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A note on flows of funds in South Africa’s national financial accounts for the year 1999

by M A Kock and D H Meyer

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Introduction

South Africa's national financial accounts for 1999 are published on pages S-44 to S-53 of this issue of the *Quarterly Bulletin*. This note highlights some of the more important observations which can be made on the basis of the information presented in the accounts.

The national financial accounts form part of the broadly defined System of National Accounts. The scope of the financial accounts extends beyond non-financial economic activity and focuses on financial intermediation in the domestic economy. The flow-of-funds accounting system illustrates the linkages between transactions in financial assets and liabilities among the domestic institutional sectors, and between the domestic sectors and the rest of the world. The net acquisition of financial assets and the net accrual of financial liabilities result in a change in the net financial investment position of the sector involved. A change in the net financial position of a sector equals the net borrowing/lending as measured in the capital account of that sector, indicating linkages with the financing of gross capital formation and the balance of payments.

The national financial accounts, by design, present the macroeconomic interrelationships between the national income and production accounts, the balance of payments, government finance statistics, the monetary survey and financial statistics and inter-sectoral linkages in a systematic and coherent manner. The financial accounts reflect in some detail the process of financial intermediation between surplus and deficit sectors in the economy.

The national financial accounts for South Africa distinguish between 11 sectors and 32 transaction items, 4 of which relate to non-financial transactions, 2 to the integration between the capital account and financial account and 26 to financial transaction items. The flow of funds is presented in a matrix. The accrual of financial liabilities and the acquisition of financial assets are respectively referred to as "sources of funds" and "uses of funds" and are shown in the columns of the matrix.

Interrelationships among macroeconomic accounts

The capital account forms the link between the current account and the financial account – i.e. between "real" economic activity and the "financial" flows in the economy. The link has its origin in the fact that gross saving together with the balance on the current account of the balance of payments must be equal to gross capital formation. The interrelationships among the macroeconomic accounts are illustrated in Table 1.

When an individual sector's saving is not fully absorbed by its investments in non-financial assets, the result will be a surplus on that sector's capital account. By contrast, a deficit is created when saving is insufficient to service investments in non-financial assets. A sector's non-financial transactions, in turn, also lead to changes in the sector's financial assets and/or liabilities. In the event of excess saving – i.e. when

1 The views expressed are those of the authors and do not necessarily reflect the views of the South African Reserve Bank. The Reserve Bank wishes to express its sincere appreciation for the co-operation of all the reporting organisations – government departments, financial market and other public and private-sector institutions – for furnishing the data used for the compilation of South Africa's financial accounts.

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Table1 Consolidated capital account and financial account for all sectors, 1999

At current prices

Uses of funds	R millions	Sources of funds	R millions
Total change in inventories*	-1 346	Consumption of fixed capital*	103 272
Total fixed capital formation*	121 242	Saving*	13 226
Net lending to the rest of the world**	-	Net capital transfers from the rest of the world**	3 398
Gross capital formation	119 896	Financing of gross capital formation	119 896
Net acquisition of domestic financial assets***	342 993	Net issue of liabilities to domestic sectors***	342 993
Net acquisition of foreign assets	79 782	Net issue of liabilities to foreigners	83 180
Net capital transfers from the rest of the world**	3 398	Net lending to the rest of the world**	-
Total uses of funds	426 173	Total sources of funds	426 173

* From the national income and product accounts.
** From the balance of payments. The total of net inflow of capital and decrease in gold and other foreign reserves, i.e. the contra item of the balance on current account.
*** On consolidation, financial claims among domestic sectors cancel out and only assets and liabilities *vis-à-vis* the rest of the world remain.

a sector is a net lender – that sector may either acquire assets or redeem liabilities or a combination of both. However, when gross capital formation exceeds gross saving – i.e. when the sector is a net borrower – the shortfall must be financed either by selling assets or by incurring liabilities, or a combination of both. The sector's surplus or deficit on the capital account therefore represents its position as a net lender or net borrower and is carried forward as the financing balance.

Financing balance

From a macroeconomic perspective, gross domestic saving, augmented by net international capital movements, is the ultimate source of finance of gross capital formation. The flow-of-funds matrix shows each sector's net borrowing/lending position which in turn must equal the net financial investment position as derived from their financial transactions. Table 2 presents the sectoral financing balances of the five major institutional groupings and four subsectors for the calendar year 1999.

An analysis of the financing balances indicates which sectors were surplus or deficit sectors in the calendar year 1999. As shown in Table 2, the general government sector was, on balance, the main financing-deficit sector that had to borrow extensively from financing-surplus sectors in order to fund its investment programmes. Non-financial public-sector enterprises recorded a small overall financing surplus for the year 1999 as this sector's gross saving and capital transfers received more than covered its gross capital formation.

Financial intermediaries, defined as the monetary authority, other monetary institutions, Public Investment Commissioners, insurers, retirement funds and other financial institutions, recorded a substantial financing surplus on a quarterly and annual basis in 1999 because of surplus saving. However, their primary role is that of a mechanism for intermediation between sectors with financial surpluses and deficits.

Table 2 Financing balances* **, 1999
R millions

	Foreign sector***	Financial inter-mediaries	General government		Non-financial corporate business enterprises		House-holds, etc.
			Central and provincial govern-ments	Local authorities	Public sector	Private sector	
1999: 1st qr	-2 349	4 535	-8 592	-1 684	-98	1 993	6 195
2nd qr	2 033	3 240	-8 893	-1 254	-398	-3 983	9 255
3rd qr	1 420	4 571	-8 587	-1 251	11	657	3 179
4th qr	2 294	5 120	6 326	-1 430	1 131	-1 252	-12 189
Year................	**3 398**	**17 466**	**-19 746**	**-5 619**	**646**	**-2 585**	**6 440**

* Gross saving plus capital transfers less gross capital formation. Gross capital formation consists of total fixed capital formation and total changes in inventories, before providing for consumption of fixed capital.

** A positive amount reflects a net lending position and by implication a net acquisition of financial assets, whereas a negative amount reflects a net borrowing position and by implication a net incurrence of financial liabilities.

*** A positive amount reflects a surplus for the rest of the world and therefore a deficit on South Africa's balance on current account of the balance of payments. A negative amount represents a deficit for the rest of the world and a surplus on South Africa's balance on current account of the balance of payments.

The financing balance of the non-financial private corporate business enterprises sector fluctuated and was in deficit for the year 1999 as a whole. This reflects periodic fluctuations in the level of gross capital formation compared to a relatively stable but slightly lower level of gross saving. The household sector, including unincorporated business enterprises and non-profit institutions serving households, recorded an overall financing surplus for the year 1999.

The balance on the current account of the balance of payments of South Africa, with the sign changed[2], reflects the amount of capital inflow or "foreign saving" used to finance the domestic saving-investment gap. A surplus on the balance of the current account in the first quarter of 1999 indicated a capital outflow to the rest of the world. For the remainder of 1999 a quarterly deficit on the current account translated into an inflow of capital from the rest of the world, and for the year 1999 as a whole the foreign sector augmented domestic saving.

2 In the national financial accounts a surplus on the current account of the balance of payments is indicated as a negative amount, whereas a deficit on the current account of the balance of payments is indicated as a positive amount.

Sectoral analysis incorporating financial instrument flows

Beyond the financing balances and net financial investment of the various sectors, the flows underlying net financial investment are classified by *financial instrument* in the national financial accounts. The realm of a sector's overall economic activity extends, among other things, from a search for investment opportunities in non-financial assets to a continuous adjustment of asset mixes across financial instruments, the allocation of saving to investment portfolios and balance-sheet adjustments, following asset and liability management in general. The financial transactions of economic sectors can therefore be analysed from a wide variety of vantage points. The observations presented below focus on key developments in 1999, and are illustrative rather than comprehensive.

General government: Central government and provincial governments

The interrelationships between the central government and provincial governments sector with all the other sectors of the South African economy in the course of 1999 are summarised in Table 3. The central government and provincial governments sector recorded a financing deficit of R19,7 billion for the calendar year 1999. This financing deficit in 1999 resulted from gross capital formation of R11,4 billion, capital transfers of R1,9 billion and dissaving of R6,4 billion. Dissaving means that current expenditure exceeded current income. The financing deficit was essentially funded through the net accrual of financial liabilities amounting to R20,2 billion in 1999. The central government borrowed extensively through the issuance of fixed-interest securities to finance the deficit and incurred net liabilities in, among other things, Treasury bills and marketable government bonds. Marketable government bonds were the main financing instrument which contributed R14,2 billion to offsetting the financing deficit, with a slight preference for short-term bonds because short-term interest rates declined well below long-term interest rates.

Table 3 Flow of funds: Central government and provincial governments, 1999

	R millions
Financing balance	**-19 746**
Net acquisition of financial assets	484
Net incurrence of financial liabilities	20 230
Net incurrence of financial liabilities by financial instrument	**20 230**
Treasury bills	1 199
Short-term government bonds	7 249
Long-term government bonds	6 981
Non-marketable government bonds	-1 830
Other	6 631
Financing by sector	**20 230**
Foreign sector	27 281
Total domestic sectors	-7 051

An increase in the liabilities of the central government will be reflected as an increase in the assets of holders of these fixed-interest securities. An analysis of the net outcome of primary market issues of rand-denominated and foreign-currency-denominated bonds as well as secondary trading in the domestic bond market shows that the holdings of South African government bonds by non-residents rose very strongly during 1999; the increase amounted to almost R29 billion. This indicates the importance of the foreign sector as a source of funding for the government's financing deficit in 1999. The decline in bond yields and the concomitant appreciation of the price of bonds, together with a relatively stable exchange rate of the rand, supported foreign investment in South African bonds in 1999.

General government: Local authorities

Local authorities, on a net basis, redeemed a small portion of their outstanding fixed-interest securities in 1999 and increased their outstanding liabilities with regard to short and long-term loans and especially their outstanding balances with other creditors. The increase in trade credit owed by local authorities was only slightly more than the trade credit owed to local authorities by various debtors.

Financial intermediaries

Financial intermediaries convert the funds they receive from surplus entities (lenders) and from their own liabilities into a variety of financial instruments structured to suit the requirements of deficit entities (borrowers). In theory, surplus and deficit entities could transact directly with one another but because of, among other things, high transaction costs, lack of information and other frictions, a niche is created for financial intermediaries.

The financial intermediaries sector identified in South Africa's national financial accounts consist of five subsectors, namely the monetary authority, other monetary institutions, Public Investment Commissioners, insurers and retirement funds, and other financial institutions. Two of the more prominent subsectors, namely "other" monetary institutions, and insurers and retirement funds, will be dealt with in some detail.

Monetary authority

The South African Reserve Bank and Corporation for Public Deposits as entities in the broader sector of financial intermediaries, interacted mostly with other monetary institutions, the central government and the foreign sector. The increase in financial liabilities can be attributed mainly to an increase in notes and coin in circulation and other liabilities, whereas the increase in foreign assets – i.e. gold and other foreign reserves – accounted for the bulk of the increase in financial assets.

Other monetary institutions

The other monetary institutions sector, by definition, includes banks, mutual banks, the Land Bank and Postbank and will be discussed with reference to the abbreviated flow of funds presented in Table 4. The financial intermediary character of this sector is affirmed by its positive financing balance which reflects this sector as a net lender with a definite bias towards investment in financial assets as opposed to non-financial assets.

Other monetary institutions recorded gross saving of R14,2 billion in 1999, of which only R5,2 billion was invested in non-financial assets, leaving a financing surplus of R8,9 billion. The financing surplus together with the accrual of additional liabilities to the amount of R55,7 billion, financed the acquisition of financial assets amounting to R64,7 billion. Monetary deposits of R42,4 billion were the major source of funds; as could be expected, funds were mostly channelled to financing-deficit sectors. Intermediation was effected through bank loans and advances amounting to R29,8 billion, gold and foreign reserves of R13,2 billion, mortgage loans of R8,2 billion and investments in bills, bonds and loan stock of R3,9 billion. In 1999, other monetary institutions invested 92,5 per cent of their total resources in financial assets and this sector's asset flows accounted for 32,7 per cent of financial intermediary asset flows and 12,8 per cent of total asset flows.

Table 4 Flow of funds: Other monetary institutions, 1999

Transaction items	Sources/ liabilities R millions	Uses/ assets R millions
Gross saving	14 189	
Gross capital formation		5 240
Net lending (+)/Net borrowing (-)	8 949	
Net financial investment (+/-)		8 949
Net incurrence of financial liabilities	55 728	
Net acquisition of financial assets		64 677
Gold and other foreign reserves	-	13 156
Monetary deposits	42 441	-186
Bank loans and advances	-2 908	29 787
Bills, bonds and loan stock	3 236	3 870
Mortgage loans	-	8 173
Other assets/liabilities	12 959	9 877
Total sources/liabilities and uses/assets	**69 917**	**69 917**
	Per cent	
Percentage of total sources used for gross capital formation	7,5	
Percentage of total sources used to acquire financial assets	92,5	
Percentage of total asset flows	12,8	
Percentage of total financial intermediary asset flows	32,7	

Insurers and retirement funds

3 *Contractual saving can be defined as a contractual or other obligation to set aside a regular amount of funds, such as premiums for long-term insurance policies and membership contributions to pension funds.*

Insurers and retirement funds, as agents for contractual saving,[3] are important financial intermediaries in the South African economy. Despite their small financing surplus, they accounted for 32,9 per cent of financial intermediary asset flows and 12,8 per cent of total asset flows in 1999.

The financing surplus together with the accrual of liabilities amounting to R67,7 billion, financed the acquisition of financial assets of R70 billion. Insurers and retirement funds acquire financial assets – i.e. the liabilities of the public and private sectors – and as such indirectly finance gross capital formation. This sector’s single most important source of funds is premium and member contributions – together with investment income less expenditure such as claims and benefits paid and other current expenses. This net inflow of funds is reflected as a change in the member’s interest in reserves, the largest liability category. The allocation of funds to the net acquisition of financial assets not only reveals insights into insurers’ and retirement fund managers’ assessment of market conditions but also information about the asset mix required to match liabilities and the need for diversification to reduce exposure to asset-price volatility. Liquid assets in the form of deposits with monetary institutions attracted 26,8 per cent of net investment in financial assets, followed by 39,2 per cent in other deposits, the major portion of which relates to official pension and provident funds’ investments with the Public Investment Commissioners. The quest for diversification was also evident from the allocations made to offshore investments in, among other things, deposits and shares.

Table 5 Flow of funds: Insurers and retirement funds, 1999

	R millions
Financing balance	2 363
Net incurrence of financial liabilities	67 661
Members' interest in the reserves of retirement and insurance funds	32 296
Other liabilities	35 365
Net acquisition of financial assets	70 024
Monetary deposits	18 754
Other deposits	27 482
Public Investment Commissioners	18 711
Foreign deposits	3 011
Other	5 760
Bills, bonds and stock	-4 893
Short-term government bonds	121
Long-term government bonds	-10 796
Other	5 782
Shares	6 370
Domestic	-25 370
Foreign	31 740
Other assets	22 311
	Per cent
Percentage of total asset flows	12,8
Percentage of total financial intermediary asset flows	32,9

Public Investment Commissioners

The Public Investment Commissioners incurred the major portion of their financial liabilities in the form of funds received from official pension and provident funds and, to a lesser extent, to funds received from, among other sources, social security funds, other government funds and trust accounts of households. These funds were mainly used to increase their investment in ordinary shares, bills and fixed-interest securities.

Other financial institutions

Other financial institutions by definition include, among other things, unit trusts, participation mortgage bond schemes, finance companies and financial public enterprises. The diversity of other financial institutions is reflected in the spread of their liabilities which ranged from deposits received to short-term loans, security issues by financial public enterprises and ordinary share capital. These funds were, in turn, mainly invested in deposits with monetary institutions, bills, fixed-interest securities and ordinary shares.

Non-financial public corporate business enterprises

Non-financial public-sector enterprises recorded a small overall financing surplus for 1999. These institutions mostly funded themselves through the issuance of bills, fixed-interest securities and share capital whereas the increases in their assets or claims on other sectors were mostly related to trade credit and short-term loans.

Non-financial private corporate business enterprises

Non-financial private corporate business enterprises, as agents for saving and investment in non-financial assets, were the most important contributors to gross saving and gross capital formation in 1999 as shown in Table 6.

Table 6 Flow of funds: Non-financial private corporate business enterprises, 1999

Transaction items	Sources/ liabilities R millions	Uses/ assets R millions
Gross saving	59 897	
Capital transfers	322	
Gross capital formation		62 804
Net lending (+)/Net borrowing (-)	-2 585	
Net financial investment (+/-)		-2 585
Net incurrence of financial liabilities	94 092	
Net acquisition of financial assets		91 507
Monetary deposits	-	15 073
Other deposits	5 512	4 578
Bank loans and advances	21 497	-
Trade credit and short-term loans	1 932	14 795
Bills, bonds and loan stock	5 497	-4 716
Shares	47 051	-643
Long-term and mortgage loans	6 830	5 956
Other assets/liabilities	5 773	56 464
Total sources/liabilities and uses/assets	**154 311**	**154 311**
	Per cent	
Percentage of total sources used for gross capital formation	40,7	
Percentage of total sources used to acquire financial assets	59,3	
Percentage of total asset flows	28,2	

For 1999, this sector's financing deficit of R2,6 billion together with the net acquisition of financial assets of R91,5 billion, was financed through the net accrual of financial liabilities amounting to R94,1 billion. Non-financial private corporate business enterprises primarily raised funds by incurring fixed-interest debt in the bond market, through loans and advances from the banking sector, and by issuing share capital in the primary share market. The acquired funding was mostly allocated to financial assets such as cash working balances, trade credit and short and long-term loans. Through the financing of business-related activities, the non-financial private corporate business enterprises were important participants in the overall process of financial intermediation as reflected by the 59,3 per cent of their total sources of funds used for acquiring financial assets. This also accounted for 28,2 per cent of total asset flows.

Households

Households, as the final consumers and owners of real-estate, were the second-largest saving sector in the South African economy and their financing surplus of R6,4 billion in 1999 was mainly channelled through the intermediation of financial institutions to other deficit sectors, such as central and provincial governments and non-financial public and private-sector corporate business enterprises.

The financing surplus together with access to financial liabilities such as bank loans and advances, short and long-term loans and trade credit, served as the mechanism for financing households' net acquisition of financial assets. On the asset side of households' balance sheet, the increase in their interest in retirement and life funds represented about 80,3 per cent of their net acquisition of financial assets in 1999. An analysis of changes in holdings of financial assets by individuals reflected a change in preference away from deposits with banking institutions towards deposits with other financial intermediaries, such as unit trusts and asset managers.

Foreign sector

The importance of the foreign sector stems from its primary role as the external balancing sector to the domestic saving-investment gap – i.e. through the balance on the current account of the balance of payments of South Africa. In 1999 this sector was a net provider of savings to the South African economy as it recorded a financing surplus of R3,4 billion. The foreign sector increased its holdings of South African financial assets mainly through the acquisition of ordinary shares and government bonds.

Summary and conclusion

South Africa's National Financial Accounts summarise the main transaction flows in the major macroeconomic accounts. The flow-of-funds analysis highlights the financial transactions in the process of intermediation between financing-surplus and financing-deficit sectors.

In 1999, the general government sector was the main financing-deficit sector followed by non-financial private-sector corporate business enterprises. These financing deficits were funded by a process of financial intermediation performed by financial intermediaries which mobilised, transformed and allocated the financial surpluses of surplus units. The surpluses originated mainly from financial intermediaries and households, as well as from an inflow of capital from the rest of the world.

Noteworthy developments and observations regarding the financial flows in 1999 include

- the importance of the foreign sector as a purchaser of government bonds and indirect source of funding for government's deficit;
- the substantial flows through insurers and retirement funds as agents for contractual savings;
- the offshore diversification of asset portfolios;
- the large contribution of non-financial private corporate business enterprises to both saving and investment in non-financial assets as well as their role in financial intermediation;
- the substantial contribution of households to saving through their interest in retirement and life funds; and
- households' increased preference for deposits with non-bank financial intermediaries such as unit trusts.

The National Financial Accounts make an important contribution to the understanding of the linkages between "real" economic activity and "financial" flows, by providing a systematic and coherent macroeconomic framework.

References

IMF. 2000. *Monetary and Financial Statistics Manual.* Washington DC: IMF. September 2000.

Uys, D J. 1992. The system of national financial accounts, in Fourie, L J and Falkena, H B and Kok, W J (eds). *Fundamentals of the South African financial system.* Halfway House: Southern Book Publishers.

Meyer, D H. 1995. *Suid-Afrika se Nasionale Finansiële Rekening*: 1980 – 1992. Ongepubliseerde M.Com-verhandeling. Johannesburg: Randse Afrikaanse Universiteit.

Meyer, D H. 1999. A flow of funds analysis: South Africa's National Financial Account. *Bank of Botswana Research Bulletin,* December 1999, vol.17, no.2. Gaborone: Bank of Botswana.

Van der Walt, J G. 1999. *Institutional sector classification guide for South Africa.* Pretoria: South African Reserve Bank.

South African Reserve Bank. 1994. South Africa's National Financial Account, 1970 – 1992. Supplement to the *Quarterly Bulletin,* no.194, December 1994. Pretoria: South African Reserve Bank.