

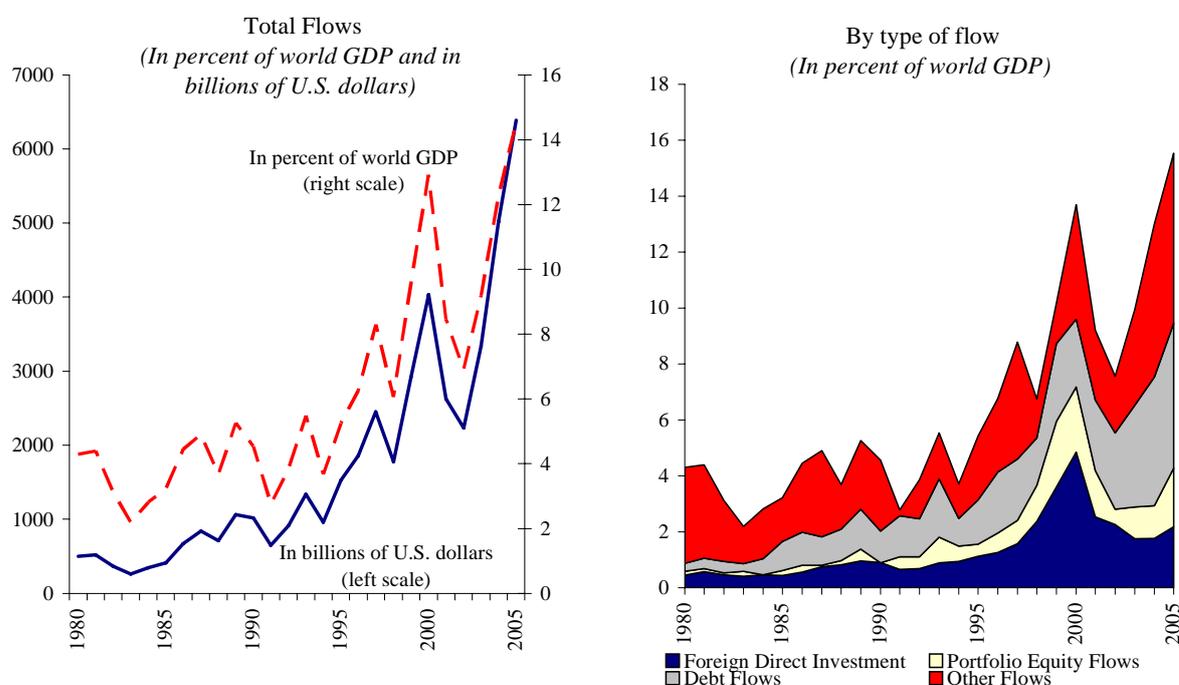
# Comparable data on bilateral external positions: an insight into globalization

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## Introduction

Cross-border financial asset flow accumulation tripled during the past decade (Figure 1). The growing cross-border financial linkages were associated with increased external net liabilities/assets positions (as mirrored in the expanding current account imbalances across economies). A recent study<sup>3</sup> by the International Monetary Fund (IMF) indicated: “Even if greater stability can be expected in the longer run, the process of transformation and the specific conditions under which it occurs may temporarily generate additional vulnerabilities.”

Figure 1



Source: IMF staff calculations based on *IFS* and *WEO*.

To shed light on some of these vulnerabilities, this paper focuses on the statistical measurement of “inter-economy” financial linkages. The first section notes that the analytical framework of the balance sheet, based on position data, is especially relevant in analyzing the financial vulnerability of economies vis-à-vis one another. The second section reviews

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<sup>3</sup> Global Financial Stability Report, Spring 2007, page 63.

selected statistical initiatives in the external sector that help populate the balance sheet framework with data. The third section describes how the framework can be used for statistical, analytical and policy purposes.

#### **A. Analytical framework to track the financial powers at play in a globalized world**

With deepening financial globalization, economies become more vulnerable to the risks inherent to integrated financial markets, namely credit, currency, maturity, and instrument composition risks. An analytical approach referred to as the balance sheet framework<sup>4</sup> – modeled from the *System of National Accounts 1993 (1993 SNA)* – may help analyse these risks. Grouping economic agents by broad sectors (e.g. government, corporations, nonresidents, etc.), the framework presents metrics on claims and liabilities on individual sectors with one another. Depending upon the details of the metrics included, the framework facilitates assessments of credit, maturity, currency, and capital structure mismatches, as well as intersectoral linkages and sectoral exposure to liquidity and solvency risks.

This paper calls for strengthening the nonresident sector in the framework, inclusive of its expansion into specific bilateral partner economies. The international economic crises of the last two decades may be analyzed as the spreading of shocks through the networks of interconnected balance sheets across economies, making it important to hone in on the ultimate foreign creditors' and debtors' economies.

#### **B. Comparable data on the non-resident sector for the balance sheet framework**

Statistical work on enhancing data on the financial positions of the nonresident sector is proceeding on three fronts – increasing data availability from various sources, creating a platform that brings these data sources together for worldwide dissemination, and harmonizing methodologies to ensure consistency of these various data sources.

In addition to collecting balance of payments statistics, the IMF has been encouraging countries to report international investment position (IIP) data. The number of countries reporting IIP statistics has increased from 37 in 1998 to 107 at present, albeit with varying degrees of component detail. Reporting on external positions was further promoted by the IMF Executive Board's decision to include the IIP data as a prescribed category of the Fund's Special Data Dissemination Standard (SDDS) as of December 31, 2001.

Since 2000, SDDS subscribers have also been reporting additional information on reserve assets in the Data Template on International Reserves/Foreign Currency Liquidity, with 56 economies currently reporting these data. In collaboration with the World Bank, the IMF has also encouraged SDDS subscribers to report quarterly data on external debt positions for inclusion in the Quarterly External Debt Statistics (QEDS); as of February 2007, 58 subscribers participated in the database.

In the mid-90s, the IMF launched the Coordinated Portfolio Investment Survey (CPIS) to improve statistics of holdings of foreign portfolio investment securities – equities and debt securities. The distinguishing feature of the CPIS was the provision of data by partner economies, which permits the derivation of measures of foreign portfolio investment liabilities. The survey has been conducted annually since 2001, with some 70 jurisdictions participating in the 2005 survey. A similar survey of the securities held as official foreign exchange reserve assets and securities held by selected international organizations is also

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

conducted to supplement the coverage of the CPIS (the bilateral data are released only in aggregate form). Likewise, the IMF approved in 2007 a Coordinated Direct Investment Survey (CDIS), modeled on the CPIS to provide for partner country data. The CDIS, which is targeted for the end-2009 reference year, will be conducted in collaboration with several partners – the European Central Bank, Eurostat, the Organization for Economic Cooperation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD), and the World Bank. As well, the Bank for International Settlements (BIS) has a long established collection of international banking data on locational and consolidated bases that provides counterpart country information.

In May 2006, the BIS, the IMF, the OECD and the World Bank jointly launched the Joint External Debt Hub (JEDH) to bring together data that they each compile on external debt of economies, providing for worldwide dissemination of these data on a common platform. As of February 2007, the hub contained comprehensive national external debt data provided by 58 subscribers to the IMF's SDDS; external debt data from creditor and market sources and selected foreign assets for over 200 countries/territories; and data descriptions (metadata). Incorporating data from both creditor and debtor viewpoints, inclusive of bilateral data, the JEDH represents a valuable database from which data on the nonresident sector of economies' balance sheet frameworks could be promulgated.

Bringing data from various sources into a common framework, as is done for instance in the JEDH, underlines the importance of data consistency, which means that data are compiled according to common guidelines. The Fund's *An Overview of the System of Macroeconomic Accounts Statistics* (forthcoming) highlights how the 1993 SNA, on which the balance sheet framework is modeled, has served as the overarching harmonizing framework for the balance of payments, the IIP and external debt datasets and a range of other statistical manuals produced by the IMF and other international organizations. The 1993 SNA framework does not call, however, for information on the currency composition and remaining maturity positions, metrics that are very useful in a balance sheet analytical framework. It should be emphasized that the monetary and financial statistic<sup>5</sup> published by the IMF provide a currency breakdown between domestic and foreign currencies, in accordance with the IMF's *Monetary and Financial Statistics Manual 2000*. Work is also underway for the new *Balance of Payments Manual*, sixth edition, to introduce currency composition and remaining maturity information into external position data, on a supplementary basis. Technical assistance and training programs also support countries' efforts to harmonize the statistical methodologies across these datasets.

### **C. Uses of the framework**

A key statistical use of the framework is data validation. The nonresident sector, notably its expansion by partner economies in the balance sheet framework, provides a useful tool for validating economies' external data. For instance, in addition to providing the data on assets of a specific economy, the CPIS database can improve the quality of an economy's data on liabilities (especially by residency of counterparty for holders of bearer instruments) on the basis of the other economies' assets data. As such, it can improve not only the coverage but also the geographical breakdown of the liability, as well as validating (and/or improving) transactions data in the balance of payments. Another example of data validation is a recent IMF initiative in which external debt data reported in the World Bank's QEDS database have been assessed against corresponding data series in the IIP reported to the IMF; comparator tables were produced with end-2004 data and, where significant differences existed,

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<sup>5</sup> See IMF, *International Financial Statistics, Supplement on Monetary and Financial Statistics*.

economies were asked to reconcile the discrepancies particularly in sector, maturity, and instrument classification. The exercise is being repeated for end-2005 data.

There are a number of analytical uses of the framework, including the study of home bias. Data have suggested a recent decline in investors' tendency to hold securities issued in their home markets – in a larger proportion than theory would indicate.<sup>6</sup> The international financial integration of OECD, emerging, and developing economies increased at a similar, though fairly gradual, pace in the 1970s and 1980s. Starting with the 1990s, there has been a marked acceleration of financial integration among OECD countries, notably in the European market where cultural traditions, legal origin, and common currency (in a currency union) are all factors that reduced home bias. The impact of international financial integration varies across economies, as evidenced by their net external position. Led by the rapid accumulation in reserve and oil fund assets in recent years, the emerging and developing economies show, in aggregate, a net external asset position. This corresponded to higher net liabilities for the United States and, to a lesser extent, other industrial economies, with the notable exceptions of net external assets for Japan and Germany. In terms of external portfolio composition, emerging and developed countries hold most of external assets and liabilities in the form of debt; Japan's external position shows relatively more debt in assets and equity in liabilities. This is in contrast to the United States, whose assets are composed more of equity instruments, while its liabilities are primarily composed of debt instruments.

As regards policy relevance, the two key drivers of globalization – deregulation and technical innovation – led to changes in the financial structure of economies. For instance, the greater availability of funds, such as pension, insurance and mutual funds, facilitated the issuance of securities, displacing some of the more traditional banking loans and deposits. Moreover, nonresidents augmented their share of both banking and security financings in countries. For policymaking purposes, changes in the financial structure affect the transmission channel of monetary policies,<sup>7</sup> and often reflect forces at play that are beyond domestic control.

The balance sheet framework helps to improve data, conduct analysis, and inform policymaking. This paper's objective was to show that its effectiveness for globalized economies can be substantially enhanced by strengthening the nonresident sector, notably with initiatives that can only be conducted at the international level.

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<sup>6</sup> IMF Working Paper, 05/16, Philip R Lane and Gian Maria Milesi-Ferreti, "A Global Perspective on External Positions".

<sup>7</sup> IMF Working Paper, 06/84, Jorge Roldos, "Disintermediation and Monetary Transmission in Canada".