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COMPILING AND UNDERSTANDING THE FLOW OF FUNDS IN DEVELOPING COUNTRIES

Christopher Green, Victor Murinde, Joy Suppakitjarak and Tomoe Moore Loughborough University and Birmingham University November 2000

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Christopher J. Green, Victor Murinde, Joy Suppakitjarak, and Tomoe Moore

Green and Moore:	Department of Economics, Loughborough University,
Murinde:	Birmingham Business School
Suppakitjarak:	Department of Economics, Loughborough University, and
	Birmingham Business School

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ABSTRACT

In this paper, we consider the construction of flow of funds data in a small sample of developing economies, which are the subjects of a general research programme for which this paper serves in part as background: Bangladesh, India, Sri Lanka, Kenya, Tanzania, Uganda and Zambia. We develop a simplified internationally comparable framework for the compilation of flow of funds tables. We demonstrate that widely available IMF data include all the major building blocks necessary to construct a surprisingly detailed flow of funds table for any reporting country, using the framework which we set out. We compile flow of funds tables for our sample countries for a recent year for which broadly adequate data are available, using IMF data. We also evaluate and comment on these data, and compare them with national source flow of funds data for India. Our methodology for compiling the flow of funds data. It provides a framework within which national statisticians can adapt pre-existing data compiled for the IMF, and upon which they can build and extend their own flow of funds data at substantially lower cost than would be incurred in compiling these data from scratch.

correspondence to:

Christopher J. Green: Department of Economics, Loughborough University, Loughborough, Leicestershire, LE11 3TU, United Kingdom *Tel:* +44 (0)1509 222711; *Fax:* +44 (0)1509 223910; *E-mail:* C.J.Green@lboro.ac.uk

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1. Introduction

Flow of funds analysis is generally recognised as an important tool to aid in the understanding of macroeconomic and financial developments in an economy, and in policy appraisal. The flow of funds is notable for its widespread use by applied economists, but limited use by academics. See Dawson (1996). A major reason for its neglect by academics is that the level of detail in a typical flow of funds matrix militates against the application of "simple" models to the data. See Green (1992). Of course, it is precisely this level of detail which makes it useful to applied economists and policy-makers who seek to understand the movement of funds in the economy which may lie behind changes in the prices of assets and products. In the major industrial countries, detailed flow of funds data are routinely compiled and published within the general framework of the UN System of National Accounts (SNA, 1993). However, the SNA remains largely a blueprint for the relatively few industrial countries with well-funded and organized statistical services.¹ As Green and Murinde (1999) have observed, attempts to apply flow of funds analysis to developing countries meet the apparently insuperable obstacle of limited or non-existent data availability. For example, Honohan and Atiyas (1993) estimated sector surpluses and deficits for a sample of 17 developing countries regarded as having the best data availability. The sector surpluses scarcely constitute flow of funds data, as they do no more than reflect the savings-investment balance and are an immediate byproduct of any basic sectorized set of national accounts. Even so, Honohan and Atiyas were only able to compile data with an average span of about 7 years per country². In general, developing countries do not possess either the organizational framework to compile even rudimentary flow of funds statistics or the resources to build such a framework.

The absence of flow of funds accounts in virtually all developing countries is unfortunate, for it can be argued that such data may be of more value in the developing world than in the industrial countries. Economic policy information is derived from both the prices and the quantities traded in an economy. The major industrial economies benefit from a vast range of organized and informal markets, which possess attributes of depth and liquidity, and whose prices provide much of the basic, timely information upon which economic policy is based in practise. See Deacon and Derry (1994). In developing economies, where organized and informal markets are more fragmented, and securities markets are invariably thin and illiquid, prices generally provide much less useful policy information. More information on quantities, particularly on the flow of funds, would be very valuable for policymakers.

In recognition of the importance of savings in the growth process, the World Bank has developed a database of internationally comparable savings data. See World Bank (1997). However, high savings are of little use if they are not channelled into productive activities, and savings data *per se* tell us nothing about the utilization of savings. In developing economies, savings have often been channelled into unproductive assets, or into liquid assets for investment in the industrial countries. See Hermes, Lensink and Murinde (1996). In the former centrally planned economies of Central and Eastern Europe, high savings often reflected suppressed consumption. Even a rudimentary flow of funds matrix enables a basic diagnosis and analysis of such issues.

More recently, there have been some studies of the behaviour of sector surpluses and deficits in developing and transition economies. Honohan and Atiyas (1993) used their data to study the elasticity of financial flows between domestic sectors, following the work of Feldstein and Horioka (1980) on international flows. Murinde (1996) studied the comparative performance of domestic and international finance as sources of domestic investment funds in four developing economies in Africa and Asia. Bahra, Green and Murinde (1999) used similar data to evaluate the impact of financial sector reform and liberalization in Poland and Estonia. Certainly, there is no shortage of potential applications for flow of funds data in developing economies.

Even though few countries have the resources in their statistical services to produce comprehensive flow of funds data, most routinely prepare data for international databases, such as the major IMF publications: *International Financial Statistics (IFS)*, the *Balance of Payments Yearbook (BOP)*, and the *Government Finance Statistics Yearbook (GFS)*. The IMF data are intended for specific purposes, and they do not directly include the flow of funds. Nevertheless, it would be an important simplification if flow of funds data could be extracted from these sources. It would represent a new and useful application of the IMF data, and the resultant flow of funds would be valuable for "quick" analyses of economic and financial issues in any particular country. Such data would have the advantage that they would be comparable across countries to the same extent as are all IMF data.

Furthermore, the methodology for compiling such a flow of funds would offer a simple framework upon which national statisticians could build and extend their own flow of funds data at a lower cost than would be incurred in compiling these data from scratch.

In this paper, we take up this argument in the context of a small sample of developing economies. First, we develop a simplified internationally comparable framework for the compilation of rudimentary flow of funds tables. Second, we demonstrate that the IMF databases include all the major building blocks necessary to construct a surprisingly detailed flow of funds for each reporting country, using the framework we set out. A few simplifying assumptions are needed to extract a flow of funds matrix from these data, but these assumptions are relatively mild, especially in relation to the size of the task involved in compiling such data from scratch in each country. Third, we then compile flow of funds tables for our sample countries for a recent year for which broadly adequate data are available, using only the internationally comparable data sources of the three major IMF publications. We also evaluate and comment briefly on these data. The sample countries are Bangladesh, India, Sri Lanka, Kenya, Tanzania, Uganda and Zambia. These countries were chosen from among the poorer countries of Africa and Asia to include those known to have limited data availability (Tanzania and Bangladesh) and those generally regarded as having good or at least, above average data resources (Kenya and India). Among all these countries, India is unique in having compiled its own national flow of funds data for over 35 years. We therefore pay particular attention to the Indian data in our discussion, but we concentrate on the possibility of using the IMF data in general, rather than on a detailed analysis of national source data. Our sample countries are also the subjects of a wider research programme for which this paper serves in part as background. See Kirkpatrick et al (1998).

In section 2 of the paper we set out the basic flow of funds *pro-formas*. In section 3 we discuss the uses and limitations of IMF data to compile the flow of funds. In section 4 we present the flow of funds for each country for a single year. A final section 5 contains some concluding remarks.

2. The Flow of Funds Framework

There are numerous presentations of the flow of funds. See *inter alia*, Green (1992), Murinde (1996), and the collection of papers in Dawson (1996). A good starting point is Dawson's (1991)

paper, which sets out a simplified flow of funds system which can be used as the basis for ultimately developing flow of funds accounts in line with the SNA³. The headings from this system are reproduced as table 1⁴. Dawson's (1991) system has certain limitations, which we discuss below, but which largely reflect the date of his paper. Since 1991, there have been important structural changes in financial markets in developing countries, particularly in the reduced role of the public sector and expansion of local capital markets. We therefore propose a revised system for developing economies; and this is shown in tables 2 and 3. Table 2 is a summary which reflects our amendments to Dawson's proposals. Table 3 is more detailed, and sets out the individual components which must be compiled and then aggregated to form table 2. Throughout this paper, we show only the net transactions of each sector, rather than the separate sources and uses. It is practically impossible and conceptually not useful to attempt to identify sources and uses separately in countries with limited data. Even at the level of individual units, sources-uses statements invariably have to "net out" many items to reflect accounting conventions rather than the underlying economic reality.

Dawson's system allows for five sectors (table 1); and it is generally accepted that there are basic functional differences among these sectors which justify their separate treatment. However, the sectorization in table 1 also reflects the reality of data availability in most countries. Long-standing domestic and international reporting requirements imply that data for the central government, central bank, and commercial banks are typically readily available and mostly of high quality.⁵ Foreign sector data form an essential building block in an open economy, and much of the basic reporting for such data was established during the 1950s under the auspices of the IMF's balance of payments data standards. The most difficult area is the "other domestic". Provided this sector is defined sufficiently widely, its data are of high quality because its transactions are all just the counterparts of transactions reported directly by other sectors. However, a wide definition involves bundling together groups which have very different economic functions: local government and other public sector bodies, non-bank financial institutions, incorporated and unincorporated business, and households. It would be desirable to attempt to identify these entities separately, or to consolidate them differently.

In most countries, the scope of the public sector has been considerably reduced in recent years, with governments generally privatizing a range of more-or-less commercial activities⁶. However, central governments are still mostly viewed as providing an implicit guarantee of the solvency of the whole

public sector. This suggests that, as far as possible, the public sector should be shown separately from the private sector, and possibly consolidated as a single entity. In this project, we have tried, as far as possible, to identify the transactions of the whole public sector. A considerable amount of data for central and local government and rather less for public entities is, in principle, published in *IFS* and *GFS*. However, the availability of non-central government data in practise is limited, and often out-of-date. We have therefore shown the central government on its own; and then identified as many transactions as possible by the rest of the public sector, and shown these separately as "other public sector".

Similar considerations apply to other (non-bank) financial institutions (OFIs). In most countries, the importance of such institutions has grown considerably in the last decade. Most OFIs bear little direct resemblance to banks, but financial companies as a whole (including banks) do share certain characteristics which distinguish them from non-financial companies: particularly in their leverage, their relationships with the financial markets, their role in interest rate determination, and in their regulatory requirements. In principle, *IFS* publishes regular data for OFIs, but in practise, the availability, scope, and coverage of these data vary considerably from country to country. Few of the countries in our sample have reported OFI data, but, where these data were available, we compiled and reported them separately.

Distinguishing between the transactions of businesses and households is practically difficult in most countries, and in this draft we have not attempted to make such a distinction. However, as Honohan and Atiyas observe, the transactions involving households and businesses are among the most important in a modern economy. It is the household sector which typically provides the savings to finance business investment, even though most of these funds may be intermediated through the financial system. In the longer term, the development of stock markets and the increase in numbers of locally-quoted firms is likely to improve the availability of (incorporated) business sector data. Quoted firms must adhere to stock market reporting requirements, and these may include the production of timely sources-uses statements or sufficient information from which to estimate such statements. These can form the foundation for constructing the business sector flow of funds. See Sen, Roy, Krishnan, and Mundlay (1996) on the Indian flow of funds. Further relevant distinctions are those between the agriculture and manufacturing/service sectors, and between the rural and

urban sectors. In developing countries, it would be particularly valuable to understand how funds are generated within each sector and transmitted between sectors. However, these details are even harder to identify than the business/household split.

We turn next to the rows of the matrix. The standard flow of funds *pro-forma* begins with the capital account, as in table 1. However, to aid in compiling these data, we believe that it is advantageous to begin with the current account, and then derive sector savings as the difference between income and expenditures. Much of the data which is used to estimate sectoral savings is contained in the national accounts (*IFS*) and in *GFS*. There would appear to be some value in spelling out these estimates explicitly, and showing their relationships to the national income aggregates. See tables 2 and 3. This also helps to highlight any problems with the data.

The main part of the matrix consists of financial transactions. As Murinde (1996) observed it is possible to view the matrix using either a sector approach or an instrument approach. Dawson's *pro-forma* largely adopts the former approach, as loans are distinguished by sector of origin rather than by instrument. While the sector of origin is important, particularly in distinguishing between government and private debt for example, there are advantages in using a more instrumental approach, particularly when sources and uses are consolidated into net transactions. For example, since banks hold one another's certificates of deposit (CDs), it makes no difference from a bank's point of view, particularly in its risk management, whether CDs (assets) are sold or (liabilities) issued to generate funds: all that matters is the net position. See Green (1999). However, it will make a risk management and regulatory difference if CDs are issued to finance the acquisition of the long-term debt of other banks. Here, it is the instrument rather than the issuer which is important. We therefore propose a *pro-forma* which places greater emphasis on differences among instruments.

Beginning with the most liquid, there would appear to be a strong case for following the IMF in separating out high-powered money flows. This implies distinguishing between cash and bank reserves as one instrument, and deposits with banks and OFIs as another. We also follow the IMF in consolidating transactions in government debt and assets onto a net basis, on the grounds that most transactions in government financial assets (such as deposits) are executed mainly for technical reasons, with a corresponding adjustment to outstanding debt. As with bank CDs, it is changes in

the government's <u>net</u> financial position that is important. Loans by banks (including the central bank) and by OFIs constitute the next categories. Unlike Dawson, we then distinguish between corporate debt and equity shares. This is a reflection of changing times: the growth in local stock markets has increased the amount of domestic equity and improved the quality of available data on these items. Equity also includes the important foreign direct investment component of domestic investment finance. One obvious omission from our *pro-forma* is life insurance and pension funds. Such data are not collected by the IMF, and are often not easy to compile from national sources. The private insurance market is typically very thin in developing countries, but many countries have substantial compulsory pension schemes, which were often originally used as a captive market for government debt. Evidently, these are markets which will require attention in the future.

A more difficult area concerns transactions denominated in foreign currencies. There would appear to be a strong case for distinguishing between foreign and domestic currency transactions in general; for example, to help evaluate a country's foreign currency risks. However, much IMF and national source data seeks to make a distinction between domestic and foreign currency debt on an instrument-by-instrument basis. There may be a case for identifying a developing country's foreign exchange reserves; but, for most purposes, it is the overall net foreign currency composition of a country's transactions that is of interest. Where data were available therefore, we compiled domestic and foreign currency transactions separately, instrument by instrument. We then aggregated foreign currency transactions into 2 categories: foreign reserves and the rest.

3. Applying IMF Data to Compile the Flow of Funds

Table 4 gives the line numbers from *IFS*, *BOP*, and *GFS* used to extract the data and compile the flow of funds table. Where flows of funds were reported in local currency (in *GFS* and most *IFS* lines), they were entered directly into the table. US dollar flows (in *BOP* and some *IFS* lines) were converted into local currency at the reported conversion rate in *BOP* (line B0101). In *IFS*, data for banks and OFIs are reported in local currency as stocks of assets and liabilities. The end-year stocks were first-differenced to estimate the within-year flows. This involves an approximation for assets that are not capital-certain, as it assumes that there were no capital gains or losses. Apart from foreign currency-denominated assets however, most financial sector assets and liabilities in

developing countries are indeed capital-certain. Moreover, financial institutions do not necessarily revalue capital-uncertain assets to market at each reporting date. Consequently, although first-differencing the balance sheets undoubtedly induces some errors, it is not clear that any other way of proceeding would produce more reliable estimates.

It should be emphasized that IMF data were not designed for use in flow of funds analysis, and they give only a partial picture of the flow of funds. There are no independent records of both sides of any class of transaction. Therefore, for each entry based on the IMF data, a counter-entry is required to ensure that the accounts balance. These counter-entries were either obvious, or were based on a "best guess". Where no information was available, counter-entries were assigned to a single sector, and no attempt was made to guess a split between different sectors. National statisticians may well have more detailed information on this issue. Data for the current and capital accounts were based mainly on the *IFS* national accounts and the *GFS* government accounts. As there are no separate income data for the financial sector, counter-entries to the government data were deducted from national income totals to produce rough estimates of income and expenditure for the consolidated non-government sector as a whole. In this way, we were able to estimate surpluses and deficits for 4 sectors: central government, other public sector, other domestic sectors, and the foreign sector. These are shown in line 7 of the matrix.

For the financial transactions at the heart of the flow of funds, considerably more detail is available, but mainly covering government and financial institutions. Most *IFS* data can be translated quite directly into our proposed flow of funds format, but *BOP* data posed more problems. The current version of the IMF's standard presentation of the balance of payments is more nearly a wish list than a realistic statement of data that are easy to compile in practise. All transactions are to be reported on a gross basis, a standard that few countries strive to achieve in their national statistics. Moreover, as we argued above, it is not necessarily desirable to record transactions on a gross basis. In practise, a high proportion of the entries in *BOP* are blank, both for our sample countries, and for virtually all IMF members including OECD countries. However, it is often unclear whether lack of data is attributable to lack of transactions (genuine zeros), or to lack of information at the required level of disaggregation⁷. In principle, the *BOP* data could aid in making "reasonable" assumptions about the currency composition of transactions. For example, we would expect direct investment

equity assets to be denominated in a foreign currency, and the liabilities to be in the home currency. In practise, direct investment assets and liabilities were often not separately available⁸; and, in this event, we assumed that all direct investment was inward to our sample country, and therefore denominated in the home currency. Other assumptions are noted in table 4. Residual transactions in domestic currency instruments were generally assigned to the domestic non-bank private sector; foreign currency residuals were assigned to the foreign sector.

Total financial transactions by sector were matched up with the sector surpluses and deficits from the current and capital accounts (line 7) by aggregating across sectors. Line 30 shows total financial transactions for all sectors separately. From here, central government was combined with the central bank. Banks, OFIs, and the rest of the private sector were combined together. These aggregated figures are shown in line 9. Unidentified transactions (line 8) were then calculated as the residual, ie: the difference between lines 9 and 7.

4. Flow of Funds Estimates

The degree of confidence which we can have in the flow of funds matrix prepared in this way depends in large part on the level of detail reported by national statisticians to the IMF. Within our sample countries, data availability actually varied considerably, both across countries and from year to year. The main problems were: *GFS*, where data were frequently out of date, or not available at all; the OFIs section of *IFS*, which was mostly not available; and *BOP*, where data availability was erratic. For each country, we compiled a single flow of funds matrix for the most recent year for which reasonably comprehensive data were available. In addition, we compiled Indian data for 1995 to compare with national source data, and Kenyan data for 1994, a year in which data availability was as good as might be expected. Table 5 gives the years for which we compiled the flow of funds, and the availability of *GFS* and OFIs data. In the rest of this section we summarize the data and main problems in compiling the flow of funds in each country. It should be emphasized that we are concerned with a single year, and we do not claim to be drawing general conclusions about the flow of funds in each country.

4.1 India: 1995 and 1997 (Table 6)

India is unique in the sample, and among developing countries more generally, in having its own well-established flow of funds accounts. Flow of funds were first prepared in India in 1964, and flow of funds data are available on an annual basis from 1951-52⁹, although there is a substantial lag in the production of the data, with the most recent figures being available for 1995-96. Nevertheless, such a long run of data, and high level of detail at which the accounts are prepared would be regarded as a substantial achievement in most industrial countries. Indeed the Indian data predate those in many of the major industrial countries. A detailed analysis of these data is a substantial task in its own right, and beyond the scope of this paper. The statistical basis of the accounts is summarized in Reserve Bank of India (2000a); the data themselves can be found in Reserve Bank of India (1999, 2000a, 2000b); and some analyses are carried out in Sen, Roy, Krishnan, and Mundlay (1996), and Sen and Vaidya (1999).

Table 6a shows India's own most recent (1995-96) flow of funds¹⁰; tables 6b and 6c give the flow of funds in our format using only IMF data, for 1995 (for comparison with table 6a) and for 1997 (for comparison with our other sample countries). IMF data for India were relatively good, but still incomplete. In particular: *GFS* data for 1997 were provisional; OFIs' data were available only up to 1988; and there was a lack of detail in some of the *IFS* and *BOP* data. In contrast, the national source data are very complete. An important element is the inclusion of provident funds which, as noted above, is perhaps the most important market that is omitted from our *pro-forma*. Overall, it seems clear that the main problem in compiling Indian data from IMF sources is one of timeliness of the data, and not a lack of underlying information.

Turning specifically to the 1997 flow of funds, the deficiencies in the IMF data may have contributed to the large unidentified entry for the private sector (line 8). The net financial balance calculated from the flow of funds has the opposite sign from that calculated from the income account, for both the government and private sectors. Within the flow of funds itself, the private sector was a net contributor to the banking system, with the flow of deposits being almost three times the flow of net lending to the private sector. The main reason for this, in an accounting sense, was the large net sales of government debt by the private sector to the banks: effectively, the private sector exchanged government debt for bank debt. However, the absence of OFI data needs to be noted in this context. Within the foreign sector, an overall financial surplus was matched by a flow of longer-term lending

to the Indian private sector (lines 19 and 20). Comparing 1995 and 1997, it seems that the broad pattern of the flow of funds is surprisingly consistent, with the private sector showing an overall deficit to be financed, and the central government and foreign sector being the main providers of funds (lines 9 and 30). It is reassuring that this is also the pattern in the 1995-96 national source data, although comparisons between the two sources must be treated with caution, as they cover overlapping time periods.

4.2 Bangladesh: 1997 (Table 7)

For Bangladesh, the absence of GFS data made it impossible to segregate the public and private sectors to any meaningful extent; and, as a result, the discrepancies between the income account and the financial account were very large. It is disconcerting that unidentified foreign sector transactions were so large, as these data were mainly derived from the balance of payments statistics. Hence, the estimated flow of funds is quite rudimentary. Among other problems, due to the lack of data for the factor cost adjustment, the (notional) entries for GDP MP (market prices) and GDP FC (factor costs) were the same. A consistent element in the data was the sign of the net financial balance in each sector: the government and the foreign sector were in deficit, whereas the private sector was in surplus, on both the income and financial account (lines 7 and 9). However, it must be borne in mind that the estimated government financial balance was approximately equal to its spending, because tax revenues were not included in its income. An important component of the private sector's financial balance was remittances from foreign workers which appear (indistinguishably) in line 2, and which amounted to about one-half of the private sector's estimated transfer income. The flow of funds matrix itself indicates that deposit banks were the main direct providers of funds to the government sector; they also supplied more loans to the private sector than they received in deposits. Moreover, a substantial proportion of the private sector's financial surplus was invested abroad (line 19), perhaps suggesting an element of capital flight.

4.3 Sri Lanka (Table 8)

The availability of data for Sri Lanka was relatively good. However, *GFS* had no report on local government accounts; and the OFIs data in *IFS* were incomplete. Apart from the foreign sector, the net financial balances for each sector exhibited sign consistency, whether calculated from the income

or financial account. However, the unidentified components were all relatively large in magnitude, even for central government and for the foreign sector, where data were, in theory, relatively good. An interesting feature of the Sri Lankan data was the sharp movement of funds between domestic and foreign currencies, with the central bank replacing its holdings of domestic government debt by foreign reserves, almost on a one-for-one basis. Of course, the domestic component of these changes may actually have reflected movements in counterpart funds rather than real changes in assets. Similar shifts could be observed for the banks and, to a lesser extent, for the private sector, with both sectors substantially increasing their net holdings of foreign currency assets relative to those denominated in domestic government debt by the central government and central bank. There was substantial private direct investment that appears (indistinguishably) as the main component in the flows from the foreign sector to the domestic private sector in lines 19 and 20.

4.4 Kenya: 1994 and 1996 (Tables 9a and 9b)

IMF data for Kenya for 1994 were the best of our sample countries; and the flow of funds matrix for that year is probably as complete as can be expected from these data sources. Even so, there was a large unidentified component in the foreign sector accounts. Moreover, this was not attributable to missing data but mainly to a large discrepancy between *BOP* and *IFS* in the data for net deposit bank transactions with the foreign sector: *BOP* showed a net outflow of over Ksh5,000m; whereas *IFS* showed a net inflow of over Ksh14,000m. This discrepancy did not appear to be due to valuation changes, as the exchange rate of the shilling did not move sharply in 1994. A second major source of error was a discrepancy between *GFS* and *BOP* in the data for foreign grants received by the public sector. As *GFS* data have been subject to substantial year-to-year revisions, we took the *BOP* data as the more reliable, but this created a corresponding discrepancy in the government accounts.

Although the 1994 data were relatively complete, only 2 of the 4 reconcilable sector financial balances exhibited the same sign as between the income account and the financial account. The identified components of the flow of funds matrix showed that the government sector was the principal net user of capital funds, with the non-bank private sector as a whole showing a substantial financial surplus on either the income or financial account estimate. Equally striking was the extent

to which the government was reliant on the banking system. Over 85% of government debt issued was acquired by either the central bank or the commercial banks. Correspondingly, the increase in commercial bank lending to the private sector was less than half the total increase in commercial bank funds: deposits and equity. Overall, the public sector played a major role in investing private savings in Kenya. It would be interesting to segregate businesses and households, to examine the impact of these flows on the pattern of financing of the business sector.

A problem with the Kenyan data is that there is a considerable lag in the reporting of *GFS* data. For 1996, central government data were available, but not those for local government. On the basis of the available data, we see that the income account for the central government and, *a fortiori*, for the private sector had broadly similar patterns to 1994, with a deficit in the government accounts and a surplus in the private sector. However, there were marked contrasts between 1994 and 1996 in the financial accounts, implying large movements in the unidentified components between the two years. According to the financial accounts, the central government ran a small financial surplus in 1996, in contrast to the large deficit of 1994; correspondingly, the private sector was in deficit in 1996, instead of a surplus in 1994. A feature of 1996 was the large inflow of foreign currency funds (line 27), at almost three times the rate of 1994. Arithmetically at any rate, these funds helped finance a higher inflow into domestic bank deposits (line 15). Moreover, the bulk of these foreign currency inflows were themselves in the form of bank deposits (not shown separately). Although we do not know the reasons for such large inflows, it would be interesting to investigate whether they were "longer-term" in nature, or more a form of "hot money".

4.5 Tanzania: 1997 (Table 10) and Uganda: 1996 (Table 11)

Both Tanzania and Uganda are lacking data for OFIs and all data from *GFS*. Hence, only a quite rudimentary flow of funds matrix can be compiled. Little can be said about the overall surplus and deficit position of each sector, as government revenues and expenses could not be segregated from those of the private sector. One might expect Tanzania to have smaller financial flows among sectors than Kenya, reflecting an economy which is more dependent on subsistence activities, but it is not possible to draw this conclusion, because of the limited availability of the data. Uganda

exhibits a similar problem to Bangladesh, with a disconcertingly large unidentified residual in the foreign sector. The corresponding figure for Tanzania is substantially smaller in proportion to the overall size of the capital account. The broad scale of the identifiable flows, in proportion to the level of private fixed investment, appears to be roughly comparable as between Tanzania and Uganda. Clearly though, more data are required to develop a proper discussion of the flow of funds in these countries.

4.6 Zambia: 1997 (Table 12)

Zambia has the worst data availability of the 7 countries. Like Tanzania and Uganda, it is lacking data for OFIs, and for local government in *GFS*. Moreover, up-to date *BOP* data are also not available. Clearly, the flow of funds matrix that can be compiled from what is left is rather notional, and few general conclusions can be drawn.

5. Conclusions

It is clear that the construction and analysis of a detailed flow of funds table for developing countries, based on IMF data, is quite feasible in principle. However, the availability of the necessary IMF data in practise is uncertain. None of our sample countries produced both adequate and timely data within the framework set out in this paper. A major problem appears to be one of timeliness, with Kenya and India producing relevant statistics but only with a substantial lag. Sri Lankan data are also relatively good. In our other sample countries the problems may be more deep-seated. However, these do include some of the poorest countries among IMF members. In general, the data compiled by the IMF do not represent a large proportion of the available social and economic statistics in a country.

The practical difficulties involved in obtaining detailed up-to-date data might suggest the value of other approaches to the flow of funds. One is to use a more aggregated framework, <u>either</u> concentrating on the sector surpluses and deficits following Honohan and Atiyas (1993) and Bahra, Green and Murinde (1999), <u>or</u> employing a sector-oriented approach following Dawson (1991). A further possibility is to retain the proposed format, but be more willing to use calibration to model and understand the behaviour of the matrix.

Ultimately though, none of these other approaches can substitute for better data, particularly more timely data. Statistical services may not be the top funding priority for developing country governments, but unless resource needs can be properly documented through such means as the flow of funds, it is hard to see how they can be properly met. In this context, we would argue that the template and techniques proposed and implemented in our paper do offer a new and practical technology for assisting this process. We have shown that it is straightforward to transform widely available data into flow of funds data which can be used for policy analysis and design. These data are comparable across countries to the same extent as are all IMF data. Furthermore, our methodology for compiling the flow of funds provides a framework within which national statisticians can adapt pre-existing data compiled for the IMF, and upon which they can build and extend their own flow of funds data at substantially lower cost than would be incurred in compiling these data from scratch. These would appear to be worthwhile goals, especially given that, in many countries, they would require relatively small improvements in the timeliness and coverage of national data reported to the IMF.

Footnotes

- The European System of National and Regional Accounts (Eurostat, 1995) is, if anything even more detailed than the UN SNA.
- 2. The length of the time series for a single country varied from just 3 years to 16 years.
- 3. It is also worth noting the efforts of the IMF (1981), which developed flow-of-funds data for Kenya as part of the IMF Institute's teaching programme. However, data limitations at the time were such that the flow-of-funds matrix they developed was substantially more rudimentary than either Dawson's proposal or that which we develop in this paper.
- 4. In tables 1-3, we save space by showing only the row and column heads of the matrices, rather than complete (blank!) matrices.
- 5. Data on central government finances are invariably (and worryingly) of poorer quality than those for the central bank and commercial banks.
- 6. Some countries still retain a large and wide-ranging public sector, notably Tanzania.
- 7. For this reason, we do not attempt to distinguish between genuine zeros and lack of data in the flow of funds that we report.
- 8. If a country has a pre-existing stock of direct investment assets and liabilities, it is practically impossible for the yearly direct investment flows to be zero according to the *BOP* classification system, since it is almost certain that there will be some reinvested earnings. It therefore seems reasonable to assume that the absence of detail on direct investment is due to lack of data, rather than lack of transactions.
- 9. The Indian flow of funds is on a fiscal year basis: April 1 March 31.
- 10. It should be emphasized that the Indian data are available in considerably more detail than shown in table 6a. In principle it would be straightforward, though tedious, to recompile the data in the formats we propose for purposes of international comparison. However, given the lack of satisfactory data for the other countries, we did not attempt such an exercise.

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Classification of Transactions	Classification of Sectors
"rows"	''columns''
Capital Account	Central Bank
Gross capital formation	Central Government
Gross saving	Commercial Banks
Balance = Sector Surplus/Deficit	Other Domestic Sectors
	Foreign
Financial Transactions	Errors and Omissions
Currency and deposits	Total
Bills, bonds, and loans	
Central government debt	
Central government loans	
Central bank advances	
Other loans and advances	
Other domestic debt	
Foreign assets	
Other claims and discrepancy, net	
Total Financial Transactions	

Table 1: Simplified Flow of Funds Pro-Forma: From Dawson (1991)

	Classification of Transactions	Classification of Sectors
	"rows"	''columns''
	Current Account	
1	Factor Incomes	1. Central Bank
2	Transfers	2. Public Sector
3	Factor Cost Adjustment	3. Financial Sector
4	Expenditures	4. Non-Financial Private Sector
4.1	Consumption	5. Foreign
4.2	Exports	6. Total
4.3	Imports	
5	Balance = Savings	
6	Capital Account	
6.1	Gross Fixed Investment	
6.2	Other	
7	Balance = Sector Surplus/Deficit	
8	Unidentified	
9	Total	
	Financial Transactions	
11	Total Domestic Currency	
12	Cash and Bank Reserves	
13	Public Sector Debt	
15	Bank Deposits	
16	Deposits with OFIs	
17	Bank Lending	
18	Lending by OFIs	
19	Corporate debt	
20	Equity	
21	Other Domestic	
25	Total Foreign Currency	
26	Foreign Reserves incl Net IMF	
27	Other Foreign Currency	
30	Total Financial Transactions	

Table 2: Aggregated Flow of Funds Pro-Forma (Green-Murinde)

	Classification of Transactions		Classification of Sectors
	"rows"		"columns"
	Current Account		
1	Factor Incomes	1.	Central Bank
1.1	Employment and Self Employment	2.	Public Sector
1.2	Profits	2.1.	Central Govt
1.3	Rent	2.2.	Local Govt
1.4	Other	2.3.	Public Sector
2	Transfers	3.	Financial Sector
2.1	Dividends and Interest	3.1.	Deposit Banks
2.2	Taxes on Income	3.2.	OFIs
2.3	Foreign (net)	4.	Non-Financial Private Sector
2.4	Other	4.1.	ICCs
3	Factor Cost Adjustment	4.2.	Persons
3.1	Taxes on Expenditure	5.	Foreign Sector
3.2	Subsidies	6.	Total (errors and omissions)
4	Expenditures		
4.1	Consumption		
4.2	Exports		
4.3	Imports		
5	Balance = Savings		
	~		
6	Capital Account		
6.1	Gross Fixed Investment		
6.2	Other Capital Account		
6.2.1	Change in Stocks		
6.2.2	Capital Taxes		
6.2.3	Other		
7	Balance = Sector Surplus/Deficit		
8	Unidentified		
9	Total = Identified Financial Transactions		
		1	
	Financial Transactions		
		1	
11	Total Domestic Currency	1	
12	Cash & Bank Reserves		
13	Net Government Debt		
13.1	Net Domestic Currency		

Table 3: General Flow of Funds Pro-Forma (Green-Murinde)

	Classification of Transactions	Classification of Sectors
	"rows"	"columns"
13.1.1	Short-dated debt/bills	
13.1.2	Long-dated debt/bonds	
13.1.3	Net Lending	
13.2	Net Foreign Currency	
14	Public Sector Debt	
14.1	Local Government Debt	
14.2	Other Public Sector Debt	
15	Bank Deposits	
15.1	Domestic Currency	
15.2	Foreign Currency	
16	Deposits with OFIs	
16.1	Domestic Currency	
16.2	Foreign Currency	
17	Bank Lending	
17.1	Domestic Currency	
17.2	Foreign Currency	
18	OFI Lending	
18.1	Domestic Currency	
18.2	Foreign Currency	
19	Corporate debt	
19.1	Bills and Trade Credit	
19.2	Corporate Bonds	
20	Equity	
20.1	Domestic Equity	
20.1.1	Shares	
20.1.2	Unit Trust Units	
20.1.3	Life & Pension Units	
20.1.4	Direct Investment	
20.2	Foreign Equity	
21	Other	
21.1	Domestic Currency	
21.2	Foreign Currency	
25	Total Foreign Currency	
26	Foreign Reserves incl Net IMF	
27	Other Foreign Currency	
30	Total Financial Transactions	

Table 4. Flow of Funds: Pro-Forma Using International Financial Statistics

				Other			Non- Financial			National
		Central	Central	Public	Damba	OFL	Private	Foreign	Total	Income
		Bank	Govt.	Sector	Banks	OFIS	Sector	Sector	lotai	1 otais
			Public Sector			Intermediaries Private Sector				
	Current Account									
1	Factor Incomes									
1.1	Employment		(()		(+ F99B		+ F99B	GDPMP
1.2	Profit		(+GCAV	()		(-GCAV			
1.3	Rent		(-GCA11	()		(+GCA11			
1.4	Other		((+GLAV)		(-GLAV			
			((-GLA11)		(+ GLA11			
)		(– GCA5		- GCA5	
)		(– GCA6		- GCA6	
)		(– GLA5		- GLA5	
)		(- GLA3,6,7		+ GLA3,6,7	
)		(+ GCC3		+ GCC3	
)		(+ GLC3		+ GLC3	GDPFC
2.	Transfers									
2.1	Dividends & interest		- GCC2				+ GCC2			
				- GLC2			+ GLC2			
							+ F98.N	– F98.N		NFIPA
2.2	Taxes on Income		+ GCA1				- GCA1			
			+ GCA2				– GCA2			
			+ GCA3				- GCA3			
			+ GCA7				– GCA7			
				+ GLA1			- GLA1			

				Other			Non- Financial			National
		Central	Central	Public			Private	Foreign		Income
		Bank	Govt.	Sector	Banks	OFIs	Sector	Sector	Total	Totals
2.3	Foreign (Net)		+ B2380					- B2380		
			- B3380					+ B3380		
							+ B2390	- B2390		
							- B3390	+ B3390		
2.4	Other									
				<u> </u>						
3.	Factor Cost Adjustment									
3.1	Taxes on Expenditure		+ GCA5	ļ		1			+GCA5	
			+ GCA6	ļ					+ GCA6	ļ
				+ GLA5					+ GLA5	
				+ GLA3,6,7					+ GLA3,6,7	
3.2	Subsidies		- GCC3	+GCC3.2					- GCC3	
									+ GCC3.2	
				– GLC3					+ GLC3	FCA
4	Expenditure									
4.1	Consumption		– F91F				– F96F		– F91F	
			+ GLC1	– GLC1						
			(=-GCC1)						– F96F	
4.2	Exports							- F90C	- F90C	
4.3	Imports							- F98C	- F98C	
				<u> </u>						
5	Balance = Savings	na	Σ	Σ	na	na	Σ	Σ		
	Capital Account		+	+						
61	Gross Fixed Investment		+	+			_ F93E		F93E	1
0.1			-GCC4	+			$\pm GCC4$		-1756	
			GCC6	+			+ GCC4			
			-000	GLC456			+ GLC0			
				-0LC+, 5, 0			\pm OLC4, $3,0$			1

		Central	Central	Other Public			Non- Financial Private	Foreign		National Income
		Bank	Govt.	Sector	Banks	OFIs	Sector	Sector	Total	Totals
6.2.1	Change in Stocks						– F93I		– F93I	
			- GCC5				+ GCC5		(+ F99A)	GDPMP
6.2.2.	Capital Taxes		+ GCA4				- GCA4			
	•			+ GLA4			- GLA4			
6.2.3	Other		+ GCAVI				– GCAVI			
			– GCC7.1				+ GCC7.1			
				+ GCC7.1.1			– GCC7.1.1			
				– GLC7			+ GLC7			
			+ B 2401					- B2401		
			– B3401					+ B3401		
							+ B2430	- B2430		
							- B3430	+ B3430		
7	Balance = Sector	na	Σ	Σ	na	na	Σ	Σ	RE	
	Surplus /Deficit									
8	Unidentified									
9	Total = Identified	Σ	Σ	Σ	Σ	Σ	Σ	Σ		
	Financial Transactions									
	Financial Transactions									
11	Total Domestic									
	Currency									
12	Cash & Bank Reserves	– E14			+ E20		+ E14A			
		+ E12E			– E12E	+E 40	- E40			
		+ E26G			– E26G		+ E14			
							$-\overline{E20}$			
							$-\overline{E14A}$			

				Other			Non- Financial			National
		Central	Central	Public			Private	Foreign		Income
		Bank	Govt.	Sector	Banks	OFIs	Sector	Sector	Total	Totals
13	Government Debt									
13.1	Net Domestic Currency									
13.1.1	Domestic Currency Debt	+ E12A	- E12A							
		– E16D	+ E16D							
			– E22A		+ E22A					
			+ E26D		– E26D					
			- E42A			+E 42A				
			+ E46D			- E46D				
13.1.3	Net Lending		+GCC8				- GCC8			
				– GLCV			+ GLCV			
13.2	Net Foreign Currency		– F85A					F85A		
14	Public Sector Debt									
14.1	Local Government Debt			– E22B	+ E22B					
				– E42B		+ E42B				
14.2	Other Public Sector Debt			– E22C	+ E22C					
				– E42C		+ E42C				
15	Bank Deposits									
15.1	Domestic Currency				– E24		+ E24			
					– E25		+ E25			
15.2	Foreign Currency				+ E21			– E21		
					– E26C			+ E26C		
							– B4734	+ B4734		
							- B4784	+ B4784		

				Other			Non- Financial			National
		Central	Central	Public			Private	Foreign		Income
		Bank	Govt.	Sector	Banks	OFIs	Sector	Sector	Total	Totals
16	Deposits with OFIs									
16.1	Domestic Currency					-E44	+ E44			
						-E45	+ E45			
16.2	Foreign Currency					– E46C		+ E46C		
17	Bank Lending									
17.1	Domestic Currency				+ E22D		– E22D			
					+ E22F	– E22F				
					+ E46H	– E46H				
17.2	Foreign Currency									
18	Lending by OFIs				+					
18.1	Domestic Currency				– E26I	+ E26I				
						+ E42D	– E42D			
					– E42E	+ E42E				
						+ E42F				
						– E42F				
18.2	Foreign Currency									
19	Corporate Debt									
19.1	Bills and Trade Credit	1					– B4710(v)	+ B4710(v)		
		1					- B4760(v)	+ B4760(v)		
19.2	Corporate Bonds						– B4725(v)	+ B4725(v)		
							– B4775(v)	+ B4775(v)		
							– B4619	+ B4619		
							– B4669	+ B4669		
20	Equity									

		Central Bank	Central Govt.	Other Public Sector	Banks	OFIs	Non- Financial Private Sector	Foreign Sector	Total	National Income Totals
20.1	Domestic Currency									
	Equity									
20.1.1	Shares & Unit Trusts	– E17A	+ E17A		– E27A		+ E27A			
						– E47A	+ E47A			
							– B4600(v)	+ B4600(v)		
							+ B4619	– B4619		
							+ B4669	- B4669		
20.1.4	Direct Investment						– B4500(v)	+ B4500(v)		
20.2	Foreign Currency Equity						(v)	(v)		
21	Other									
21.1	Domestic Currency	– E17R					+ E17R			
		– E16E	+ E16E		– E27R		+ E27R			
						– E47R	+ E47R			
21.2	Foreign Currency						– B4746(v)	+ B4746(v)		
							– B4796(v)	+ B4796(v)		
25	Total Foreign Currency									
26	Foreign Reserves, Net IMF	+ E11						– E11		
		– E16C						+ E16C		
		– E16CL						+ E16CL		
27	Other Foreign Currency									
•										
30	Total Financial Transactions									

Notes

na: not separately available

- (v) Variation in line numbers: line numbers may differ as between different editions of the source publications. In particular, certain lines giving an alternative breakdown of balance of payments data are not published in all editions.
- **19.** Corporate debt may be split as:

 $B4710 = B4711 + B4712 \\B4760 = B4761 + B4762 \\B4725 = B4726 + B4727 \\B4775 = B4776 + B4777$

20. Equity: The portfolio investment component may be split as: B4600 = B4602 + B4652

If B4602 and B4652 <u>are</u> available separately, they should be classified separately as domestic and foreign currency equity. In this case, the debt components of portfolio investment (B4619 and B4669) should also be deducted separately under domestic and foreign currency:

20.1.1	Shares & Unit Trusts			– B4652(v)	+ B4652(v)	
				+ B4669	– B4669	
20.1.4	Direct Investment			-B4500	+ B4500	
20.2	Foreign Equity			– B4602(v)	+ B4602(v)	
				+ B4619(v)	– B4619(v)	

20.1.4. Direct investment may be split as:

B4500 = B4505 + B4555

However, if B4505 and B4555 are available separately, they should be reclassified as between domestic and foreign currency direct investment:

20.1.4	Direct Investment			– B4555(v)	+ B4555(v)	
20.2	Foreign Equity			(v)	(v)	
				– B4505(v)	+ B4505(v)	

21. Other may be split as: B4746 = B4747 + B4748

B4796 = B4797 + B4798

National Income Totals

- GDPMP Gross Domestic Product at Market Prices
- GDPFC Gross Domestic Product at Factor Cost
- GNPMP Gross National Product at Market Prices
- GNPFC Gross National Product at Factor Cost
- NFIPA Net Factor Income Paid Abroad
- FCA Factor Cost Adjustment
- RE Residual Error

 $GNP^{**} = GDP^{**} - NFIPA$ ***MP = ***FC + FCA

Sources

Data are referred to by line number in IMF, International Financial Statistics, Balance of Payments Yearbook, or Government Finance Statistics Yearbook

Publication Prefix :

B: Balance of Payments Yearbook

These are flows. However they are all reported in US dollars and must be multiplied by the relevant exchange rate (on line B.0101) to be converted into domestic currency and entered into the flow of funds table.

E: International Financial Statistics

These are IFS balance sheet items which must be first differenced to obtain the flow of funds. The flow of funds for any year (t) is the difference between the end of (t) and end of (t-1) balance sheets as reported in IFS

F: International Financial Statistics

These are IFS flows which can be entered directly in the flow of funds matrix

G: Government Finance Statistics Yearbook

These are flows which can be entered directly in the flow of funds matrix.

	Year	GFS data	OFIs data
India	1995	yes	no
India	1997	provisional	no
Bangladesh	1997	no	no
Sri Lanka	1997	partial	no
Kenya	1994	yes	yes
Kenya	1996	partial	yes
Tanzania	1997	no	no
Uganda	1996	no	no
Zambia	1997	partial	no

Table 5. Data Availability

 Table 6a. India: Flow of Funds Matrix for 1995-96 (National Sources)

Billions of I.Rupees				Non-Financial			
	Public	Financial Sector Priva		Privat	eSector	Foreign	Total:
	Sector	1		Corporate		Sector	residual
		Banks ¹	OFIs	Businesses²	Households		error
Financial Transactions							
1 Currency & Deposits	-37	-754	-35	97	697	34	2
2 Investments	-458	321	471	-383	95	263	390
2.1 Central & State Govt Securities	-464	381	406	-4	0	0	319
2.2 Other Govt Securities	-4	-12	-17		6		-27
2.3 Corporate Securities	9	5	163	-396	51	163	-5
2.4 Bank Securities	-5	-28	31	2	1		2
2.5 OFI Securities	7	-19	-93	-5	37		-72
2.6 Foreign Securities		-6	1	4		100	99
2.7 Other Securities	-1	-1	-20	15			-6
3 Loans & Advances	-20	414	341	-586	-255	-38	-144
4 Small Savings	-92		0		92		0
5 Life Fund	-12		-128		139	0	0
6 Provident Fund	-88		-135		223		0
7 Compulsory Deposits		0			-0		0
8 Trade Debt	-9		-5	1	4		-9
9 Foreign Claims n.i.e.	5	-53				-76	-124
10 Other n.i.e.	-49	406	-27	-182			148
Total Financial Transactions	-759	334	483	-1054	995	183	182

Source: Reserve Bank of India, *Flow of Funds Accounts of The Indian Economy: 1951-52 to 1995-96*, Mumbai, 2000.

Notes: 1. Including Reserve Bank of India

2. Including Non-financial Co-operative Societies

Table 6b. India: Flow of Funds Matrix for 1995

	Billions of I.Rupees	Central	Central	Other	Deposit	OFIs	Non-			
	IR 32.427=US\$1	Bank	Govt	Public	Banks		Financial			National
				Sector			Private	Foreign		Income
		Total	Public	Sector	Financial	Sector	Sector	Sector	Total	Totals
	Current Account									
1	Factor Incomes		354	146			11009	0	11509	GDP FC
	o/w						12180		12180	GDP MP
2	Transfers		-125	-189			451	-137	0	
	o/w						-135	135	0	NFIPA
									11374	GNP FC
3	Factor Cost Adjustment		102	568					670	FCA
4	Expenditures		-419	-851			-7574	-450	-9294	
4.1	Consumption		-419	-851			-7574		-8844	
4.2	Exports		0	0				-1307	-1307	
4.3	Imports		0	0				857	857	
5	Balance = Savings		-88	-326			3886	-587	2885	
6	Capital Account		-176	-87			-2858	0	-3120	
6.1	Gross Fixed Investment		-40	-188			-2673	0	-2901	
6.2	Other Capital Account		-136	101			-185	0	-219	
									-12414	GDP MP
									-12279	GNP MP
7	Balance=Sector Surplus/Deficit		-264	-413			1028	-587	-235	
8	Unidentified		495	462			-1302	580	235	
9	Total=Identified Financial		232	49			-274	-7	-0	
	Transactions									
	Financial Transactions	57	175	49	-84		-190	-7	-0	
11	Total Domestic Currency	6	178	49	-84		-227	78	-0	
12	Cash & Bank Reserves	-98	0	0	-78		176	0	0	
13	Net Domestic Government Debt	93	174	49	68		-384	0	0	
14	Public Sector Debt	0	0	0	0		0	0	0	
15	Bank Deposits	0	0	0	-357		357	0	0	
16	Deposits with OFIs	0	0	0	0		0	0	0	
17	Bank Lending	0	0	0	284		-284	0	0	
18	Lending by OFIs	0	0	0	0		0	0	0	
19	Corporate debt	0	0	0	0	0	9	-9	0	
20	Equity	-4	4	0	0		-121	121	0	
21	Other	15	0	0	-1		20	-34	-0	
25	Total Foreign Currency	51	-3	0	0		37	-85	0	
26	Foreign Reserves incl Net IMF	51	0	0	0		0	-51	0	
27	Other Foreign Currency	0	-3	0	0		37	-34	0	
	- *									
30	Total Financial Transactions	57	175	49	-84		-190	-7	-0	

Table 6c. India: Flow of Funds Matrix for 1997

	Billions of I.Rupees	Central	Central	Other	Deposit	OFIs	Non-			
	IR36.313=US\$1	Bank	Govt	Public	Banks		Financial			National
				Sector			Private	Foreign		Income
		Total	Public	Sector	Financial	Sector	Sector	Sector	Total	Totals
	Current Account									
1	Factor Incomes		468	150			14353	0	14971	GDP FC
	o/w						15636		15636	GDP MP
2	Transfers		-83	-220			674	-371	0	
	o/w						-134	134	0	NFIPA
									14837	GNP FC
3	Factor Cost Adjustment		-28	692					664	FCA
4	Expenditures		-550	-1189			-9604	485	-10858	
4.1	Consumption		-550	-1189			-9604		-11343	
4.2	Exports							-1627	-1627	
4.3	Imports							2112	2112	
5	Balance = Savings		-193	-567			5423	114	4777	
6	Capital Account		-216	-106			-3331	0	-3653	
6.1	Gross Fixed Investment		-51	-214			-3313	0	-3578	
6.2	Other Capital Account		-165	108			-18	0	-75	
									-14511	GDP MP
									-14377	GNP MP
7	Balance=Sector Surplus/Deficit		-409	-673			2092	114	1124	
8	Unidentified		462	635			-2268	47	-1123	
9	Total=Identified Financial		53	-38			-176	161	0	
	Transactions									
	Financial Transactions	-21	74	-38	-4		-172	161	0	
11	Total Domestic Currency	-256	98	-38	-4		-168	368	0	
12	Cash & Bank Reserves	-218	0	0	41		177	0	0	
13	Net Domestic Government Debt	13	90	-38	351		-416	0	0	
14	Public Sector Debt	0	0	0	0		0	0	0	
15	Bank Deposits	0	0	0	-955		955	0	0	
16	Deposits with OFIs	0	0	0	0		0	0	0	
17	Bank Lending	0	0	0	376		-376	0	0	
18	Lending by OFIs	0	0	0	0		0	0	0	
19	Corporate debt	0	0	0	0	0	-137	137	0	
20	Equity	-8	8	0	0		-223	223	0	
21	Other	-43	0	0	183		-148	8	0	
25	Total Foreign Currency	235	-24	0	0		-4	-207	0	
26	Foreign Reserves incl Net IMF	235	0	0	0		0	-235	0	
27	Other Foreign Currency	0	-24	0	0		-4	28	0	
30	Total Financial Transactions	-21	74	-38	-4		-172	161	0	

Table 7.	Bangladesh:	Flow of Funds	Matrix for 1997
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	Billions of Taka T43 892=US\$1	Central Bank	Central Govt	Other Public	Deposit Banks	OFIs	Non- Financial			National
	113.072-0541	Dunk	0011	Sector	Dunks		Private	Foreign		Income
		Total	Public	Sector	Financial	Sector	Sector	Sector	Total	Totals
	Current Account									
1	Factor Incomes		**	**			1403	0	1403	GDP FC
	o/w						1403		1403	GDP MP
2	Transfers		14	**			150	-165	0	
	o/w						71	-71	0	NFIPA
									1474	GNP FC
3	Factor Cost Adjustment		**	**					**	FCA
4	Expenditures		-198	**			-1100	109	-1189	
4.1	Consumption		-198				-1100		-1298	
4.2	Exports							-217	-217	
4.3	Imports							326	326	
5	Balance = Savings		-184	**			454	-56	214	
6	Capital Account		16	**			-214	-16	-214	
6.1	Gross Fixed Investment		**				-214	0	-214	
6.2	Other Capital Account		16				0	-16	0	
	*								-1403	GDP MP
									-1474	GNP MP
7	Balance=Sector Surplus/Deficit		-168	**			240	-72	0	
8	Unidentified		153	-3			-205	56	-0	
9	Total=Identified Financial		-15	-3			35	-16	0	
	Transactions									
	Financial Transactions	-9	-6	-3	7	1	27	-16	0	
11	Total Domestic Currency	-8	-6	-3	8	1	26	-18	0	
12	Cash & Bank Reserves	-7			-0		8	0	0	
13	Net Domestic Government Debt	-2	-7		9			0	0	
14	Public Sector Debt			-3	3			0	0	
15	Bank Deposits				-40		40	0	0	
16	Deposits with OFIs							0	0	
17	Bank Lending				52	1	-53	0	0	
18	Lending by OFIs							0	0	
19	Corporate debt						24	-24	0	
20	Equity	-1	1		-4		-1	6	0	
21	Other	3			-11		9	0	0	
25	Total Foreign Currency	-1	0	0	-1		0	2	0	
26	Foreign Reserves incl Net IMF	-1					0	1	0	
27	Other Foreign Currency				-1		0	1	0	
30	Total Financial Transactions	-9	-6	-3	7	1	27	-16	0	

	Millions of SL.Rupees	Central David	Central	Other	Deposit Deposit	OFIs	Non-			NI-4 ¹ 1
	SLK38.995=05\$1	Вапк	Govt	Public Sector	Banks		Financial Drivoto	Foreign		Incomo
		Total	Public	Sector	Financial	Sector	Sector	Sector	Total	Totals
	Current Account	10001	Tuble	Sector	Financiai	Sector	Sector	Beeton	10001	Totals
1	Factor Incomes		22267	**			799102	0	821369	GDP FC
1			22207				800272	0	890272	CDP MP
2	Transfers		-31074	**			70211	-39137	0	
2			-31074				-0034	003/	0	NFIDA
	0/ 11						-7754	7754	811435	CNP FC
3	Factor Cost Adjustment		68903	**					68903	FCA
4	Expenditures		-83833	-8363			-643839	62653	-673382	1011
4.1	Consumption		-83833	-8363			-643839	02000	-736035	
4.2	Exports							-324923	-324923	
4.3	Imports							387576	387576	
5	Balance = Savings		-23737	-8363			225474	23516	216890	
-										
6	Capital Account		-32378	1511			-181098	-5138	-217103	
6.1	Gross Fixed Investment		-25468	0			-191405	0	-216873	
6.2	Other Capital Account		-6910	1511			10307	-5138	-230	
0.2			0,10	1011			10007	0100	-890485	GDP MP
									-880551	GNP MP
7	Balance=Sector Surplus/Deficit		-56115	-6852			44376	18378	-213	
8	Unidentified		41426	6256			-22044	-25425	213	
9	Total=Identified Financial		-14689	-596			22332	-7047	0	
	Transactions									
	Financial Transactions	724	-15413	-596	568	**	21764	-7047	0	
11	Total Domestic Currency	-18333	-5691	-596	-10713		7281	28052	0	
12	Cash & Bank Reserves	1945	0	0	-4846		2901	0	0	
13	Net Domestic Government Debt	-16493	-12434	0	12794		16133	0	0	
14	Public Sector Debt	0	0	-596	596		0	0	0	
15	Bank Deposits	0	0	0	-32000		32000	0	0	
16	Deposits with OFIs	0	0	0	0		0	0	0	
17	Bank Lending	0	0	0	21017		-21017	0	0	
18	Lending by OFIs	0	0	0	0		0	0	0	
19	Corporate debt	0	0	0	0	0	-17161	17161	0	
20	Equity	-6743	6743	0	-5130		-20244	25374	0	
21	Other	2958	0	0	-3144		14669	-14483	0	
25	Total Foreign Currency	19057	-9722	0	11281		14483	-35099	0	
26	Foreign Reserves incl Net IMF	19057	0	0	0		0	-19057	0	
27	Other Foreign Currency	0	-9722	0	11281		14483	-16042	0	
30	Total Financial Transactions	724	-15413	-596	568	**	21764	-7047	0	

Table 9a.	Kenya:	Flow	of Funds	Matrix for	1994
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	Millions of K.Shillings	Central	Central	Other	Deposit	OFIs	Non-			
	KSh56.051=US\$1	Bank	Govt	Public	Banks		Financial			National
				Sector			Private	Foreign		Income
		Total	Public	Sector	Financial	Sector	Sector	Sector	Total	Totals
	Current Account									
1	Factor Incomes		9083	3894			337411	0	350388	GDP FC
	o/w						400722		400722	GDP MP
2	Transfers		4017	0			-11923	7907	0	
	o/w						-23074	23074	0	NFIPA
									327314	GNP FC
3	Factor Cost Adjustment		50021	313					50334	FCA
4	Expenditures		-56689	-4030			-250098	-12584	-323401	
4.1	Consumption		-56689	-4030			-250098		-310817	
4.2	Exports							-148225	-148225	
4.3	Imports							135641	135641	
5	Balance = Savings		6432	177			75390	-4677	77321	
6	Capital Account		-22112	782			-55991	22	-77299	
6.1	Gross Fixed Investment		-21389	-475			-53752	0	-75616	
6.2	Other Capital Account		-723	1257			-2239	22	-1683	
									-400700	GDP MP
									-377626	GNP MP
7	Balance=Sector Surplus/Deficit		-15680	959			19398	-4655	22	
8	Unidentified		-6171	-3131			-6741	16021	-22	
9	Total=Identified Financial		-21851	-2172			12658	11366	0	
	Transactions									
	Financial Transactions	-251	-21600	-2172	1128	-3488	15017	11366	0	
11	Total Domestic Currency	-527	-30597	-2172	15589	-3692	28781	-7382	0	
12	Cash & Bank Reserves	-12508	0	0	12583	2981	-3056	0	0	
13	Net Domestic Government Debt	9952	-30744	-175	16792	2627	1548	0	-0	
14	Public Sector Debt	0	0	-1997	1319	679	0	0	0	
15	Bank Deposits	0	0	0	-37053	0	37053	0	0	
16	Deposits with OFIs	0	0	0	0	-10302	10302	0	0	
17	Bank Lending	0	0	0	20158	-3055	-17104	0	-0	
18	Lending by OFIs	0	0	0	-297	2370	-2073	0	0	
19	Corporate debt	0	0	0	0	0	8335	-8335	0	
20	Equity	-93	93	0	-7614	-1458	8865	207	-0	
21	Other	2121	54	0	9701	2467	-15089	745	-0	
25	Total Foreign Currency	276	8997	0	-14461	204	-13764	18748	0	
26	Foreign Reserves incl Net IMF	276	0	0	0	0	0	-276	0	
27	Other Foreign Currency	0	8997	0	-14461	204	-13764	19024	0	
20	Total Financial Transpotiers	251	21600	2172	1170	2100	15017	11266	0	
30	Total Financial Transactions	-251	-21600	-2172	1128	-3488	15017	11366	0	

	Millions of K.Shillings	Central	Central	Other	Deposit	OFIs	Non-			
	KSh57.1149=US\$1	Bank	Govt	Public	Banks		Financial	г •		National
		T-4-1	D-14-	Sector	F ²	C - 4	Private	Foreign	T-4-1	Income
	Course and A an arrest	Total	Public	Sector	Financial	Sector	Sector	Sector	1 otai	1 otais
1	Current Account		10244	**			460002		490226	CDDEC
1	Factor Incomes		19344	**			460992		480336	GDP FC
2	O/W		17(00	**			52/96/	17094	52/96/	GDP MP
2	Iransfers		1/690	~~			-40/	-1/284	0	
	0/W						-13837	15837	0	NFIPA CND EC
2	Foston Cost A director ant		47621	**					404499	GNPFC
3	Factor Cost Adjustment		4/031	**			260177	21(20	4/631	FCA
4	Expenditures		-81960	**			-360177	21639	-420498	
4.1	Consumption		-81900	* *			-3001//	172521	-442137	
4.2	Exports							-1/3331	-1/3331	
4.3	Imports		2505	**			100400	195170	195170	
5	Balance = Savings		2705	**			100408	4355	10/469	
6	Capital Account		-17915	1334			-90865	-23	-107469	
61	Gross Fixed Investment		16365	**			-70005	-23	104460	
6.1	Other Capital Account		1550	1334			-00104	23	2000	
0.2	Other Capital Account		-1550	1554			-2701	-23	-3000 527067	CDD MD
									-512130	GDF MF GNP MP
7	Balance=Sector Surplus/Deficit		-15210	1334			9543	4332	0	
8	Unidentified		16261	-1658			-19144	4541	0	
9	Total=Identified Financial		1051	-324			-9600	8873	0	
	Transactions									
	Financial Transactions	-6	1057	-324	1056	-2882	-7774	8873	-0	
11	Total Domestic Currency	-23929	-52	-324	3137	-2985	28865	-4712	-0	
12	Cash & Bank Reserves	-7003			7854	-1051	200		0	
13	Net Domestic Government Debt	-13224	-865		17868	-3442	-337		0	
14	Public Sector Debt			-324	357	-33			0	
15	Bank Deposits				-43928		43928		0	
16	Deposits with OFIs					9299	-9299		0	
17	Bank Lending				32593	-4018	-28575		0	
18	Lending by OFIs				-396	-3835	4231		0	
19	Corporate debt						3707	-3707	0	
20	Equity	-813	813		-11007	725	9854	428	-0	
21	Other	-2889			-204	-630	5157	-1434	0	
25	Total Foreign Currency	23923	1109		-2081	103	-36639	13585	0	
26	Foreign Reserves incl Net IMF	23923						-23923	0	
27	Other Foreign Currency		1109		-2081	103	-36639	37508	0	
30	Total Financial Transactions	-6	1057	-324	1056	-2882	-7774	8873	-0	

	Billions of T.Shillings TSh612.12=US\$1	Central Bank	Central Govt	Other Public	Deposit Banks	OFIs	Non- Financial	D		National
		Total	Public	Sector	Financial	Sector	Private Sector	Foreign	Total	Income
	Current Account	Total	Tublic	Sector	Fillanciai	Sector	Sector	Sector	10141	Totals
1	Factor Incomes		**	**			4703		4703	GDP FC
-							4703		4703	GDP MP
2	Transfers		169	**			19	-189	0	
_	o/w		109				-76	76	0	NFIPA
	0,11						,,,	70	4628	GNP FC
3	Factor Cost Adjustment		**	**					**	FCA
4	Expenditures		-414	**			-4006	467	-3953	
4.1	Consumption		-414				-4006		-4420	
4.2	Exports							-741	-741	
4.3	Imports							1208	1208	
5	Balance = Savings		-244	**			716	-278	750	
	¥.									
6	Capital Account		280	**			-754	-276	-750	
6.1	Gross Fixed Investment		**				-744	0	-744	
6.2	Other Capital Account		280				-11	-276	-7	
	•								4703	GDP MP
									4628	GNP MP
7	Balance=Sector Surplus/Deficit		35	**			-38	3	0	
8	Unidentified		29	1			-47	17	0	
9	Total=Identified Financial		64	1			-85	20	0	
	Transactions									
	Financial Transactions	-259	322	1	1	0	-86	20	0	
11	Total Domestic Currency	-248	278	1	-51	0	11	9	0	
12	Cash & Bank Reserves	-17			-25		42		0	
13	Net Domestic Government Debt	-34	56		-22				0	
14	Public Sector Debt			1	-1				0	
15	Bank Deposits				-75		75		0	
16	Deposits with OFIs					-0	0		0	
17	Bank Lending				50		-50		0	
18	Lending by OFIs								0	
19	Corporate debt						-9	9	0	
20	Equity	-222	222		33		-33		0	
21	Other	25			10		-15		0	
25	Total Foreign Currency	-10	44		52	0	-97	11	0	
26	Foreign Reserves incl Net IMF	-10						10	0	
27	Other Foreign Currency		44		52	0	-97	1	0	
30	Total Financial Transactions	-259	322	1	1	0	-86	20	0	

Table 10. Tanzania: Flow of Funds Matrix for 1997

	Billions of U.Shillings	Central	Central	Other	Deposit	OFIs	Non-			
	Ush1046.08 = S\$1	Bank	Govt	Public	Banks		Financial			National
				Sector			Private	Foreign		Income
		Total	Public	Sector	Financial	Sector	Sector	Sector	Total	Totals
	Current Account									
1	Factor Incomes		**	**			6637	0	6637	GDP FC
	o/w						6637		6637	GDP MP
2	Transfers		300	**			-449	-748	0	
	o/w						**	**	**	NFIPA
									6637	GNP FC
3	Factor Cost Adjustment		**	**					**	FCA
4	Expenditures		-661	**			-5434	583	-5512	
4.1	Consumption		-661				-5434		-6095	
4.2	Exports							-792	-792	
4.3	Imports							1375	1375	
5	Balance = Savings		-361	**			1651	-166	1124	
6	Capital Account		64	**			-1005	-64	-1005	
6.1	Gross Fixed Investment		**				-1013	0	-1013	
6.2	Other Capital Account		64				8	-64	8	
									-6518	GDP MP
									-6518	GNP MP
7	Balance=Sector Surplus/Deficit		-297	**			646	-230	119	
8	Unidentified		169	-9			-753	474	-119	
9	Total=Identified Financial		-127	-9			-107	244	0	
	Transactions									
	Financial Transactions	-9	-119	-9	-6	**	-101	244	0	
11	Total Domestic Currency	-71	91	-9	54		-3	-62	0	
12	Cash & Bank Reserves	-35			32		3		0	
13	Net Domestic Government Debt	4	7		-10				0	
14	Public Sector Debt			-9	9				0	
15	Bank Deposits				-82		82		0	
16	Deposits with OFIs								0	
17	Bank Lending				75		-75		0	
18	Lending by OFIs								0	
19	Corporate debt						62	-62	0	
20	Equity	-84	84		-23		23		0	
21	Other	45			-4		-41		0	
25	Total Foreign Currency	63	-209		-3		-155	305	0	
26	Foreign Reserves incl Net IMF	63						-63	0	
27	Other Foreign Currency		-209		-3		-155	368	0	
30	Total Financial Transactions	-9	-119	-9	-6	**	-101	244	0	

Table 11. Uganda: Flow of Funds Matrix for 1996

	Billions of Z.Kwacha	Central	Central	Other	Deposit	OFIs	Non-			
	ZKw1314.5=US\$1	Bank	Govt	Public	Banks		Financial			National
				Sector			Private	Foreign		Income
		Total	Public	Sector	Financial	Sector	Sector	Sector	Total	Totals
	Current Account									
1	Factor Incomes		37	**			4516		4554	GDP FC
	o/w						5156		5156	GDP MP
2	Transfers		305	**			-378	73	-0	
	o/w						-73	73	0	NFIPA
									4481	GNP FC
3	Factor Cost Adjustment		602	**					602	FCA
4	Expenditures		-792	**			-3006	644	-3154	
4.1	Consumption		-792				-3006		-3798	
4.2	Exports							-1552	-1552	
4.3	Imports							2196	2196	
5	Balance = Savings		152	**			1132	717	2002	
6	Capital Account		12	**			-2015	0	-2003	
6.1	Gross Fixed Investment		**				-1929	0	-1929	
6.2	Other Capital Account		12				-86	0	74	
									-5157	GDP MP
									5084	GNP MP
7	Balance=Sector Surplus/Deficit		165	**			-883	717	-1	
8	Unidentified		92	9			676	-776	1	
9	Total=Identified Financial		257	9			-207	-59	0	
	Transactions									
	Financial Transactions	-47	304	9	-9	**	-198	-59	0	
11	Total Domestic Currency	-77	304	9	-38		-198		0	
12	Cash & Bank Reserves	-81			21		59		0	
13	Net Domestic Government Debt	-77	213		0		-136		0	
14	Public Sector Debt			9	-9				0	
15	Bank Deposits				-146		146		0	
16	Deposits with OFIs								0	
17	Bank Lending				36		-36		0	
18	Lending by OFIs								0	
19	Corporate debt								0	
20	Equity	-92	92		-25		25		0	
21	Other	172			85		-257		-0	
25	Total Foreign Currency	30			29			-59	0	
26	Foreign Reserves incl Net IMF	30						-30	0	
27	Other Foreign Currency				29			-29	0	
30	Total Financial Transactions	-47	304	9	-9	**	-198	-59	0	

Table 12. Zambia: Flow of Funds Matrix for 1997