Twentieth Meeting of the IMF Committee on Balance of Payments Statistics Washington, D.C., October 29–November 1, 2007

Data Needs In The Areas Of International Investment Positions And Balance Of Payments Arising From The 2007 Decision On Bilateral Surveillance

Prepared by the Policy Development and Review Department International Monetary Fund

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October 2007

I. THE 2007 DECISION ON BILATERAL SURVEILLANCE

- 1. Under the Articles of Agreement, the IMF and its member countries work towards the stability of the international financial system by "collaborat[ing] ... to promote a stable system of exchange rates." This collaboration is particularly important for the existing globalized economic environment, as currency and financial crises can have profound adverse implications for countries' welfare and can disrupt the growth opportunities created by integrated goods and financial markets.
- 2. IMF surveillance is a process that monitors economic developments both at the global and country levels and enables the IMF and its members to develop country-specific assessments enriched by a multilateral perspective. These assessments help countries in the design of their economic policies, which, in turn, constitute the foundations for a stable world economy.
- 3. The IMF's 2007 Decision on Bilateral Surveillance constitutes an upgraded guide to country-level surveillance for both the Fund and its members. The Decision replaces a Decision taken in 1977—soon after the breakdown of the Bretton Woods system of fixed exchange rates—and is the culmination of a long and thorough effort to distill the modern best practice of surveillance, and to crystallize a common vision of surveillance in a comprehensive statement.
- 4. The 2007 Decision sets out, based on the Articles of Agreement, a conceptual framework to guide the collaboration of the Fund and its members. Recognizing that the stability of the international financial system ultimately depends on broad stability in cross-country transactions, this conceptual framework is centered on the concept of external stability—"a balance of payments position that does not, and is not likely to, give rise to disruptive exchange rate movements." A balance of payments position consistent with external stability is one in which both (i) the underlying current account is broadly in line with its equilibrium, and (ii) the capital and financial account does not create risks of abrupt

¹ This paper presents views for discussion at BOPCOM and should not be taken to represent an official IMF position.

shifts in capital flows, particularly through the build up of vulnerable net external asset positions (Figure 1). Domestic stability, specifically in the areas of economic activity, prices, and the financial system, is recognized as a key ingredient for attaining external stability. Exchange rate, fiscal, monetary, and financial sector policies are all identified as key to stability in every case, with the importance of other policies recognized on a case-by-case basis.

- 5. The framework introduced by the 2007 Decision reminds us of at least three essential issues for the promotion of international financial stability:
- First, it is essential to assess current account balances and trajectories of net foreign asset positions, and to do so both from a country perspective and from a global perspective. External stability requires that a country's underlying current account—i.e., the current account stripped of temporary factors—be in equilibrium, so that the country's net external asset position evolves in a manner consistent with the country's structure and fundamentals.² Unstable trajectories of current account balances and net foreign asset positions—symptoms that the exchange rate is incompatible with the policy mix or, in the language of the Decision, "fundamentally misaligned"—are disequilibria that bring risks of disruptive adjustments, with important implications for the welfare of the country at issue and that of other countries.
- Second, in order to analyze the sources and likely implications of developments in current accounts and exchange rates, it is then essential to get a good *understanding of developments in the official and quasi-official sectors*, because these are large agents whose behavior in accumulating assets—unlike that of the private sector—cannot necessarily be assumed to respond primarily to market forces.
- Third, it is key to assess financial-account-based vulnerabilities, particularly those arising from private capital flows. In a word with increasingly globalized financial markets and with continuously growing gross cross-country financial positions, vulnerabilities associated with the modalities of financing can trigger disruptive effects on trade, financial flows, and exchange rates, or magnify shocks originating in other sectors.
- 6. The features of the conceptual framework focus attention on the relevance of certain data, especially in the areas of the balance of payments (BOP) and the international investment position (IIP), and indeed the Decision explicitly includes a list of indicators that IMF staff should pay especially close attention to in assessing at least countries' exchange rate policies (Box 1). Naturally, through the accompanying emphasis on domestic stability,

² Temporary factors for which the current account is adjusted to yield the underlying current account include cyclical influences, temporary shocks, and the lagged effect of exchange rate and policy changes.

the Decision also focuses attention on the relevance of economic data in other sectors, but a discussion of these issues is beyond the scope of this paper.³ The remainder of this paper examines the implications of the conceptual issues highlighted in the previous paragraph for specific data needs, while at the same time discussing how the issues may fit under existing data initiatives.

Box 1. Indicators

The Decision identifies the following indicators as signals that the Fund may need to discuss with a member the conduct of its exchange rate policies:

- (i) protracted large-scale intervention in one direction in the exchange market;
- (ii) official or quasi-official borrowing that either is unsustainable or brings unduly high liquidity risks, or excessive and prolonged official or quasiofficial accumulation of foreign assets, for balance of payments purposes;
- (iii) (a) the introduction, substantial intensification, or prolonged maintenance, for balance of payments purposes, of restrictions on, or incentives for, current transactions or payments, or
 - (b) the introduction or substantial modification for balance of payments purposes of restrictions on, or incentives for, the inflow or outflow of capital;
- (iv) the pursuit, for balance of payments purposes, of monetary and other financial policies that provide abnormal encouragement or discouragement to capital flows;
- (v) fundamental exchange rate misalignment;
- (vi) large and prolonged current account deficits or surpluses; and
- (vii) large external sector vulnerabilities, including liquidity risks, arising from private capital flows.
- 7. Before entering into the data discussion, it is important to clarify that while the Decision has introduced a clearer conceptual framework, most of its practical implications were already part of the best practice of surveillance, which has already informed the international community's efforts in the areas of data methodologies and availability. In the

³ At the end of section IV, however, we mention some data issues that are closely related to monetary and financial statistics and that may require work in that area.

area of data needs, for instance, BOPCOM has considered in the past data issues similar to those raised by the Decision, and has taken major steps forward in some of them. Thus, while this paper points at data needs and argues that further progress needs to be achieved in some key areas, this should not be seen as lack of recognition of the tremendous progress achieved in the area of data collection during the past 15 years, specially in the area of international investment positions. Collection of IIP data has increased substantially since the introduction in the Balance of Payments Manual, fifth edition (BPM5), of a set of comprehensive guidelines. The usefulness of these data for the debate on global imbalances is only the most recent example of their usefulness for economic surveillance.⁴

II. ASSESSING CURRENT ACCOUNT BALANCES AND TRAJECTORIES IN NET INTERNATIONAL INVESTMENT POSITIONS

- 8. As noted above, tracking current accounts and the trajectories of net foreign asset positions is crucial to detecting emerging disequilibria that can threaten national and international stability. Member countries and the Fund have made tremendous progress in the measurement of current account balances and, especially, net international investment positions (NIIPs). Currently, the number of countries reporting at least a partial IIP following the template and methodology outlined in BPM5 has reached 111, up from 35 in 1996. There has also been progress in measurement of current account balances, which has been reflected in a reduction in world's current account discrepancy, despite a sharp increase in transactions.
- 9. Notwithstanding this progress, there are still important areas that need to be improved:

Number of IIP Reporters, Frequency, and Reporting Lags

10. Although reporting rates have been improving, the NIIP still remains unreported by a large number of countries, and some countries only report partial NIIPs. In addition, most countries report IIPs annually with a significant time delay (only about one-third of the countries reporting NIIP data do so at quarterly frequency), which limits the potential to use NIIP data for higher frequency assessments of vulnerabilities.

Reconciliation of Balance of Payments Flows and Changes in IIP Positions

11. The IMF and its member countries routinely undertake consistency checks between balance of payments data and IIP data. Nevertheless, changes in the net position between end-periods arising from valuation changes remain poorly understood, which calls for further work in this area. Recent research has highlighted that the valuation component of the

⁴ See Lane and Milesi-Ferretti (2006), and Gourinchas (2007).

international investment position is large and volatile, and sometimes can outweigh the changes in net foreign assets driven by current account balances (Gourinchas, 2007). Further work in this area is warranted.

- 12. One area in which valuation issues have proved to be particularly important and little understood is in the measurement of foreign direct investment (FDI) positions, as has been recently highlighted by the debate on global imbalances. The case of the United States has been at the center of the debate, as different valuation methods may yield different pictures regarding the evolution of the US's net foreign asset position (Figure 2).
- 13. Given the link between the trajectory of countries' net foreign assets positions and their external stability, it is clear that data differences as those noted in Figure 2 have tremendous importance for the analysis of national and international stability. Given FDI flows' fast pace of growth, issues of valuation of FDI are expected to be increasingly important in the future for a broad set of countries.
- 14. In this context, the planed Coordinated Direct Investment Survey (CDIS), which will collect comprehensive and harmonized information on the stock of outward (for the case of major investing countries) and inward FDI constitutes a key initiative. The CDIS will not only help countries in the valuation of this important stock of net foreign assets, but also (subject to confidentiality constraints) will allow participants to exchange bilateral data.

III. UNDERSTANDING DEVELOPMENTS IN THE OFFICIAL AND QUASI-OFFICIAL SECTORS

- 15. The official and quasi-official sectors play key roles in the development of current accounts and net external assets, and deserve special scrutiny. As noted in BPM5, "the provision of resources to the rest of the world in the form of a buildup of net claims on nonresidents will, by and large, result in an efficient allocation of the domestic economy's saving as long as the buildup of net claims reflects the operation of market forces rather than government policies designed directly or indirectly to increase such claims." In consequence, it is essential in this context to achieve a good understanding of developments in the official and quasi-official sectors, particularly as regards the volume of net foreign assets they accumulate.
- 16. Work in this area in recent years has been focused on obtaining critical information in the areas of reserve assets and public sector external debt, and substantial progress has been achieved in terms of both data availability and frequency. The development of the International Reserves and Foreign Currency Liquidity Guidelines and the External Debt Statistics Guide constitute two major steps in this area.
- 17. In addition, a growing development is the increasing use of Sovereign Wealth Funds (SWFs) to manage official foreign assets more efficiently in an environment of rapid

globalization of financial markets.⁵ Ensuring that flows and stocks of non-reserve official and quasi-official assets are appropriately recorded and presented in the balance of payments and IIP is essential.

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IV. ASSESSING FINANCIAL-ACCOUNT-BASED VULNERABILITIES

18. The two previous sections are mainly related to measurement issues and assessment of current account and NIIP developments. A third essential issue for promoting international stability is associated with countries' financial-account-based vulnerabilities.

Measuring Reserve Assets and Foreign Currency Liquidity

- 19. International financial crises in the late 1990s underscored the importance of comprehensive and timely information on countries' international reserves and foreign currency liquidity. The increasing size and complexity of foreign currency trading has given additional relevance to this issue, particularly given the growth of transactions in derivatives markets.
- 20. In this context, a broader use of the *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template*, prepared by the IMF, in consultation with other international agencies in the aftermath of these crises, would be very beneficial for economic surveillance. Currently, this framework is used for data dissemination to the public almost exclusively by the 64 Fund members that subscribe to the Special Data Dissemination Standard (SDDS).

Currency Breakdown in the IIP

- 21. Currency composition is one area of external vulnerability that has proved to be key both in the crises of the late 1990s and in the recent episode of global imbalances. In the former case, currency depreciations were associated with adverse balance sheet shocks, while in the latter a depreciation of the U.S. dollar has strengthened the U.S. net foreign assets position.
- 22. Composition of the IIP helps understand these developments. For example, if assets are largely denominated in foreign currency, and liabilities largely denominated in domestic currency, a depreciation (an appreciation) of the domestic currency will have positive (negative) wealth effects. Moreover, the currency composition of the IIP helps understand the dynamics of the economy in the context of an exchange rate adjustment: Since currency depreciations (appreciations) usually have expansionary (contractionary) impacts on the

⁵ While these funds have traditionally been associated with resources originated from the sales of nonrenewable natural resources, they have now acquired a broader dimension. For instance, some exporters of manufactures have created SWFs to administer part of the stock of reserve assets.

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economy via the improvement (worsening) of net exports, the wealth effect associated with the currency composition of foreign assets and liabilities will reinforce such an impact, via the impact of wealth on consumption. On the contrary, when assets are denominated in the domestic currency and liabilities in a foreign currency the wealth effect associated with a currency change will go in the opposite direction to the impact on net exports.

- 23. Further, ranging beyond the external accounts, debts among residents that create internal balance sheet mismatches also generate vulnerability to an external balance of payments crisis. For instance, a change in the exchange rate coupled with unhedged foreign exchange exposure in the nonfinancial corporations sector can undermine confidence in the banks that have lent to that sector and prompt a run on the banking system. If the latter results in an increased demand for foreign currency / foreign assets by domestic residents this could lead to financial outflows, loss of reserves, or both.
- 24. The currency breakdown of assets and liabilities is thus an important determinant of the degree to which net foreign asset positions are sustainable. Improving the IIP along the currency-breakdown dimension would constitute a major step for the assessment of external sector vulnerabilities and their evolution. An illustration of the usefulness of this additional data dimension is the work done using the balance sheet approach (BSA), which has been primarily used to analyze vulnerabilities associated with currency mismatches with respect to nonresidents, but that also allows the incorporation of currency mismatches vis-à-vis other residents.⁶ Adding the currency-breakdown dimension to the IIP would help fill important data needs for the BSA in the area of mismatches vis-à-vis nonresidents.

Monitoring Derivatives Positions

- 25. Trading on foreign exchange markets has grown substantially in recent years, and this growth has been particularly strong in the derivatives segment of the market. The BIS's *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity (April 2007)* found that the average daily turnover in traditional foreign exchange markets rose 71 percent in April 2007 when compared to April 2004, with the growth in foreign exchange swaps being particularly large. The survey also found large increases in the average daily turnover in cross-currency swaps and foreign exchange options (111 percent).
- 26. Including the value of positions in foreign exchange swaps and financial derivatives is not only essential to achieve a proper valuation of the NIIP, but also, and probably more importantly, to learn about the vulnerability and hedging implications of these financial instruments. An example of the latter was discussed by BOPCOM in its 2002 meeting in the context of the paper "Measuring Australia's Foreign Currency Exposure."

⁶ See Mathisen and Pelecchio (2006) for a description of the BSA methodology, and IMF (2007, Selected Issues Paper) for an application of the methodology to the case of Croatia.

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27. Given these issues, collecting data on the notional value of foreign currency derivatives with nonresidents would constitute an important step to capture hedging and vulnerability issues in countries NIIPs. As illustrated by the aforementioned paper on Australia's foreign currency exposure, notional values can provide valuable information regarding the exposure to foreign exchange that has been covered through derivative positions. In this context, the proposed formulation in the supplementary tables on IIP data included in BPM6 (as a basis for reporting for the Balance of Payments Statistics Yearbook, BOPSY), is a welcome step.

Other Issues

- 28. There are other vulnerability dimensions that are potentially important for the assessment of a country's external stability, in particular liquidity mismatches and the existence of off-balance sheet exposures. The recent turmoil in international credit markets vividly illustrates how important these issues can be.⁷
- 29. In this context, consideration could be given to improving our understanding on two fronts. First, the assessment of liquidity risk could be improved by extending the current breakdown based on original maturity to a breakdown containing remaining maturity. Second, the tracking of balance sheet vulnerabilities could be improved by tracking nonbank financial institutions separately in some external accounts. Given that nonbank financial institutions have been increasing in size and given that they are less regulated than banks (if at all), considerable exposures can build up in the nonbank financial sector.

V. CONCLUSIONS

- 30. The 2007 Surveillance Decision has upgraded the conceptual framework that guides the Fund and its members in their collaboration to promote international financial stability. This conceptual framework has highlighted the relevance of certain data, especially in the areas of balance of payments and IIP, and suggests a need for further progress in some areas of data availability. In particular:
- First, there is a need to improve the measurement of countries' IIPs and to reconcile changes in the latter with the flows observed in the balance of payments. In this context, making further progress in accounting for valuation changes would be an important step, and the planned CDIS should help shed light on one area where measurement problems are proven to be significant.

⁷ To name just one example, the German bank IKB had to be rescued after two off-balance sheet investment funds it managed faced substantial losses due to their exposure to U.S.' subprime mortgages. The off-balance sheet funds were exposed to substantial liquidity risk since they financed their operations through short-term commercial paper.

- Second, there is a need to attain a good understanding of external sector developments in the official and quasi-official sectors. Given the large growth of official and quasi-official assets observed in recent years, and given that many countries are changing their asset management strategy, it is becoming increasingly important to improve the information available on non-reserve official and quasiofficial external assets (including SWFs).
- Third, financial-account-based vulnerabilities are key for the assessment of countries' external stability and efforts are needed to improve the measurement of these vulnerabilities. Measuring the currency of denomination of external assets and liabilities would be an important step forward in this area, as currency mismatches have been identified in the past as an area of particular importance for assessing external stability.

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The Components of External Stability Figure 1

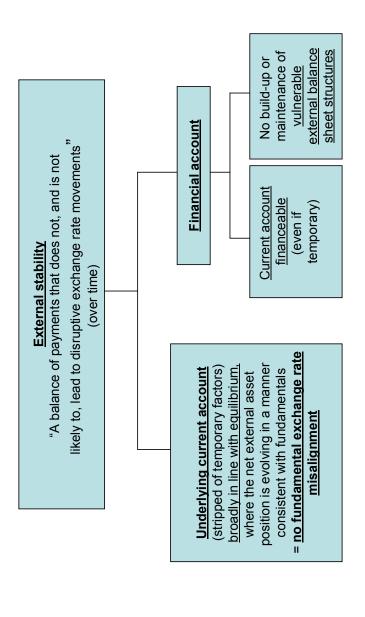


Figure 2. **United States: FDI Valuation and NIIP** 4.0 4.0 2.0 2.0 0.0 0.0 (% of GDP) -2.0 -2.0 -4.0 -4.0 -6.0 -6.0 -8.0 -8.0 2000 2001 2005 r 2002 2003 r 2004 r 2006 p ☐ Current Acount Balance ☐ Change in NIIP (FDI at current cost) ☐ Change in NIIP (FDI at market value)