

Note on the progress in developing South Africa's integrated economic accounts¹

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1. Introduction

The South Reserve Bank (SARB) has been developing an integrated economic accounts (IEA) statistical framework for the South African economy since 2015. These macroeconomic statistics will address some of the data gaps identified by the Group of Twenty (G20)³ Data Gaps Initiatives (DGI). This note illustrates progress made with the balance sheet (non-financial assets and financial assets and liabilities) as well as the accumulation accounts – as represented by the shaded areas in Figure 1.

Figure 1 Simplified integrated economic accounts framework*

Balance sheet	Accumulation accounts			Balance sheet
Opening balance	Transactions	Other volume changes	Revaluations	Closing balance
Non-financial assets				
Financial assets and liabilities				
Net worth				Net worth

* For a more comprehensive IEA framework and full delineation of institutional sector and financial instrument coverage, refer to the two previous notes (published in the December 2016 and December 2017 editions of the *Quarterly Bulletin*). The methodology underlying the compilation of the sectoral balance sheet and accumulation accounts follows the guidelines of the *System of National Accounts, 2008* (SNA 2008). *Transactions* for non-financial assets and financial assets and liabilities are recorded in the capital and financial accounts respectively. Transactions include gross purchases minus gross sales (including realised holding gains and losses) plus accrued interest (reinvestment of interest until payment). The *capital account* records acquisitions and disposals of non-financial assets as a result of transactions with other economic units, internal bookkeeping transactions linked to production (such as changes in inventories and consumption of fixed capital) and the redistribution of wealth by means of capital transfers. The *financial account* records acquisitions and disposals of financial assets and liabilities. *Other volume changes* record changes in the amounts of the assets and liabilities held by institutional units or sectors as a result of factors other than transactions, for example, the destruction of fixed assets by natural disasters. *Revaluations* record those changes in the values of assets and liabilities that result from changes in market prices, also referred to as unrealised holding gains and losses.

Source: Based on the System of National Accounts, 2008

2. Analysis of preliminary sectoral balance sheet results⁴

An overview of South Africa's macroeconomic balance sheet by main domestic institutional sectors and the rest of the world (ROW) 'sector', broken down by non-financial assets as well as financial assets and liabilities as at 31 December 2013, is provided in Table 1. Total assets of the domestic economy of R38.1 trillion comprised financial assets of R26.5 trillion and non-financial assets of R11.6 trillion, resulting in a total net worth of R11.6 trillion and a negative net financial worth of R0.1 trillion, as financial liabilities exceeded financial assets.

1 This note is the third in a series highlighting the development of South Africa's integrated economic accounts (IEA). The first, titled 'The further development of integrated economic accounts for South Africa – institutional sector balance sheets' was published in the December 2016 *Quarterly Bulletin*, and the second, titled 'The further development of sectoral financial balance sheets for South Africa's integrated economic accounts' in the December 2017 *Quarterly Bulletin*. The intention is to compile and publish IEA data on a quarterly basis at some future date. At this stage, the data published and discussed in this note should be treated as preliminary.

2 The views expressed are those of the authors and do not necessarily reflect that of the SARB.

3 The G20 is an international forum for ministers of finance and central bank governors of 19 of the largest advanced and emerging economies as well as the European Union.

4 These are experimental results and are subject to future adjustment.

Table 1 Summary balance sheet* at market value, 31 December 2013

R trillions

	Non-financial corporations ¹		Financial corporations		General government		Households		Total domestic economy		Rest of the world ²	
	A	L	A	L	A	L	A	L	A	L	A	L
Non-financial assets ³	5.3		0.4		2.6		3.3		11.6			
Financial assets and liabilities.....	2.7	7.8	14.6	15.0	1.9	2.0	7.3	1.8	26.5	26.6	4.2	4.1
Net worth ⁴		0.2		0.1		2.5		8.9		11.6		0.1
Total assets and liabilities	8.0	8.0	15.0	15.0	4.5	4.5	10.6	10.6	38.1	38.1	4.2	4.2
Memo item:												
Net financial worth⁵.....		-5.1		-0.3		-0.1		5.6		-0.1		

A = assets

L = liabilities

* The balance sheet shows the market value of non-financial assets as well as financial assets and liabilities as at a specific point in time.

1 Private non-financial corporations' data are not directly sourced, but derived from counterparty positions. It should therefore be treated as preliminary and will be revised when administrative data sources are incorporated.

2 In the IEA, the rest of the world is shown as a separate sector.

3 Total produced assets, including underlying land.

4 Total assets minus total liabilities.

5 Financial assets minus financial liabilities.

Components may not add up due to rounding off.

Source: SARB

The non-financial corporations held 46% of South Africa's non-financial assets and the financial corporations held more than 50% of both financial assets and financial liabilities, while households accounted for almost 80% of total net worth. Households also had the largest positive net financial worth, whereas non-financial corporations had the largest negative net financial worth. The ROW had a small positive net financial asset position of R0.1 trillion vis-à-vis the domestic institutional sectors.

2.1 Non-financial assets⁵

In South Africa's macroeconomic balance sheet, the stock of non-financial assets (both produced and non-produced) at market value⁶ is an important asset class in addition to financial assets, and reflects fixed capital formation in production capacity supporting employment and income.

Table 2 Stock of non-financial assets at market value per institutional sector

R billions

	Non-financial corporations	Financial corporations	General government	Households	Total domestic economy
Opening stock in first quarter 2010	3 592	282	1 989	2 750	8 613
Closing stock in fourth quarter 2013	5 278	413	2 615	3 313	11 619
Change in stock over period	1 686	131	626	563	3 006
Contribution to growth by sector (per cent)	19.6	1.5	7.3	6.5	34.9

Source: SARB

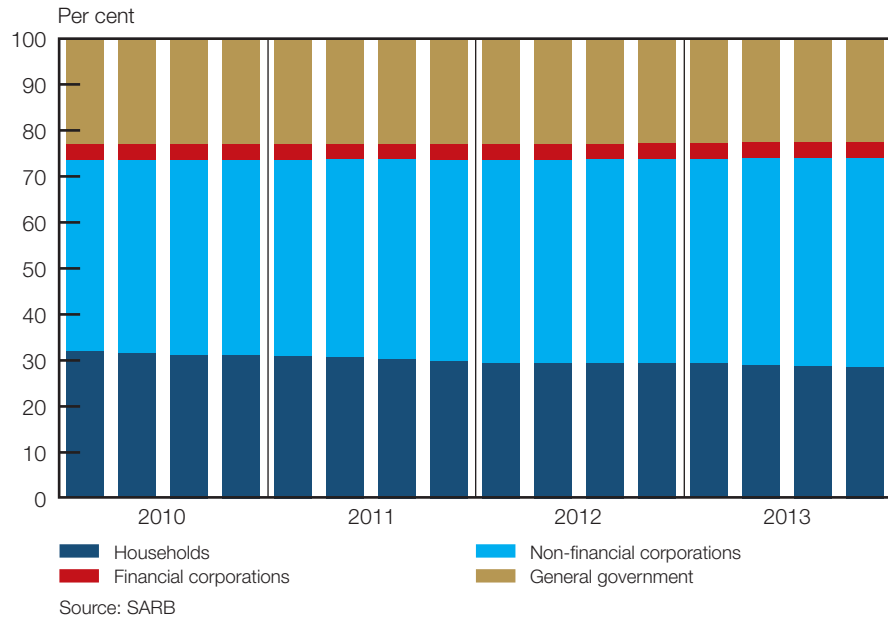
The market value of the stock of non-financial assets for the economy as a whole, as reflected in Table 2, increased by R3.0 trillion (or 34.9%) from the first quarter of 2010 to the fourth quarter of 2013. This change reflects the net outcome of gross fixed capital formation, consumption of fixed capital as well as revaluation. The non-financial corporations contributed 19.6% to the growth in this asset class over the period. Institutional sector ownership changed somewhat –

5 Non-financial produced assets consist of fixed assets (dwellings, buildings other than dwellings, other structures, machinery and equipment, cultivated biological resources and intellectual property); inventories; and valuables. At present, databases; entertainment; literary and artistic originals; and valuables are not measured. Non-financial non-produced assets consist of natural resources; contract leases and licences; and purchased goodwill and marketing assets. At present, only land underlying dwellings, other buildings and other structures are included. Vacant land and sub-soil assets will be introduced later.

6 Non-financial assets are valued at end of period market prices, or derived as replacement value minus consumption of fixed capital.

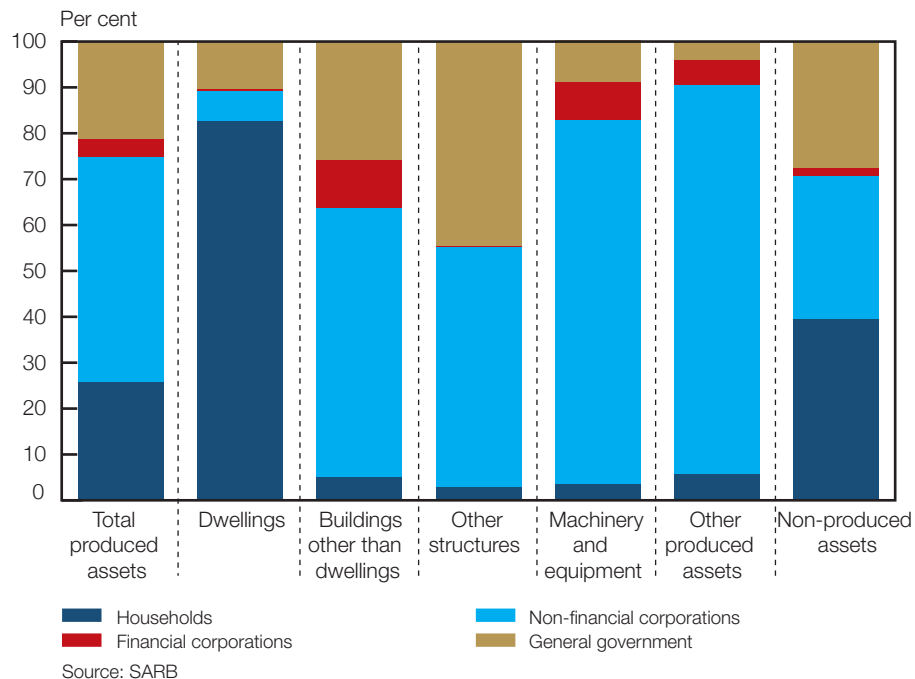
over the same period as a whole – with the contribution of households declining from 32% to 29% and that of non-financial corporations increasing from 42% to 45%, as this sectors' capital expenditure outpaced that of the other sectors (see Figure 2).

Figure 2 Institutional sector holdings of non-financial assets



The distribution of non-financial assets across the institutional sectors as a percentage per asset type varies significantly, as indicated in Figure 3. The non-financial corporations owned 49% of all produced assets, followed by households and general government with 26% and 21% respectively at the end of 2013. Households held 83% of dwellings and the non-financial corporations held 59% of buildings other than dwellings. Other structures, mainly infrastructural assets, reside mostly with non-financial corporations (both private and public) and general government. Machinery and equipment as well as other produced assets (cultivated biological resources, intellectual property products and inventories) were largely held by the non-financial corporations.

Figure 3 Institutional sector holdings by type of non-financial assets as at the end of 2013



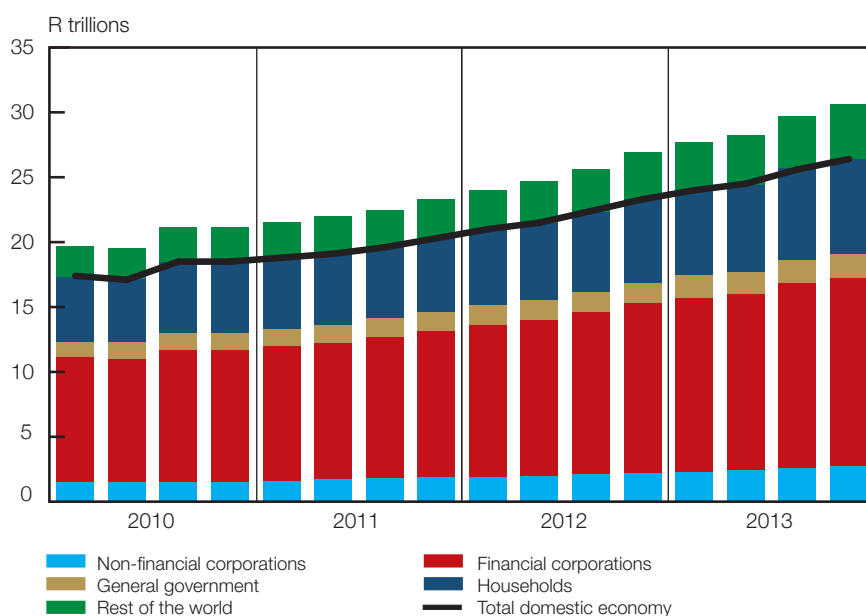
Capital outlays on mineral exploration and evaluation as part of intellectual property contributed most to the non-financial corporations' large share of other produced assets.

Non-produced assets, currently comprising only the value of land underlying dwellings as well as other buildings and structures, were fairly evenly distributed among households, non-financial corporations and general government.

2.2 Financial assets and liabilities

The financial asset holdings of domestic institutional sectors increased by R9.0 trillion from the first quarter of 2010 to the fourth quarter of 2013, as shown in Figure 4. Financial corporations and households held most of the financial assets at, on average, 56% and 28% respectively over the period. The relative share of financial assets held by non-financial corporations and general government remained in single digits over this period. The financial assets of the ROW vis-à-vis the domestic institutional sectors increased from R2.4 trillion in the first quarter of 2010 to R4.2 trillion in the fourth quarter of 2013.

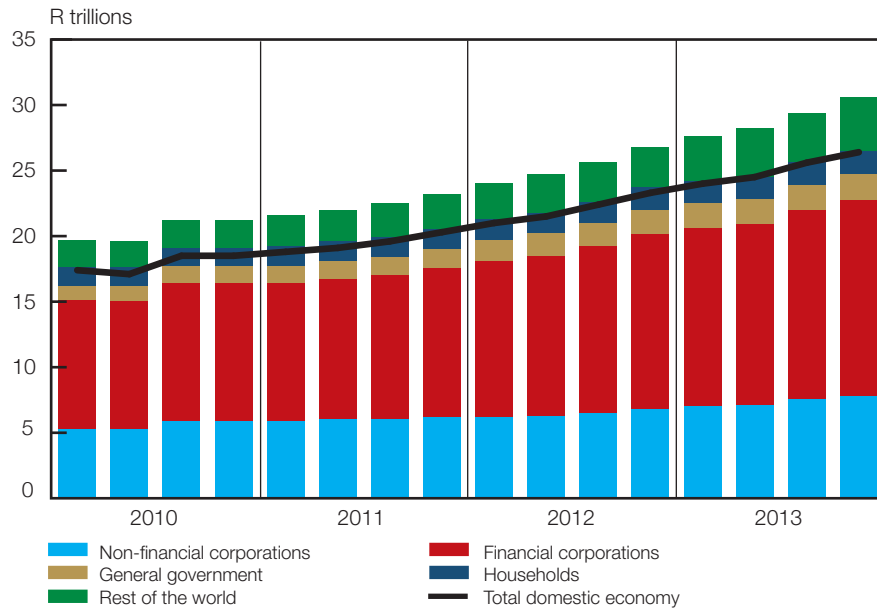
Figure 4 Market value of total financial assets per institutional sector



Source: SARB

Due to the symmetry of harmonised financial assets and liabilities in the IEA, the trend in total financial liabilities remained broadly aligned to that of total financial assets, but with markedly different institutional sector contributions. Financial corporations held most of the financial liabilities, at about 56%, similar to its large share of total financial assets. By contrast, non-financial corporations' relative share of total financial liabilities – of about 30% – far exceeded its share of total financial assets of less than 10%, while households' relative small share of financial liabilities of 7% was outstripped by its share of financial assets of 28% over the period. The financial liabilities of the ROW vis-à-vis the domestic institutional sectors increased from R2.1 trillion in the first quarter of 2010 to R4.1 trillion in the fourth quarter of 2013.

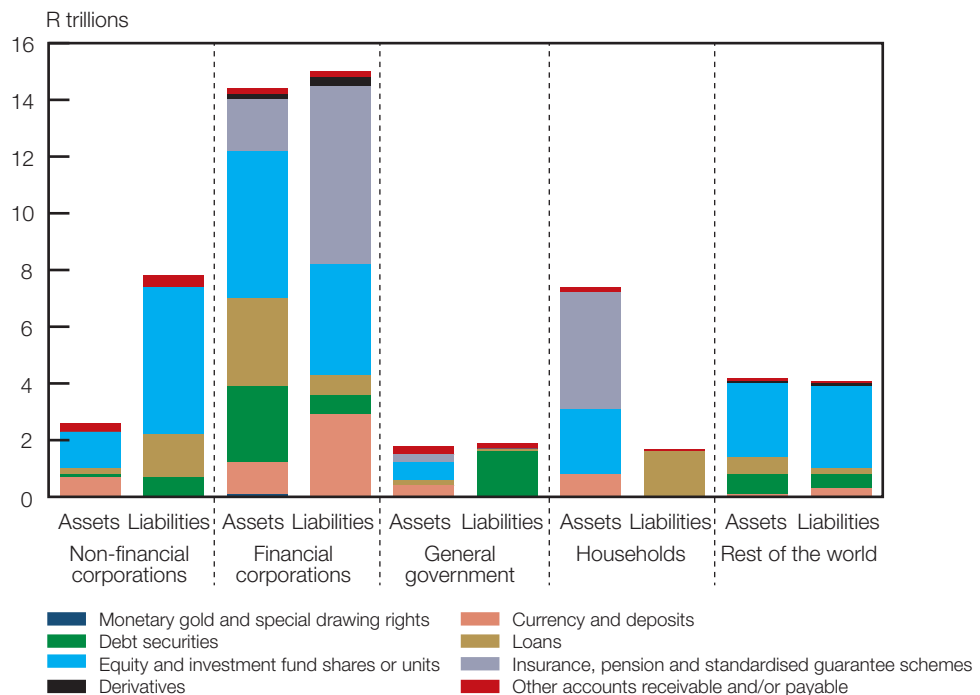
Figure 5 Market value of total financial liabilities per institutional sector



Source: SARB

The breakdown of total financial assets and liabilities by institutional sector and financial instrument, as at 31 December 2013, is shown in Figure 6. *Equity and investment fund shares or units* accounted for a significant portion of both financial assets and liabilities of the domestic sectors, at 49% and 67% respectively at the end of 2013. In the case of the ROW, this instrument was even more prevalent, and accounted for about 61% and 71% respectively of its financial assets and liabilities. *Insurance, pension and standardised guarantee schemes* accounted for 42% of financial corporations' financial liabilities, while dominating household financial assets at approximately 56%. *Loans* from financial corporations (mostly banks) dominated households' financial liabilities. *Debt securities* accounted for 80% of general government's financial liabilities.

Figure 6 Market value of financial assets and liabilities by institutional sector and financial instrument, 31 December 2013



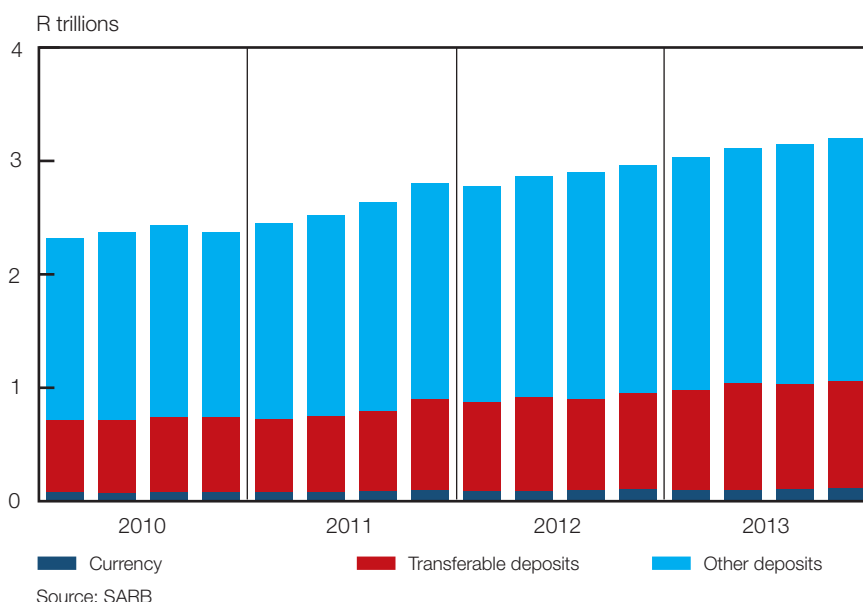
Source: SARB

The macroeconomic statistics compiled in the IEA framework also provides for detailed analysis per financial instrument at sub-instrument level, an example of which is shown in Figure 7 for *currency and deposits*, and in Figure 8 for loans. *Other deposits*⁷ remained the main driver of the increase in currency and deposits at, on average, 69% between the first quarter of 2010 and the fourth quarter of 2013. Over the same period, *other transferable deposits*⁸ contributed 28% and *currency* contributed 3%.

7 Other deposits comprise all claims, other than transferable deposits, that are represented by evidence of deposit.

8 Transferable deposits comprise all deposits that are exchangeable on demand, at par without penalty or restriction and directly usable for making payments by cheque, draft, giro order, direct debit/credit or other direct payment facility.

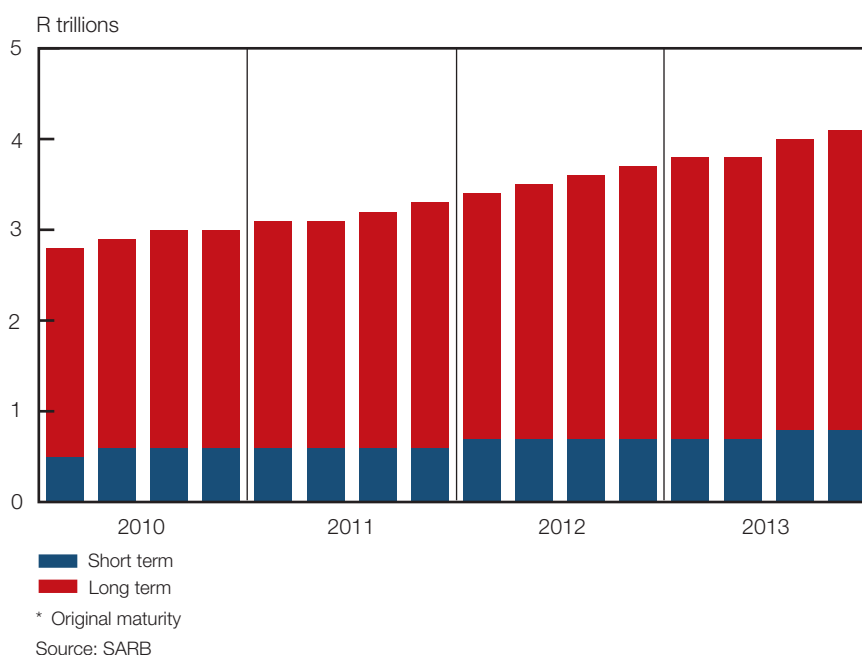
Figure 7 Components of currency and deposits



The maturity breakdown of loans shows the continued dominance of *long-term loans*.⁹ Long-term loans contributed 80%, on average, to total loans from the first quarter of 2010 and the fourth quarter of 2013.

9 Loans are created when a creditor lends funds directly to a debtor, and consist of short-term loans that have an original maturity of one year or less, and long-term loans with an original maturity of more than one year.

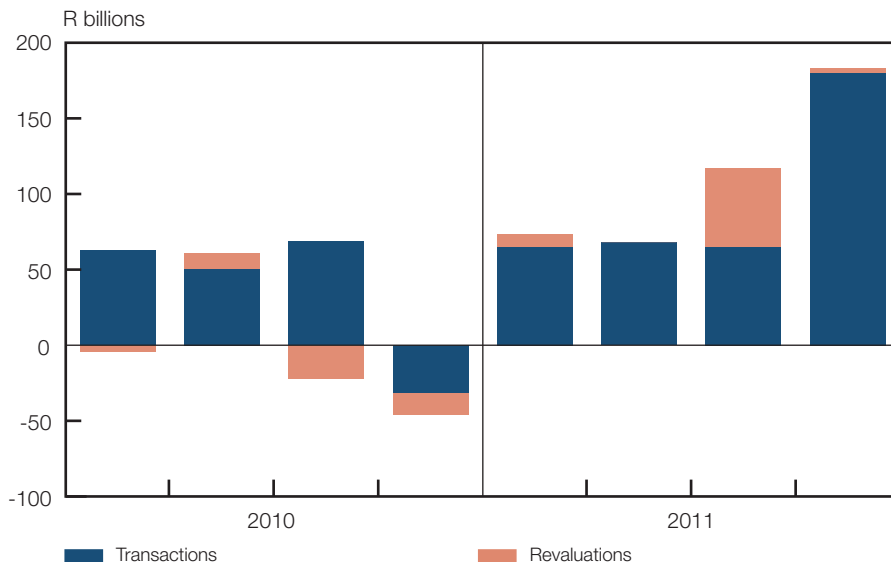
Figure 8 Maturity breakdown of loans*



2.3 Transactions and revaluations in the accumulation account

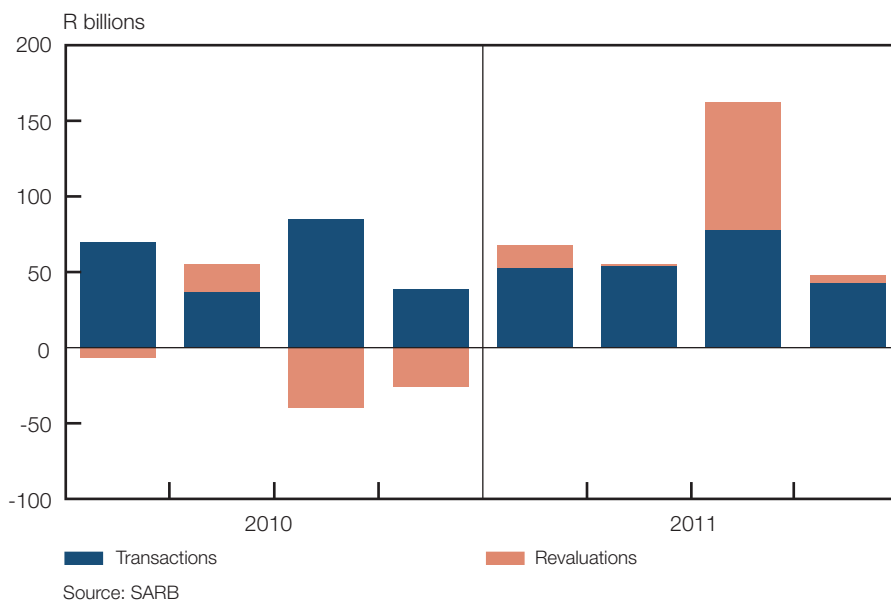
The change between the opening and closing balances of a financial instrument is explained by the three components (transactions, revaluations and other volume changes) of the accumulation account, as shown in Figure 1. This is further illustrated in Figures 9 and 10 for currency and deposits as well as for loans from the first quarter of 2010 to the fourth quarter of 2011.

Figure 9 Attribution of change in currency and deposit balances



The change between stock positions for both financial instruments is mostly explained by transactions. When denominated in foreign currency, revaluations are driven by changes in the exchange value of the rand, with the effect of an appreciation clearly visible in the third and fourth quarters of 2010 and that of a depreciation in the third quarter of 2011.

Figure 10 Attribution of change in loan balances



2.4 From-whom-to-whom positions

An institutional sector's financial assets and liabilities vis-à-vis a counterparty institutional sector reveals financial linkages within the economy and vis-à-vis the ROW. The from-whom-to-whom balanced financial asset and liability stock positions of the four domestic institutional sectors and the ROW, as at 31 December 2013, is shown in Table 3. The horizontal view (rows) shows the total financial assets of each institutional sector vis-à-vis the institutional sector against which claims are held. Similarly, the vertical view (columns) shows the counterparty breakdown of an institutional sector's total financial liabilities. For example, financial corporations' financial assets of R2.9 trillion represent a claim against non-financial corporations. For financial corporations as a whole, intra-sectoral positions of R6.4 trillion accounted for about 43% of this sector's financial assets and liabilities.

Table 3 From-whom-to-whom market value positions of financial assets and liabilities between resident institutional sectors and the rest of the world, 31 December 2013

R billions

Institutional sectors		Financial liabilities by institutional sector (vertical)					Total assets	
		Non-financial corporations	Financial corporations	General government	Households	Rest of the world		
Financial assets by institutional sector (horizontal)	Non-financial corporations	136	1 044	77	67	1 372	2 696	30 710
	Financial corporations	2 891	6 350	1 091	1 624	2 594	14 629	
	General government	711	974	82	83	0	1 850	
	Households	1 743	5 360	110	0	116	7 330	
	Rest of the world	2 336	1 240	630	0	0	4 206	
	Total liabilities	7 816	14 968	1 990	1 774	4 082	-123*	
							30 631	80**

* This value is equal to the net international investment position, excluding monetary gold, which has no counterparty classification in the financial balance sheets.

** This is the value of the monetary gold held by the SARB as at 31 December 2013; it equates to the difference between the balanced assets and liabilities, because monetary gold has no counterparty classification in the financial balance sheets.

Source: SARB

On a net basis, the ROW held assets (claims) of R4.2 trillion and had liabilities (owed) of R4.1 trillion, vis-à-vis the domestic economy.¹⁰

3. Conclusion

The preliminary and experimental statistics in this note reflects progress made with the further development of South Africa's IEA. Data for sectoral non-financial assets and financial assets and liabilities for both stocks and accumulation accounts currently range from the first quarter of 2010 to the fourth quarter of 2013. The focus now shifts to completing the data set to 2018, and to harmonise the complete IEA.

10 The financial assets and liabilities of the ROW are compiled from the perspectives of foreign economies, resulting in an inverse dataset – which corresponds to South Africa's international investment position.