EXTERNAL BALANCE SHEETS: CONCEPTS AND EMPIRICAL APPROXIMATION*

BY ROBERT V. KENNEDY

International financial relationships should be interpreted in the context of a comprehensive conceptual framework; this paper advocates the use of concepts developed to measure and analyze balance of payments flows. Broad-based, empirical estimates of the international wealth of most countries of the western world are presented on the basis of cumulating balance of payments flows over a lengthy period. Among the more interesting aspects of the results are: the importance of intra-industrial country capital flows in a global context; the propensity of debtors to regard a larger share of their aggregate external debt as long term than do their creditors; the overwhelming importance of banks located in the industrial countries in global external asset and liability positions, and the preponderance of short-term positions taken by those banks; and the tendency for balance of payments records to report more direct investment assets than liabilities. The paper also contains some observations, based on the cumulations of balance of payments capital flows, concerning the nature and size of certain deficiencies in alternative sources—particularly the World Bank's Debtor Reporting System, and the Bank for International Settlements' banking data—of information on outstanding external debt positions.

INTRODUCTION

This paper presents, in five sections and a Statistical Appendix, broad-based, empirical estimates of the international wealth of most countries of the western world. In Part I it is argued that international financial relationships should be analyzed in the context of a comprehensive conceptual framework; it is advocated that the concepts developed to measure and analyze balance of payments flows should be taken as the starting point. In Part II, the problems that arise because of missing data are addressed. Broad generalizations, made within an appropriate conceptual framework, are offered as a useful means of overcoming specific data deficiencies by assessing how alternative sources of partial information should be related to each other. Part III provides a concrete example of how the principles expressed in Parts I and II may be used to construct external balance sheets for many countries by cumulating the capital flow entries contained in their balance of payments records. In Part IV the results are compared with various alternative partial estimates published by the World Bank and by the Bank for International Settlements (BIS). Some interesting aspects of the results are reiterated in Part V, where reference also is made to the scope for further work.

I. THE CONCEPTUAL FRAMEWORK

A good statistician, perhaps more so than the average practitioner of economics, is acutely aware of the need to collect information within the guidance

of a comprehensive set of mutually exclusive definitions or concepts. Such a conceptual framework is necessary for the analyst to form a detailed understanding of the statistical construct as well as for an accurate classification of borderline cases. The interpretation of changes in external asset and liability positions, for example, may differ considerably depending upon whether external positions are defined to encompass holdings of foreign-currency-denominated financial instruments, or, alternatively, the net financial claims of residents against nonresidents, irrespective of the currency denomination of the net claims.

It should be stated, at the outset, that the author does not believe that any specific conceptual structure is superior to all others. The most appropriate statistical framework depends on the type of question being asked. For example, enquiries into the impact of foreign exchange dealings on exchange rates might require information about holdings of financial securities which are potentially susceptible to, or at least prime candidates for, acquisition or disposal through the foreign exchange markets. This is necessary even if transactions in such financial securities have no net effect on a country's external position.[1] Similarly, analysts engaged in assessing prudential aspects of international banking positions need a conceptual framework that focuses on the net foreign exchange position of each individual bank, consolidated over all of the countries in which the bank operates. For other purposes, including the analysis of countries' external asset and liability positions, the preferred conceptual framework should be based on a resident/nonresident distinction of the kind used in the balance of payments methodology.[2]

In short, various conceptual structures are possible and, depending on the perception of the analyst, could seem desirable. But once a conceptual framework is chosen, strict understanding of, and adherence to, its underlying tenets are necessary in order to prevent subsequent confusion. It is unfortunate, therefore, that some analysts tend to adopt *most* of a particular statistical framework, but (through thoughtlessness, attempts to adapt to data deficiencies, or otherwise) are unduly willing to modify various aspects of the conceptual framework. Although not necessarily to be condemned, tampering with well-established theoretical concepts should not be undertaken lightly.

Most detailed statistical frameworks have evolved from many years of expert opinion and discussion. For example, in the area of domestic data collections, much time and thought have been expended in constructing the national accounting framework. That effort involved considerable international cooperation, which now is codified in the UN System of National Accounts, and represents an admirable attempt by the staff of the United Nations to draw together the expertise and experience of national compilers. Similar efforts to devise thorough and appropriate conceptual frameworks have been applied to national statistical series that range over estimates of monetary aggregates, demographic statistics, flow of funds data, and price indices.

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[1] For example, holdings could reflect resident-to-resident transactions, such as occur when a central bank acquires foreign-currency-denominated securities in the foreign exchange market which were supplied by a resident.

[2] Definitions of residents and nonresidents as adopted for balance of payments purposes may be found in *Balance of Payments Manual*, Fourth Ed., IMF, 1977, Chapter 3, pp. 19–25.

With respect to the collection of information about countries' external transactions, the most highly developed counterpart to these worldwide attempts to devise and improve theoretically adequate frameworks for the reporting of national statistics surely relates to the development of balance of payments methodology. In this important sphere, the IMF plays a leading role in pursuing global agreement on the most useful conceptual structure to guide the collection and consistency of this information. Although balance of payments methodology is directed primarily to compiling estimates of flows of goods, services, and capital between countries (or more specifically—and more in accord with the argument to accept the collective wisdom of the experts—between residents and nonresidents), it is equally applicable, as a conceptual base, for collating the external stock positions that arise as a result of those flows. Thus, in the absence of compelling arguments to the contrary, important advantages accrue from a decision to base the compilation of external balance sheets (and hence the analysis of external debts and claims) on the framework of the well-established balance of payments methodology.

Such a decision, of course, involves more repercussions than is appropriate to discuss here. However, as already mentioned, one major consequence is that the measure of external wealth becomes based on the claims and liabilities of residents of one country vis-à-vis those on, or to, other countries and not, as some definitions of international wealth would have it, on the currency denomination of financial claims.[3] This basic tenet of balance of payments methodology, when combined with the balance of payments definition that regards a resident as any entity conducting business in the country concerned,[4] clearly specifies what constitutes an international financial transaction.

Many important pragmatic benefits also accrue from the decison to use the theoretical balance of payments framework to measure and analyze external wealth. One major advantage of this kind arises from the adoption of the double-entry system of bookkeeping. This system not only ensures taking into account of both sides of a country's external books, but it also alerts the compiler, or the analyst, to be aware of (missing) counterpart flows.[5] In addition, the double-entry system also provides a broad (net) check on the overall accuracy of the statistics.

The double-entry system of balance of payments accounting is useful in developing other conceptual aspects of the data collection, such as the need to record all transactions at the time of ownership change and at appropriate market values. Balance of payments compilers would recognize this as the *raison d'être* for the timing, valuation, and coverage adjustments that they make to the raw data

[3]In principle, external debt denominated in domestic currency is no different from foreign currency denominated debt as, on maturity, the nonresident creditors, in either case, may use the proceeds to àcquire resources from the debtor country.

[4]Minor exceptions are made in the case of embassy personnel, temporary workers, and members of the armed services. Analysts wishing to define residency on another criterion (for example, one involving the chain of ownership among affiliated enterprises) should need to show cause why their particular analysis ought to diverge from the more generally accepted balance of payment concepts.

[5]One useful aspect of this is dealt with more fully in the subsequent section of this paper. Analysts of external debt seem quite prone to overlook the assets side of the books, probably because they often work with partial information, mainly related to external liability positions.

underlying the balance of payments records. Strict adherence to the double-entry principles requires the recording of transactions at the same value for each partner to a transaction, and at a specific moment in time. Hence financial claims and liabilities are imputed to arise at the moment ownership of resources changes, thus making it possible, conceptually at least, to measure financial flows (and, in our case, outstanding external claims and liabilities) in a way that corresponds with the changes in real wealth that net flows of these financial securities represent.[6]

Adoption of the balance of payments concepts for measuring external positions also provides subsidiary gains in that it yields various readymade "second-order" definitions. The balance of payments principles that are used to classify transations according to the nature of the transactor[7] or, for dealings in financial instruments, according to the nature of the security,[8] come readily to mind. Of course, any analyst of external debt positions should be free to suggest alternative definitions that may be more appropriate for his purpose (and, for many purposes, it seems obvious that a maturity definition based on time-to-maturity, rather than on original maturity, would be a prime candidate for such an argument). But, in the absence of a convincing counter proposition, it seems equally clear that the volume of constructive thought that underlies the balance of payments concepts should ensure that they be seriously considered.

A final, practical advantage of using the balance of payments framework to measure and analyze external debt positions arises because that approach facilitates the reconciliation of balance of payments and external wealth data. The opportunity to interface two sets of statistics, such as is done, for example, between flow-of-funds estimates and the savings component of the national accounts, or the balance of payments records of real resource flows and the external elements of the national accounts, represents an advantage that should not be passed over lightly. Looking further down the road, a system of measuring total wealth (domestic and external) which is completely compatible with national accounts records may readily be envisaged.

II. Broad Generalization as Means of Overcoming Data Deficiencies

1. Deficiencies of Main Sources of Data on National External Positions

The extraordinary increase in the prices of internationally traded petroleum products during 1974, in association with the deepest global recession since the 1930s, resulted in a virtual quantum jump in the aggregate external debt of the nonindustrial countries.[9] Since that year, these countries' annual external bor-

[6]Problems of subsequent valuation changes caused by the effect of exchange rate variations on the value of financial claims notwithstanding.

[7]That is, the definitions of transacting sectors. The main sector classifications drawn within the balance of payments framework distinguish among the transactions of the general government sector (essentially central government including monetary authorities, and state and local government), the banking sector, and the residual private nonbank sector (which, of course, includes public enterprises).

[8]For example, into ownership claims, portfolio investments, etc., plus a maturity classification of the securities.

[9]The countries covered in this study and the composition of groupings is set out in Table A, Appendix.

rowings have been sustained at unprecedented magnitudes. Initially, increased resort to external credits arose from a broad-based desire to secure sufficient time to allow orderly adjustments to the sudden deterioration in their external positions. Later, however, the motivation to sustain external borrowing was centered more on the need to replenish official reserves and to restructure external debt profiles.

Analysts of international relationships have sought to evaluate the impact of these developments, but unfortunately data generally were unavailable in the desired degree of detail. Moreover, the available information was unable to produce a current, yet comprehensive, understanding of the levels of, or the changes in, countries' external positions, either individually or in the aggregate.[10]

In practice, most analysts of external debt positions have relied primarily on data concerning public and publicly guaranteed external long-term debt as reported to the World Bank under its Debtor Reporting System (DRS).[11] These data, based on the records of the individual debtor country, offer the potential advantage of providing a fairly complete record of the debt covered by the statistical collection, on a basis designed to ensure a degree of intercountry comparability. However, they are subject to a number of shortcomings. Apart from some country coverage problems,[12] the DRS data suffer from a rather lengthy reporting lag,[13] the exclusion of potentially considerable amounts of external debt,[14] and the omission from the collection of information on each country's external asset position, which is just as important as changes in external liabilities for a detailed assessment of external positions.

The BIS is another widely-quoted source of information on individual countries' external positions. Of relatively recent origin, this series shows the external assets and liabilities of each country relative to the reporting banks (which, for the most part, comprise banks in the G-10 countries and Switzerland,

[10]This paper does not concern itself with the potentially very important problem of the quality of the data available from alternative series. A convenient summary of the main sources of information on external indebtedness of (or financial flows to) developing countries (which approximates the nonindustrial grouping under discussion here) was published in the *IMF Survey* of September 6, 1976. That article provided details of the type of information covered in each of the source documents discussed, together with an ingenious diagrammatic presentation showing how the various sources overlapped.

A more recent, and most useful discussion of various sources of data on international banking flows, including some comment on their interrelationships, has been prepared by G. D. Short and B. B. White in International Bank Lending: A Guided Tour Through the Data, *Federal Reserve Bank of New York Quarterly Review*, Autumn 1978, Vol. 3, No. 3, pp. 39–46.

[11]For the most recent, complete publication of these data, see *World Debt Tables, External Debt of Developing Countries*, World Bank, Vols. I and II, October 15, 1979.

[12]The World Bank series only covers countries that are using, or have recently used, World Bank resources. In practice, this is not a major deficiency so far as the analysis of non-oil developing countries is concerned.

[13]One consequence of the increased interest in external positions is that the World Bank has been able to shorten the reporting lag by the introduction of *World Debt Tables—Supplements*, ibid., which contain more prompt reports of the most important aggregates.

[14]External short-term debt is completely excluded from the DRS system, as is long-term external debt incurred without a public guarantee. However, in the 1978 *Supplements* the World Bank began reporting some estimates of private, nonpublicly guaranteed long-term external debt, at least for those non-oil developing countries where such debt is thought to be of significant size.

plus branches of U.S. banks operating in the Caribbean area and the Far East).[15] Attempts to gap-fill missing information on other external assets and liabilities may be made by resorting to other sources, such as the Development Assistance Committee (DAC) information on official lending transactions,[16] or World Bank publications relating to financial transactions in international financial markets, including publicized Eurocurrency credits.[17] Of course, making supplementary use of other sources frequently introduces additional difficulties, either because they provide information that is not fully compatible, within a consistent framework, with that yielded by alternative data sources,[18] or because they comprise only part of the transactions required.[19] Furthermore, attempts to match subsidiary data sources with the BIS data on banks' positions have been hampered by the fact that the BIS, at least until very recently, did not provide a country-based disaggregation of external asset and liability positions classified by the maturity of the assets and liabilities concerned.[20] The usefulness of early moves in this direction partly was diminished by the BIS decision to classify maturity on the basis of remaining life rather than on original maturity, the criterion used in other collections. Further, because of inconsistencies in individual reporting-country coverage, the BIS data contain substantial values of external assets and liabilities held by the reporting banks which are unallocated by country, a deficiency that could prove grossly misleading for the unwary user of these data.

Thus the author decided to experiment with another set of statistics—the balance of payments records of the countries concerned—which, at least at the conceptual level, offered the possibility of constructing comprehensive and consistent estimates of each country's external asset and liability positions.

Of course, these data also contained shortcomings. Of major importance in this regard was the fact that deriving outstanding external asset and liability positions from records of balance of payments transactions conceptually called for an unbroken flow of information starting from the time of the first external capital

[15]This series was first published in terms of individual country positions as of end-1974, although the later inclusion of U.S. bank branches operating in a number of offshore banking centers effectively means that the present series commenced as of end-1975. (A further, relatively minor, break in the series occurs at end-1977, when the external positions of banks in Austria, Denmark, and Ireland were added to the basic collection.)

[16]The DAC produces detailed reports on financial flows to individual countries from member countries, but these reports are based on annual developments and are published after a considerable lag.

[17]See *Borrowing in International Capital Markets: Foreign and International Bond Issues, Publicized Eurocurrency Credits*, World Bank, Washington, D.C., quarterly issues.

[18]DAC data, being based on creditor records, are not usually consistent, because of variations in valuation and/or timing, with the counterpart debtor records.

[19]For example, bond raisings in international capital markets are usually only reported gross (i.e. the statistics do not take into account the value of amortizations). Similarly, the series on publicized Eurocurrency credits, as well as implicitly counting part of the financial transactions that also are recorded in the DRS and the BIS series, refers to *gross commitments* of credits rather than to the more informative *net new disbursements*.

[20]See *Maturity Distribution of International Bank Lending*, BIS mimeographed document, January 1979. That deficiency of the BIS data (or, alternatively, the exclusion of external long-term debt without public guarantee and all external short-term debt from the DRS data) also prevents any meaningful direct reconcilliation of the BIS records with those of the DRS.

transactions of each country under study. It was impossible to obtain balance of payments records for such long periods. However, ongoing real economic growth, in combination with the rapid escalation of global prices during the 1970s, presumably would have enlarged the nominal value of recent annual capital flows to the point where changes in a country's external assets and liabilities over, say, the last 16 years could resonably be expected to have dwarfed, in magnitude the value of the comparable stocks outstanding at the beginning of the period. To illustrate, the outstanding value of global international liquidity at the end of 1961, at $62 billion, amounted to only 25 percent of the comparable stock at the end of 1977—$244 billion.[21] Alternatively, reported short-term liabilities of banks in the United States to nonresidents at the end of 1961, at $23 billion, was only 19 percent of the $124 billion of comparable liabilities outstanding at the end of 1977.[22] Many other examples could be cited.

2. The Alternative Approach

Notwithstanding the obvious benefits that have arisen from the pioneering efforts that underlie the two main sources of direct data on countries' outstanding external positions (i.e. the series compiled by the BIS and the World Bank's DRS), those estimates fall well short of the conceptual ideal. An attempt might be made, of course, to build a system around these two sources by including, for example, estimates of debts to official creditors (as may be obtained from the DAC records), information on trade credits extended, an allowance for borrowing by countries on external bond markets, and other data on countries' external asset holdings, as found, for example, in *IFS* data on official reserve holdings and external assets of each country's banking sector.[23] However, very soon one realizes that compiling net external wealth estimates from such a wide assortment of source material not only leaves huge gaps in the data as required under the conceptual framework but also introduces major problems of overlapping data and insoluble incompatibilities.

Thus was formed the basis for reasoning that a cumulation of annual capital flows, as recorded in the balance of payments records of Fund member countries, over the period beginning with 1962 could provide a meaningful indication of total external asset/liability positions. Furthermore, the cumulations might subsequently be adjusted to include known, or carefully estimated, outstanding external debt positions at end-1961.[24] Although not completely meeting the

[21]*International Financial Statistics*, May 1976 and September 1978.

[22]Refer to *Federal Reserve Board Bulletin*, March 1962 and April 1978.

[23]See *Manual on Statistics Compiled by International Organizations on Countries' External Indebtedness*, BIS, Monetary and Economics Department, Basle, March 1979, which indicates that the DAC combines sources, more or less in this way, in order to obtain rather comprehensive estimates of the *long*-term external liabilities of the developing countries.

[24]Detailed balance of payments information, in standardized format, has been stored in the IMF Data Fund for most member countries, plus Switzerland, since 1967. By slow and careful scrutiny of the information published in early issues of the *IMF Balance of Payments Yearbook*, the author was able to extend, back to 1962, consistent and standardized balance of payments records for the 98 countries shown in Table A, Appendix.

theoretical ideal, this alternative procedure came much closer to it and involved fewer data difficulties than did the piecemeal approach outlined above.[25]

One of the main difficulties, of course, was that only by cumulating flows of external financial transactions from their very beginning could one hope to approximate closely the desired stock estimates. However, this major conceptual deficiency was met, in a pragmatic manner, by noting that, over a lengthy period of time, the continuing process of economic growth and inflation means that more recent increments to the nominal stock of external wealth tend to swamp the value of the outstanding stocks at the start of the period. Furthermore, by comparing the cumulations of specific flows for which comparable stock estimates are available, the general veracity of the basic assumption could be examined. In short, given the adoption of a detailed conceptual framework, a reasonable attempt to compensate for the inevitable data deficiencies presented itself and, what is more, offered scope for some empirical testing of the results.

Estimates of countries' external wealth based on cumulations of balance of payments flows are presented in section III. However, a potential deficiency of the approach deserves comment before moving to that section.

A difficulty arises because external wealth can vary from the sum of the income streams that contribute to it because of revaluations of some assets (and liabilities) relative to others. Exchange rate changes that affect the relative values of financial claims denominated in various currencies are usually the main source of such variations.

In principle, this need not constitute a major conceptual hurdle insofar as the approximation of external positions from cumulated balance of payments flows is concerned. Theoretically, all that is required is knowledge of the currency denomination of the flows; however, that information is not usually available. Until recently, of course, the effects of exchange rate changes on external wealth have not constituted a major practical problem because of the general fixity of exchange rates through 1970. The subsequent exchange rate flexibility, on the other hand, raises concern in this regard, as the value of transactions in financial claims during any given period can now diverge quite markedly from the change in the outstanding stocks of external assets/liabilities at the beginning and end of that period. This is especially true when the outstanding stocks are large relative to the usual values of transactions—unfortunately (from this point of view), a fairly typical situation as far as the external wealth, or external debt, of countries is concerned.

The problem of dealing with the detrimental impact of variable exchange rates on the methodology of cumulating balance of payments data to obtain external wealth estimates is a serious one, which receives relatively little attention in this paper. But, for many types of wealth or debt related analyses, it frequently is more illuminating to work with changes in the stock positions, exclusive of the

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[25]Some evidence for this assertion is obtainable from the rather suggestive chart in the *BIS Manual on Statistics*, ibid., which shows that, for most country groups and types of claims held by creditors, the balance of payments flows, although incomplete, appear to provide consistently more data than the other sources shown in that chart.

valuation effects, and this concept more closely parallels what the balance of payments records provide!

III. DERIVING EXTERNAL ASSET/LIABILITY POSITIONS FROM BALANCE OF PAYMENTS RECORDS

1. *Technical Aspects of the Cumulations*

Before presenting the results of cumulating external capital flows from the balance of payments records of the 98 countries included in this project,[26] a few comments are in order concerning the degree of disaggregation adopted. A primary classification of the various capital flows entered in the balance of payments records distinguishes between assets (or claims on nonresidents) and liabilities (claims of nonresidents on residents of the reporting country). This distinction was preserved, not only because net asset and net liability flows generally are recorded separately in the balance of payments accounts, but, more importantly, because potential changes in countries' net external assets frequently are underrated in assessments of their external positions which have relied on sources concentrating on changes in external liabilities.

Beyond the asset/liability dichotomy, another important distinction was drawn between financial instruments that carry repayments obligations and those that do not. This decision, which meant classifying direct investment assets and liabilities separately from other external assets and liabilities, allowed the external balance sheets to distinguish between total external positions and external debt positions; the latter were considered to be of more immediate relevance for the assessment of the sustainability of recent levels of external borrowings.[27] In passing, it should be noted that, in reflection of the focus on external debt developments which initiated this work, various aspects of the cumulation of direct investment flows were not addressed as fully as might be warranted in a serious attempt to measure national external wealth. To the extent that countries report direct investment data in accordance with the appropriate balance of payments concepts, these flows should (correctly) include allowance for the reinvestment of undistributed earnings. However, many countries are remiss in this regard. Furthermore, the consistency, across countries, of how direct investment flows are defined leaves much to be desired,[28] and this study by-passed the whole complex subject of how to handle depreciation of externally held direct investment assets. Considerable work is required in this area.

Another major subgrouping of debt flows (whether assets or liabilities) was based on the nominal maturity of the financial instruments concerned. Following

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[26]It should be noted that the main focus of interest was to assess the buildup of external indebtedness in a global environment, rather than to assess the debt positions of individual countries. Nevertheless, the cumulated capital flows approach also provided useful information for analysis of the individual countries.

[27]Although the external debt positions do include flows of portfolio capital which carry no repayment obligations. Insofar as reports prior to 1978 are concerned, these flows were not distinguished from other forms of capital in the balance of payments compilations that most member countries submitted to the Fund.

[28]For more details, see *Balance of Payments Manual*, op. cit., Appendix E, Survey of Direct Investment: Concepts and Compilation.

the balance of payments methodology, financial instruments that were due to mature in less than one year were classified as short term; all others were regarded as long term. Although this classification is of limited meaning for many purposes,[29] it was necessary to retain it in order to make comparisons with alternative sources of information which do use such a distinction (the DRS data cover long-term liabilities in this way[30]). A notable departure from the short-term/long-term classification of external financial obligations was made with respect to the treatment of official reserve assets and reserve liabilities. These financial claims and liabilities are classified in the balance of payments accounts (and also, to a largely comparable degree, in the stock estimates provided in the international liquidity pages of *IFS*) primarily on the basis of their availability for balance of payments financing. For comparison purposes, it was considered useful to maintain the reserves classification as recorded.[31]

Finally, again following the distinction normally drawn in balance of payments compilations, capital flows (other than those related to reserves) also were cumulated according to the transacting sector in the reporting country. This alternative classification of the external (nonreserve) debt flows, apart from its potential for analytic usefulness, was undertaken to facilitate comparisons with other sources of information on countries' external positions. For example, cumulating the balance of payments records of capital flows to and from banks in the reporting countries was necessary to relate such information to the BIS external debt series.[32] Similarly, drawing comparisons with the DRS data required cumulating the long-term external flows transacted by both banks and governments in the industrial (or DAC) countries. Accordingly, the cumulation of capital flows retained a distinction between three sectors in each of the reporting economies—the government sector, the banks, and the rest of the private sector.

The nature of the classification scheme adopted is set out in Table B, Appendix, which shows, for the world as a whole, the cumulated sums of all external claims and liabilities for 1962 through end-1973, 1975, and 1977, respectively. Similar summaries of the results of cumulating external capital flows for each of eight analytical groupings frequently used by the Fund are given in Tables C–J, Appendix. All of these tables take the form of external balance sheets as of end-1973, end-1975, and end-1977; they all distinguish between (i) the types of external positions discussed above, and (ii) the disaggregation into three

[29]Often short-term debt is more or less automatically rolled over on maturity, and some long-term instruments are readily marketable. Indeed, as noted below, asymmetrical treatment of bank credits advanced on an automatic rollover basis probably was responsible for most of the discrepancy between global short-term liabilities and claims.

[30]Inconsistencies in the conventions governing maturity classification as adopted for alternative data compilations greatly lessen the chances of making precise comparisons across data sources. In addition to the problem discussed in the previous footnote, there also is the difficulty associated with the alternative use of "original" maturity or "remaining" maturity to classify such loans. The latter concept, for example, is used by the BIS to classify the maturity structure of external assets of the banks included in its collection.

[31]The long-term/short-term disaggregation of external debt positions, as shown in the global balance sheets, counts all reserve assets and liabilities as short-term instruments.

[32]It was hoped that the further distinction drawn between long-term and short-term flows to and from these banks could illuminate the relationship between the BIS bank positions data and the DRS information on long-term indebtedness to banks.

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sectors of external positions with respect to assets and liabilities unrelated to reserve positions.

2. *Comments on Summations*

As the tabulations are largely self-explanatory, the following remarks are deliberately focused on highlights of the results. Table 1 assists the discussion by summarizing the main elements of the Appendix tables for the single year 1977.

As expected, the industrial countries accounted for the dominant share of global external assets/liabilities. At end-1977, they held over four fifths of these assets and about three quarters of the liabilities (Table 1, first line). Most global capital transactions reflected flows between industrial countries. Nevertheless, as of the same date, the industrial countries held combined net claims on the rest of the world of about $90 billion.[33] The major oil exporting countries apparently had built up their net external claims to over $110 billion by end-1977 from an almost balanced position at end-1973 (Table D, Appendix) and counterpart net external liability positions were held by the non-oil primary producing countries (about $70 billion by the more developed primary producers—Table E—and almost $150 billion by the non-oil developing countries—Table F).

The information on types of external capital flows showed that the industrial countries held virtually all (98 percent at end-1977) of the global external direct investment asset position. They also accounted for over two thirds of the global external direct investment liabilities, although this assessment is complicated by an apparent tendency for underrecording transactions in these liabilities relative to the comparable asset flows. Nevertheless, even after making a crude allowance for that problem,[34] the cumulated balance of payments estimates imply that net direct investment claims comprise a major share of the industrial countries' net external claims vis-à-vis the other groups. The industrial countries possibly held about $65 billion of such net claims at the end of 1977. These net claims were spread over the other groups as follows: more developed primary producers, about $25 billion, and the non-oil developing countries, about $45 billion. The net direct investment position of the major oil exporters was about $25 billion, and the non-oil developing countries, about $45 billion. The net direct investment position of the major oil exporters was about balanced (in fact, the cumulations suggested that some minor net disinvestment occurred in direct investment flows to the major oil exporting countries over the 1962–72 period).

At first glance, it seemed somewhat odd that the industrial countries did not appear to be substantial *net* providers of credit (other than direct investment) to the rest of the world—indeed, the end-1977 estimate implied that industrial countries held minor net "debt" liabilities (of $14 billion). Two factors may be cited to explain this somewhat unexpected outcome: (a) the global asymmetry in the recording of direct investment positions, and (b) the existence of relatively large placements, by the rest of the world, of official reserve assets with banks situated in the industrial countries.

[33]Plus, of course, any net position they might have held at end-1961.

[34]By prorating the global shortfall of direct investment liabilities to groups and making an offsetting adjustment to the recorded external debt data.

TABLE 1

SUMMARY OF CUMULATIONS OF CAPITAL FLOWS: RECORDED POSITIONS OF MAJOR COUNTRY GROUPS AS OF END-1977[a]

(In billions of U.S. dollars)

	External Assets			External Liabilities			Net External Positions		
	Global Totals	Industrial Countries	Other Countries	Global Totals	Industrial Countries	Other Countries	Global Totals	Industrial Countries	Other Countries
Total assets/liabilities	1383	1141	242	1400	1051	349	−17	+90	−107
Direct investment	214	210	4	154	107	47	+60	+103	−43
External debt	1168	930	238	1246	944	302	−78	−14	−64
Of which:									
Long-term	317	270	47	459	242	217	−142	+28	−170
Short-term	851	661	190	787	702	85	+64	−41	+105
or, of which:									
Reserves	240	110	130	146	134	12	+94	−24	+118
Nonreserves	928	820	108	1100	810	290	−172	+10	−182
Of which:									
Government	111	68	43	176	61	115	−65	+7	−72
Long-term	108	68	40	165	57	108	−57	+11	−68
Short-term	3	—	3	11	4	7	−8	−4	−4
Banks	582	550	32	578	514	64	+4	+36	−32
Long-term	75	75	—	41	22	19	+34	+53	−19
Short-term	507	475	32	537	493	44	−30	−18	−12
Other private	235	202	33	346	235	111	−111	−33	−78
Long-term	134	127	7	252	163	89	−118	−36	−82
Short-term	101	75	26	94	71	23	+7	+4	+3

[a]Covers the cumulated sums of all external claims and liabilities for 1962 through end-1977.

With regard to point (a), after making a rough allowance for counter-part adjustments for the assumed recording asymmetries of direct investment liabilities, the industrial countries' net external lending position at end-1977 was closer to $30 billion (and therefore somewhat more in line with the similarly adjusted position of the other three groups of countries). More precisely, this $30 billion, together with the implied net figure of $110 billion lent by the major oil exporters, fairly closely matches the *net* external debt position of about $45 billion estimated for the more developed primary producing countries and of $100 billion similarly estimated for the less developed group.[35]

The end-1977 data of the industrial countries, after allowance for the asymmetrical recording of direct investment flows, suggested that they had accumulated quite substantial net external *long-term* claims over the years 1962-77. For example, the unadjusted estimates placed net external long-term claims held by the industrial countries at $28 billion at the end of 1977. But, if the allowance for the asymmetrical recording of direct investment liabilities also assumed that the mismatching mainly occurred through the underrecording of *long-term* loan liabilities by the recipient (mainly industrial) countries,[36] then the industrial countries' net long-term external lending to the rest of the world would approach $70 billion.[37] Using similar assumptions, the *net* long-term external indebtedness of the rest of the world at end-1977 (Tables D–F, Appendix) would be about $150 billion (i.e. the net long-term external debt of the more developed primary producers would be about $45 billion, and that of the non-oil developing countries about $120 billion).[38] The major oil exporters extended about $20 billion in net long-term loans to the other groups. Thus, long-term external debt positions, even after allowance for asymmetrical recording of direct investment flows, still exhibited a global asymmetry of about $80 billion. This essentially reflected a mismatching of maturities in the respective debtor and creditor records.[39]

In regard to the other factors raised in (b) above—the placement of official reserve assets with banks in the industrial countries—it should be noted that, as at

[35]Note, that these estimates imply *gross* external borrowing positions as at the end of 1977 of $80 billion for the more developed countries and of about $180 billion for the non-oil developing countries; gross liability positions more often are cited by debt analysts.

[36]This assumption probably was too extreme, as direct investment flows include considerable amounts of short-term capital. Over time, however, the short-term flows should be largely self-reversing.

[37]This estimate would be even higher if rollover loans extended by banks in the United States and the United Kingdom were classified as long-term lending in the balance of payments records of those countries. They are so classified in the debtor country records, and therefore contribute to the global mismatching of capital flows based on maturity.

[38]It can be inferred that the non-oil developing countries' *gross* external long-term debt was about $125 billion at the end of 1977 (Appendix Table F). As indicated in Section IV, below, that figure corresponded quite closely, after appropriate adjustments, with comparable estimates obtained from the DRS.

[39]In addition, it also reflected errors and omissions in recording the time of flows and the less than complete global coverage of these compilations (e.g. the net long-term external positions of non-Fund members, and particularly of most of the COMECON countries, are excluded—although, as these countries have net liabilities, their inclusion would tend to aggrevate the global asymmetry).

If it were possible to quantify the asymmetry noted in footnote 37, the residual asymmetry would be reduced accordingly. It is suggested below that the asymmetrical recording of these bank loans might well have accounted for about half of this $80 billion.

the end of 1977, the unadjusted data suggested the industrial countries as a group were net borrowers, of some $41 billion, by having incurred net short-term external liabilities (including official reserve liabilities) to the rest of the world. This small net position, however, was the result of quite massive short-term external asset and liability positions. Some $134 billion of the industrial countries' $702 billion in short-term external liabilities reflected direct placements of official foreign exchange reserve assets in those industrial countries that recorded such placements as official reserve liabilities.[40] The reserve liabilities of non-industrial countries are minimal, and cumulated global reserve liabilities (at $146 billion at end-1977), amounted to slightly more than one half of the cumulated global reserve assets. This recording asymmetry requires an explanation.

The estimates of cumulated official reserve assets, in addition to including the direct placements of official assets just mentioned, also included official holdings of gold and SDRs as well as official reserve assets held in Euro-currency markets (mainly in the industrial countries), plus placements with international institutions and banks in countries that do not classify such investments as official reserve liabilities. These placements, which do not evoke counterpart reserve liability entries, probably amounted to about $135 billion at the end of 1977.[41] After adjusting the cumulated official reserve liabilities for this asymmetrical recording, the global asymmetry in net official reserve positions was virtually eliminated.[42]

The total value of official reserve holdings at the end of 1977 amounted to $318 billion;[43] whereas the data presented in this paper recorded official reserve assets cumulated over the years 1962–77 at $240 billion (Table B, Appendix). As the cumulations excluded about $62 billion that was outstanding at end-1961, these figures are quite comparable.[44] Nonindustrial country official reserve holdings, as reported in IFS, totaled $149 billion at end-1977, whereas the cumulations placed these official reserve assets at $130 billion.[45] According to IFS, the foreign exchange component of these reserves amounted to $133 billion. Reserve placements by the nonindustrial countries, therefore, obviously constituted a major offset to the net external lending positions of the industrial countries. Indeed, after adjusting for the ($94 billion) asymmetrical recording of official reserve assets and liabilities (assuming that it was all reflected in the industrial country records), the industrial countries would appear to have held about $75 billion in nonreserve-related net short-term claims on the other groups.[46] The

[40]Estimated from the data published in Table 16 of the IMF Annual Report for 1978.

[41]Gold (valued at SDR 35 per ounce) and holdings of SDRs amounted to $53 billion. The value of the other types of placements ($82 billion) was estimated from the data contained in Table 16 of the IMF Annual Report for 1978.

[42]Note that the estimates mentioned in the preceding footnote involved positions outstanding prior to commencement of the cumulations in 1962.

[43]See IFS, June 1979.

[44]Most of the remaining discrepancy presumably reflected the effects of valuation changes arising from movements of exchange rates and the expressing of the value of outstanding official reserves in terms of U.S. dollars.

[45]The small remaining discrepancy, once again, mainly reflected the value of outstanding official reserve holdings at the end of 1961—$13 billion—and the effect of valuation changes over the period 1962–77.

[46]It must be recalled, however, that this total included rollover loans by banks in the United States and the United Kingdom which were classified as long-term in the balance of payments records of the borrowing countries.

nonindustrial countries, however, only recorded net short-term (nonreserve-related) external liabilities to the industrial countries of about $10 billion; this asymmetry reflected the already mentioned propensity of debtors to record more of their external debt as long-term than was included in the counterpart entries of the creditors' records.[47]

The inferences that can be drawn from the estimated external positions of sectors cross-classified by country groups are particularly abstruse because of the complexity of the transactions that underlie these positions. For example, net external lending positions of banks in the industrial countries, at about $36 billion at the end of 1977 (unadjusted for recording asymmetries—see Table 1), comprised their positions vis-à-vis the three other country groups and against the government and private sectors within the industrial country group. Similar juxtapositions apply to the net external positions shown for these other two sectors.

Nevertheless, it was readily apparent that each of the sectors in the industrial countries held a dominant share of the claims estimated for the corresponding global sector. For example, industrial country governments accounted for about 60 percent of *all* governments' external assets;[48] banks in industrial countries accounted for about 95 percent of all banks' external assets; and the industrial countries' nonbank private sectors accounted for about 85 percent of global private nonbank external claims. Although this dominance was not quite so marked for external liabilities (the industrial countries' government, bank, and private nonbank sectors accounted for about 34 percent, 90 percent, and almost 70 percent, respectively, of global liabilities), it was apparent, with the possible exception of the government sector's external transactions, that most industrial country external asset and liability positions must have arisen through intragroup transactions.

IV. RELATIONSHIP BETWEEN CAPITAL FLOW CUMULATIONS AND
ALTERNATIVE SOURCES OF DATA

An objective of this project was to use the cumulations of balance of payments capital flows to draw inferences concerning the nature and size of certain deficiencies in alternative sources of information on countries' outstanding external debt positions. This was done with respect to two statistical collections: (i) with the data on long-term external debt of non-oil developing countries, as collected in the World Bank's DRS; and (ii) with the estimates of external positions of banks in major banking centers, as published by national authorities and the BIS.

1. *Capital Flow Cumulations and the Debtor Reporting System*

The relationship between the cumulated capital flow estimates for non-oil developing countries and the data collected in the DRS may be used (i) to imply

[47]See the preceding footnote.
[48]This proportion had fallen from 80 percent as recently as end-1975 and 90 percent at end-1973. The change reflected the rapid growth of external assets (apart from reserves) held by governments of major oil exporting countries.

the broad order of magnitude of the outstanding long-term indebtedness of those countries at the end of 1961; and (ii) to approximate the total value of their short-term external debt at the end of 1977. The procedure adopted to do this is discussed below, and the results are set out in Table 2.

TABLE 2

COMPARISON OF NON-OIL DEVELOPING COUNTRIES' CUMULATED BALANCE OF PAYMENTS CAPITAL FLOWS DATA WITH DRS ESTIMATES: END-1977

(In billions of U.S. dollars)

	Cumulated External Nonreserve Liabilities by Borrowing Sector	Adjusted[a] Cumulated External Nonreserve Liabilities by Borrowing Sector		Outstanding External Liabilities in DRS[b] by Lending Sector
Total long-term	140	190	Total	190
Of which borrowed by:			Of which:	
Governments	80	109	Private without guarantee	47[c]
Banks	14	19	Public and publicly	
Other	46	62	guaranteed	144
Total short-term	48	65	Of which lent by:	
Of which borrowed by:			Governments	55
Governments	5	7	International institutions	24
Banks	28	38	Banks	43
Other	15	20	Other private lenders	22
Total liabilities	188	255		
Of which borrowed by:				
Governments	85	115		
Banks	42	57		
Other	61	83		

[a]Adjusted by raising each estimate by 36 percent, the amount necessary to bring the long-term cumulation into agreement with the DRS figure. A major part of the discrepancy between the adjusted and unadjusted totals reflected outstandings at end-1961.

[b]DRS data adjusted for country coverage and to include IMF area desk economists' estimates.

[c]Based on an estimate ($47 billion) shown in World Debt Tables: External Public Debt of Developing Countries, Vol. 1, World Bank, October 20, 1978 (Table G), but adjusted to maintain country coverage more consistent with that used throughout this paper.

The Fund's 1978 *Annual Report* estimated the end-1977 value of the non-oil developing countries' oustanding public and publicly-guaranteed long-term external debt at about $144 billion.[49] This estimate excluded the value of private (unguaranteed) long-term external debt which, according to recent World Bank estimates,[50] amounted to about $47 billion at the end of 1977. Most of the difference between the DRS estimate (adjusted to include the $47 billion of

[49]IMF *Annual Report* 1978 (chart 8, page 27). The creditor source breakdown of the $144 billion is shown in Table 2.

[50]*World Bank Tables: External Public Debt of Developing Countries*, Vol. 1, World Bank, October 20, 1978 (Table G).

nonguaranteed debt) of the non-oil developing countries' long-term external debt outstanding at end-1977 ($190 billion) and the total of cumulated long-term capital inflows taken from balance of payments records for the years 1962 through 1977 ($140 billion), presumably reflected the value of these countries' outstanding long-term external debt at end-1961.[51]

For the non-oil developing countries as a group, the cumulation of all long-term external capital flows (apart from direct investment), as recorded in their balance of payments records for the years 1962 through 1977, yielded an estimate that accounted for about three quarters of their actual long-term external debt outstanding at the end of 1977. By assuming that the distribution of the outstanding external long-term debt of these countries at end-1961 would not differ greatly from that of the debt accumulated during the 1962–77 period (or, more loosely, that any divergence in the distribution of the outstanding long-term external debt at end-1961 would be virtually insignificant, given its relatively small size), the discrepancy between the cumulated total of long-term external debt and the comparable DRS estimates may, fairly safely, be prorated by borrowing sector. This type of calculation, in the aggregate, is shown under the heading "Adjusted Cumulated External Nonreserve Liabilities by Borrowing Sector" in Table 2.

By further assuming that the ratio of the non-oil developing countries' outstanding long-term external debt at end-1961 to their outstanding long-term external debt at end-1977 (about 26 percent) more or less approximated the comparable ratio for short-term debt outstanding at end-1961, it was possible to estimate their total outstanding short term-term external liabilities as of the end of 1977. Estimates based on this procedure suggested that the aggregate outstanding external debt of the non-oil developing countries at end-1977 was about $255 billion, of which about $190 billion was contracted as long-term (i.e. with an original maturity of one year or longer). The aggregate estimate of short-term debt outstanding at end-1961 was not particularly sensitive to the precise value of the assumed ratio. For example, if it were accepted that the "true" ratio fell in the range of 25–35 percent of the cumulated flows, the $65 billion shown as outstanding at end-1977 (Table 2) would need to be converted to a range estimate of $62–67 billion. These calculations therefore suggest that the DRS collection of data on long-term public and publicly guaranteed external debt captured well over one half of the *total* external debt of the non-oil developing countries, and that the current extension of the DRS to include major unguaranteed long-term external debt should raise its coverage to about three quarters.

It is also worth noting, that owing to (i) the relatively insignificant value of long-term external borrowing by the banking sectors of the non-oil developing countries, and (ii) the fact that those banking sectors dominate non-oil developing country short-term external borrowing, the public and publicly guaranteed collection of the DRS does provide quite high coverage of *total* borrowings by

[51]Broad confirmation of this is obtainable from World Bank estimates, which indicate that the value of non-oil developing country publicly guaranteed external long-term debt amounted to just under $20 billion at the end of 1961. (See *The External Debt of Developing Countries*, World Bank, May 1977, Annex Table 1.) Other factors, e.g. coverage discrepancies, valuation adjustments, etc. would contribute to the residual difference.

governments and private non-banks in the non-oil developing countries. Information on the external liabilities (and assets) of banks in non-oil developing countries is available from other sources.[52] Many analysts have long realized that, with the exception of a very few countries, relatively little long-term external borrowing by residents of non-oil developing countries has occurred without government guarantee (i.e. without the guarantee of the government of the debtor country). The inferences to be drawn here go further, however, and postulate that, with the exception of external borrowing by banks in the non-oil developing countries, the omission of short-term external debt from the DRS does not constitute a major difficulty.

Of considerable interest is the relatively high estimate, $38 billion at end-1977, of non-oil developing country bank external short-term debt. Two factors should be kept in mind in this regard: (i) that some of these short-term external liabilities might be used as a basis for extending long-term domestic loans; and (ii) that as the non-oil developing country group includes a growing number of so-called offshore banking centers, some of these liabilities reflect the receipt of funds destined for subsequent placement (possibly at long-term) with nonresidents, in the industrial countries or elsewhere.[53] Debt analysts also should bear in mind that a given amount of outstanding short-run external debt requires as much annual rollover refinancing as a much larger value of long-term external debt with maturities spread over a number of years. This point is significant for any country that encounters difficulty in maintaining its credit rating.

It was considered useful to prepare comparable estimates of the gross external indebtedness of the more developed group of primary producing countries using the procedures underlying the construction of Table 2. As for the non-oil developing country group, it was assumed that cumulated capital flows over the years 1962 through 1977 would account for about three quarters of the total outstanding long-term external debt of the more developed primary producers at the end of 1977. As of that date their long-term external debt would then have amounted to about $82 billion (Table 3). By applying a similar coverage adjustment to the cumulated short-term capital flows, this group's total external debt at end-1977 would have amounted to about $112 billion.[54]

These estimates for the more developed group are of particular interest because analysts have not previously been given comprehensive estimates of even the long-term external indebtedness of this group. DRS data are not available for all of these countries (the estimates of public and publicly guaranteed external debt, shown in Table 3, include IMF area desk economists' estimates for countries not covered in the DRS), and it generally has been assumed (though not quantified) that private unguaranteed external long-term debt would be relatively

[52]For example, *International Financial Statistics*, published by the IMF.

[53]Although the quantitative impact of this point is blunted somewhat because of the omission of most of the major offshore centers from the capital flow cumulations undertaken in this study. This omission reflects the absence of balance of payments records for most of these countries.

[54]Again the estimate of outstanding short-term debt is not very responsive to variations in the coverage adjustment. Extending the adjustment range to 30–40 percent results in a range estimate for the more developed primary producing countries' outstanding short-term external debt of between $29–31 billion at end-1977, not too different from the single figure shown in Table 3.

TABLE 3
COMPARISON OF MORE DEVELOPED PRIMARY PRODUCERS CUMULATED BALANCE OF
PAYMENTS CAPITAL FLOWS DATA WITH DRS ESTIMATES: END-1977

(In billions of U.S. dollars)

	Cumulated External Nonreserve Liabilities by Borrowing Sector	Adjusted[a] Cumulated External Nonreserve Liabilities by Borrowing Sector		Outstanding External Liabilities in DRS[b] by Lending Sector
Total long-term	60	82	Total	82
Of which borrowed by:			Of which:	
Governments	17	23	Private without guarantee	52[c]
Banks	4	6	Public and publicly	
Other	39	53	guaranteed	30
Total short-term	22	30	Of which lent by:	
Of which borrowed by:			Governments	6
Governments	1	1	International institutions	4
Banks	14	20	Banks	13
Other	7	9	Other private lenders	8
Total liabilities	82	112		
Of which borrowed by:				
Governments	18	24		
Banks	19	26		
Other	45	62		

[a]Adjusted by raising each estimate by about 36 percent, the amount assumed necessary to allow for outstandings at end-1961—see text.

[b]Based on World Bank estimates supplemented by some Fund area desk estimates of public and publicly guaranteed long-term external debt of countries not reporting to DRS.

[c]Obtained as a residual after assuming total long-term external debt can be derived from the adjusted cumulation.

more important in these countries than in the non-oil developing countries. The implicit estimate of unguaranteed long-term debt ($52 billion, derived as the difference between the coverage-adjusted cumulations of long-term external debt and the DRS based estimates of public and publicly guaranteed debt) bears out this supposition: private (unguaranteed) long-term external debt accounted for almost two thirds of the total estimated long-term debt of the more developed primary producing countries, whereas for the non-oil developing countries it only accounted for about one quarter of their total external debt.

2. Capital Flow Cumulations and National Banking Data

Another objective of this study was to relate the cumulated external capital flows to and from banks, as recorded in the balance of payments records, with the BIS data. A comparison of the information concerning banks' external claims as

obtained from both sources is provided in Table 4. In line 7 of that table, it is disclosed that the cumulated external claims of banks operating in the 11 major countries reporting to the BIS were almost identical in value to the BIS reported claims as of end-1977, despite the omission from the cumulated series of all outstanding claims as of end-1961.[55] For *all* banks reporting to the BIS, the share of external claims covered by the balance of payments cumulations (line 9) falls to about 90 percent, primarily because balance of payments records were not

TABLE 4

COMPARISON OF EXTERNAL CLAIMS OF BANKS IN MAJOR BANKING COUNTRIES AS REPORTED BY DIFFERENT SOURCES, END-1977

(In billions of U.S. dollars)

	Total External Assets			Short-Term External Assets				Long-Term External Assets			
	Cum.[a]	BD[b]	Cov.[c]	Cum.[a]	BD[b]	Cov.[c]	Adj.[d]	Cum.[a]	BD[b]	Cov.[c]	Adj.[d]
1. Banks in the United Kingdom	192	161	1.19	183	...	...	153	9	...	...	8
2. Banks in seven other European countries reporting to BIS[e]	237	232	1.02	186	...	...	182	51	...	...	50
3. Banks in Canada	8	18	0.46	8	...	...	18	—	...	...	—
4. Banks in Japan	18	22	0.81	16	...	...	20	1	...	...	2
5. Banks in countries above (1+2+3+4)	455	434	1.05	393	...	...	375	62	...	...	59
6. Banks in the United States	84	93	0.91	74	80	0.92	80	10	13	0.81	13
7. Banks in countries above (5+6)	539	526	1.03	467	...	...	455	72	...	...	71
8. Banks in offshore banking centers[f]	11	91	0.12	11	...	...	81[g]	—	...	...	10[g]
9. Total (7+8)	550	617	0.89	478	...	...	536[g]	72	...	...	81[g]

[a]Cumulated capital flows, 1962–77.

[b]BIS *Forty-Eighth Annual Report*, Basle, June 12, 1978, p. 100 and *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, Washington, D.C., No. 3, Vol. 64, March 1978, Tables 3.15, 3.18, 3.19, and 3.21.

[c]Ratio of cumulated data relative to comparable banking source data.

[d]Adjusted for coverage on the basis of the total external positions.

[e]Viz. Belgium–Luxembourg, France, Germany, Italy, Netherlands, Sweden, and Switzerland.

[f]The countries included here under the cumulations are much fewer (viz. only Singapore and Panama) than those included in the banking data (i.e. also Bahamas, Cayman Islands, and Hong Kong), although the banking data are restricted to only the U.S. bank branch operations in the countries covered.

[g]Estimated by assuming the long-term external claims of banks in the offshore centers would comprise the same share of their total external claims as is the case for the banks in the other countries included in the table (see the text). In addition, it is estimated that this figure might be understated by perhaps $40 billion due to the asymmetrical reporting of capital flows by maturity.

[55]In the aggregate, the cumulations slightly exceeded the BIS figures despite the omission of pre-1962 positions and the fact that coverage was less than complete for the banks in particular countries, e.g. Canada, Japan, and the United States. More work needs to be done on the reasons why limited cumulations of balance of payments data can exceed the BIS stock estimates, but it seems likely that the effects of exchange rate changes on outstanding external positions are primarily responsible.

available—at least for a long run of years—for most of the important offshore banking centers.[56]

The data in Table 4 further suggest that only about $70 billion of the approximately $530 billion in outstanding external claims of banks in the G-10 countries, plus Switzerland, at the end of 1977 was classified as long-term in the balance of payments compilations. Application of this ratio to the aggregate external claims of all banks reporting to the BIS (i.e. including U.S. bank branches in the offshore centers) would raise the estimated value of the long-term component to a little over $80 billion out of the $620 billion aggregate. This procedure might well involve an understatement of the extent of long-term external bank lending, as the offshore centers possibly extended a higher than average share of long-term external loans. Of even greater significance for the potential understatement of the value of long-term external loans extended by banks reporting to the BIS is the fact that the long-term/short-term distinction was not applied consistently by compilers of external capital and debt data. As indicated earlier, a particular difficulty arises because the compilers of U.S. and U.K. balance of payments records classify as short term those bank loans advanced in the form of rollover loans, whereas compilers in the recipient countries generally regard these advances as being long term. This problem presumably accounted for a major share of the $80 billion global asymmetry between debtor and creditor country records of long-term asset accumulations and the counterpart asymmetries in the recorded short-term capital flows.

The practical problem, of course, is to quantify the value of this asymmetry in the treatment of external capital flows from these banks. One approach would be to assume that the maturity composition of the external claims of banks, in countries where balance of payments compilers treat rollover loans as long term, approximates that of banks in the United Kingdom and the United States (including branches of U.S. banks in offshore areas). From the data in Table 4 (line 5 less line 1), indications are that $53 billion of the total of $263 billion (i.e. about 20 percent) of external claims held by banks in countries where the statisticians had classified rollover loans as long term in their balance of payments data were recorded as having an original maturity of one year or more. By applying that ratio to the total of outstanding external claims by banks reporting to the BIS, the suggested outcome is that their long-term claims might have approached $120 billion at end-1977, implying that about half (perhaps $40 billion) of the aforementioned global asymmetry between the recording of long-term external borrowing and lending might be traced to this cause.[57]

Further insights on the maturity structure of external claims by banks may be gleaned from surveys recently initiated by the BIS.[58] Unfortunately for present

[56]See also footnote f to Table 4.

[57]The breakdown of this adjustment, relative to the data in Table 4, would attribute an additional $5 billion to external long-term claims to banks in the United States, $24 billion to banks in the United Kingdom, and $8 billion to banks in the offshore centers. Short-term claims would be reduced commensurately.

[58]The BIS first introduced these surveys as of end-December 1976, although definitional changes in each succeeding survey have hindered their usefulness. Details of the end-1976 and end-1977 surveys were provided in various issues of the BIS Press Review (see Press Preview No. 144, July 29, 1978 for the end-1977 results). A mid-1978 survey was published as a mimeographed document entitled Maturity Distribution of International Bank Lending, January 1979.

purposes, the BIS adopted a months-to-maturity, rather than an original maturity, criterion to classify securities; thus the data in the surveys are inconsistent with the balance of payments data. According to the BIS survey for end-1977, almost one half of the $217 billion in external claims that the reporting banks held against residents of countries outside the reporting area had one year or longer left to maturity.[59]

An important factor to be kept in mind is that the BIS estimates of long-term claims, being based on months-to-maturity, exclude a proportion of external claims for which the original maturity would have exceeded one year. A broad indication of the importance of this factor may be obtained by assuming that the average length of long-term external loans extended by banks in the early 1970s was six–seven years.[60] Then, if new external lending by banks had been stable for a six to seven year period, the BIS classification would exclude about 15 percent of long-term claims (defined on the original maturity concept) from its long-term category based on months-to-maturity. Of course, to the extent that external bank lending was rising over the six or seven years, the true impact of this factor would be somewhat below 15 percent.

However, even after allowing for this definition difference, the gap between the two estimates could well remain at 15–20 percentage points. Thus a second explanatory factor is important. The BIS surveys exclude the external claims of the reporting banks on residents of the reporting area; these claims are heavily dominated by claims on non-resident banks within the reporting area. As these interbank claims are predominantly short term in nature, their exclusion from the BIS surveys overstates the apparent share of long-term external assets in the *total* external assets held by these banks. This observation calls for a comparison of the BIS survey findings about the maturity distribution of reporting-area-bank claims on residents outside the reporting area with comparable estimates of long-term and short-term external liabilities of banks to residents of countries outside the BIS reporting area. Using the estimates in Tables 2 and 3 this can be done partially for two subgroupings of countries.[61]

DRS estimates indicate that banks had provided about $43 billion in public and publicly guaranteed long-term external loans to non-oil developing countries as at end-1977. The BIS survey, on the other hand, suggests that the outstanding value of credit extended to these countries by banks in the reporting area (that, at end-1977, still had more than one year to maturity) was about $50 billion (Table 5). That figure would be consistent with the DRS estimates if, after crudely adjusting for the definitional differences, about half of the nonpublicly guaranteed

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[59]Relative to the figures in Table 4, the reporting area for the BIS survey was extended to include banks in Austria, Denmark, and Ireland, as well as all foreign affiliates of U.S. banks not included in Table 4, plus estimates for the positions of affiliates of banks in other reporting countries which are operating in offshore centers. The surveys, however, do not collect information on the maturity distribution of external assets of the reporting banks vis-à-vis residents of the reporting areas.

[60]For example, *Financial Market Trends*, OECD, Paris, June 1977 (p. 14), indicates that the average final maturity of Euro-credits arranged in 1976 was about six years.

[61]The approach, of course, remains less than optimal as, for example, the DRS estimates relate to public and publicly guaranteed long-term external liabilities with *all* nonresident banks, not just those within the BIS reporting area. That problem, however, should be much less important, quantitatively, than the different definitions employed to measure short-term maturities.

TABLE 5

APPROXIMATE RECONCILIATION OF BANK LENDING IN BIS DATA WITH CUMULATED
BALANCE OF PAYMENTS FLOWS, END-1977

(In billions of U.S. dollars)

	Claims on all Countries[a]	Claims on Non-Oil LDCs other than Offshore Centers[b]	Claims on More Developed Primary Producers[c]	Claims on Other Countries (Mainly Industrial Countries and Offshore Centers)[d]
External claims of all banks in the reporting area				
Total claims	617[a]	92[e]	47[e]	478
Of which:				
Long-term (to maturity)[e]	...	50	23	...
Short-term (to maturity)[e]	...	42	24	...
or, of which:				
Long-term (original maturity)	120	57	26	37
Short-term (original maturity)	497	35	21	441
Memo items:				
Approximate share of long-term claims in total claims (in percent)				
Years to maturity	19	62	64	8
Original maturity	...	54	49	...

[a]Data taken from Table 4.
[b]Estimates based on Table 3 and assumptions provided in the text.
[c]Estimates based on Table 4 and assumptions provided in the text.
[d]Obtained as a residual. Also includes smaller amount for major oil exporters and common countries.
[e]Taken from the BIS survey.

external debt of the non-oil developing countries was owed to banks—a not implausible possibility.[62] On that basis, the ratio of long-term debt to the total debt of the non-oil developing countries to banks in the reporting area would be almost two thirds at end-1977.

Similar calculations may be made for the external debt to banks of countries in the more developed group. According to the BIS survey, the reporting banks held claims on residents of these countries of $47 billion at end-1977, of which $23 billion had more than one year to maturity (or, after adjustment, perhaps $26 billion had original maturities that exceeded one year). This result is broadly consistent with debtors' records if it were assumed that about one half of the private (unguaranteed) long-term external debt of these countries was owed to banks.

These calculations suggested that almost two thirds of the external debt to banks incurred by these two groups of countries was long term on an original

[62]This conclusion is based on the premise that the BIS survey estimate, that $50 billion of the $92 billion of outstanding credits to non-oil developing countries at end-1977 still had over one year to maturity, would be equivalent to almost $60 billion on an original maturity basis.

maturities basis, or that, as of the end of 1977, about $80 billion of the total ($140 billion) outstanding external credit granted by banks in the reporting area to non-oil primary producing countries at the end of 1977 probably had an original maturity of one year or more. In short, the share of long term total claims held by these banks on non-oil primary producing countries approaches two thirds, whether calculated from the BIS survey or from the cumulated balance of payments flows. By combining these broad estimates with the data in Table 4, the residuals imply that reporting-area-bank external lending to residents of the remaining countries (mainly of the industrial countries and offshore banking centers, but also residents of the major oil exporting countries) must have totaled about $480 billion at end-1977,[63] and (given the crude adjustment for the asymmetrical recording of the maturity classification) that only about $40 billion of that total (i.e. 8 percent) would have been undertaken with original maturities in excess of one year. Inferential evidence in support of this may be taken from Table 1, which shows industrial country banks' short-term external assets and liabilities at end-1977 to have been in the vicinity of $475–500 billion; most of those positions surely represented interbank transactions. In addition, the BIS survey excludes quite large positions, many of which would be of a short-term nature, between reporting area banks and banks in offshore areas.

A comparison of cumulated bank sector external liabilities (taken from balance of payments records) was made with comparable BIS reported data (Table 6). The cumulations again provided a relatively high coverage (about 90 percent) of the aggregate external liabilities of banks in the 11 major countries reporting to the BIS. This proportion was not quite as high as that for similar bank claims (shown in Table 4), particularly because of the markedly lower coverage of external liabilities of banks in the United States. This outcome mainly reflected the treatment of official reserve liabilities in the U.S. balance of payments, which included $16.7 billion of official deposits and other short-term liabilities (including negotiable certificates of deposit) placed with banks in the United States as at the end of 1977.[64] Excluding those liabilities from the U.S. bank liabilities recorded by the BIS (and shown in Table 6) raises the coverage of the cumulated estimates to about 84 percent, and therefore more closely in line with the coverage implied for banks in the other countries.

Virtually all of the external liabilities of banks in the BIS reporting area were of short-term maturity; at end-1977, only about $23 billion of the almost $570 billion aggregate outstanding external liabilities of banks in the 11 main reporting countries reflected original maturities of one year or more. Unfortunately, owing to the absence of balance of payments reports, this observation excluded the positions of banks in the major offshore centers. However, only a very small portion of the previously mentioned $120 billion of estimated outstanding external long-term claims of banks reporting to the BIS could have been advanced to banks in the industrial countries.

[63]By regrouping the individual country estimates published in the *BIS Annual Report 1978* (before inclusion of the estimates for the reporting banks in Austria, Denmark, and Ireland) into Fund classifications, the $480 billion comprises about $345 billion in claims on industrial countries, $100 billion in claims on offshore centers, and $35 billion in claims on major oil exporters.

[64]See *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, Washington, D.C., No. 3, Vol. 54, March 1978 (Table 3.15).

TABLE 6

COMPARISON OF EXTERNAL LIABILITIES OF BANKS IN MAJOR BANKING COUNTRIES AS REPORTED BY DIFFERENT SOURCES, END-1977

(In billions of U.S. dollars)

	Total External Liabilities			Short-Term External Liabilities				Long-Term External Liabilities			
	Cum.ᵃ	BDᵇ	Cov.ᶜ	Cum.ᵃ	BDᵇ	Cov.ᶜ	Adj.ᵈ	Cum.ᵃ	BDᵇ	Cov.ᶜ	Adj.ᵈ
1. Banks in the United Kingdom	196	182	1.08	196	...	...	182	—	...	...	3
2. Banks in seven other European countries reporting to BISᵉ	221	258	0.82	203	...	...	237	19	...	...	20
3. Banks in Canada	10	19	0.50	10	...	...	19	—	...	...	—
4. Banks in Japan	25	29	0.89	25	...	...	29	—	...	...	—
5. Banks in countries above (1+2+3+4)	453	488	0.93	434	...	...	468	19	...	...	20
6. Banks in the United States	51	78	0.65	49	75	0.66	75	1	3	0.53	3
7. Banks in countries above (5+6)	503	566	0.89	483	...	...	543	20	...	...	23
8. Banks in offshore banking centersᶠ	12	92	0.14	11	...	...	84	1	...	...	8
9. Total (7+8)	516	658	0.78	494	...	...	628	21	...	...	30

[a]Cumulated capital flows, 1962–77.

[b]BIS *Forty-Eighth Annual Report*, Basle, June 12, 1978, p. 100 and *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, Washington, D.C., No. 3, Vol. 64, March 1978, Tables 3.15, 3.18, 3.19, and 3.21.

[c]Ratio of cumulated data relative to comparable banking source data.

[d]Adjusted for coverage on the basis of the total external positions.

[e]Viz. Belgium–Luxembourg, France, Germany, Italy, Netherlands, Sweden, and Switzerland.

[f]The countries included here under the cumulations are much fewer (viz. only Singapore and Panama) than those included in the banking data (i.e. also Bahamas, Cayman Islands, and Hong Kong), although the banking data are restricted to only the U.S. bank branch operations in the countries covered.

V. CONCLUSIONS AND SCOPE FOR ADDITIONAL WORK

1. Conclusions

The compilation of external balance sheets for individual countries by aggregating capital flows as recorded in their balance of payments records over a lengthy period of time generally has been a successful venture. First and foremost, the exercise yielded interesting information on the nature of external assets and liabilities for all of the countries concerned. For most of the countries, the results are on a comparable and fairly comprehensive basis and extend beyond anything of this kind previously available.

The most interesting aspect of the results are:

* The marked tendency for balance of payments records to report more direct investment assets than direct investment liabilities.
* The apparent propensity of debtors to regard a larger share of their aggregate external debt to be of long-term maturity than do the creditors (in large part this was found to reflect inconsistencies in the recording of rollover loans

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extended by banks in the United States and the United Kingdom in the balance of payments records of the debtor and creditor countries).

* The importance of intra-industrial countries' capital flows in a global context; those countries apparently hold about four fifths of global external assets and about three quarters of the counterpart liabilities.
* The asymmetrical recording of reserve asset and reserve liability positions.
* The overwhelming dominance of banks in the industrial countries insofar as total external asset and liability positions are concerned, but the markedly lesser importance, within these aggregates, of long-term external positions taken by the banks.
* The relative importance of long-term borrowing for both the government and nonbank private sectors in each of the three groups.
* The demonstration of the fairly complete DRS coverage of non-oil developing country long-term external debt positions, and the suggestion that the omitted short-term external positions themselves are not of major concern (especially as the external positions of non-oil developing country banks may be obtained from banking data sources).
* The implied estimates of external debt positions for the countries and groups not available in the DRS.
* The study's confirmation of the predominance of short-term inter-bank external positions in the BIS data and national banking data, despite the demonstration that long-term external bank lending to nonindustrial countries accounted for almost two thirds of the total external indebtedness of those countries to banks, whether measured from the debtor or creditor records.

On the negative side of the ledger, however, the widespread existence of asymmetrical reporting in the balance of payments records resulted in considerable difficulties in interpreting some of the estimates provided by the exercise. Attempts to attribute causes of these asymmetries in order to discuss the results in a more meaningful manner must necessarily be broad-brush and simplistic in application. However, it is worth noting that the cumulation of capital flows over many years does greatly facilitate a discussion of global asymmetries in the balance of payments records because it essentially "washes out" most of the asymmetries that arise from timing discrepancies in the recording of the flows.

Another potential problem, only touched briefly in this paper, concerns the effects on the outstanding values of external financial positions which arise from changes in exchange rates. For example, whereas the rise in the outstanding external claims of banks in the United Kingdom, according to BIS records, was only $20 billion during 1976 (from $120 billion to $140 billion), balance of payments data, which excluded the effects of exchange rate changes on the previously outstanding stocks, recorded an increase of $43 billion.[65] The problem

[65]These balance of payments flows were actually estimated by the author subsequent to the publication of *United Kingdom Balance of Payments, 1964–74*, C.S.O. (Table 24, p. 27). The U.K. compilers adopted the practice of including only the net foreign exchange positions of banks in the United Kingdom in the official balance of payments presentations. These net positions were grossed by the author on the basis of U.K. official estimates of the currency composition of the external foreign currency claims and liabilities of these banks. See also *United Kingdom Balance of Payments, 1967–77* (Table 12.4, p. 79).

of valuation adjustments caused by exchange rate changes has become more important since the occurrence of more flexible exchange rates.

The main deficiency in the approach of this study, however, was foreseen from the outset, viz. the omission of outstanding external debt and liability positions as of end-1961, the date from which the balance of payments cumulations commenced. Nevertheless, various pieces of evidence gathered and presented throughout highly suggest that the omitted positions generally were within the range of about one quarter to one third of the truncated cumulations. It would seem, therefore, that the application of coverage adjustments within that order of magnitude would be unlikely to distort seriously the true levels of external assets and liabilities outstanding at the end of 1961.

2. *Additional Work*

Despite the sentiments just expressed, the estimates of outstanding external debt positions probably would be more acceptable if they incorporated some specific attempts to include estimates of end-1961 positions.[66] This might well prove an area for fruitful development. For example, considerable amounts of country-by-country data already exist on certain external asset/liability positions as of end-1961; *IFS* contains information on such variables as reserve asset levels and various banking sector external assets and liabilities. The DRS probably could be used to compile estimates of the long-term external debt positions of non-oil developing countries as of end-1961, and U.S. and U.K. banking data could prove useful for providing other direct estimates.

For the few countries that do provide external balance sheets, it might be possible to include official end-1961 estimates and, to the extent that such sources provide partner country information (e.g. U.S. direct investment assets by country of investment), further gaps could conceivably be filled. Indeed, having given due consideration to the way the various sources of external debt data hang together, plus a liberal usage of assumptions to bridge the problem of lack of data on certain diaggregations, it appears quite feasible to present reasonably plausible estimates of end-1961 external debt positions on a country-by-country basis. As mentioned earlier, the whole subject of the treatment of direct investment flows warrants considerably more attention than it was given here.

Another area for further research calls for more care in establishing the relationships between the various sources of data concerning external debt positions, particularly to ascertain if some of the more currently available partial data may be used to project broader based developments.[67] Progress in this direction requires establishing interconnections between the various sources at a much more disaggregated level than contemplated in the present study.

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[66]Indeed, given the nature of the problem, benchmark estimates for any year-end subsequent to 1961 would be sufficient. Furthermore, it would not matter if the benchmark data for different countries did not relate to the same year.

[67]This type of research, of course, presumably also would be of great assistance in terms of constructing comprehensive end-1961 external debt estimates.

TABLE A

SUMMARY OF EXTERNAL BALANCE SHEETS AS OF END-1977, BY COUNTRY, OBTAINED
BY CUMULATING CAPITAL FLOWS OVER THE YEARS 1962 THROUGH 1977

(In billions of U.S. dollars)

	External Assets				External Liabilities			
	Total	Direct Invest-ment	Other Long-Term	Other Short-Term[1]	Total	Direct Invest-ment	Other Long-Term	Other Short-Term[1]
World total	1,382.5	214.3	317.0	851.2	1,400.0	154.3	458.6	787.0
Industrial countries	1,140.7	210.4	269.7	660.5	1,051.1	107.2	241.6	702.3
Austria	11.9	0.3	4.3	7.3	14.5	1.0	6.1	7.4
Belgium	77.4	2.2	6.6	68.6	70.9	7.3	0.9	62.7
Canada	25.6	5.6	6.3	13.7	54.4	8.6	32.9	12.9
Denmark	6.0	0.4	1.4	4.3	13.7	1.3	7.6	4.8
France	109.0	7.8	29.8	71.4	104.4	10.4	21.9	72.0
Germany	123.3	17.0	36.1	70.2	84.6	17.2	23.3	44.0
Italy	52.3	3.8	5.2	43.3	64.3	8.8	13.1	42.3
Japan	75.5	11.6	26.3	37.6	48.9	1.5	13.7	33.7
Netherlands	50.4	10.3	15.4	24.8	39.7	6.8	9.9	23.1
Norway	6.0	0.8	1.3	4.0	18.8	2.3	13.5	3.0
Sweden	12.8	3.9	3.4	5.4	16.0	1.3	12.0	2.6
Switzerland	51.4	—	31.5	19.9	10.4	—	—	10.4
United Kingdom	253.2	28.6	10.5	205.0	258.3	15.4	36.0	206.9
United States[2]	286.0	118.0	82.6	85.3	252.2	25.2	50.7	176.4
Major oil exporters	127.6	0.1	35.0	92.5	14.3	−6.8	17.8	3.3
Venezuela	15.1	—	1.9	13.1	2.5	−1.2	2.5	1.3
Iran	20.7	—	6.3	14.5	−3.8	−5.8	1.4	0.7
Iraq	10.6	—	0.8	9.8	−0.8	−1.4	0.6	—
Saudi Arabia	65.1	—	23.4	41.8	−1.8	−2.8	−0.1	1.1
Indonesia	2.3	—	—	2.3	7.5	1.5	8.0	−2.0
Algeria	2.1	0.1	0.3	1.8	7.3	1.0	6.6	−0.2
Libya	7.0	—	2.2	4.9	−0.5	−1.5	−1.2	2.1
Nigeria	4.7	—	0.2	4.6	3.9	3.6	—	0.3
More developed primary producers:	36.1	3.2	6.5	26.3	108.0	20.0	60.1	27.9
Finland	3.5	0.4	0.6	2.5	9.3	0.3	5.1	3.8
Greece	1.2	—	—	1.2	9.9	0.4	5.9	3.6
Iceland	0.2	—	—	0.2	0.7	0.1	0.5	0.1
Ireland	6.4	—	1.0	5.3	8.3	1.0	2.8	4.5
Malta	0.7	—	0.1	0.6	0.4	0.2	0.2	—
Portugal	1.1	0.1	0.2	0.8	4.1	0.6	0.5	3.0
Spain	9.2	0.6	1.9	6.7	23.6	3.3	14.7	5.7
Turkey	2.4	—	0.3	2.0	10.6	0.9	8.6	1.2
Yugoslavia	4.9	—	0.8	4.1	9.8	—	8.1	1.8
Australia	4.4	1.6	1.1	1.8	17.0	10.0	5.6	1.6
New Zealand	−0.3	—	−0.2	−0.2	3.1	0.9	1.8	0.4
South Africa	2.5	0.5	0.6	1.3	11.1	2.4	6.3	2.4
Non-oil developing countries	78.1	0.7	5.7	71.8	226.3	33.8	139.1	53.5

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	External Assets				External Labilities			
	Total	Direct Invest-ment	Other Long-Term	Other Short-Term[1]	Total	Direct Invest-ment	Other Long-Term	Other Short-Term[1]
In Western								
Hemisphere	37.9	0.7	3.0	34.3	120.8	22.2	70.8	27.8
Argentina	3.4	—	0.5	2.9	2.7	0.3	2.0	0.3
Bolivia	0.5	—	0.1	0.4	1.4	0.1	1.3	—
Brazil	9.9	0.5	1.3	8.1	43.6	10.1	27.6	5.9
Chile	0.7	—	0.1	0.6	4.1	−0.5	3.3	1.4
Columbia	2.1	0.1	0.1	2.0	3.4	0.6	2.3	0.5
Costa Rica	0.4	—	—	0.4	1.8	0.4	0.9	0.5
Dominican Republic	0.2	—	—	0.2	1.7	0.6	0.8	0.2
Ecuador	0.8	—	—	0.7	2.0	0.7	1.0	0.3
El Salvador	0.4	—	—	0.3	0.8	0.2	0.4	0.3
Guatemala	0.7	—	—	0.7	1.3	0.6	0.5	0.3
Haiti	0.1	—	—	—	0.2	—	0.1	—
Honduras	0.3	—	—	0.2	1.0	0.1	0.6	0.2
Mexico	4.4	—	0.6	3.7	29.2	5.2	19.8	4.2
Nicaragua	0.3	—	—	0.2	1.3	0.2	0.9	0.3
Panama	10.1	—	—	10.2	12.1	0.3	2.1	9.7
Paraguay	0.4	0.1	0.1	0.4	1.0	0.1	0.7	0.1
Peru	0.9	—	—	0.8	7.1	0.6	4.6	1.9
Uruguay	—	—	—	−0.1	1.0	—	0.5	0.6
Barbados	0.1	—	—	—	0.3	0.1	0.1	0.1
Guyana	—	—	—	—	0.4	—	0.4	0.1
Jamaca	0.1	—	0.1	—	2.1	1.0	0.9	0.3
Netherlands Antilles	0.6	—	—	0.6	0.9	0.2	—	0.6
Suriname	—	—	—	0.1	0.1	0.1	—	—
Trinidad & Tobago	1.6	—	—	1.6	1.2	1.2	0.1	−0.1
In Middle East	6.7	0.1	0.5	6.2	21.7	1.5	14.5	5.6
Cyprus	0.3	—	—	0.3	0.6	0.2	0.2	0.2
Israel	4.4	0.1	0.3	4.0	13.1	1.1	7.9	4.1
Jordan	0.7	—	—	0.7	0.6	—	0.4	0.1
Yemen, P.D. Rep.	−0.1	—	—	−0.1	0.3	—	0.3	—
Syria	0.7	—	—	0.6	1.3	—	0.8	0.5
Egypt	0.8	—	0.1	0.6	5.9	0.1	4.9	0.7
In Asia	28.3	−0.1	1.3	27.1	61.8	7.0	39.1	15.8
Bangladesh	0.1	—	—	0.1	1.9	—	1.7	0.2
Burma	—	—	—	—	0.4	—	0.3	0.1
Kampuchea, Dem.	−0.1	—	—	−0.1	0.1	—	—	—
Sri Lanka	0.3	—	—	0.3	1.0	—	0.7	0.3
China, Rep. of	6.2	—	0.8	5.4	5.8	0.6	2.6	2.6
India	5.5	—	0.1	5.4	11.6	−0.7	11.9	0.5
Korea	5.5	0.1	0.3	5.1	13.5	0.7	8.5	4.3
Malaysia	2.4	—	—	2.4	3.4	1.8	1.3	0.5
Pakistan	0.2	—	—	0.2	7.3	0.2	6.4	0.7
Philippines	2.0	−0.2	—	2.1	6.3	0.2	3.2	2.8
Singapore	4.4	—	—	4.4	5.7	3.1	0.8	1.8
Thailand	1.7	—	0.1	1.5	4.4	1.0	1.6	1.9
Fiji	0.1	—	—	0.1	0.3	0.1	0.2	—
Western Samoa	—	—	—	—	—	—	0.1	—

	External Assets				External Liabilities			
	Total	Direct Invest-ment	Other Long-Term	Other Short-Term[1]	Total	Direct Invest-ment	Other Long-Term	Other Short-Term[1]
In Africa	<u>5.2</u>	<u>0.1</u>	<u>0.9</u>	<u>4.3</u>	<u>22.0</u>	<u>3.1</u>	<u>14.6</u>	<u>4.4</u>
Zaire	0.8	—	0.6	0.3	3.4	0.5	1.8	1.4
Benin	—	—	—	—	0.3	—	0.2	0.1
Ethiopia	0.3	—	—	0.2	0.6	0.2	0.4	—
Gabon	0.8	0.1	0.1	0.7	0.5	0.4	0.2	−0.1
Ghana	—	—	—	—	1.0	0.4	0.4	0.2
Ivory Coast	0.7	—	0.1	0.6	2.3	0.4	1.5	0.4
Kenya	0.4	—	—	0.4	1.4	0.2	1.1	0.2
Malawi	0.1	—	—	0.1	0.7	0.1	0.4	0.1
Mali Rep.	0.1	—	—	0.1	0.5	—	0.3	0.2
Mauritius	0.1	—	—	0.2	0.1	—	—	—
Morocco	0.4	—	—	0.3	4.1	0.1	3.7	0.3
Rwanda	0.1	—	—	0.2	0.1	—	0.1	—
Sierra Leone	—	—	—	—	0.4	0.1	0.2	—
Somalia	0.2	—	—	0.1	0.4	—	0.3	—
Sudan	—	—	—	—	1.4	—	0.6	0.8
Tanzania	0.3	—	—	0.3	1.1	—	1.1	—
Togo	0.1	—	—	0.1	0.2	—	0.2	—
Tunisia	0.5	—	—	0.5	2.4	0.6	1.7	0.2
Uganda	−0.1	—	—	—	0.2	—	0.2	−0.1
Zambia	0.4	—	0.2	0.3	0.8	−0.2	0.4	0.6

[1]Including all reserve related assets or liabilities.

[2]It is of some interest that the U.S. Department of Commerce (Release dated October 28, 1977) estimated the U.S. investment position as of end-1975 to comprise external assets of $295.7 billion, and external liabilities of $221.0 billion. These estimates again suggest that the end-1961 positions account for between one quarter and one third of the "true" outstandings at end-1975.

TABLE B

(Based on Cumulation of Balance of Payments Flows, for 98 countries, since 1962)
(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	610.9	613.9	945.9	947.2	1,382.5	1,400.0
Direct investment	117.5	91.2	164.4	124.5	214.3	154.3
External debt positions	493.3	522.7	781.4	822.8	1,168.3	1,245.6
Of which:						
Long-term	132.5	185.7	204.6	289.6	317.0	458.6
Short-term[2]	360.8	336.7	576.8	533.0	851.2	787.0
or, of which:						
Reserves	105.4	58.2	157.0	87.1	240.3	145.7
Non-reserves	387.9	464.5	624.5	735.7	928.0	1,099.9
Of which:						
Government	44.5	57.6	70.2	100.3	110.8	175.6
Long-term	42.8	55.4	68.1	91.0	107.9	165.0
Short-term	1.7	2.2	2.0	9.2	2.9	10.5
Banks	243.1	248.9	399.0	393.3	581.8	577.8
Long-term	24.2	11.0	46.0	21.0	75.2	41.0
Short-term	218.9	238.0	353.1	371.3	506.6	536.8
Other private	100.3	158.0	155.3	243.1	235.3	346.5
Long-term	65.6	119.5	90.6	177.6	134.0	252.4
Short-term	34.7	38.4	64.7	65.4	101.3	94.0

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.

[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.

TABLE C

INDUSTRIAL COUNTRIES: EXTERNAL BALANCE SHEETS, END-1973, END-1975, AND END-1977[1]

(Based on Cumulation of Balance of Payments Flows, for 14 Countries, since 1962)
(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	537.3	468.9	793.9	708.6	1,140.7	1,051.1
Direct investment	115.7	60.5	161.5	85.8	210.4	107.2
External debt positions	421.6	408.3	632.4	622.8	930.3	943.9
Of which:						
Long-term	126.4	98.1	183.3	147.6	269.7	241.6
Short-term[2]	295.2	310.2	449.1	475.2	660.5	702.3
or, of which:						
Reserves	56.1	57.5	64.5	81.1	110.1	134.3
Non-reserves	365.5	350.9	567.9	541.7	820.2	809.6
Of which:						
Government	40.0	8.6	51.4	25.5	68.3	60.7
Long-term	39.2	8.3	51.2	21.6	67.9	56.6
Short-term	0.8	0.2	0.2	3.8	0.4	4.1
Banks	233.7	228.9	380.1	351.2	550.2	514.4
Long-term	24.1	5.3	45.9	9.3	75.2	21.8
Short-term	209.5	223.6	334.1	341.9	475.0	492.6
Other private	91.8	113.5	136.4	165.0	201.7	234.5
Long-term	63.0	84.5	86.2	116.7	126.7	163.1
Short-term	28.8	28.9	50.2	48.3	75.0	71.4

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.
[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.

TABLE D

MAJOR OIL EXPORTING COUNTRIES: EXTERNAL BALANCE SHEETS, END-1973, END-1975, AND END-1977[1]

(Based on Cumulation of Balance of Payments Flows, for 8 Countries, since 1962)
(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	12.7	13.9	78.7	9.9	127.6	14.3
Direct investment	0.2	2.0	0.1	−3.2	0.1	−6.8
External debt positions	12.7	11.9	78.7	13.1	127.5	21.1
Of which:						
Long-term	0.9	9.3	13.1	11.0	35.0	17.8
Short-term[2]	11.7	2.6	65.6	2.1	92.5	3.3
or, of which:						
Reserves	11.3	0.1	58.9	—	75.4	—
Non-reserves	1.4	11.8	19.8	13.1	52.1	21.1
Of which:						
Government	0.5	7.5	12.6	8.5	34.3	12.3
Long-term	0.5	7.2	12.4	8.0	34.1	11.6
Short-term	0.1	0.3	0.2	0.5	0.2	0.7
Banks	0.3	1.0	1.5	2.0	3.5	3.1
Long-term	—	0.9	—	1.2	—	1.4
Short-term	0.3	0.1	1.5	0.8	3.5	1.7
Other private	0.5	3.2	5.7	2.6	14.3	5.7
Long-term	0.5	1.2	0.7	1.8	1.0	4.8
Short-term	—	2.1	2.1	5.0	0.8	13.4

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.
[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.

MORE DEVELOPED PRIMARY PRODUCING COUNTRIES: EXTERNAL BALANCE SHEETS, END-1973. END-1975, AND END-1977[1]

(Based on Cumulation of Balance of Payments Flows, for 12 Countries, since 1962)
(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	27.8	41.1	29.3	72.9	36.1	108.0
Direct investment	1.6	11.6	2.5	16.2	3.2	20.0
External debt positions	26.2	29.6	26.7	56.7	32.9	88.0
Of which:						
Long-term	2.2	22.9	4.1	39.6	6.5	60.1
Short-term[2]	24.0	6.7	22.7	17.1	26.3	27.9
or, of which:						
Reserves	18.4	−0.1	11.9	2.2	12.3	5.5
Non-reserves	7.8	29.7	14.9	54.5	20.5	82.5
Of which:						
Government	1.3	5.7	2.6	10.0	3.4	18.3
Long-term	0.9	5.8	1.6	9.3	2.5	17.2
Short-term	0.4	−0.1	0.9	0.7	0.9	1.1
Banks	2.7	5.3	5.7	12.2	7.1	18.8
Long-term	—	0.9	—	3.0	—	4.2
Short-term	2.7	4.4	5.7	9.2	7.1	14.5
Other private	3.8	18.7	6.6	32.4	10.1	45.5
Long-term	1.3	16.2	2.4	27.4	4.0	38.7
Short-term	2.5	2.5	4.2	5.0	6.0	6.8

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.

[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.

NON-OIL DEVELOPING COUNTRIES: EXTERNAL BALANCE SHEET, END-1973, END-1975, AND END-1977[1]

(Based on Cumulation of Balance of Payments Flows, for 64 Countries, since 1962)
(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	33.1	89.9	44.0	155.8	78.1	226.3
Direct investment	0.2	17.1	0.3	25.6	0.7	33.8
External debt positions	32.9	72.8	43.6	130.2	77.5	192.5
Of which:						
Long-term	3.0	55.4	4.2	91.4	5.7	139.1
Short-term[2]	29.8	17.3	39.4	38.7	71.8	53.5
or, of which:						
Reserves	19.6	0.7	21.7	3.9	42.4	5.9
Non-reserves	13.2	72.1	21.9	126.4	35.1	186.6
Of which:						
Government	2.7	35.9	3.6	56.3	4.8	84.3
Long-term	2.2	34.0	2.9	52.0	3.4	79.7
Short-term	0.5	1.9	0.7	4.2	1.4	4.6
Banks	6.4	13.7	11.7	26.9	21.0	41.5
Long-term	—	3.9	—	7.5	—	13.5
Short-term	6.4	9.8	11.7	19.4	21.0	28.0
Other private	4.1	22.6	6.6	43.2	9.2	60.8
Long-term	0.8	17.6	1.3	31.8	2.3	45.8
Short-term	3.3	4.9	5.3	11.2	6.9	14.9

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.
[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.

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NON-OIL DEVELOPING COUNTRIES IN THE WESTERN HEMISPHERE: EXTERNAL BALANCE SHEETS, END-1973, END-1975, AND END-1977[1]

(Based on Cumulation of Balance of Payments Flows, for 24 Countries, since 1962)
(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	16.8	43.8	21.7	81.1	37.9	120.8
Direct investment	0.1	11.5	0.3	16.6	0.7	22.2
External debt positions	16.7	32.3	21.4	64.5	37.3	98.6
Of which:						
Long-term	1.6	23.8	2.2	45.1	3.0	70.8
Short-term[2]	15.1	8.5	19.2	19.5	34.3	27.8
or, of which:						
Reserves	9.9	0.1	8.4	0.6	18.3	2.0
Non-reserves	6.8	32.2	13.0	63.9	19.0	96.6
Of which:						
Government	1.6	10.3	2.1	19.0	3.0	29.5
Long-term	1.3	9.7	1.6	17.5	1.7	27.7
Short-term	0.3	0.6	0.5	1.4	1.3	1.7
Banks	3.5	8.9	7.7	18.5	12.1	29.9
Long-term	—	3.8	—	7.4	—	13.3
Short-term	3.5	5.1	7.7	11.1	12.1	16.7
Other private	1.7	13.0	3.2	26.5	4.0	37.2
Long-term	0.3	10.4	0.7	20.1	1.3	29.8
Short-term	1.4	2.7	2.5	6.4	2.6	7.4

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.
[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.

TABLE H

NON-OIL DEVELOPING COUNTRIES IN THE MIDDLE EAST: EXTERNAL BALANCE SHEETS,
END-1973, END-1975, AND END-1977[1]

(Based on Cumulation of Balance of Payments Flows, for 6 Countries, since 1962)
(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	4.5	9.6	4.8	16.0	6.7	21.7
Direct investment	—	0.9	—	1.1	0.1	1.5
External debt positions	4.5	8.7	4.8	14.8	6.7	20.1
Of which:						
Long-term	0.2	5.7	0.3	9.6	0.5	14.5
Short-term[2]	4.2	3.0	4.5	5.3	6.2	5.6
or, of which:						
Reserves	2.3	0.3	1.9	0.6	2.6	0.9
Non-reserves	2.2	8.4	2.9	14.2	4.1	19.3
Of which:						
Government	0.2	4.8	0.2	8.6	0.4	13.5
Long-term	0.1	4.3	0.1	7.8	0.4	12.6
Short-term	0.1	0.5	0.1	0.7	—	0.8
Banks	1.5	2.1	2.2	3.2	2.9	3.0
Long-term	—	—	—	—	—	—
Short-term	1.5	2.1	2.2	3.2	2.9	3.0
Other private	0.5	1.5	0.5	2.4	0.8	2.8
Long-term	0.1	1.4	0.1	1.7	0.1	1.9
Short-term	0.3	0.2	0.4	0.7	0.7	0.8

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.
[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.

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TABLE I

NON-OIL DEVELOPING COUNTRIES IN ASIA: EXTERNAL BALANCE SHEETS, END-1973, END-1975, AND END-1977[1]

(Based on Cumulation of Balance of Payments Flows, for 15 Countries, since 1962)

(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	9.4	28.6	13.9	44.8	28.3	61.8
Direct investment	—	3.2	—	5.6	−0.1	7.0
External debt positions	9.3	25.4	13.9	39.2	28.4	54.8
Of which:						
Long-term	0.7	20.4	1.0	27.9	1.3	39.1
Short-term[2]	8.7	4.9	13.0	11.2	27.1	15.8
or, of which:						
Reserves	6.5	0.1	10.4	1.9	19.9	1.9
Non-reserves	2.9	25.3	3.5	37.3	8.5	53.0
Of which:						
Government	0.8	16.3	0.9	21.1	1.1	28.9
Long-term	0.7	15.6	1.0	19.8	1.1	28.1
Short-term	0.1	0.7	—	1.3	—	0.8
Banks	1.2	2.7	1.5	4.9	5.2	7.8
Long-term	—	—	—	0.1	—	0.2
Short-term	1.2	2.6	1.5	4.8	5.2	7.6
Other private	0.9	6.4	1.1	11.4	2.1	16.3
Long-term	—	4.7	—	8.0	0.2	10.7
Short-term	0.9	1.5	1.1	3.3	1.9	5.5

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.

[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.

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NON-OIL DEVELOPING COUNTRIES IN AFRICA: EXTERNAL BALANCE SHEETS, END-1973, END-1975, AND END-1977[1]

(Based on Cumulation of Balance of Payments Flows, for 19 Countries, since 1962)

(In billions of U.S. dollars)

	1973		1975		1977	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Total assets/liabilities	2.3	8.0	3.6	14.0	5.2	22.0
Direct investment	—	1.5	—	2.3	0.1	3.1
External debt positions	2.3	6.4	3.6	11.6	5.2	19.0
Of which:						
Long-term	0.5	5.6	0.7	8.9	0.9	14.6
Short-term[2]	1.9	0.9	2.8	2.7	4.3	4.4
or, of which:						
Reserves	1.0	0.2	1.1	0.7	1.6	1.2
Non-reserves	1.4	6.2	2.5	10.9	3.5	17.8
Of which:						
Government	0.2	4.6	0.4	7.6	0.4	12.5
Long-term	0.1	4.5	0.2	6.9	0.3	11.2
Short-term	0.1	0.1	0.1	0.7	0.1	1.3
Banks	0.2	—	0.4	0.4	0.8	0.8
Long-term	—	—	—	—	—	0.1
Short-term	0.2	—	0.4	0.3	0.8	0.7
Other private	1.0	1.6	1.8	2.9	2.3	4.5
Long-term	0.4	1.1	0.5	2.0	0.6	3.4
Short-term	0.6	0.5	1.2	0.9	1.7	1.1

[1]Covers the cumulated sums of all external claims and liabilities for 1962 through end of year shown.

[2]Includes reserve assets or reserve liabilities irrespective of nominal maturity.