

Work on Foreign Currency Exposures Report to G-20 Economies



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ACRONYMS

BIS	Bank for International Settlements
<i>BPM6</i>	<i>IMF Balance of Payments and International Investment Position Manual</i> , sixth edition
COFER	Currency Composition of Official Foreign Exchange Reserves
CPIS	Coordinated Portfolio Investment Survey
DGI	Data Gaps Initiative
ECB	European Central Bank
FMCBG	Finance Ministers and Central Bank Governors
FSB	Financial Stability Board
<i>GFSM</i>	<i>Government Finance Statistics Manual</i>
G-20	Group of 20
IAG	Inter-Agency Group on Economic and Financial Statistics
IIP	International Investment Position
IMF	International Monetary Fund
NPISHs	Nonprofit Institutions Serving Households
OECD	Organization for Economic Cooperation and Development
OFCs	Other Financial Corporations
PSDS	Public Sector Debt Statistics
QEDS	Quarterly External Debt Statistics
RDT	Reserves Data Template
SDDS	IMF's Special Data Dissemination Standard
SDR	Special Drawing Rights
SRF	Standardized Report Form
STA	IMF Statistics Department

I. BACKGROUND

1. This paper on the work by IMF staff to address data gaps involving foreign currency exposures is in response to a request from the G-20 Finance Ministers and Central Bank Governors (G-20 FMCBG).¹ It is coordinated with parallel work being undertaken by the Financial Stability Board (FSB) and Bank for International Settlements (BIS).
2. The work on foreign currency exposures was initiated in April 2014 when the G-20 FMCBG requested the IMF, FSB and BIS to advance work to address data gaps involving foreign currency exposures to better assess cross-border risks, building to the extent possible on existing data initiatives. Following this request, IMF staff prepared the paper “*Advancing the Work on Foreign Currency Exposures*” for the September 2014 G-20 FMCBG meeting.² That paper reviewed existing report forms that the IMF Statistics Department (STA) uses to collect data in which foreign currency breakdowns are available, and further explored how the report forms conceptually fit together to provide a holistic view of the foreign currency positions of an economy (see Table 1).
3. This paper updates the 2014 report, covering: i) the growing policy interest in data on foreign currency exposures in the IMF, including through balance sheet analysis; ii) progress made over the past year in the reporting of data on foreign currency exposures by G-20 economies through collection forms used by STA; iii) recent outreach activities through technical assistance (TA) and training by STA as well as G-20 consultations; and, iv) proposed way forward, including the continuation of outreach activities and more explicit incorporation of data on foreign currency exposures in the recommendations of Phase II of the G-20 Data Gaps Initiative (DGI).

II. GROWING POLICY INTEREST IN DATA ON FOREIGN CURRENCY EXPOSURES IN THE IMF

4. There is a continued policy interest in understanding foreign currency exposures among policy makers and therefore it remains important to support such analysis with relevant data.³

¹ In their September 2014 communiqué the G-20 FMCBG stated: “We ask the IMF, FSB and BIS to take forward the work on data gaps on foreign currency exposures described in their respective submissions, building as far as possible on existing statistical and data initiatives, and report back to us in one year.”

² The document is available at: <http://www.imf.org/external/np/g20/pdf/2014/foreigncurrency.pdf>

³ This interest in foreign currency exposures is reflected in the IMF Staff Report to the G-20 FMCBG Meeting in February 2015 (<http://www.imf.org/external/np/g20/pdf/2015/020915.pdf>), BIS 85th Annual Report (<http://www.bis.org/publ/arpdf/ar2015e.pdf>), and the 2nd FSB Annual Report (<http://www.financialstabilityboard.org/wp-content/uploads/FSB-2nd-Annual-report.pdf>). At the present time there is particular interest in foreign currency borrowing in emerging market economies.

5. The importance of strengthening balance sheet analysis in IMF surveillance has been emphasized in recent work by IMF staff.⁴ With comprehensive balance sheet data, potential shocks to stock variables that drive economic activity as well as vulnerabilities arising from currency and maturity mismatches can be analyzed. For example, balance sheet data can be used to analyze the potential effects of sharp movements in exchange rates that could cause significant wealth transfers both within an economy and between an economy and the rest of the world. Further, data on currency and maturity mismatches of external debt can be used to assess the potential vulnerability of the economy to exchange rate and foreign interest rate shocks.

6. The recent IMF work on balance sheet analysis quoted above found the need to address key data gaps, with particular emphasis on other financial corporations (OFCs), nonfinancial corporations (NFCs), governments, and households, and information related to currency and remaining maturity breakdowns, counterparties, and off-balance sheet exposures.⁵ The foreign currency exposures data initiative of the G-20 will encourage countries to provide such data, particularly for the external sector.

III. PROGRESS MADE IN REPORTING DATA ON FOREIGN CURRENCY EXPOSURES THROUGH COLLECTION FORMS

7. As the statistical framework for monitoring the external position is the International Investment Position (IIP), the IMF is emphasizing the collection of cross-border foreign currency exposure data through the memorandum Table A9-I in the sixth edition of the IMF's *Balance of Payments and International Investment Position Manual (BPM6)*, which is included in IIP report forms (see Appendix). This table identifies separately the positions of individual institutional sectors vis-à-vis nonresidents, specifically: central bank, general government, other deposit taking corporations, OFCs, and inter-company lending; and for each of these sectors, provides a breakdown of debt claims and liabilities by domestic currency and selected foreign currencies (U.S. dollar, Euro, and Yen) with short-term original maturity separately identified. A subset table within Table A9-I aims at collecting off-balance sheet exposures to receive and pay foreign currency under financial derivatives contracts. Japan was the first economy that reported Table A9-I, in mid-2015 (see Table 2). To encourage broader reporting, the IMF is drawing attention to the reporting of Table A9-I in its outreach with G-20 economies.

⁴ These include the IMF Staff papers on Balance Sheet Analysis in Fund Surveillance and the Spillover Report. The most recent IMF document on Balance Sheet Analysis in Fund Surveillance can be found at:

<http://www.imf.org/external/np/pp/eng/2015/061215.pdf>

⁵ There is growing policy interest in data on domestic derivative positions particularly with foreign currency exposures, and other hedging activities, such as natural hedges, to understand foreign currency risk exposure among domestic sectors. However, these are not covered by existing IMF report forms.

8. The IMF also is collecting data on foreign currency exposures through surveys of specific subcomponents of the IIP. Regarding the Coordinated Portfolio Investment Survey (CPIS), it collects on an encouraged basis, data *on the foreign currency composition* of portfolio investment (security) assets by the same three currencies (U.S. dollar, Euro, and Yen) identified in the IIP report form plus the British pound and the Swiss franc. Forty-six economies report these data, including 13 G-20 economies, in the latest 2015 submission that included data as of June 2014.

9. As for external debt, the currency composition of external debt (domestic/foreign) is an encouraged item under the IMF's Special Data Dissemination Standard (SDDS). This information is collected by the World Bank through Table 2: "Gross External Debt Position: Foreign Currency and Domestic Currency Denominated Debt," which is included in its Quarterly External Debt Statistics (QEDS) website. Thirty-one economies report these data to the World Bank, including nine G-20 economies.

10. On currency composition of reserve assets, since its origins, the SDDS Reserves Data Template (RDT) has included a breakdown of foreign currency reserves into SDR basket currencies and non-SDR basket currencies. Although the SDDS prescription is to report this currency breakdown at least once a year, the majority of economies report these data on a monthly basis. These data can be compared with data in the IIP presentation. Currently 79 economies including SDDS and non-SDDS subscribers, in addition to the European Central Bank (ECB) and the consolidated Eurosystem disseminate the RDT. Eighteen G-20 economies report the RDT.

11. As for monetary data, the Standardized Report Forms (SRFs) have an accounting structure, detailing the financial instrument, the currency of denomination of the instruments (domestic and foreign currency), and the counterpart sector for each instrument. Counterparty institutional units are split into resident and nonresident units. Among the G-20, 13 economies report data with currency breakdown in the central bank report form (1SR), 12 economies report data with currency breakdown in the other depository corporations report form (2SR), and eight economies report data with currency breakdown in the OFCs report form (4SR). The most recent reporter is the Eurosystem, which reports the currency breakdown in these three consolidated forms, including for the ECB.

12. In the fiscal domain, the new government finance statistics report forms based on the updated government finance statistics methodology (i.e., *2014 Government Finance Statistics Manual (GFSM 2014)*) provide a domestic currency/foreign currency breakdown by instrument for general government debt liabilities. In addition, for debt securities and loan liabilities the new report forms provide a domestic currency/foreign currency breakdown by original and remaining maturity. Brazil was the first G-20 economy to report this information in the new report forms that were introduced by STA in September 2014. As for the Public Sector Debt Statistics, 11 G-20 economies have reported items denominated in domestic and foreign currency.

13. In the context of enhancing the compilation and dissemination of sectoral accounts and balance sheets, the Inter-Agency Group on Economic and Financial Statistics (IAG) has developed templates for a minimum and an encouraged set of internationally comparable sectoral accounts and balance sheets. Through these templates domestic and foreign currency positions can be identified for the domestic sectors of the economy—including NFCs and subsectors of OFCs—and rest of the world for all debt instruments except insurance, pension and standardized guarantee schemes.⁶

14. Staff has further explored how these data sets fit together to provide a holistic view of the foreign currency positions of an economy (see Table 1). As reported in the paper submitted to the G-20 in 2014, existing reporting templates provide a basis for monitoring foreign currency risk across the economy. Thus, initial steps toward closing data gaps should be aimed at increasing the availability of data that are already being sought, which are not widely reported.

⁶ The standard template for sectoral accounts, which was developed under Recommendation 15 of the DGI, includes totals and “of which domestic currency” splits to allow the foreign currency component to be derived as a residual. The template is quarterly and includes both stocks and flows. Data will start to be collected by Eurostat, OECD, and the IMF, with countries reporting data as available. The templates are available at <http://www.imf.org/external/np/sta/templates/sectacct/index.htm>. Other DGI recommendations, for example BIS’s international banking statistics and data templates for Globally Systemically Important Banks (GSIBs) developed by the FSB through its working group, also cover improvements in data collection on foreign currency exposures, crossed with other relevant dimensions for the analysis (e.g. jurisdiction of the reporting and counterparty entity, maturity).

**Table 1. Intersectoral Asset and Liability Positions in Foreign Currency
(Balance Sheet Matrix)**

		Holder of the Asset (Creditor)						Total
		Central Bank	Deposit-taking Corporations except the Central Bank	Other Financial Corporations	General Government	Other non-financial	Rest of the World	
Issuer (Debtor)	Central Bank							
	<i>Total</i>						IIP 1/	
	<i>In domestic currency</i>		SRF 1SR 3/	SRF 1SR 3/	SRF 1SR 3/	SRF 1SR 3/	SRF 1SR 3/	SRF 1SR 3/
	<i>In foreign currency</i>							
	Deposit-taking Corporations except the Central Bank							
	<i>Total</i>						IIP 1/ 7/	
	<i>In domestic currency</i>	SRF 1SR 3/	SRF 2SR 4/	SRF 2SR 4/	SRF 2SR 4/	SRF 2SR 4/	SRF 2SR 4/	SRF 2SR 4/
	<i>In foreign currency</i>							
	Other Financial Corporations							
	<i>Total</i>						IIP 1/ 7/	
	<i>In domestic currency</i>	SRF 1SR 3/	SRF 2SR 4/	SRF 4SR 5/	SRF 4SR 5/	SRF 4SR 5/	SRF 4SR 5/	SRF 4SR 5/
	<i>In foreign currency</i>							
	Government							
	<i>Total</i>						IIP 1/	GFS 2/
	<i>In domestic currency</i>	SRF 1SR 3/	SRF 2SR 4/	SRF 4SR 5/				
	<i>In foreign currency</i>							
	Other Non-financial							
	<i>Total</i>							IAG /8
<i>In domestic currency</i>	SRF 1SR 3/	SRF 2SR 4/	SRF 4SR 5/			IIP 1/ 6/	IIP 1/ 6/	
<i>In foreign currency</i>								
Rest of the World								
<i>Total</i>								
<i>In domestic currency</i>	IIP 1/	IIP 1/ 7/	IIP 1/ 7/					
<i>In foreign currency</i>	SRF 1SR 3/	SRF 2SR 4/	SRF 4SR 5/	IIP 1/	IIP 1/ 6/		IIP 1/	
Total								
<i>Total</i>								
<i>In domestic currency</i>	IIP 1/	IIP 1/	IIP 1/	IIP 1/	IAG /8			
<i>In foreign currency</i>	SRF 1SR 3/	SRF 2SR 4/	SRF 4SR 5/		IIP 1/ 6/	IIP 1/		

Notes

- 1/ Short and long term, and a domestic/foreign currency breakdown, for debt claims and liabilities. Except for reserves, a foreign currency breakdown for these claims and liabilities is provided for US dollars, euro, yen and other currencies.
- 2/ For loans and debt securities a further breakdown by maturity (short and long both original and remaining maturity) is provided.
- 3/ Standardized Report Form (SRF) 1SR reported for the central bank provides data with domestic/foreign currency breakdown with no maturity breakdown.
- 4/ Standardized Report Form (SRF) 2SR reported for deposit-taking corporations provides data with domestic/foreign currency breakdown with no maturity breakdown.
- 5/ Standardized Report Form (SRF) 4SR reported for other financial corporations provides data with domestic/foreign currency breakdown with no maturity breakdown.
- 6/ Includes intercompany lending.
- 7/ The IIP and SRF data can only be compared at the total financial sector level as IIP includes money market funds in OFC, while SRF include them in depository corporations and not in OFC.
- 8/ Data may be available through the IAG templates on Sectoral Accounts.

IV. RECENT OUTREACH

A. G-20 DGI Consultations and Feedback Received

15. During the outreach activities as part of the G-20 DGI,⁷ IMF staff discussed with data compilers and users from the G-20 economies, international organizations and, as appropriate, with the private sector representatives, the importance of foreign currency exposures from data reporting and policy perspectives. The consultations revealed that the need for data on foreign currency exposures has become increasingly important, given the growth and complexity of cross-border financial linkages.

16. During the consultations, Table A9-I (in *BPM6*) was seen to be a significant improvement, as previously foreign currency data were not covered in the IMF's *Balance of Payments Manual*. Indeed, the table was considered a first step towards meeting the objective of capturing foreign currency exposures, and so could form a basis for an analysis of such exposures. But further information is needed. In particular, some interest was expressed for more information on hedging activities, particularly for countries where the shares of foreign-currency denominated external assets and liabilities are significant.

17. While Table A9-I covers derivatives positions, hedges can also arise from future receipt/payments of foreign currency through, say, merchandise transactions, while "natural hedges" may exist within multinational corporations. Designing datasets for monitoring such hedges is a major challenge and collection through ad-hoc national surveys was suggested. This work would likely only be achieved in the longer term.

18. Some countries underlined that further breakdowns of "other sectors" in Table A9-I would contribute to an analysis of the shadow banking sector while one country saw a need for information on the regional distribution of currency positions to better understand cross-border exposures.

19. The discussions with G-20 economies indicate that some countries could partially or less frequently disseminate the data in Table A9-I while others will consider reporting it as part of their implementation of the *BPM6* methodology. Other countries, while appreciating the usefulness, underlined the challenges (i.e., lack of data sources) and emphasized that the reporting of foreign currency data is a longer term goal.

⁷ The Regional Conferences were held in Ottawa/Canada (February 2015), Ankara/Turkey (March 2015), London/UK (April 2015) and Tokyo/Japan (June 2015) and hosted by the authorities of the respective countries. The Global Conference was held in Washington, D.C. in June 2015 hosted by the IMF and FSB.

B. Technical Assistance and Training

20. IMF staff has also been addressing gaps in relevant data and promoting data collection through TA missions to non-G-20 economies on external sector statistics drawing attention to Table A9-I. In addition, IMF staff has been publicizing the usefulness of these data, especially as part of the IMF's efforts to strengthen surveillance, including work on risks and spillovers, at workshops and other meetings, and has maintained a record of foreign currency external sector data disseminated by G-20 economies.

21. On training in external sector statistics, the IMF has included in the past within IIP presentations important references to Table A9-I. Starting in 2015, Balance of Payments and IIP courses included presentations on cross-border positions and foreign currency exposures. Moreover, STA is preparing a full two-week course on Cross Border Position Statistics to encourage compilation of these data. The first course will be delivered in the autumn of 2015.

22. Further, STA will promote the need for foreign currency data during its outreach on sectoral accounts and will continue to promote the use of SRFs for monetary statistics.⁸

V. PROPOSED WAY FORWARD

23. An important component of the work forward by the IMF will be carried out as part of the G-20 DGI. In the Phase II of the DGI⁹ it is proposed to make a more explicit reference to data on foreign currency exposures, particularly in three recommendations.

- The DGI Phase II recommendation on the “international investment position” includes a specific reference to the reporting of currency composition data consistent with *BPM6*. However, it is recognized that this work may have a long time horizon.¹⁰
- The DGI Phase II recommendation on the “cross border exposures of non-bank corporations” spells out the need for work to improve the consistency and dissemination of data on non-bank corporations’ cross-border exposures, including foreign currency mismatches to better analyze the risks and vulnerabilities arising from such exposures. The relevance of this recommendation is reinforced by the

⁸ The domestic/foreign currency split is an integral part of the SRFs.

⁹ In 2015, the G-20 FMCBG asked the Staff of the IMF and FSB Secretariat to make a proposal for Phase II of the DGI.

¹⁰ As a result of consultations with G-20 economies and international organizations on the DGI Phase II proposals for the IIP, implementation challenges for reporting the currency composition of assets and liabilities, as well as the feasibility of separately identifying NFCs and reporting remaining maturity of debt instruments are to be discussed at the next meeting of the IMF's Committee on Balance of Payments Statistics in October, 2015.

recent increase in corporate foreign currency bond issuance through subsidiaries in offshore centers.

- The DGI Phase II recommendation on “securities statistics” proposes that the G-20 economies provide to the BIS data on debt securities issuance consistent with the *Handbook on Securities Statistics*, including a currency breakdown.

If proposals for DGI Phase II are endorsed by the G-20 FMCBG, the next step would include discussions with the national authorities in the first half of 2016 on an action plan for implementing the proposed recommendations. This would include potential timelines for delivery of information.

24. The IMF will continue to work with the G-20 economies in cooperation with the international organizations, to encourage countries to close the gaps in the reporting of foreign currency information within existing data initiatives.

Table 2. IMF Statistics Department Data Collection Forms**G-20 Reporters**

Data Collection Form	Economies Currently Reporting Foreign Currency Breakdown
External Sector	
–International Investment Position Statistics (IIP)- Table A9-I Currency Composition of Assets and Liabilities	Japan (1economy)
–Coordinated Portfolio Investment Survey (CPIS)- Table 2. Currency Breakdown of Portfolio Investment Assets	Brazil, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, South Africa, Turkey, and U.S. (13 economies)
–Quarterly External Debt Statistics (QEDS)-Table 2. Gross External Debt Position. Foreign Currency and Domestic Debt	Argentina, Germany, India, Korea, Mexico, Russia, South Africa, Turkey, and U.S. (9 economies)
–Reserves Data Template (RDT) ^{1/}	Argentina, Australia, Brazil, Canada, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, U.K. and U.S. (18 economies)
– Composition of Foreign Exchange Reserves Survey (COFER)	Data and list of reporters are confidential
Financial Sector ^{2/3/}	
–Standardized Report Forms (SRF)- Central Bank (1SR)	Australia, Brazil, Canada, France, Germany, Indonesia, Italy, Japan, Korea, Mexico, South Africa, Turkey, and U.S. (13 economies)
–Standardized Report Forms (SRF)- Other Depository Corporations (2SR)	Australia, Brazil, France, Germany, Indonesia, Italy, Japan, Korea, Mexico, South Africa, Turkey, and US. (12 economies)
–Standardized Report Forms (SRF)- Other Financial Corporations (4SR)	Australia, Brazil, Indonesia, Japan, Mexico, South Africa, Turkey, and U.S. (8 economies)
Government Finance Sector	
–Public Sector Debt Statistics (PSDS). Items in the report form: (a) Domestic currency denominated; (b) Foreign currency denominated ^{4/}	Australia, Brazil, France, Indonesia, Italy, Mexico, Russia, South Africa, Turkey, U.K. and U.S. (11 economies)
–Updated Government Finance Statistics (GFSY)- Table 6A	Brazil (1 economy)

^{1/} The Eurosystem reports a consolidated RDT that includes the ECB. The ECB also reports separately.

^{2/} Argentina, and Saudi Arabia provide partial currency breakdowns for some financial instruments using non- SRF report forms.

^{3/} The Eurosystem reports consolidated forms 1SR, 2SR, and 4SR that include the ECB.

^{4/} Canada reports the breakdown for Central Government and not for General Government.

Appendix. Table A9-I in *BPM6*

Assets (Market Value)

	Central Bank	General Government	Deposit-Taking Corporations, except the Central Bank	Other Sectors OFC/Other/Total ^{2/}	Intercompany Lending	Total
Total ^{3/}						
Domestic Currency						
Foreign Currency						
U.S. dollar						
Euro						
Yen						
Other currencies						
Unallocated ^{4/}						
Of which one year or less ^{5/}						
Domestic Currency						
Foreign Currency						
U.S. dollar						
Euro						
Yen						
Other currencies						
Unallocated ^{4/}						
Reserve Assets ^{6/}						
In SDR basket						
Not in SDR basket						

Financial Derivative Positions—To Receive Foreign Currency (Notional Value)

	Central Bank	General Government	Deposit Taking Corporations	Other sectors OFC/Other/Total ^{2/}	Intercompany Lending	Total
Receive Foreign Currency					n.a.	
U.S. dollar					n.a.	
Euro					n.a.	
Yen					n.a.	
Other currencies					n.a.	

Notes:

1/ Table A9-I is a memorandum item of the IIP statistical framework.

2/ OFC=other financial corporations. Other=nonfinancial corporations (except intercompany lending), households and NPISHs.

3/ Excluding reserve assets.

4/ Paragraph 5.107 in *BPM6* explains when currency data is shown as unallocated.

5/ Original maturity.

6/ Total reserve assets.

Appendix. Table A9-I in *BPM6* (concluded) ^{1/}

Liabilities (Market Value)

	Central Bank	General Government	Deposit-Taking Corporations, except the Central Bank	Other Sectors OFC/Other/Total ^{2/}	Intercompany Lending	Total
Total ^{3/}						
Domestic Currency						
Foreign Currency						
U.S. dollar						
Euro						
Yen						
Other currencies						
Unallocated ^{4/}						
Of which one year or less ^{5/}						
Domestic Currency						
Foreign Currency						
U.S. dollar						
Euro						
Yen						
Other currencies						
Unallocated ^{4/}						

Financial Derivative Positions—To Pay Foreign Currency (Notional Value)

	Central Bank	General Government	Deposit Taking Corporations	Other Sectors OFC/Other/Total ^{2/}	Intercompany Lending	Total
Pay foreign currency					n.a.	
U.S. dollar					n.a.	
Euro					n.a.	
Yen					n.a.	
Other currencies					n.a.	

Notes:

1/ Table A9-I is a memorandum item of the IIP statistical framework.

2/ OFC=other financial corporations. Other=nonfinancial corporations (except intercompany lending), households and NPISHs.

3/ Excluding reserve assets.

4/ Paragraph 5.107 in *BPM6* explains when currency data is shown as unallocated.

5/ Original maturity.