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Improving the Sectorization of Nonresident Issuers for CPIS Reporting

Lessons Learnt from the Pilot Exercise and the Way Forward

Improving the Sectorization of Nonresident Issuers for CPIS Reporting: Lessons Learnt from the Pilot Exercise and the Way Forward¹

Following from the BOPCOM discussion last year, the ECB and the FED conducted a pilot exercise to exchange data on securities and issuer sectors. The pilot proved that, for the initiative to be operationally successful, the exchange should be based on as standardized the information as possible. Prior to taking upon this endeavor, STA proposes to conduct a survey among CPIS reporters to collect information about the volume and format of the data that could potentially be exchanged, including legal limitations as well as to gauge potential interest to participate. The results of the survey will allow the IMF to evaluate the cost and benefits of implementing a centralized database for securities' data exchange.

I. INTRODUCTION

1. At the BOPCOM's Twenty-Ninth meeting in Washington D.C., Committee members revisited the initiative to promote the compilation of CPIS' Table 5 on Portfolio Investment Assets by Sector and Economy of Nonresident Issuer. This issue was also discussed previously at the BOPCOM's meeting in Rio, which attracted the attention of the Inter-Agency Group on Economic and Financial Statistics (IAG) and the Financial Stability Board (FSB) Secretariat that recommended seeking the views of the Committee as to whether a centralized exchange of information across countries could help improve CPIS' sectorization of nonresident issuers.
2. The information in the CPIS' Table 5 permits a from-whom-to-whom cross-border view of portfolio financing by counterpart country and sector (see annex 1). While the dissemination of these data by 28 economies is by itself a commendable achievement, sectorization of nonresident counterparts remains a challenge. Therefore, BOPCOM concluded that its quality could be further improved by assisting compilers to sectorize nonresident issuers with data provided by counterpart economies. Thus, Committee members agreed to consider further establishing a centralized exchange of information across economies aimed at enhancing the sectorization of nonresident issuers and, as a first step, to start by conducting a pilot exercise.
3. To that aim, STA approached some selected CPIS reporters that compile data on a security-by-security basis. Ultimately, and mostly due to copyright issues, the pilot was limited to the European Central Bank (ECB—contributing the data of 27 European Union countries) and the Board of Governors of the Federal Reserve System (FED—providing U.S. data). In this way, the exchange could take place directly and did not require pooling the data at the IMF in the Fund as detailed below. This note presents some proposals on the way forward, following the pilot exchange.

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II. BACKGROUND

4. As a follow-up to the discussion with BOPCOM members (whom fully supported the pilot exchange), STA initiated contacts, first, with the ECB to seek their possible participation in the exercise. The ECB's participation was deemed crucial, since it would bring the data corresponding to 27 European Union countries via its Centralized Securities Database (CSDB). The ECB agreed to participate in the pilot, although made STA aware of certain restrictions coming from their contracts with commercial data providers whereby they are only allowed to exchange information once a year and only with the FED and the Bank of Japan (BOJ). Although the compilation of CPIS data on a security-by-security basis is not a pre-requisite to benefit from the data exchange, Japan was not asked formally to participate in the pilot since the required information was not readily available in Japan.

5. The IMF coordinated the exercise and discussed the modalities of the data exchange with both parties. The FED would receive from the ECB a file corresponding to the securities issued by U.S. issuers and held by European Union (EU) investors and the ECB would receive from the FED a file with the securities issued by EU countries and held by U.S. investors. Each institution would take care of sectorizing its own issuers and thereafter the files with the additional information would be returned to the ECB and the FED, respectively.

III. TECHNICAL DETAILS

6. The modalities of the data transmission were discussed among the three parties in a series of teleconferences. To facilitate automation of the exercise, mainly securities with an ISIN code would be exchanged. The files also contained the following other variables (to the extent they were available): (a) ISO code of the country of the issuer, based on the information available, and (b) 2-digit ISO country code as defined in ISO 3166.² Each party took care of sectorizing the securities issued in their respective economies.

7. Prior to the exercise the ECB and the FED had already been able to identify the sector of the nonresident issuer. The parties agreed to include the information in the initial file, and that the counterpart be requested to confirm or otherwise correct the sector assigned by the other institution. No additional information (e.g., currency, type of security, original maturity, etc.) was part of the exercise to keep it as simple as possible (and because the addition of information could exacerbate potential copyright and confidentiality issues for the exercise going forward).

² The ISO country codes are internationally recognized codes that designate for each country and most of the dependent areas a two-letter combination or a three-letter combination. ISO 3166 is the International Standard for countries' and their subdivisions' codes.

8. With the aim to standardize the sectoral breakdown in the exchange of data, it was agreed to use the *SNA2008* sectorization of issuers. When it was not possible to go to the full breakdown, still the use of higher level categories in *SNA2008* was deemed to be appropriate.

9. The transmission of data was undertaken on a CSV format. Following a formal agreement between the two parties, an exchange of data was initiated in the second quarter of 2017. The ECB selected several ISIN codes with the following features:

Attributes: ISIN, issuer name, issuer country, SNA/ESA sector

Filter: Alive (not matured) securities issued by US residents with

- Amounts outstanding and/or market capitalisation above Euro 10 million, for all sectors except one.
- Amounts outstanding and/or market capitalisation above Euro 50 million for the sector excluded above.

Total ISINs:

- 67,176 for all sectors except one.
- 56,661 for a single sector excluded above.

10. ISINs were selected on the criteria above and these were not necessarily held by EU residents. Nevertheless, it was considered that these securities, with the largest amounts, were the most likely to be relevant in terms of holdings and sufficient for the pilot.

11. As for the FED's data, it produced for the exchange a file of about 45,000 securities held by U.S. residents and issued by EU countries as of end-2015. The file contained the U.S. "master" security identifier, CUSIP or ISIN if known, country of issuer, security description, issuer name, and sector assignment, which was based on the NAICS industry code.

12. By market value of holdings, the FED was able to match a very high share of the U.S. securities listed by the ECB. A significant complication was the use in the U.S. dataset of multiple types of security identifiers (CUSIP, ISIN, etc.). Matching was nonetheless possible in many cases because a mapping from the U.S. "master" ID to more standard IDs were available.

IV. LESSONS LEARNT AND WAY FORWARD

13. As mentioned before, the availability of a local database connecting individual securities with issuers and their institutional sector (e.g. stock exchange, public debt or other securities databases) would be enough to be able to participate, even for countries not collecting full information security-by-security. While not collecting portfolio investment flows/stocks security-by-security would not permit to use directly the centralized database, participating countries could still benefit from using the mirror data provided by counterparty economies to compile their portfolio investment liabilities by sector with a much higher level of accuracy. This would be so because thanks to their contribution, counterparty economies could benefit from using the centralized database. Those economies would be able to reap full benefits (i.e., including direct use of the centralized database to sectorize resident holdings of securities issued by nonresidents) as soon as they started to collect security-by-security information.

14. Because the ultimate objective of this undertaking is to expand the exercise to other CPIS reporters, the success of the pilot exercise suggests that the proposed centralized database should preferably be built upon the structure used in the pilot in terms of variables and format. While this initial exchange of data was not materialized through a centralized database as originally envisaged by the IMF, results show that the transition from a bilateral exchange to a multilateral exchange via a centralized database could be feasible. For the exercise to be operationally successful, the exchange should be based on:

- Focus the exercise on securities for which cross-border holdings exceed a certain threshold (e.g., USD 1 mil.);
- Use of the International Securities Identification Number (ISIN) as securities' identifier;
- Use of a standard identification for issuers (e.g., Legal Entity Identifier (LEI));
- Use of *SNA 2008* and *BPM6* methodology for the sector classification of issuers.

15. Economies willing to participate in future exercises should adopt, to the extent possible, the codification for holding securities mentioned above. The use of ISIN-LEI standard codes would provide the necessary connection between the security and its issuer. Any bridging from national sectorization guidelines to internationally accepted codification, should take place prior to the provision of these data to the centralized database.

16. As a way forward, the IMF proposes to conduct a survey among CPIS reporters next year to gauge from each CPIS reporter the following information:

- a) whether it has a security-by-security database or can otherwise draw the necessary information (linking individual securities and issuer sector) from alternative sources available at national level;
- b) volume of data (i.e., number of foreign securities for which resident holdings exceed USD 1 mil). Optionally, the questionnaire would also request information about the number of domestic securities for which non-resident holdings exceed the same threshold;
- c) whether the data would be available in the standard codification/format (ISIN, LEI, sectorization methodology, etc.);
- d) whether there are confidentiality or copyright limitations to share this limited information (ISIN, LEI, name of the issuer and sector) with peers through a centralized database hosted and managed by the IMF; and
- e) potential interest to participate in such a multilateral exchange.

A first draft of the general questions that could be included in the survey is provided in the Annex II.

17. After analyzing the results of the survey and if a critical mass of reporters express an interest to participate in the exercise with the required information and format, the IMF would undertake a feasibility study to consider the technical requirements and associated costs of a centralized database hosted and managed by the IMF. In this regard, a subgroup of the CPIS reporters expressing an interest on the project could be invited to participate in another pilot test.

18. Additionally, STA endorses the recommendation of both the ECB and the FED to repeat the bilateral exchange of data next year with a more targeted set of securities, such as securities issued by government or Financial Vehicle Corporations.

Questions for the Committee:

1. *What are the views of the Committee as to the outcome of the pilot exercise conducted by the ECB and the FED?*
2. *Following the experience of the bilateral exchange, do Committee members agree with the proposal to implement a survey among CPIS reporters as delineated above?*
3. *What are the Committee member's views on the general questions to be included in the survey (see Annex II)?*

**ANNEX II. DRAFT QUESTIONS THAT COULD BE INCLUDED IN THE SURVEY TO CPIS
REPORTERS**

- A. Does your institution have a security-by-security database with information on individual securities and issuer sectors? *[The Survey will include some questions in this area to clarify how data is compiled, its periodicity and timeliness.]* If you do not have a security-by-security database, can the necessary information (linking individual securities and issuer sector) be drawn from alternative sources available at national level?
- B. What is the total number of individual domestic and foreign securities in your database?
- C. What is the number of foreign securities for which resident holdings exceed USD 1 mil? (only securities above this threshold will be part of the proposed exchange)
- D. [Optional] What is the number of domestic securities for which nonresident holdings exceed USD 1 mil?
- E. Is the International Securities Identification Number (ISIN) code used in your database to identify securities? Which other identifiers are used? If several identifiers are used, please provide the number of securities for each type of identifier.
- F. Is the Legal Entity Identifier (LEI) used for the identification of issuers? Which other identifiers are used? If several identifiers are used, please provide the number of securities for each type of identifier.
- G. Is the *SNA 2008* methodology used in your database to sectorize securities' issuers? If yes, is there any exception? If not, what is the sectoral classification currently used?
- H. In your economy are there any legal (confidentiality, copyright, etc.) limitations to share the limited securities' information (securities ID, issuer ID, and sector) with CPIS peers and with the IMF? If yes, do these limitations only refer to data acquired from commercial data providers? If yes, could information not subject to such limitations be segregated from your database to make the exchange with other CPIS reporters possible without restrictions?
- I. Would you be interested to participate in the proposed data exchange either now or at some stage in the future? If you meet the preconditions to start participating in the short run, would you be interested in being part of a pilot? If you are interested, but do not reach the pre-conditions on codification/methodology, is there a code bridging or alternative procedure that you may want to propose?