financial corporations	General government	Households and NPISH	All residents		
Residents	Currency							
	Maturity							
	Interest rate							
Non-residents	Currency							
	Maturity							
	Interest rate							
All issuers	Currency							
	Maturity							
	Interest rate							

Source: Handbook, Part 2.

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be added (nominal value). Finally, the SNA (and IIP) could make use of securities issue statistics if the latter are also compiled using market values.

[22] Other changes (in volume) cover changes in outstanding amounts that can not be explained as transactions or revaluations. Examples include a change in reporting population (ie the addition of a new reporter that has issued previously should not be treated as an increase in real economic activity, ie in the same way as net issues) or a re-sectorisation of issuers.

[23] Flows in holdings statistics will cover the same types of changes (transactions, revaluations, other changes in volume) and should always be based on market valuation.

Special attention in holdings statistics should be given to consolidation and valuation principles. Consolidation can be performed on different levels, but the one that could be applied at sectoral level can blur comparability between securities issues and securities holdings statistics because assets and liabilities of institutional units of the same sector would cancel out and the two sets of statistics would no longer be comparable. That is why the comparability of two statistics can be achieved only by providing the statistics on an unconsolidated basis.

Valuation principles are also a challenge to consistent measurement. Investors can hold their securities in different portfolios: if securities are held to maturity, they will be valued differently (at nominal value) to those bought for trading (at market value). As a result, the aggregate of outstanding securities on the investors' assets side of the balance sheet (which is a data source for holdings statistics) will be a combination of different valuation principles,[24] meaning that it can not be easily compared with the aggregate value in securities issues statistics, even when the latter are marked to market.[25] The only solution to this problem is that the statistician should apply the specific valuation principles that are needed for the production of specific statistics, ie market valuation for securities holdings statistics and nominal for issues.[26] This is closely linked to the SBS reporting systems.

Finally, securities can be bought and sold outright. They will end up on market participants' balance sheets, so that the identification of all market participants and the information on the revaluation of balance sheet positions could ultimately provide comprehensive securities statistics. The following section shows that the production of statistics from such a system could be challenging unless one has a precise knowledge of financial innovations.

Financial innovations and securities statistics

The report by the US government's Financial Crisis and Inquiry Commission[27] states that the total value of mortgage-backed securities issued in the US market between 2001 and 2006 was $13.4 trillion. These securities are based on a pool of mortgage loans usually issued by specialised corporations in a process called securitisation.[28]

The Handbook establishes that securitisation results in the creation of debt securities for which coupon or principal payments (or both) are backed by specified financial or non-financial assets or future income streams. In other words, a company (or its affiliate) groups financial assets (such as housing loans from a bank), issues securities backed by those assets, and sells them to investors who receive returns funded by the original assets (principal and interest payments from the housing loans).[29]

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[24] The Handbook, Part 2, states that market values should be used for holdings statistics.

[25] Ideally, both sets of statistics would be compiled using exactly the same valuation principle with complete coverage of the markets (financial instruments and market players). This implies that both issues and holdings should be revalued to market values, which is extremely difficult if the reporting system is based on aggregate (balance sheet) data.

[26] The Handbook recommends that debt securities should be presented on a market value and nominal-value basis.

[27] Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States.

[28] Woodford (2010) argues that non-bank financial intermediaries have become increasingly important as sources of credit, particularly as a result of the growing popularity of securitisation.

[29] There are more players in the whole process. Rating agencies rate securities. Investors rely on these ratings when assessing the riskiness of different securities meaning that the rating companies can substantially

It is important that in this process, the original assets may (i) stay on the issuer's balance sheet, (ii) be transferred to a securitisation corporation, or (iii) are only affected by the transfer of the credit risk of the original assets, either through a securitisation corporation (also known as a special purpose vehicle or SPV) or through the direct issuance of debt securities by the original asset owner (Figure 3).[30]

Figure 3

Securitisation process
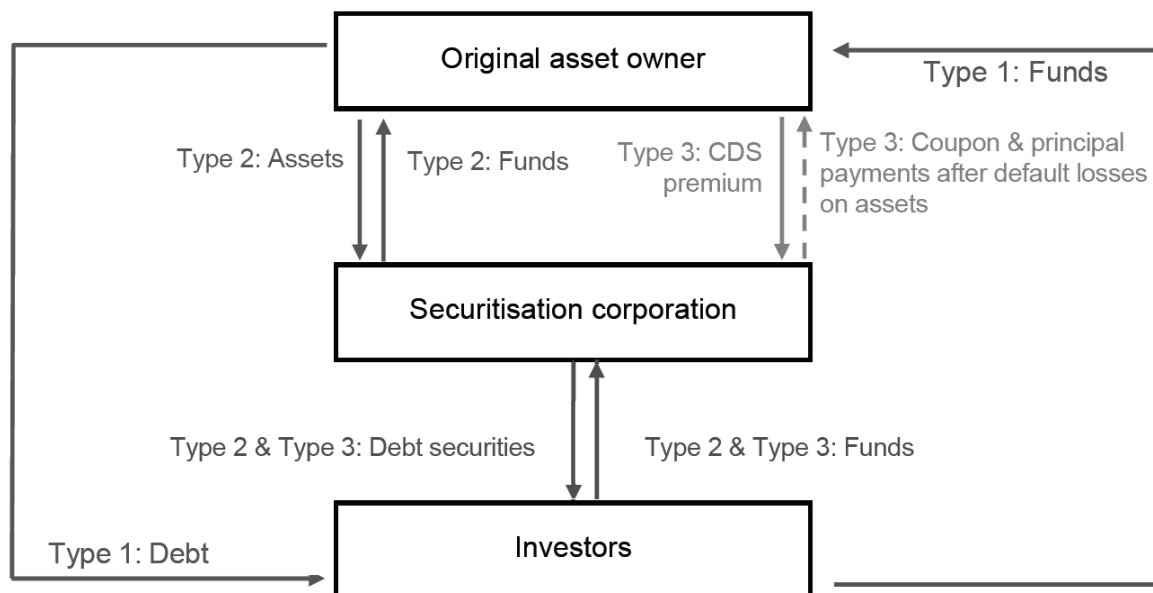
Source: Handbook, Part 1.

The main problem in securities issues statistics is to correctly allocate securities to the issuing sectors. The first two types of securitisation do not pose problems in that sense, while the third type requires more attention.

Transfer of credit risk can be achieved by buying protection against possible default losses. Financial derivatives or, more precisely, credit default swaps (CDS)[31] provide such insurance[32] and are not classified as securities.

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influence investors' decisions. In the case of securitisation, understanding of the process and the quality of the underlying assets are crucial in determining the riskiness of the new security. Finally, information technologies are necessary to access and analyse large amounts of data (especially when securitisation is based on large pool of loans whose borrowers differ significantly in quality).

The FCIC summarises that in the mid-2000s "with these pieces in place – banks that wanted to shed assets and transfer risk, investors ready to put their money to work, securities firms poised to earn fees, rating agencies ready to expand, and information technology capable of handling the job – the [US] securitization market exploded".

[30] Depending on the technique, securitisation is defined as (i) on-balance sheet, (ii) true-sale or (iii) synthetic securitisation.

[31] SNA (2008) defines a CDS as a financial derivative whose primary purpose is to trade credit default risk.

[32] Albertazzi (2011) notes that securitisation involves a transfer of credit risk and is therefore similar to an insurance contract.

SPVs issue securities based on assets that stay on the original owner's balance sheet. The original owner pays a premium to the corporation to protect against the default of the original debtor(s). This premium is combined with the interest on proceeds from the securities issued to provide coupon payments to investors. In case of the insured event (default of the original asset), investors suffer losses and the protection buyer (original asset owner) is compensated by the protection seller (SPV).

Securities statistics will only recognise the creation of securities issued either by the original owner or by the securitisation corporation. Depending on the arrangement, the Handbook mentions that securitisation results in different types of securities, ie asset-backed securities (ABS), asset-backed commercial papers (ABCP), covered bonds, credit-linked notes, or collateralized debt obligations (CDO).[33]

Reverse transactions are another example of financial innovation that need to be taken into account. They involve the sale (the change of legal ownership) of securities with a commitment to repurchase them (or other similar securities) on a specified date at a pre-agreed price. Apart from plain repos, securities lending and sell/buy-backs are also considered to be reverse transactions.[34]

A problematical case is mentioned in the Handbook: the securities provided under reverse transactions are treated as not having changed economic ownership because the lender still receives the income yielded by the security (since coupon payments and dividends are passed on in the form of a "manufactured dividend") and remains subject to the risks or benefits of any change in the price of the security. The exchange of funds under reverse transactions does not involve the issuance of any new debt securities. Holding statistics, however, can suffer from double reporting if an indirect or mixed system of collecting the data is applied by national authorities because (eg) custodian accounts, based on legal changes of ownership, will record "new" securities on the client's account while, at the same time, the same securities will stay in the books of the original owner.

Solutions to the various problems mentioned in the previous sections depend mainly on the choice of securities statistics compilation system.

Compilation of securities statistics

The quality of data sources ultimately determines the quality of statistical reports. At the same time, even if individual data sources are of high quality, a deficient compilation process can result in final statistical output of lower quality.

As already noted, data on securities are part of the balance sheets of issuers and holders/investors. It is therefore possible to create a direct reporting system in which data on securities issues and holdings are provided directly by the respective entities. Financial intermediaries play a crucial role in this, since they are typically large issuers of securities as well as holders. The latter they do on their own behalf or as custodians for clients[35]. Normally, issuers value their liabilities on a nominal basis, while investors use market values. The direct reporting system for securities statistics will probably rely on both sources, meaning that there is a high probability of overlaps in the data when only aggregate amounts

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[33] This list is not exhaustive. Further information can be found in the Handbook, Part 1 (p 17).

[34] Further information on these instruments can be found in the Handbook, Part 2 (p 21).

[35] In securities statistics, these investments should be attributed to the ultimate investors' institutional sector, not to custodians.

are reported. Introduction of breakdowns (the need for more granular data) in such systems will usually require cooperation with specialised financial intermediaries.

An alternative reporting system relies on Central Securities Depositories (CSDs) and custodians which keep records of securities (issued and held in the case of CSD, held only in case of custodians) and can provide reports on the current ownership of issued securities. Their records can be used if the authorities request them to identify investors (not necessarily as individuals, but rather as resident/non-resident or by some other basic sectoral breakdown) or if the issuers are to report their liabilities using market values. However, in most cases, CSD and custodian accounts mask the real, ultimate, investors in their records, meaning that the statistical breakdowns needed by authorities can only be partially provided. Custodians can also contribute their data (without disclosing individual investors), but again there will be a problem of double reporting (this time for both CSD and custodians) unless detailed information is provided. The advantage of indirect reporting systems is that they reduce the overall reporting burden due to a much lower number of reporters than in direct systems.

Some features of securities (eg coupons) require up-to-date records in the CSD in order to distribute returns to investors.[36] Also, since the main feature of securities is negotiability, this needs to be supported by the market infrastructure. That is why statisticians see intermediaries as a reliable, if not the best, solution when it comes to data sources.[37]

Direct reporting by issuers and investors, indirect reporting by intermediaries, or a mixed system of direct and indirect reporting could be organised on an aggregate level or on an individual security level (SBS). Both approaches (aggregate and micro level data) have benefits and costs.

Compilers (and analysts) would probably benefit more from a SBS system because they can fully control classifications (of securities and issuers), have enough flexibility to organise the data in the best way to meet users' needs, can compile both stocks and flows using the valuation principle needed, or complement issuance statistics with data on holdings and thus provide the full set of securities statistics. On the other side, a SBS system is costly (requiring skilled staff, IT support, paid access to private data sources) and complex to manage. Databases can grow significantly, implying a need for a data warehouse, and as a minimum a register of resident companies has to be available.[38] In order to reduce the direct financial cost of acquiring data and instead of buying market databases covering individual securities,[39] authorities can develop their own system by relying on SBS data from CSD and

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[36] Trading, or change of ownership, need not be carried out only on exchanges. In some cases, especially when natural persons are considered (ie a resident sells securities to a nonresident), the change of ownership will simply be registered with a public notary and the transaction will not be reflected in exchange records. On the other hand, if the new investors are interested in receiving coupons, the proof of change of ownership will be provided to the CSD meaning that the CSD still has full market coverage.

[37] This is only applicable to securities issued on local markets and holdings of resident securities by resident investors because a resident CSD can only cover the domestic market.

[38] A register of institutional units includes basic data on all companies and related jurisdictional aspects (such as ownership, main activities, or address), together with sector identification.

[39] Such data sources can be extremely useful for securities issues statistics because providers such as Thomson Reuters, or Dealogic can provide a large number of properties of individual securities (issuer, market price, nominal value, outstanding amount, currency, coupons etc). On the other hand, individual data providers cannot cover the whole universe of securities, which implies a need to combine several data providers (the ECB's Central Securities Database is a good example of this type of solution). Finally, not all securities are covered perfectly and in most cases data cleaning will be a major task for statisticians.

custodian records. These can be combined with the data on issues and investments in foreign markets. Figure 4 illustrates such a hybrid reporting system.

Figure 4

Example of hybrid reporting system for securities statistics
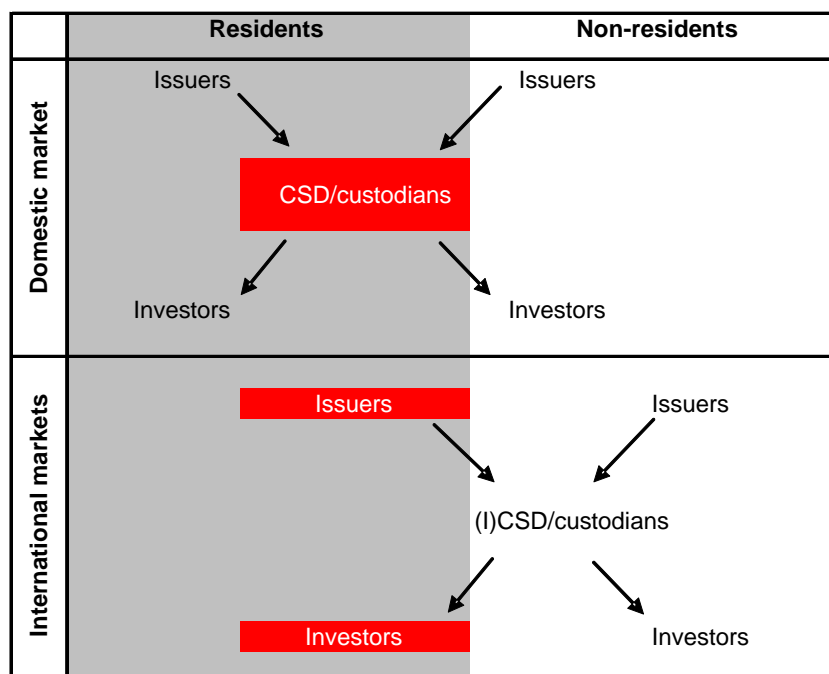
Arrows indicate the flows of securities and data reporters are marked in red. Individual securities issued on the domestic market, either by residents or non-residents, as well as investment in those securities by resident or non-resident investors, are registered and reported by resident CSD (indirect reporting). Resident issues on international markets will be directly reported by resident issuers, while investments in securities traded in international markets (which also include securities issued by residents on foreign markets) will be reported by resident investors (direct reporting). The authorities will thus be able to identify securities, issuers and investors in individual securities all together.[40] The final step in compilation of securities statistics is the production of global aggregates. International organisations provide global and country-comparable statistics in the field of their expertise. The BIS statistics covers securities issues.[41]

BIS (2009) notes that the origins of its activities in the field of international financial statistics go back to the mid-1960s and the emergence of the Eurocurrency markets. As a result of the

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[40] Identification of individual non-resident issuers on foreign markets is not needed for statistics: an allocation between domestic and foreign portfolio investments is all that is needed.

[41] Data on holdings, in particular cross-border holdings, are part of the Coordinated Portfolio Investment Survey coordinated and compiled by the IMF. Since the CPIS is quite comprehensive in terms of geographical coverage and includes a breakdown by country, it can provide both a creditor and debtor view of cross-border portfolio holdings. Indeed, holdings by a country's residents of debt securities issued by resident sectors of other countries (creditor) can provide a mirror view of holdings by residents of other countries of debt securities issued by resident sectors (debtor). CPIS data are available at http://cpis.imf.org/.

increasing role of the international securities markets in global financial intermediation,[42] the BIS was mandated in 1986 to collect and publish statistics on international debt securities.[43]

In 2007 the Committee on the Global Financial System (CGFS) issued a report on financial stability and local currency bond markets. The report was illustrated with additional data on bond markets collected through an ad hoc survey with the assistance of central banks. It was recognised that the lack of detailed, internationally comparable and timely data was a matter of concern. To remedy this, it was suggested that:

- central banks covered by the BIS domestic debt securities (DDS) statistics should work with the BIS to regularly update part of the information collected for the preparation of the report;

- the BIS should explore how the collection of data in its DDS database could be improved and expanded on the basis of the existing collection framework (ie from available national sources);

- the Working Group on Securities Databases (WGSD), a joint undertaking of the BIS, IMF and ECB, should reconvene to promote the collection of timely data on debt securities issues in support of financial stability monitoring (it was noted that the segregation of domestic and international bond data had outlived its usefulness and that a number of other proposed breakdowns would be more relevant).

As a follow-up to G20 recommendations (Recommendation #7 is concerned with securities statistics), the BIS took the lead in the WGSD to sponsor the first part of the Handbook covering debt securities issues. A number of concrete reporting templates have been proposed as a follow-up to the recommendations, which cover all the breakdowns suggested by the CGFS. All central banks currently included in the BIS DDS have been contacted to report their national data on the basis of the G20-approved tables in an automated way through the BIS Data Bank. Contacts have been nominated by all central banks and G20 central banks are close to reporting the initial high-level data[44] that are needed in order to improve the data published on the BIS website. The new statistics will thus focus on providing national aggregates for securities issued on all markets, as well as those issued on international markets.[45]

Conclusion

Banks and other financial intermediaries play a crucial role in financial markets directly or on behalf of their customers. While banks' own activities are well covered in statistics compiled by local authorities and international organisations (such as the BIS international banking statistics), statistics on direct access to financing by non-banks is less well covered, especially when it comes to internationally comparable statistics.

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[42] CGFS, Recent innovations in international banking (Cross Report), 1986, http://www.bis.org/publ/ecsc01.htm.

[43] Originally based on official sources (such as the OECD and the Bank of England data), this database is today based on commercial databases. Statistics on announced international equity issues (by nationality of issuer) and statistics on domestic debt securities (by residence of issuer) are also part of the current BIS securities statistics (these are based on commercial databases and publicly available information from central banks, respectively).

[44] For the euro area countries the BIS is collaborating with the ECB which has already introduced consistent reporting on debt securities issues for individual euro area countries and for the euro area as a whole.

[45] Users can calculate securities issued on domestic market as residual category.

Recent financial crises have confirmed the existence of information gaps. G20 IMF/FSB recommendations call for the improvement in various fields of financial statistics, including the one on securities. As a result, the BIS, IMF and ECB took the lead in the WGSD to produce the Handbook on Securities Statistics in which the common framework has been defined so that internationally comparable securities statistics, based on national data sources, can be produced.

Although the identification of market participants is key in designing a proper statistical information system, special attention should be given to the choice of aggregate or micro-level data sources, treatment of financial innovations and data collection methods. We showed that a combined indirect (based on central securities depository and custodians) and direct (needed for international issues and investments abroad) reporting system could give a solid foundation for various statistical breakdowns, based on the Handbook recommendations.

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