

**Twenty Second Meeting of the  
IMF Committee on Balance of Payments Statistics  
Shanghai, China, P.R. November 2-4, 2009**

**International Investment Position  
Improving Data Availability**

**Prepared by the Statistics Department  
International Monetary Fund**



## INTERNATIONAL INVESTMENT POSITION IMPROVING DATA AVAILABILITY<sup>1</sup>

### A. Background

1. The main purpose of this paper is to update the Committee on the progress made over the past year by the IMF Statistics Department's (STA) to improve the availability of IIP data, particularly developing international investment position (IIP) world and regional tables.
2. The project on world and regional tables (project) originally responded to the heightened need for balance sheet data as it was recognized that assessing developments in a country's IIP had become key for Fund surveillance. At the 2008 Committee meeting, the first phase of the STA project to produce IIP world and regional tables was introduced. A set of tables that included global and regional IIP aggregates was distributed. These tables used IIP data *reported* to STA by economies for publication in country tables in the *Balance of Payments Statistics Yearbook (BOPSY)* and the *International Financial Statistics (IFS)*. In this first phase of the project, no estimations were made for nonreporters, late reporters, or International Organizations. This paper introduces the results of the second phase of the project—to include estimations for nonreporters and late reporters—for the first time in STA.
3. The paper documents progress made in the past year to increase the number of countries reporting IIP data to STA and on reducing the number of late reporters, the request from users to further enhance the availability of IIP data, and also presents the methodology used for the estimations to produce more comprehensive world and regional aggregates. The paper also discusses some global and regional trends in IIP data in 2002-2008 and the next steps in the project.
4. Some issues for discussion are included at the end of the paper.

### B. Availability of IIP Data to STA

5. When producing the IIP world and regional tables, official country IIP data reported to STA are used as the primary source. This follows a long-held practice in the BOP world and regional tables.

#### Increasing numbers

6. STA has continued its efforts to increase the number of countries reporting IIP data through its *IIP Pipeline Project*, an initiative to assist a subset of countries in compiling IIP statistics, notably those countries that STA considers could potentially develop such data in the near future. Since the last reporting to the Committee, five additional countries submitted IIP

---

<sup>1</sup> This paper was drafted by Colleen Cardillo.

data to STA—Bosnia and Herzegovina, Cape Verde, Guatemala, Guinea, and Nigeria. This brings the total number of countries reporting IIP data from under 40 economies in 1998 to 118 in 2009.<sup>2</sup> Over 70 economies do not yet report IIP data to STA for publication in *BOPSY*.<sup>3</sup> Including data for the five additional countries resulted in a total of approximately US\$100 billion being added to assets and US\$90 billion added to liabilities in 2007, and this spanned three regions – Europe, Africa, and the Western Hemisphere.

7. Currently there are nine countries participating in the *IIP pipeline project* and one currency union is considering joining. To date, interest in participating in the project has been keen and a “pre-pipeline” list of countries is being maintained to fill spots in the pipeline as they become available. Any expansion of the number of countries on the pipeline list beyond ten would require additional resources.

### **Reducing the number of late reporters**

8. In addition to expanding the number of new IIP reporters, STA has encouraged late IIP reporters to submit their data in a timelier manner, and as of October 2009 only four countries of the 118 economies had not yet reported 2007 IIP data. This is an improvement from previous years’ experience.

### **Increasing frequency**

9. The recent financial crisis has once again highlighted the need for more frequent economic indicators, including quarterly IIP data, to facilitate timely analytical work. At the 2008 Committee meeting, in a forward looking agenda, members acknowledged the need for high frequency IIP data. Further, the crisis has again focused users’ attention on the availability of economic and financial data (see BOPCOM—09/16). Among the recommendations emerging is that for more countries to report quarterly IIP data, consistent with balance of payments data. The number of economies reporting quarterly IIP data, which is an encouraged item under SDDS guidelines, remains low with only 47 economies reporting quarterly IIP data to STA—an increase of three since last year.

### **Other enhancements**

10. Also, in light of some of the events of the crisis, users have noted the progress made by BOPCOM in the *Balance of Payments and International Investment Position Manual*, sixth edition (*BPM6*) to make enhancements to the IIP, such as identification of nonbank financial institutions, information on the impairment of cross-border loans, standardized reporting for the currency composition of international assets and liabilities; and supplementary (voluntary) detail on the remaining maturity of international assets and debt liabilities.

---

<sup>2</sup> One country, Burkina Faso, was deleted from the count as data were last reported for 2001 IIP. This brings the overall net increase in IIP reporters since the last Committee meeting to four.

<sup>3</sup> IIP data for the Euro Area are published in *BOPSY* and *IFS*, and the Euro Area is included in the count of “economies” reporting IIP data to STA. Euro Area IIP data will also be published in the World and Regional IIP tables in *BOPSY 2009*, as requested at the 2008 Committee meeting.

11. Committee members are asked to provide their thoughts on ways to work toward the goals of encouraging more countries to provide quarterly IIP data and to introduce the enhancements to IIP data (see Questions for Committee Members, at the end of this paper).

### C. Estimations for Nonreporters and Late reporters

12. The second phase of the project includes *estimations* for nonreporters and late reporters to produce world and regional aggregates, similar to the coverage in the balance of payments world and regional tables (*BOPSY, Part 2*).<sup>4</sup> Two tables are being included in *BOPSY Part 2, 2009* for the first time—(i) Net IIP, and (ii) Total Assets and Total Liabilities.

13. Since the World Economic Outlook (WEO) database used for estimations for the balance of payments world tables does not include IIP data, another source for deriving estimates was needed. As a result, STA conducted a study on the suitability of using the *External Wealth of Nations (EWN)* database<sup>5</sup> maintained principally by the IMF's Research Department (RES) to provide estimates for gross assets and gross liabilities for those countries and years for which IIP data were not reported, and it was found that the methodology used to construct the estimates met our requirements.<sup>6</sup> Data from this database, which includes data for some 180 countries, are used extensively by IMF staff for multilateral surveillance and for research, and these data are also in the public domain. They are updated and validated by the RES on a continuing basis.<sup>7</sup>

14. External assets and liabilities in the *EWN* are estimated from a variety of sources. Typically, official IIP data are used for countries that report such estimates. For countries and years for which IIP data are not reported, the data are estimated using alternative sources. These include, for example; (i) BIS reported data and partner-country BIS data (for foreign assets), (ii) *IFS* data on banks' and nonbank financial institutions' foreign assets, (iii) *IFS* data for official reserves, (iv) Joint External Debt Hub, the World Bank's Global Development Finance, and the WEO databases for external debt liabilities, (v) cumulative financial flows (adjusted for valuation changes)—financial flows are taken from STA published data as well as

---

<sup>4</sup> This phase of the project included system development work and we acknowledge the expertise and support of the Statistical Information Management Division (SI), particularly Dwayne Raiford, and the Technology and General Services Department (TGS).

<sup>5</sup> The methodology used in this database is described in the IMF Working Paper (WP/06/69): *The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2004*, by Philip R. Lane and Gian Maria Milesi-Ferretti <http://www.imf.org/external/pubs/ft/wp/2006/wp0669.pdf>. Also published in the *Journal of International Economics* vol. 73 (November 2007), 223-250.

<sup>6</sup> The RES database does not include gold in reserve assets, because it covers financial instruments for which there are matching liabilities. Estimates in the IIP world tables for *BOPSY* include gold, consistent with published reported IIP data. Gold values reported for countries in the *IFS* International Liquidity series are added to the total assets from the RES database for the STA estimations.

<sup>7</sup> STA would like to acknowledge the excellent cooperation and collaboration of Gian Maria Milesi-Ferretti and John Kowalski (RES) on integrating the estimates from the *EWN* into the world and regional tables for *BOPSY*.

WEO (when STA data are not available), (vi) UNCTAD data on foreign direct investment (FDI), (vii) Coordinated Portfolio Investment Survey data for portfolio investment, and (viii) partner-country data from national sources for both FDI and portfolio equity assets and liabilities.

15. In some cases, for a small number of economies, neither STA reported data nor RES data were available for one or more years in the time series (almost all data gaps were for 2008). In these cases, estimates were derived using a relevant growth rate (example: regional growth rates).<sup>8</sup>

16. Countries with no data available from STA or RES for the entire period are not included in the published tables. As this project moves forward, these remaining data gaps will be filled as soon as source data become available. The effect of the missing data on regional and world aggregates is believed to be small except for countries that are offshore centers.<sup>9</sup>

17. Estimated data are included in regional and world aggregates only. *No* STA estimates are published at the country level because they are not considered official data.

18. The effect of including estimates in the IIP world and regional tables varies by region and can be determined by examining *reported* data as a percentage of the total (reported plus estimates). At the time of writing this paper, data were not finalized for *BOPSY 2009*, therefore data are considered preliminary, particularly for 2008.

19. Table 1 shows that for the period 2002-2007, the world total reported assets account for an average of 97 percent of total assets while for advanced economies reported data account for 100 percent. For Africa, there has been an improvement over the period in the percentage of reported data from approximately 60 percent in 2002 to 70 percent in 2007. For Developing Asia, data for China P.R. Mainland were estimated in 2002 and 2003 as official data are not available for these years and this resulted in low reporting percentages for the region during these years. For Europe and Western Hemisphere, the percentages have remained high. The region with the lowest reporting percentage for assets is the Middle East where reported data account for an average of 20 percent of the total, fairly constant during the period. Most of the major oil producers in the region do not publish IIP data.

---

<sup>8</sup> Since the financial crisis in 2008 resulted in uneven changes in IIPs by region and country, global year-over-year growth rates were not used to estimate 2008 data.

<sup>9</sup> The effect of offshore centers is discussed in paragraph 27.

**Table 1: Total Assets by Region – Reported IIP data as a Percentage of Total (Pilot)**

Total Assets by Region	2002 %	2003 %	2004 %	2005 %	2006 %	2007 %	2008 <sup>P</sup> %
World Total	96.4	96.6	98.2	98.0	97.9	97.7	84.2
Advanced Economies	100	100	100	100	100	100	86.1
Emerging and Developing Economies	55.9	56.2	76.6	76.9	77.0	77.7	68.9
Africa	59.8	63.1	63.6	73.4	72.0	70.2	12.3
Developing Asia	32.4	33.3	93.5	93.8	94.4	94.9	85.5
Europe	97.4	97.5	98.0	98.0	97.5	97.5	97.0
Central and Eastern Europe	96.6	96.7	97.9	97.8	96.9	97.0	97.1
CIS and Mongolia	98.0	98.1	98.1	98.1	97.9	97.8	97.0
Middle East	16.6	18.8	21.5	20.8	20.9	20.1	18.9
Western Hemisphere	96.4	96.4	96.8	98.4	98.3	98.6	82.0

*P = Preliminary*: at the time of finalizing this paper, data for *BOPSY 2009* were still being processed therefore the data in these tables should be considered preliminary, particularly for 2008.

20. For liabilities, which would include external debt data, Table 2 indicates that for the world total a slightly higher percentage of reported liabilities were reported compared to assets. Emerging and developing countries as a whole had consistently higher reported liabilities than assets, however there were differences by region—for Africa a lower percentage of liabilities were reported between 2002-2005 while for the Middle East, reported liabilities were consistently higher than assets, which could be a result of the nonreporters being major oil-producing countries that may have more assets than liabilities.

**Table 2: Total Liabilities by Region – Reported IIP data as a Percentage of Total (Pilot)**

Total Liabilities by Region	2002 %	2003 %	2004 %	2005 %	2006 %	2007 %	2008 <sup>P</sup> %
World Total	97.0	97.4	98.9	99.0	99.0	98.9	85.4
Advanced Economies	100	100	100	100	100	100	86.6
Emerging and Developing Economies	71.9	74.0	88.0	89.9	90.1	89.8	75.5
Africa	45.3	52.5	57.5	70.0	73.0	74.5	13.3
Developing Asia	50.4	52.4	94.6	94.8	95.0	94.2	74.8
Europe	95.8	96.3	97.2	97.7	97.8	98.0	97.0
Central and Eastern Europe	95.7	96.1	97.3	97.3	97.2	97.2	96.3
CIS and Mongolia	95.9	96.6	97.0	98.3	98.7	99.0	98.3
Middle East	29.8	33.9	45.9	45.1	42.5	39.3	35.2
Western Hemisphere	96.2	96.3	96.8	98.4	98.4	98.6	86.3

*P = Preliminary*: at the time of finalizing this paper, data for *BOPSY 2009* were still being processed therefore the data in these tables should be considered preliminary, particularly for 2008.

#### D. World and Regional Trends in IIP in 2002-2008

21. Table 3 shows that the Advanced Economies account for approximately 90 percent of total external assets. Emerging and Developing Economies however are increasing their share, particularly over the past few years. Of these developing economies, for 2002-2007, the CIS Countries and Mongolia show the largest percentage increase in share while Western Hemisphere economies decreased their share.

22. Total assets worldwide increased approximately 160 percent between 2002 and 2007 from \$37.1 trillion to \$97.5 trillion. Although some data for 2008 are not yet finalized, including for four advanced countries and many African countries, the preliminary data indicate that for the first time, worldwide assets will decline in 2008. This decline was partly due to the financial crisis and reflects declines in asset values and a fall-off in lending.

**TABLE 3: REGIONAL ASSETS in million of U.S.\$ and as % of TOTAL ASSETS (Pilot)**

	2002	2003	2004	2005	2006	2007	2008P
World Total	37,090,955	46,321,571	55,960,179	62,369,272	77,642,333	97,483,661	92,997,781
Advanced Economies	34,094,966	42,726,803	51,530,847	56,945,510	70,414,053	87,626,743	82,416,532
% of World Total	91.9%	92.2%	92.1%	91.3%	90.7%	89.9%	88.6%
Emerging and Developing Economies	2,995,989	3,594,768	4,429,331	5,423,761	7,228,281	9,856,918	10,581,249
% of World Total	8.1%	7.8%	7.9%	8.7%	9.3%	10.1%	11.4%
Africa	194,166	248,800	317,321	373,091	483,288	606,066	629,172
% of World Total	0.5%	0.5%	0.6%	0.6%	0.6%	0.6%	0.7%
Developing Asia	946,805	1,157,653	1,494,332	1,848,825	2,481,281	3,458,810	4,041,390
% of World Total	2.6%	2.5%	2.7%	3.0%	3.2%	3.5%	4.3%
Europe	575,252	686,387	856,343	1,049,646	1,509,460	2,184,847	2,178,010
% of World Total	1.6%	1.5%	1.5%	1.7%	1.9%	2.2%	2.3%
Central and Eastern Europe	249,133	300,834	378,875	433,423	622,906	857,831	881,376
% of World Total	0.7%	0.6%	0.7%	0.7%	0.8%	0.9%	0.9%
CIS and Mongolia	326,119	385,554	477,469	616,223	886,554	1,327,016	1,296,633
% of World Total	0.9%	0.8%	0.9%	1.0%	1.1%	1.4%	1.4%
Middle East	680,803	824,229	998,124	1,270,344	1,681,667	2,216,507	2,236,796
% of World Total	1.8%	1.8%	1.8%	2.0%	2.2%	2.3%	2.4%
Western Hemisphere	598,963	677,699	763,212	881,855	1,072,585	1,390,689	1,495,881
% of World Total	1.6%	1.5%	1.4%	1.4%	1.4%	1.4%	1.6%

*P = Preliminary*: at the time of finalizing this paper, data for *BOPSY 2009* were still being processed therefore the data in these tables should be considered preliminary, particularly for 2008.

23. Table 4 shows that the Advanced Economies and Emerging and Developing Economies share of total external liabilities has stayed fairly constant during 2002-2007. Of the developing economies, the CIS Countries and Mongolia again show the largest percentage increase while Developing Asia and Western Hemisphere economies have decreased their share during the period.

24. Total liabilities worldwide increased approximately 150 percent during 2002-2007, from \$39 trillion to \$98.5 trillion. According to the preliminary data, it is expected that total liabilities will decline in 2008 for the first time.

25. On a net basis, total liabilities worldwide have exceeded total assets in all years, resulting in a negative net IIP, although the gap between assets and liabilities has been narrowing during 2004 – 2008. The Middle East is the only region showing more assets than liabilities during the period and the gap is growing.<sup>10</sup>

<sup>10</sup> The difference between assets and liabilities at the global level reflects errors in data provided by economies that reported IIP data, errors in the estimations that were made for nonreporting economies, and the omission of data (neither reported nor estimated) for a small number of economies.



**TABLE 4: REGIONAL LIABILITIES in million of U.S.\$ and as % of TOTAL LIABILITIES (Pilot)**

	2002	2003	2004	2005	2006	2007	2008P
World Total	38,976,120	48,222,159	57,968,858	63,814,190	78,876,222	98,529,595	93,167,480
Advanced Economies	34,861,124	43,424,208	52,460,180	57,536,497	71,096,321	88,258,307	83,347,341
% of World Total	89.4%	90.1%	90.5%	90.2%	90.1%	89.6%	89.5%
Emerging and Developing Economies	4,114,996	4,797,951	5,508,679	6,277,693	7,779,901	10,271,289	9,820,139
% of World Total	10.6%	9.9%	9.5%	9.8%	9.9%	10.4%	10.5%
Africa	444,059	516,670	589,301	613,821	630,134	747,911	726,143
% of World Total	1.1%	1.1%	1.0%	1.0%	0.8%	0.8%	0.8%
Developing Asia	1,213,857	1,385,425	1,525,146	1,743,452	2,165,498	2,661,634	2,842,303
% of World Total	3.1%	2.9%	2.6%	2.7%	2.7%	2.7%	3.1%
Europe	855,688	1,097,364	1,406,728	1,684,765	2,331,937	3,451,780	2,994,037
% of World Total	2.2%	2.3%	2.4%	2.6%	3.0%	3.5%	3.2%
Central and Eastern Europe	520,097	664,895	864,722	980,046	1,340,084	1,899,311	1,872,209
% of World Total	1.3%	1.4%	1.5%	1.5%	1.7%	1.9%	2.0%
CIS and Mongolia	335,591	432,470	542,007	704,719	991,852	1,552,468	1,121,828
% of World Total	0.9%	0.9%	0.9%	1.1%	1.3%	1.6%	1.2%
Middle East	325,820	376,493	443,633	535,730	710,389	992,102	1,025,154
% of World Total	0.8%	0.8%	0.8%	0.8%	0.9%	1.0%	1.1%
Western Hemisphere	1,275,572	1,421,999	1,543,870	1,699,925	1,941,944	2,417,862	2,232,502
% of World Total	3.3%	2.9%	2.7%	2.7%	2.5%	2.5%	2.4%

*P* = *Preliminary*: at the time of finalizing this paper, data for *BOPSY 2009* were still being processed therefore the data in these tables should be considered preliminary, particularly for 2008.

26. Table 5 shows the top ten countries *reporting* assets and liabilities in 2008 (the latest data reported for Ireland at the time of writing was 2007). For assets and liabilities, these countries account for approximately 72 percent of world totals. The composition of the top ten countries for 2008 compared to their 2007 rankings reported in last year's Committee paper is shown in brackets. Some countries have moved up or down in the ranking. China, P.R. and Ireland moved into the top ten on the asset side, while Italy and Hong Kong dropped off. For liabilities, Switzerland replaced Italy in the top ten.

**Table 5: Top Ten Economies for Assets and Liabilities - 2008\***

Assets		Liabilities			
	<i>Economy</i>	<i>Billions of U.S.\$</i>			
1	United States (1)	19,888	1	United States (1)	23,357
2	United Kingdom (2)	10,401	2	United Kingdom (2)	10,266
3	Germany (4)	6,912	3	France (3)	6,559
4	France (3)	6,041	4	Germany (4)	5,984
5	Japan (6)	5,721	5	Luxembourg (5)	5,229
6	Luxembourg (5)	5,276	6	Ireland (2007) (10)	3,384
7	Netherlands (7)	3,473	7	Netherlands (6)	3,356
8	Ireland (2007) (11)	3,338	8	Japan (8)	3,236
9	China, P.R. (12)	2,920	9	Spain (7)	3,136
10	Switzerland (8)	2,913	10	Switzerland (11)	2,305
	<i>Sub total</i>	66,883		<i>Sub total</i>	66,812
	<b><i>World total</i></b>	<b>92,998</b>		<b><i>World total</i></b>	<b>93,168</b>

\* Reported data only

## E. Next Steps

27. In the short-term, STA will continue its efforts to expand the number of countries reporting IIP data, including through the *IIP Pipeline Project*. Also, RES staff are continuing their work on developing IIP estimates for offshore centers not currently covered by STA or the *EWN* databases. It is expected that these estimates will not have a large impact on the global net IIP figure, but they will increase totals shown for assets and liabilities for the IIP.

28. In the longer term, estimates for functional categories of IIP will be compiled when comparable source data are available – currently the functional classifications in the *EWN* database do not distinguish between portfolio debt securities and debt included in other investment.

29. In the *Summary of Discussions*<sup>11</sup> after last year's Committee meeting, the Chair saw scope for developing bilateral breakdowns of IIP in the longer run. The growing demand for developing bilateral IIP data will be discussed in a companion paper, *Improving the Tracking of Cross-Border Financial Exposures Using Aggregate and Bilateral Data—A Template*.

## F. Questions for Committee Members

1. *Do Committee members have comments on the development of IIP world and regional tables?*
2. *Do Committee members have views on the feasibility of, and approaches for, increasing the number of annual IIP reporters?*
3. *Do Committee members have views on the feasibility of, and approaches for, increasing the number of quarterly IIP reporters (see paragraph 9) and for implementing some of the other enhancements (see paragraph 10)?*

---

<sup>11</sup> BOPCOM-08/30