Data on bilateral external positions, an insight into globalisation[1]

Lucie Laliberté[2] and John Motala[3]

During the past decade, cross-border financial transactions tripled to more than $7 trillion, reaching some 15% of world GDP in 2005. This led to a rapid accumulation of cross-border savings, which were channelled into a range of investments – portfolio equity and debt securities, direct investment, and other types of investment, including deposits with banks abroad. The growing cross-border financial linkages are reflected in a sharp increase in economies' external assets and liabilities.

This paper describes how the analytical framework of the balance sheet approach (BSA) can help analyse these "inter-economy" financial linkages. The first section describes how the BSA framework, which generally focuses on domestic sectors of an economy, can be extended to encompass foreign economies; the second section reviews selected statistical initiatives relating to external sector statistics that can help populate this expanded balance sheet framework; the third section presents the results of the Coordinated Portfolio Investment Survey for 2006 to highlight the relevance of expanding the BSA to non-residents; and finally, some broad conclusions are presented.

I. Analytical framework to track the financial developments in a globalised world

The BSA framework[4] – drawn from the 1993 SNA – provides an analytical framework for assessing the risks inherent to integrated financial markets, namely by credit, currency, maturity and instrument. By grouping economic agents by broad sectors (eg government, financial and non-financial corporations, and the non-resident/rest of the world sector), the framework usually presents metrics on claims and liabilities of individual domestic sectors with one another and with non-residents as a single group. With deepening financial globalisation, this paper suggests adapting the BSA to identify the impact of non-residents by identifying the largest partner countries by broad types of investment (direct investment, portfolio investment, reserve assets and other investment) (Figure 1). This would help focus on country risks as encapsulated in the credit, currency and instrument risks. The resident sectors could be grouped between the government and all other residents (by instruments) for preliminary analysis, with the focus subsequently shifting to the domestic sectors most affected by external vulnerability. For instance, in less developed countries, a significant portion of government debt could be foreign-held, with the other sectors holding assets abroad. In more developed countries, the other domestic sectors are likely to be both

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[1] This is a revised version of the authors' paper presented at the International Statistical Institute Conference, Lisbon, Portugal, 22–29 August 2007. The views expressed in this paper are those of the authors and should not be attributed to the IMF, its Executive Board, or its management.

[2] Deputy Director, Statistics Department, IMF, llaliberte@imf.org.

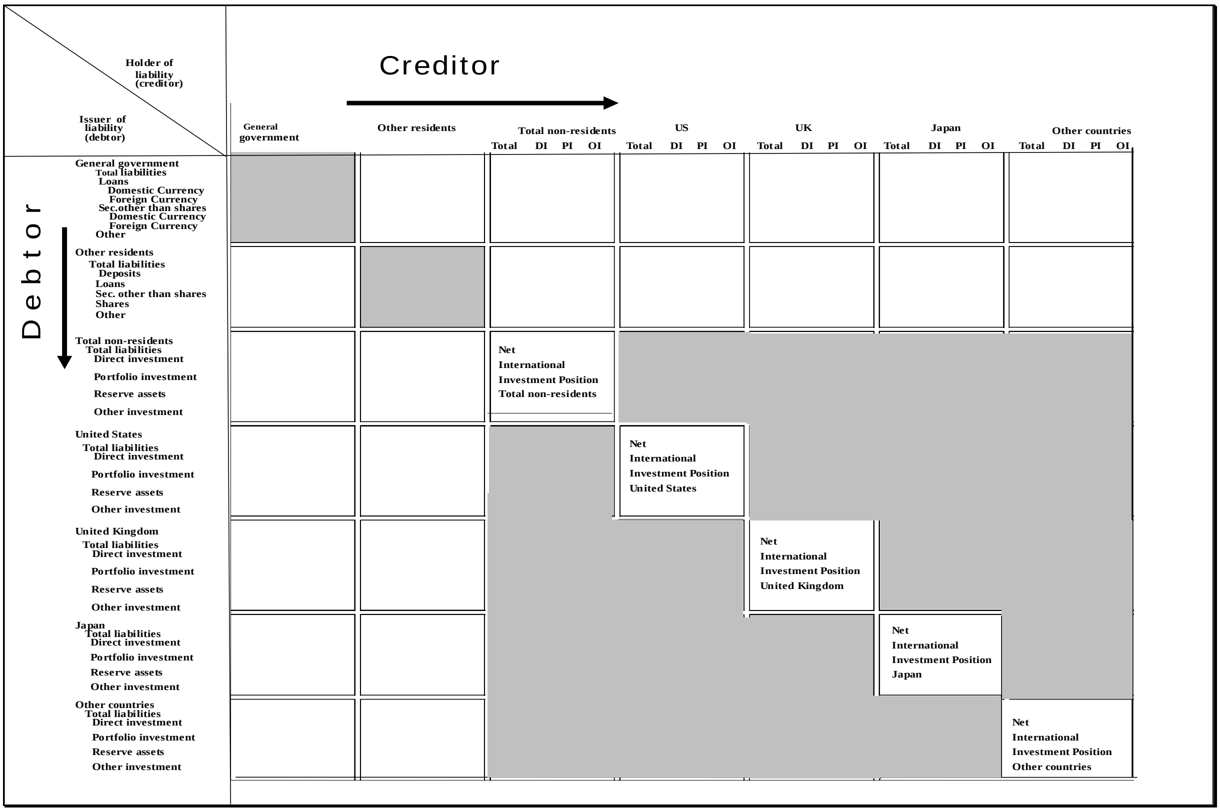
[3] Senior Economist, Statistics Department, IMF,.jmotala@imf.org.

[4] Johan Mathisen and Anthony Pellechio, "Using the Balance Sheet Approach in Surveillance: Framework, Data Sources, and Data Availability", *IMF Working Paper*, 06/100.

substantial holders of assets (creditors) as well as and debtors to foreign residents. This is evidenced by some analytical studies on home bias that have suggested a recent decline in investors' tendency to hold securities issued in their home markets in a larger proportion than theory would indicate.[5] Changes in the financial structure show a growing importance of pension funds, insurance and mutual funds, that displaces some of the more traditional banking loans and deposits, and increased investment abroad for portfolio enhancement purposes. These changes in the financial structure affect the transmission channel of monetary policy.[6] They also reflect forces at play that are often beyond domestic control, such as the spreading of shocks through the networks of interconnected balance sheets across economies, which the expanded BSA can help identify.

Figure 1

An economy's inter-sectoral asset and liability positions with other countries



Source: IMF.

II. Developing comparable data on the non-resident sector for the balance sheet framework

A number of international statistical initiatives are in train that can help operationalise the proposed expansion of the BSA. These initiatives can be divided into two broad categories –

5 Philip R Lane and Gian Maria Milesi-Ferreti, "A global perspective on external positions", *IMF Working Paper*, 05/16.

6 Jorge Roldos, "Disintermediation and monetary transmission in Canada", *IMF Working Paper*, 06/84.

improving data availability, including partner country detail; and harmonising methodologies to ensure consistency of these datasets.

A. Improving data availability on external positions

Over the past decade, several important projects were launched to provide more data on countries' external positions.

First, the IMF has been encouraging countries to ***report international investment position (IIP)*** data for publication in the *Balance of payments statistics yearbook*. The number of countries reporting IIP statistics has increased from 37 in 1998 to 113 at end-2007, albeit with varying degrees of component detail. Reporting on external positions was further promoted by the IMF Executive Board decision to include the IIP data as a prescribed category of the IMF's Special Data Dissemination Standard (SDDS) as of 31 December 2001.

Second, since 2000, countries subscribing to the SDDS have also been reporting additional information on ***reserve assets*** in the Data Template on International Reserves/Foreign Currency Liquidity. More than 60 economies currently report these data to the IMF.

Third, in collaboration with the World Bank, the IMF has also encouraged SDDS subscribers as well as participants in the General Data Dissemination System (GDDS) to report quarterly data on ***external debt*** positions for inclusion in the Quarterly External Debt Statistics (QEDS); more than 70 economies currently participate in the QEDS database.

Fourth, since 2001, the IMF has conducted the ***Coordinated Portfolio Investment Survey (CPIS)*** each year to improve statistics of holdings of foreign portfolio investment securities – equities and debt securities. A distinguishing feature of the CPIS is the provision of data by partner economies. The data disseminated by the IMF also incorporate the survey results of large reserve-holding economies that provided, on a confidential basis, the geographical breakdown of securities held as reserve assets (a similar survey is also undertaken for securities held by selected international organisations).

Fifth, a ***Coordinated Direct Investment Survey (CDIS)***, modelled on the CPIS, is being conducted for the reference year 2009. The CDIS will gather partner country data on both inward and outward foreign direct investment. The CDIS will be conducted in collaboration with several of the IMF's inter-agency partners – the European Central Bank (ECB), Eurostat, the Organisation for Economic Cooperation and Development (OECD), and the United Nations Conference on Trade and Development (UNCTAD). Over 100 countries have indicated their interest in participating in the CDIS.

Sixth, the Bank for International Settlements (BIS) has a long-established collection of ***international banking statistics*** that provide extensive counterpart or partner country information on borrowing from non-resident banks (foreign liabilities of partners) and deposits with non-resident banks (foreign assets of partners). The BIS locational banking statistics provide information on the aggregated positions of the 40 BIS-reporting countries vis-à-vis individual countries, for cross-border loans (partner country liabilities) and cross-border deposits (partner country assets); some of the individual reporting economies publish their bilateral data.

Seventh, the BIS also maintains a ***database on international securities*** issued in foreign markets on a security-by-security basis (the database also includes selected bonds issued domestically).

Eighth, the ECB is developing a ***Centralised Securities Database (CSDB)*** that captures security issues by euro-area residents and holdings by euro-area residents of securities issued outside the euro-area. International cooperation in the CSDB could include the cross-checking of securities information by the countries that issued the securities (but using appropriate mechanisms to deal with any legal constraints on the sharing of information).

These data measure external sector positions from various angles. The first three initiatives draw on aggregate information compiled by individual countries; the next three contain the added aggregate dimension of partner country detail; and the last two provide details of individual securities by issuer and country of issue. Through their identification of partner country data, three of the initiatives (banking, CPIS, CDIS and international banking) provide "mirror" data that can be used to validate national data. For example, Canada's national data on portfolio assets in the United States can be compared to United States national data on portfolio liabilities towards Canada (leaving aside any errors in measurement). Using a common methodology (see next section) in producing the data greatly facilitates such data validation.

The BIS, IMF, OECD, and the World Bank brought together some of these data by launching in 2006 the Joint External Debt Hub (JEDH). The JEDH contains comprehensive external debt statistics of all SDDS-subscribing countries and selected GDDS countries; and data on external claims and liabilities from selected creditor and market sources (mainly the CPIS and the BIS international banking and international securities statistics).

B. Developing common statistical methodologies

Bringing together various datasets from sources into a common framework, as in the BSA and the JEDH, underlines the importance of data consistency, that is, data compiled according to common concepts, definitions, and classifications so that the data can be compared across countries.

The IMF's *The System of Macroeconomic Accounts Statistics, An Overview,* highlights how the *System of National Accounts 1993 (1993 SNA)* has served as the overarching framework for the balance of payments, the international investment position (IIP), external debt, monetary and financial and government finance methodological standards, as well as a range of other economic statistics.

The IIP provides the sectoral (and maturity) breakdown of economies' claims on and liabilities to the non-resident sector. Unlike the update of the *1993 SNA* framework, that is currently underway, the draft sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)* will provide, as supplementary information, a currency composition for debt claims and liabilities, and, for debt liabilities, a remaining term to maturity breakdown. The latter dimensions enhance significantly the analytical potential of the BSA.

For both the CPIS and the CDIS, the IMF, in collaboration with other organisations and national expert groups, has prepared survey guides to assist countries to compile portfolio and direct investment statistics using harmonised concepts, definitions and classifications. Similarly, the BIS has developed a guide for its international banking statistics; a detailed currency breakdown forms part of the BIS reporting template for the locational banking statistics, but currency details are not disseminated in the context of the bilateral data. The BIS is planning to produce a guide on debt securities statistics to assist national compilers in producing data consistent with international statistical standards such as the *1993 SNA* (institutional sector and financial asset classifications; financial balance sheets, transactions, and other changes; market and nominal values).

The IMF's *Monetary and Financial Statistics Manual 2000*[7] provides, among other things, for a domestic/foreign currency breakdown of instruments. In fact, reflecting the key financial role of depository corporations in the domestic economy, the BSA is usually centered on the

[7] See IMF, *International financial statistics, supplement on monetary and financial statistics*.

financial corporate sector of the economy that provides extensive and valuable details called for by the manual.

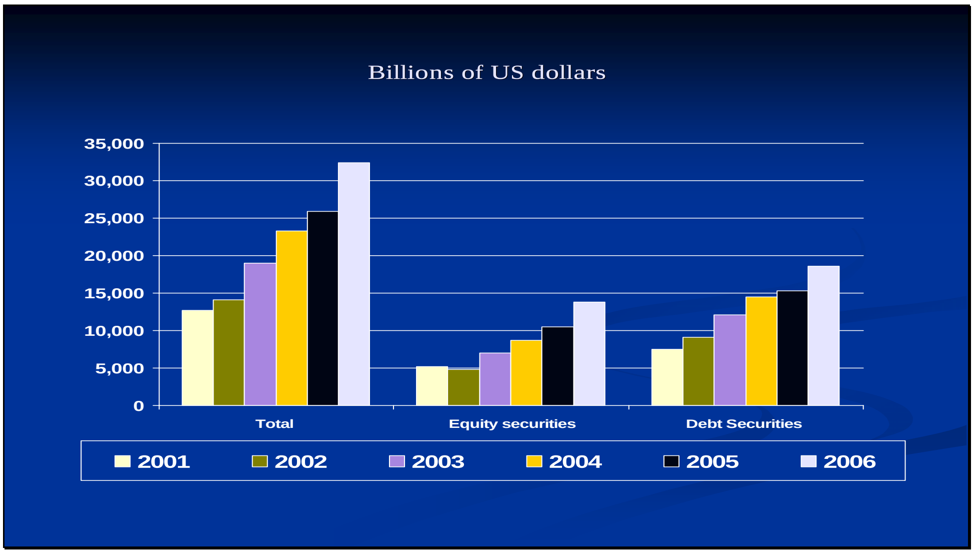
III. Results of the 2006 coordinated portfolio investment survey

Using results of the CPIS, this section highlights the magnitude of the amounts involved in cross-border portfolio investment as well as the relative importance of selected countries in international financial markets.

Seventy-four jurisdictions participated in the 2006 CPIS. The overall survey results show cross-border holdings of securities reaching $32.4 trillion at end-2006 (Chart 1),[8] an increase of 26% in dollar terms from the end-2005 level. Holdings of equity securities increased by over 30% to $13.8 billion, while holdings of debt instruments increased by 18% to $18.6 trillion. In addition to a higher coverage (four new participants in the 2006 survey), the increase reflected increased cross-border activity, as financial markets continued to become more integrated, and the impact of dollar depreciation. Over a longer term, the CPIS reveals that since 2001 total portfolio investment asset holdings increased at an average annual rate of 21%.

Chart 1

CPIS: portfolio investment assets



The results also show a concentration of portfolio investment assets in a few economies, with the top 10 economies accounting for about 70% of the total holdings (see Chart 2) with the ranking remaining largely unchanged over the period under review.

Table 1 shows the bilateral claims of the reporting economies vis-à-vis 10 partner countries.[9]

[8] Data compiled by Thomas Elkjaer, economist in the IMF Statistics Department.

[9] The CPIS also collects supplementary information on holdings by sector. However, at this time relatively few countries report such information.

Chart 2

Top 10 holders of CPIS assets

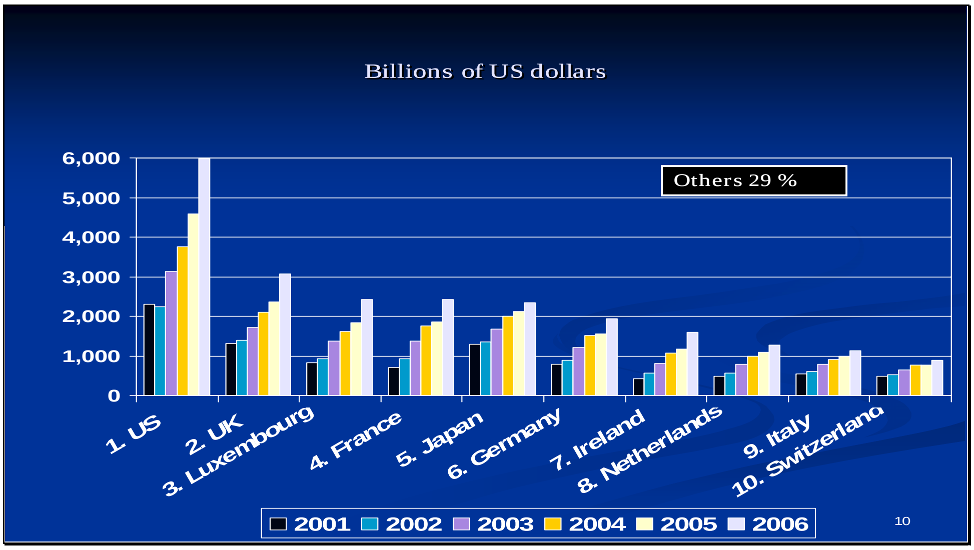


Table 1

Geographic breakdown of total portfolio investment: top 10 economies by holders and issuers

US Dollars Billions

	Investment from: / Invest-ment in:	1 US	2 UK	3 LU	4 FR	5 JP	6 DE	7 IE	8 NL	9 IT	10 CH	Total value of invest-ment
1	United States	..	817	417	254	798	179	397	306	104	119	**6,254**
2	United Kingdom	1,076	..	196	247	145	148	308	110	46	51	**3,178**
3	Germany	288	144	304	239	174	..	115	192	141	101	**2,541**
4	France	397	195	220	..	142	171	92	107	123	65	**2,096**
5	Luxembourg	60	87	..	124	89	300	39	61	325	131	**1,652**
6	Netherlands	234	162	117	223	77	154	57	..	78	55	**1,509**
7	Italy	106	121	163	305	67	166	124	97	..	10	**1,441**
8	Japan	586	231	104	86	..	28	57	37	14	19	**1,435**
9	Cayman Islands	376	126	69	79	324	32	57	17	26	..	**1,368**
10	Spain	111	101	98	223	33	216	76	63	33	8	**1,119**
	Other	2,739	1,085	743	651	494	544	272	274	251	322	**9,801**
	Investment	**5,972**	**3,068**	**2,431**	**2,429**	**2,343**	**1,938**	**1,594**	**1,263**	**1,141**	**881**	**32,394**

IV. Conclusions

As a way to address the sharp growth in cross-country financial flows, this paper first calls for the BSA to be expanded to main bilateral partner economies. It covers several initiatives that have been conducted at the international level from compiling data to the harmonisation of concepts, definitions and classifications.

The growing breadth and scope of cross-border investment creates an international financial market, bringing complex challenges to policymakers that need to be addressed at the international level. A multilateral perspective can usefully supplement the more traditional national perspective in gauging the risks for policy purposes.