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The Meaning of Balance of Payments Statistics  
in an Interdependent World

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Abstract

The relevance of the standard measures of international transactions in goods and services as reflected in the fifth edition of the IMF *Balance of Payments Manual (BPM)* and in the 1993 System of National Accounts (*SNA*) has been questioned in several recent studies and articles. Alternative measures have been proposed, that either (i) substitute an ownership basis for transactions for the long-established residency basis; (ii) maintain the residency basis but combine net direct investment income with goods and services; or question the validity of any measures in the form of net balances as a guide to policy. This paper affirms the central role of residency in the international accounts, discusses the supplementary value of alternative proposals, and notes the importance of international efforts to improve and refine the measurement of external transactions based on the principles of the *BPM* and *SNA*.

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### Summary

The adequacy of available international economic data--in particular, the balance of payments and international investment position, which constitute the standard set of international accounts--has recently been the subject of widespread criticism. Several studies have proposed that other data be integrated with these accounts and/or that the residency criterion be revised or replaced by an ownership criterion. Such proposals, if accepted, would compromise the structure of both international and national accounts. Given that the two most important international standards for measuring these accounts--the *1993 System of National Accounts (SNA)* and the fifth edition of the *IMF Balance of Payments Manual*--were recently issued and closely harmonized, efforts to change them would be misguided.

The central role of residence is identical in both sets of guidelines because the residency status of producers in an economy determines the limits of domestic production, affects the measurement of GDP--among other variables--and is the basis for compilations of balance of payments transactions and for the rest-of-the-world sector in the national accounts. Nonetheless, it is recognized that no one statistical measure can satisfy all possible purposes. The development and use of complementary or supplementary data is therefore both necessary and valuable for policy purposes, in particular, for trade negotiation. However, if such data are combined with standard measures to derive new "net balances" (e.g., for transactions in international goods and services), they should not be confused with, accorded the same weight as, or take precedence over, the standard measures.

It is more important for countries to adhere to the conceptual, definitional, and classification standards of the *SNA* and *the Balance of Payments Manual* than to revise or "adjust" standard measures. Such conformity can help reduce existing bilateral, regional, and global asymmetries in the international accounts and thereby improve the statistical basis for analysis and policy formulation.

Significant international, regional, and national initiatives are under way to refine and improve the coverage and measurement of international transactions within the framework of the *Balance of Payments Manual* and the *SNA*. Increasingly, partner countries are working towards harmonizing and exchanging data. These developments will enhance the relevance and usefulness of the standard measures. This is not to say that the structure and concepts of the *Balance of Payments Manual* and the *SNA* should not be reassessed at some future time, and certainly within a shorter interval than the 16 years and 25 years, respectively, between the previous and latest editions of the two international standards.



## The Meaning of Balance of Payments Statistics in an Interdependent World

### I. Introduction

"The growing economic interdependence of the world economy, including the internationalization of markets for goods, services, financial assets, and factors of production, is creating increasing demand for the measurement and monitoring of economic influences across national boundaries. The international repercussions of sharp policy shifts and structural changes over the last two decades have rendered obsolete conventions of closed-economy measurement and assessment. Empirical research in open-economy economics has increased substantially in scope and magnitude over this period. In addition, fluctuating exchange rates, growing external imbalances, mounting U.S. net international indebtedness, and wide swings in financial markets across countries have stimulated international consultation and cooperation in the formulation of economic policies. These developments in research and policy analysis necessarily have depended increasingly on the monitoring and measurement of international transactions.

At the same time, concern is growing among professional economists in the research and policy communities . . . that existing international economic data have not kept fully abreast of structural changes in the global economy and that they are in need of critical assessment, and in some cases significant overhaul". 1/

Prominent among such economic data are the standard set of international accounts--i.e., the balance of payments and international investment position. A number of studies related to the adequacy of these accounts for use in international trade and services negotiations and in the formulation of economic policy recently have received widespread attention. These studies generally have focused on the desirability of integrating other data with the standard accounts and/or revising the basis--i.e., residency--of the accounting framework. Not unexpectedly, data for the United States, with its wealth of information concerning direct investments, have been the subject of these proposals. It is especially important to consider them (and the opening quotation cited in this paper) in light of the fact that two most important international standards of measurement--the 1993 *System of National Accounts (SNA)* and the fifth edition of the IMF's *Balance of Payments Manual (BPM)*--were recently issued and closely harmonized after years of international consultations of concerned national and international experts. Although flexibility in the application of these

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1/ Hooper, Peter and J. David Richardson, Editors, International Economic Transactions - Issues in Measurement and Empirical Research, NBER, Studies in Income and Wealth, Volume 55, University of Chicago Press, 1991.

two standards for certain circumstances and in their utilization with supplementary data are to be accepted or even encouraged, efforts to "adjust" or replace their basic internationally accepted concepts would be, to say the least, misguided at the very time when many countries are in the process of implementation of the new standards.

The central role of residence in both the balance of payments and national accounts is discussed in Section II. In Section III, the studies questioning the adequacy of the residency concept in measuring international transactions are considered. Section IV presents a discussion of the current status of the measurement of international transactions and international efforts towards improvement and harmonization. A summary and conclusions appear in Section V.

## II. The Central Role of Residence in the Balance of Payments Accounts and the SNA

The concept of residence is crucial--and identical--in both the balance of payments accounts and the rest of the world (external transactions) account in the *SNA*. Residence is an important attribute of institutional units--i.e., households, corporations, quasi-corporations (e.g., branches of foreign direct investors), non-profit institutions, and the government of the economy involved--in respect of the external accounts, which record transactions between residents and nonresidents. Also, the residency status of producers in an economy determines the limits of domestic production and affects the measurement of gross domestic product and many important flows in the *SNA*. Other economic variables, such as growth rates, employment, prices, exchange rates, etc.--all of which affect the formulation of macroeconomic policy--are closely linked to the accounting structure of the *SNA*. Thus, the concept of residence serves as an underpinning for both the national and international accounts systems, a fact which must always be kept in mind when considering the introduction of alternative measures of international transactions. That is, any change from the residency basis would have an impact well beyond the particular item--e.g., exports and imports of goods and services--subject to a revised basis of measurement. It should be noted that an institutional unit is a resident unit when it has a center of economic interest in the economic territory 1/ of a country, as defined both in the *SNA* and *BPM*.

Because the studies discussed subsequently in Section III concentrate, for the most part, on the measurement of international goods and services transactions, an example (from the *BPM*) concerning the attribution of

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1/ Briefly, an institutional unit has a center of economic interest in a country if the unit has engaged, or intends to engage, in economic activities and transactions for one year or more (as a guideline). The economic territory excludes foreign government or international organization enclaves within a country's geographical boundaries.



production undertaken by a resident enterprise outside of its economic territory under the residency rules of the *BPM* and *SNA* would be in order at this point. An enterprise is said to have a center of economic interest and to be a resident unit of a country (economic territory) when the enterprise is engaged in a significant amount of production of goods and/or services there or when it owns land or buildings located there. The enterprise must maintain at least one production establishment in the country and must plan to operate the establishment indefinitely or over a long period of time. Together with other considerations noted below, a guideline of one year or more, to be applied flexibly, is suggested.

Production undertaken outside the economic territory of such a resident enterprise by the personnel, plant, and equipment of that resident enterprise is treated as part of host country production and the enterprise is treated as a resident unit (branch or subsidiary) of that country. In addition, the enterprise must, among other considerations, maintain a complete and separate set of accounts of local activities (i.e., income statement, balance sheet, transactions with the parent enterprise), pay income taxes to the host country, have a substantial physical presence, etc. If these conditions are not present, the activity should be classified as an export of services by a resident enterprise. Production can generate such an export only if the production is classified as domestic production (undertaken by a resident even though the physical process takes place outside the economic territory). These considerations also apply to the particular case of construction activity carried out abroad by a resident producer. Special mention is warranted for construction involving major specific projects--bridges, dams, power stations, etc.--that often take several years to complete and are carried out and managed by nonresident enterprises through unincorporated site offices. In most instances, site offices will meet the criteria that require site office production to be treated (as would that of a branch or affiliate) as the production of a resident unit and as part of the production of the host economy rather than as an export of services to that economy.

### III. Alternative Measures of International Transactions--Integration with or Supplementary to Standard Measures?

Three recent proposals to integrate data for U.S. cross-border trade in goods and services (based on the residency concept) with data on sales and purchases of U.S.-owned foreign enterprises and foreign-owned U.S. enterprises to derive a new net balance on U.S. global sales and purchases of goods and services--as opposed to the internationally accepted standard net exports of goods and services as presented in the national and balance of payments accounts--warrant consideration. Although the proposals

differ in that two 1/ are based on ownership rather than residency and one 2/ is a "residency-based" measure, they all derive net balances of global sales and purchases of goods and services that reflect the integration or combination of balance of payments data (cross-border trade) with data on sales and purchases of U.S.-owned companies abroad and of foreign-owned companies in the United States. This integration is a rather troublesome aspect of these interesting and informative studies. Because U.S. firms that set up and/or expand production outside the United States have better maintained their competitive positions, as reflected in their share of the global market, than the U.S. share of total world exports, which has declined much more, the total of U.S. cross-border exports and net direct investment affiliate sales abroad is more favorable than the traditional balance of payments measure of net exports. 3/ If such new net balances are used by policymakers for certain bilateral and multilateral negotiation purposes, pressures could mount to accord them more prominence than the internationally-accepted standard measures as delineated in the *BPM* and *SNA*.

In another study, 4/ the use of the supplemental framework in the National Research Council proposal is endorsed, along with recommendations for a new set of consistent definitions for foreign affiliates (which already exist and are identical in both the *BPM* and the draft "OECD Benchmark Definition of Foreign Direct Investment," Third Edition, July 1994), and the incorporation of goods trade data from U.S. annual surveys of multinational companies into the standard goods trade included in the balance of payments accounts (although the two sets of data are not on an identical basis).

An astute analyst of the U.S.-Japan economic relationship, Kenichi Ohmae, a political reform leader in Japan and formerly a partner of McKinsey and Company, has long taken the view that political attention to the reported trade data between the two countries is misplaced because the data "are not an accurate reflection of general flows of economic activity....they are the result not of government policies but of strategic

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1/ National Research Council, Panel on Foreign Trade Statistics, Behind the Numbers: U.S. Trade in the World Economy, ed. Anne Y. Kester (Washington, D.C.: National Academy Press, 1992); DeAnne Julius, Global Companies and Public Policy: The Growing Challenge of Foreign Direct Investment (New York, N.Y.: Council on Foreign Relations Press, 1990).

2/ U.S. Department of Commerce, Bureau of Economic Analysis, Alternative Frameworks for U.S. International Transactions, Landefeld, J. Steven et al, Washington, D.C., Survey of Current Business, December 1993.

3/ See Lipsey, Robert, Outward Investment and the U.S. Economy, National Bureau of Economic Research, Working Paper 4691, March 1994.

4/ Duncan, Joseph W. and Andrew C. Gross, Statistics for the 21st Century, The Dun and Bradstreet Corporation, New York, 1993.

choices made by individual companies operating in the global marketplace." <sup>1/</sup> For instance, he notes, if a U.S. chip manufacturer sells its product in Osaka, those sales may count towards the 20 percent of the Japanese market targeted for U.S. firms, but if the chips were fabricated in Malaysia, they are not reflected in the U.S.-Japan trade data. Similarly, when a U.S. sportswear manufacturer sells in Hokkaido garments sewn in Taiwan or Indonesia, the sales do not show up in U.S.-Japan trade flows. Ohmae concludes that per capita sales in Japan of "American" goods and services--as Japanese consumers perceive them--by far exceed American purchases of "Japanese" goods and services. The bottom line, according to Ohmae, is that reported bilateral trade deficits or surpluses are not in themselves a problem, that these imbalances should neither guide policy nor beget official pronouncements as to the "proper" level of exchange rates, and that a much wider range of data than net balances, of whatever variety, be utilized as a basis for appraising the state of economic affairs between Japan and the United States.

It is important to note that when such items as receipts and payments of profits from and to U.S. and foreign parents, and employee compensation are included in any new measures of net exports, as is the case with two of the previously mentioned studies, the concept of a clear separation of services from income in the national and international accounts is compromised. It is rather confusing to include the net earnings of direct investment enterprises (income) in a balance on goods and services. These net earnings are fully reflected in the investment income component of the current account. Further, the ownership-based proposals would have ramifications throughout the entire system of national accounts because accounts for production, outputs, expenditures, etc., which are based on residency, would not be in accord with the attribution of production, etc., in the international accounts on the basis of ownership. Another aspect concerns possible perception problems associated with ownership-based proposals, e.g. in regard to certain affiliates of foreign enterprises that are considered as domestic companies because of their long-standing operations in a country, or, in contrast, to affiliates recently acquired, which still may be viewed as domestic even though there is a change in ownership. Additional complications arise in cases of joint ventures or international consortia, involving owners of different countries, where there would be major difficulties associated with any attempts to allocate sales and purchases to the countries of the joint owners. In fact, reflecting the trend towards increased internationalization of ownership, the significance of ownership-based statistics may become less salient in the future, although there is widespread interest in such data now. Finally, ownership-based statistics could generate instances of duplication of data, associated with indirectly held affiliates' sales being allocated

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<sup>1/</sup> Wall Street Journal, U.S.-Japan: Counting What Counts, March 22, 1994. Similar comments were made by Walter Wriston in the Washington Post, Bashing Japan With Flawed Figures, August 4, 1994.

to the transactions of both the country of the ultimate foreign parent and those of the intermediate parent in the ownership structure of a group of companies. 1/

The above considerations do not at all obviate the need for detailed and extensive data related to transactions of foreign affiliates, branches, or associates of direct investors. 2/ Quite the contrary--so-called "establishment trade" data (the entire range of activity of such units, including production, employment, sales, etc.) is both relevant and necessary for international trade negotiations and policy purposes. These activities for both goods and services may be associated with considerations such as national reciprocity and access to markets, because the activities often substitute for cross-border trade between residents and nonresidents. Certainly, although neither the system of balance of payments statistics nor detailed data on foreign affiliate activities was devised to meet an all-encompassing range of uses, they both are vital sources of information.

While various alternative measures of international transactions may be helpful for global and regional negotiation and other policy purposes, such measures should not be integrated with or substituted for standard measures based on the residency concept. Nor should any "new" derived net balances be accorded equal prominence with or take precedence over the standard balance of payments measures, because such balances can be computed in a variety of manners, are subject to no internationally-accepted standard, and could tend to proliferate and to be misinterpreted. In those instances in which statistical agencies choose to present such supplementary balances, the latter should be accompanied by caveats as to their correct interpretation and use. However, data--in as much detail as possible--on foreign direct investment-related activities of enterprises (trade in goods, services, employment, production, income statements, balance sheets, local sales, etc.) are valuable for analytical and policy purposes. The collection, compilation, dissemination, and analysis of this information should be encouraged--subject, of course, to cost/benefit considerations from both national and international standpoints--and the information should be viewed as complementary or supplementary to the balance of payments and national accounts, rather than as a substitute for those accounts. In this context, the perhaps unwarranted emphasis on certain bilateral goods trade imbalances--especially on a monthly basis--by analysts and policymakers could be lessened.

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1/ These problems of interpreting statistics on establishment transactions were noted by Bernard Ascher and Obie G. Whichard in Hooper, op.cit., p. 216.

2/ Associates (defined as 50 percent or less foreign-owned) usually would not be included in establishment data used for trade negotiation purposes, because "control" is the generally operative concept in multilateral trade agreements, as opposed to the direct investment concept of "effective voice in management."

#### IV. Further Improvements in and Harmonization of the Measurement of International Transactions

In addition to the previously noted international efforts to harmonize and improve concepts and the structure and classification of the international accounts that culminated in the 1993 *SNA* and the fifth edition of the *BPM*, there are significant international, regional and national initiatives underway to improve the measurement of international transactions, just a few of which are mentioned below. Under the auspices of the IMF and its Committee on Balance of Payments Statistics (Committee), planning for a coordinated survey of portfolio investment positions of the leading industrial countries (G-10 and several others) is underway. The Fund also is coordinating efforts, along with the Bank for International Settlements, to refine the systems of international banking statistics to facilitate their use as a source for balance of payments compilation. Regional and bilateral initiatives to effect the exchange of geographic balance of payments data, along with Fund assistance, where appropriate, are being undertaken by the Statistical Office of the European Communities (Eurostat), the Asia Pacific Economic Cooperation (APEC) group, and a number of individual partner countries. Improvements in the coverage of international service transactions, particularly on the part of developing countries, also are being promoted by the Inter-Agency Task Force on Service Statistics (comprising the World Bank, the IMF, the OECD, Eurostat, UNCTAD, and GATT), likewise are engaged in such efforts, which also will consider the modalities of developing a reporting framework for establishment data as a complement to balance of payments statistics. In addition, Eurostat, together with the OECD, is working towards the development of a statistical system for establishment trade. Finally, the Fund is assisting member countries in conforming to the guidelines of the fifth edition of the *BPM*, is finalizing two companion documents--the *Balance of Payments Compilation Guide* and the *Balance of Payments Textbook*--and is providing technical assistance and training to balance of payments compilers from a wide range of member countries. All these activities, it should be noted, are being undertaken within the framework of the *BPM* and *SNA*.

#### V. Summary and Conclusion

1. The concept of residency must continue to be the underpinning of the set of international accounts, i.e., the balance of payments and international investment position, and of the system of national accounts, including the rest of the world (external transactions) account. Data based on the residency principle are indispensable for the derivation and/or analysis of variables of interest to economic analysts such as domestic production, prices, exchange rates, rates of growth, employment, etc. and their interaction. These variables, in turn, are important inputs into the formulation of macroeconomic policies. Consistency between the international and national accounts must not be compromised. Both the 1993 *SNA* and the fifth edition of the *BPM* contain extensive revisions reflecting

the important changes that have occurred in the conduct of international transactions since previous editions were issued (1968 and 1977, respectively).

2. It should be kept in mind that no statistical measure is designed to satisfy all possible purposes--analytic, policy, specific negotiations, or other. In this regard, complementary or supplementary data, serving as adjuncts to the standard resident-based measures, are valuable, such as those associated with foreign direct investment-related trade in goods and services and establishment data covering the full range of operations of these enterprises, i.e., production, employment, sales, industry activity, balance sheets and income statements, geographic allocation of activities, etc. Some countries compile such data for both transactions and foreign direct investment positions, while others are in the process of developing these statistics. Eurostat, the OECD, and APEC are involved in regional compilation of these statistics.

3. Extensive and detailed data on inward and outward activities of foreign direct investors and their affiliates, branches and associates--those of the United States are arguably the most developed--can be and are profitably utilized by policymakers, private sector researchers, and academicians. However, the data, if combined with standard measures to derive new "net balances" of goods and services or other international transactions, should not be presented in a manner which could be confused with or be accorded precedence over the standard measures. Otherwise, there would be ramifications for national accounts measures, as to the allocation of production and many other aspects of those accounts, if the residency concept is compromised.

4. Adaptation and adherence of countries to the conceptual, structural, and classification standards, as reflected in the *BPM* and *SNA*, for international transactions and stocks of external financial assets and liabilities, are high priority items. Such conformity will foster international comparability of--and contribute to the reduction of global, regional, and bilateral asymmetries in--these data, and provide policymakers with a better statistical basis for analysis and policy formulation. Continuous and coordinated efforts to improve and refine the standard international set of accounts, together with related training and technical assistance--as provided by the Fund and other international organizations--will enhance the relevance of these internationally-accepted measures in an increasingly interdependent world.

5. Finally, it should be noted that at some point in time, a reassessment of the concepts and recommendations embodied in the 1993 *SNA* and in the fifth edition of the *BPM* will not only be appropriate, but mandatory. Given the rapid pace of technological and financial innovation and of the globalization of markets, a "new look" must be planned for, hopefully reflecting a shorter interval than the 25 and 16 years, respectively, between the previous and latest editions of the two international statistical standards.

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