

## Chapter 4: Banking-sector overview

### 4.1 Introduction

This chapter provides an overview of the financial and risk information, compiled by means of the aggregation of data relating to the domestic operations of individual South African-registered banks, including domestic branches of international banks (offshore branches and subsidiaries of domestic banks are excluded). Information mostly represents aggregated banks' solo information, except where indicated that it represents the consolidated banking groups concerned (refer to sections 4.3.4 and 4.6.2 for consolidated banking group information). Section 4.2.3 on the global presence of South African banks includes the banks' offshore subsidiaries, branches and representative offices (Figure 4.2). Also, it should be noted that information presented in respect of credit risk does not in all instances represent aggregated total banks; rather the aggregated amount relating to groupings of banks that adopted certain approaches to calculate minimum capital requirements.

Information in this chapter is presented for 2008 and 2009, except in areas where smoothed ratios (i.e., 12-month moving averages) are calculated, in which instances these ratios are only provided for 2009.

the four largest banks contributed 84,6 per cent of the banking sector

The South African banking-sector information is dominated by the four largest banks, which contributed 84,6 per cent to the balance-sheet size of the banking sector. Appendix 2 provides the balance-sheet sizes of all individual banks and Appendix 6 provides additional financial and risk information tables.

### 4.2 Structural features of the banking sector

#### 4.2.1 Banking entities registered in South Africa

Table 4.1 reflects the number of entities that have been registered or licensed with the Department since 2001. During 2009 the number of registered banks reduced from 19 to 18 due to a transaction in which Absa Group Limited acquired all the shares in Meeg Bank Limited (Meeg). Following the divisionalisation of Meeg into Absa Bank Limited, Meeg's banking licence was cancelled with effect from 25 May 2009.

**Table 4.1 South African banking sector: Number of entities registered or licensed**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Banks* .....	41	30	22	20	19	19	19	19	18
Mutual banks .....	2	2	2	2	2	2	2	2	2
Branches of international banks in the Republic of South Africa.....	15	14	15	15	15	14	14	14	13
Representative offices .....	56	52	44	43	47	43	46	43	42
Controlling companies .....	37	27	19	16	15	15	15	15	15
Banks under curatorship .....	1	1	1	0	0	0	0	0	0
Banks in receivership .....	0	2	2	0	0	0	0	0	0
Banks in final liquidation .....	1	1	1	2	2	2	2	2	2

\* Includes active banks and banks exempted by the Registrar of Banks (with effect from 1 July 1996) in terms of the Supervision of Financial Institutions Rationalisation Act, 1996 (Act No. 32 of 1996) and section 1(cc) of the Banks Act, 1990.

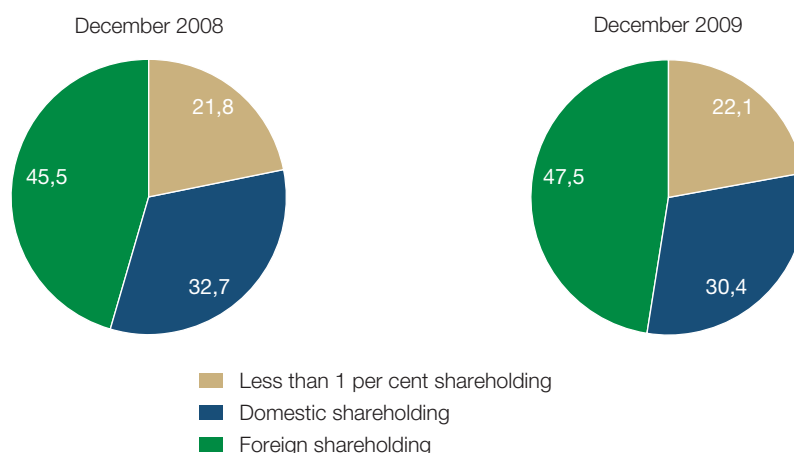
Furthermore, the number of branches of foreign banking institutions also declined from 14 at the end of 2008 to 13 at the end of 2009 owing to the conversion of Commerz Bank Aktiengesellschaft (Johannesburg Branch) from a branch to a representative office. During 2009 four representative offices decided to close down and three new representative offices were registered. Appendices 2, 3, 4, 5 and 8 provide information regarding the entities registered or licensed with the Office of the Registrar of Banks at the end of 2009.

#### 4.2.2 Shareholding structure

The shareholding structure of South African banks is set out in Figure 4.1. Foreign shareholders held 47,5 per cent of the nominal value of the South African banking sector's shares in issue at the end of December 2009, slightly higher than the 45,5 per cent recorded at the end of December 2008. A large foreign shareholding in one of the largest banks, Absa Bank Limited, contributes significantly to the high percentage of shares held by foreign shareholders. Domestic shareholders accounted for 30,4 per cent and minority shareholders 22,1 per cent of the nominal value of banking sector shares in issue at the end of December 2009 (December 2008: 32,7 per cent and 21,8 per cent respectively).

foreign shareholders held 47,5 per cent of banking sector's

Figure 4.1 Shareholding structure of the South African banking sector (nominal value of shares) (per cent)



#### 4.2.3 Approval of local and foreign expansions by South African banking groups

The Core Principles prescribe that banking supervisors should have the power to review major acquisitions or investments by a bank or a bank controlling company against prescribed criteria, including the establishment of cross-border operations. This review should confirm that corporate affiliations or structures do not expose the bank to undue risks or hinder effective supervision. Section 52 of the Banks Act, 1990, requires that banking groups obtain the prior approval of the Registrar for the establishment or acquisition of any subsidiary, cross-border branch, representative office or any undertaking that has its registered office or principal place of business outside South Africa. Table 4.2 reflects the number of applications that have been approved by the Department since 2001. The vast majority of applications processed by the Department are submitted by the five largest banking groups.

banking supervisors should have the power to review major acquisitions

**Table 4.2 South African banking sector: Number of approvals for local and international expansions granted in terms of section 52 of the Banks Act, 1990**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Local .....	72	47	28	16	29	16	12	15	10
Foreign .....	44	43	31	20	17	8	25	19	28
Total .....	116	90	59	36	46	24	37	34	38

#### 4.2.4 Banking-sector global presence

Figure 4.2 provides the global representation of South African banking groups in respect of branches, subsidiaries and representative offices.

**Figure 4.2 Global presence of South African banks**



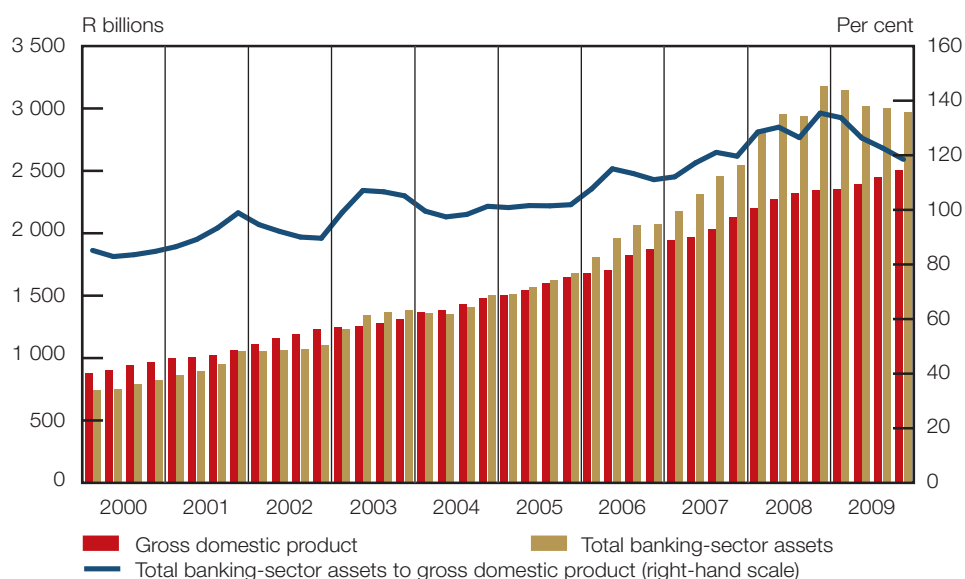
#### 4.2.5 Banking-sector assets to gross domestic product

slowdown in the growth of gross loans and advances during 2009

Figure 4.3 measures the balance-sheet size of the banking sector relative to that of the gross domestic product<sup>30</sup> (GDP). The banking sector balance-sheet size grew to R3 177 billion in December 2008 (135,4 per cent of GDP), the highest quarter-end level during that period, followed by a decline in asset growth during 2009, ending the year at R2 967 billion (118,5 per cent of GDP). As described in section 4.3.1 below, a substantial increase in derivative financial instruments during October 2008, and subsequent decline thereof during 2009 was the main contributor to fluctuations in balance sheet growth from the latter part of 2008 to the end of 2009. A slowdown in the growth of gross loans and advances during 2009 further added to the decline in the growth of total assets (refer to Figure 4.6).

<sup>30</sup> 'Gross domestic product' refers to the gross domestic product at market prices, as published in the South African Reserve Bank *Quarterly Bulletin*, reference code NRI 6006L.

Figure 4.3 Total banking-sector assets to gross domestic product



## 4.3 Balance sheet

### 4.3.1 Assets

Figure 4.4 illustrates the growth in banking-sector assets, and gross loans and advances from January 2008 to December 2009. There was a notable decline in banking-sector assets during 2009, as opposed to significant growth in the preceding year. In 2008 the rate of growth in banking-sector assets remained above 20 per cent reaching a peak of 30 per cent at the end of October 2008 (mainly due to a material increase in the value of derivative financial instruments, in particular at the height of the international financial crisis) prior to slowing down ending the year at 24,8 per cent. The slowdown in the growth of banking-sector assets continued throughout 2009, reaching 2,2 per cent at the end of September 2009 and turning negative, year on year, during the last quarter of 2009.

slowdown growth of banking-sector assets continued throughout 2009

At the end of December 2009, banking-sector assets amounted to R2 967 billion (December 2008: R3 177), representing a decline of 6,6 per cent at the end of 2009. The decline in banking-sector assets during 2009 can be attributed to the strong and consistent monthly decreases in the value of derivative financial instruments coupled with a general slowdown in the growth of gross loans and advances. Figure 4.6 provides further detail in this regard.

Gross loans and advances declined by 2,6 per cent from R2 316 billion at the end of December 2008 to R2 257 billion at the end of December 2009 (December 2008: 9 per cent increase). As shown in Figure 4.5, banking-sector assets comprise mainly loans and advances, followed by derivative financial instruments. Derivative financial instruments increased from R245 billion at the end of September 2008 to R507 billion at the end of October 2008 due to fair value adjustments necessitated by the turmoil experienced in international financial markets at the time. This resulted in a substantial increase in the percentage composition of derivative financial instruments

fair value adjustments necessitated by turmoil in international financial markets

derivative financial instruments represented 8,9 per cent of banking-sector assets

during the aforementioned period. The subsequent monthly decreases in the fair value of derivative financial instruments were due to the re-adjustment of financial markets subsequent to the height of the international financial market crisis. By the end of 2009 derivative financial instruments represented 8,9 per cent of banking-sector assets (December 2008: 14,3 per cent) and loans and advances represented 74,3 per cent of banking-sector assets (December 2008: 71,7 per cent).

Figure 4.4 Total assets, gross loans and advances, and their respective growth rates (year on year)

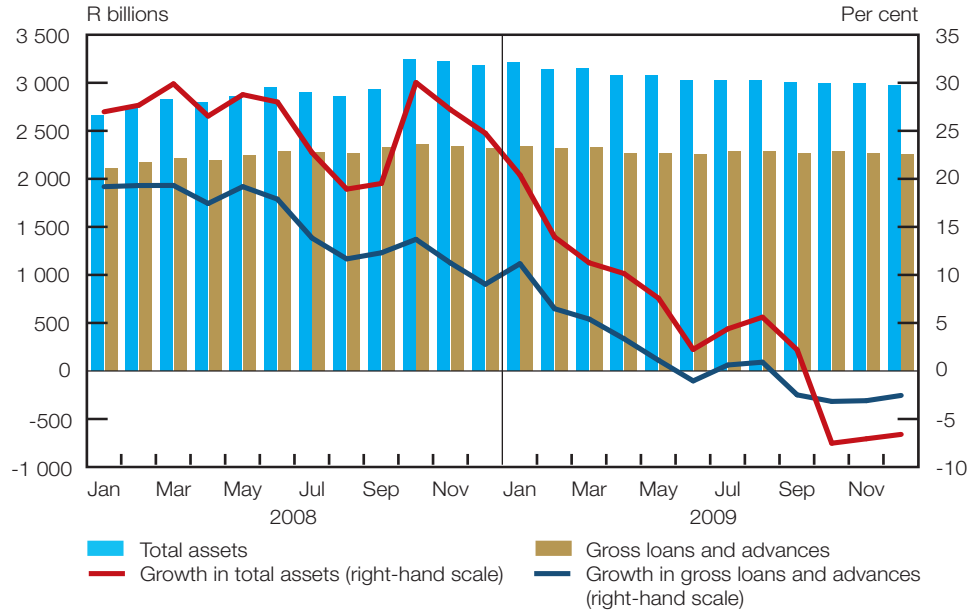


Figure 4.5 Composition of total assets

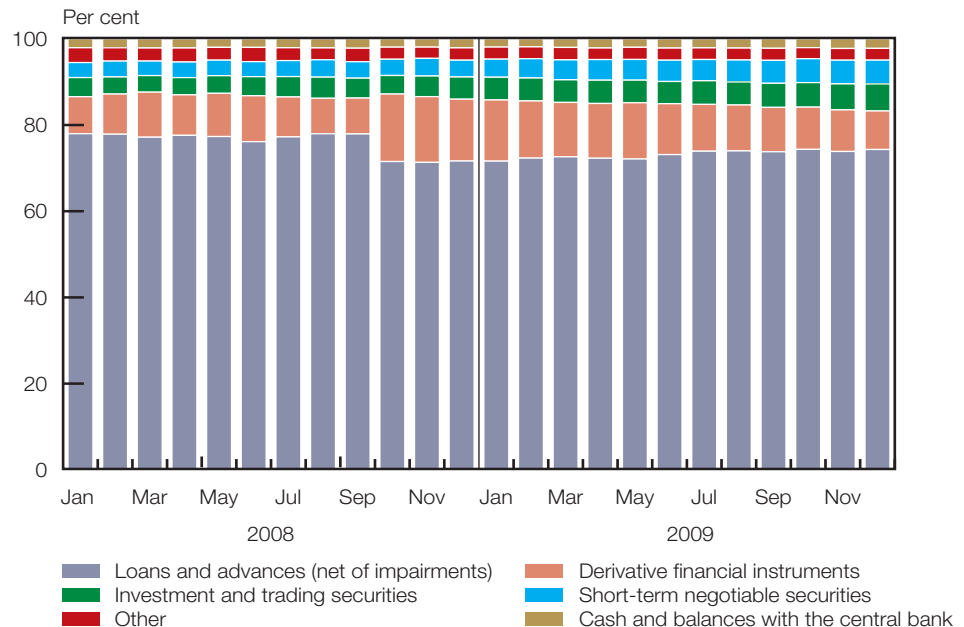


Figure 4.6 depicts the growth rates of various types of loans and advances during 2009. The decline in total gross loans and advances was mainly attributable to declines in the growth rates of homeloans, term loans, lease and instalment debtors, commercial mortgages, bank intra-group balances, and other loans. The annual growth in homeloans (which constituted 34,8 per cent of gross loans and advances) declined from

10,5 per cent at the end of January 2009 to 3,0 per cent at the end of December 2009. Term loans (contributing 16,8 per cent to gross loans and advances) also grew at a much slower pace at the end of 2009; being down from 35,4 per cent at the end of January 2009 to 0,15 per cent at the end of December 2009. Prevailing economic conditions, including lower income growth, the level of indebtedness of consumers and a general decline in consumer confidence contributed to the lower levels of growth in loans and advances during the period under review.

term loans grew at a much slower pace

Figure 4.6 Growth rates of selected asset classes within loans and advances (year on year)

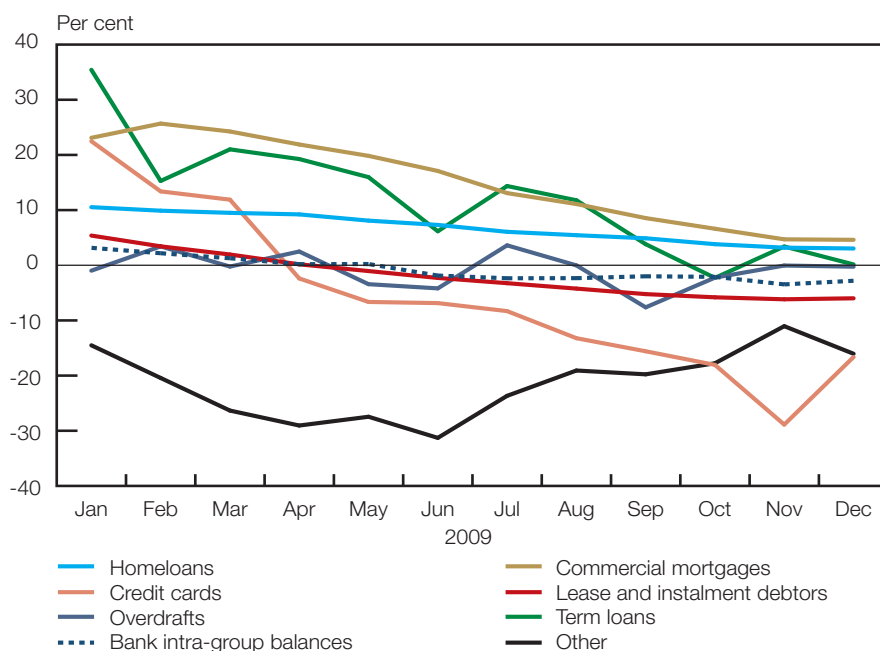
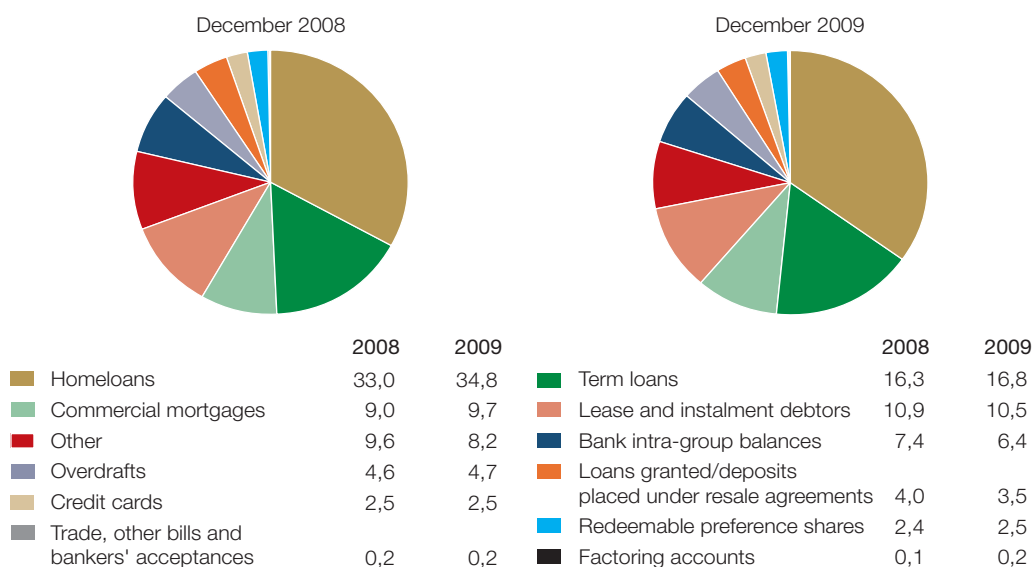


Figure 4.7 provides a breakdown of gross loans and advances. Homeloans and term loans represented approximately 52 per cent of gross loans and advances at the end of December 2009, slightly higher than the level recorded at the end of December 2008. Lease and instalment debtors represented 10,5 per cent, commercial mortgages 9,7 per

homeloans and term loans represented 52 per cent of gross loans and advances

Figure 4.7 Composition of gross loans and advances (per cent)



cent, bank intra-group balances 6,4 per cent and other loans 8,2 per cent at the end of December 2009. Overdrafts, loans granted or deposits placed under resale agreements, credit cards, redeemable preference shares, factoring accounts, other bills and bankers' acceptances, each constituted less than 5 per cent of gross loans and advances at the end of both December 2008 and December 2009.

loans and advances to banks remained fairly stable

Loans and advances to banks, as shown in Figure 4.8, remained fairly stable during 2009 compared with 2008 where they fluctuated between R332,8 billion and R409,2 billion. By the end of December 2009, loans and advances to banks amounted to R293,7 billion (December 2008: R332,8 billion), representing a year-on-year decrease of 11,8 per cent. Expressed as a percentage of gross loans and advances, loans and advances to banks fluctuated between 12,8 per and 14,8 throughout 2009 and constituted 13 per cent of gross loans and advances at the end of December 2009 (December 2008: 14,4 per cent).

Figure 4.8 Loans and advances to banks

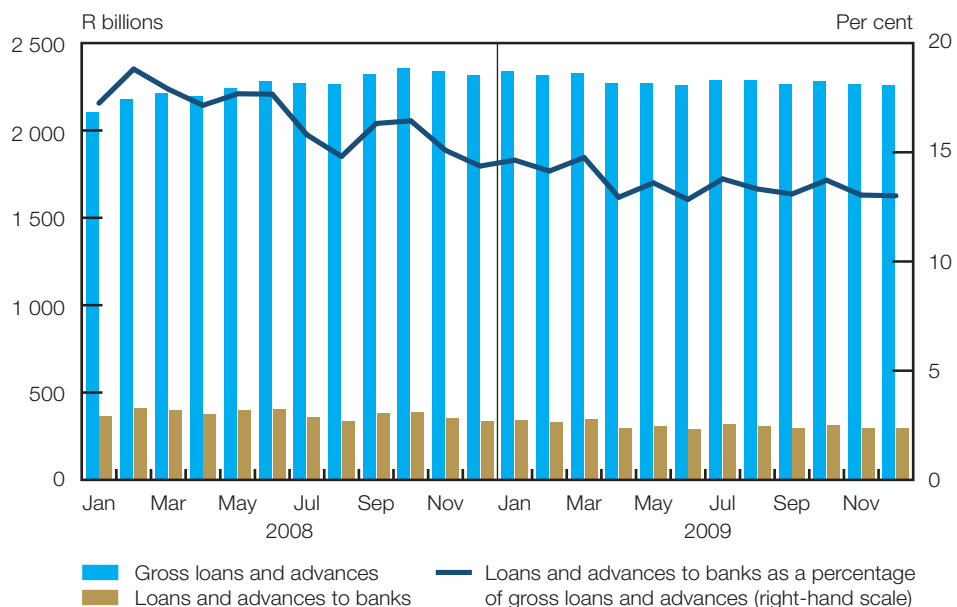


Figure 4.9 depicts foreign-currency loans and advances, and foreign-currency deposits and foreign-currency funding. There was a substantial decrease in foreign-currency loans and advances at the end of April 2009, September 2009 and to some extent November 2009. The decrease in April 2009 was reported mainly by one large bank, while the decreases in September 2009 and November 2009 were reported by a few large banks and some of the branches of international banks. By the end of December 2009 foreign-currency loans and advances amounted to R163,8 billion (December 2008: R177,5 billion). Expressed as a percentage of banking-sector assets, foreign-currency loans and advances represented 5,5 per cent of banking-sector assets at the end of December 2009 (December 2008: 5,6 per cent).

Moreover, foreign-currency deposits and foreign-currency funding were lower during 2009 compared with the levels recorded during 2008, indicating that South African banks are not overly dependent on foreign sources of funding and deposits. Significant decreases were reported during April 2009 and May 2009 by some of the large banks and two branches of international banks. By the end of December 2009, foreign-currency deposits and foreign-currency funding amounted to R119,1 billion (December 2008: R152,3 billion). Expressed as a percentage of banking-sector liabilities, foreign-currency deposits and foreign-currency funding constituted 4,3 per cent of banking-sector liabilities (December 2008: 5,1 per cent).

South African banks are not overly dependent on foreign sources of funding and deposits

**Figure 4.9** Foreign-currency loans and advances (as a percentage of total assets) and the total of foreign-currency deposits and foreign-currency funding (as a percentage of total liabilities)

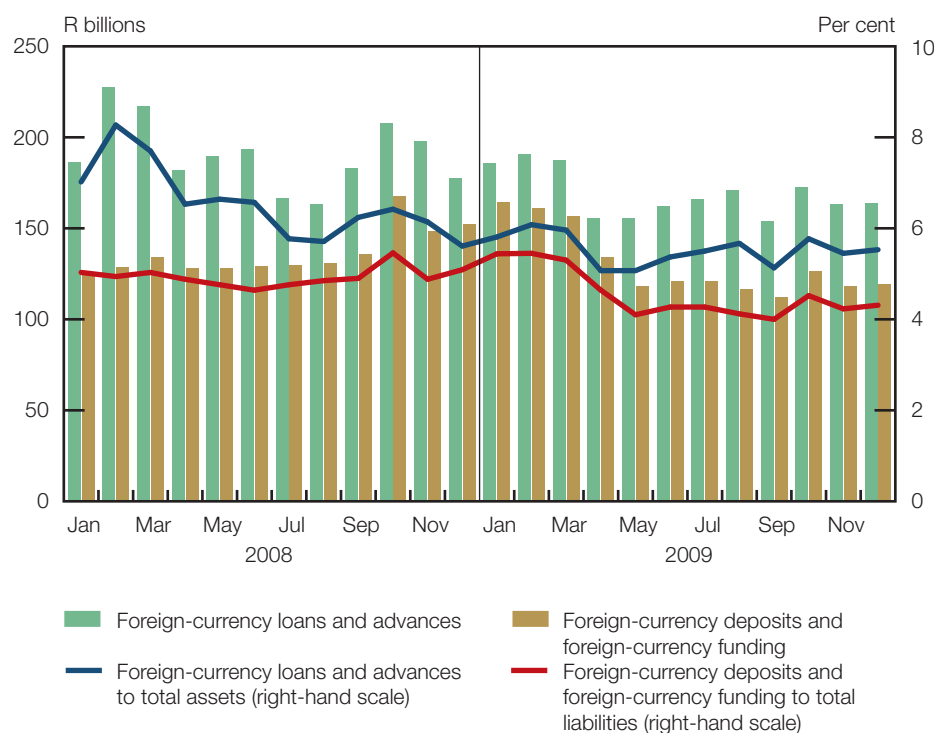
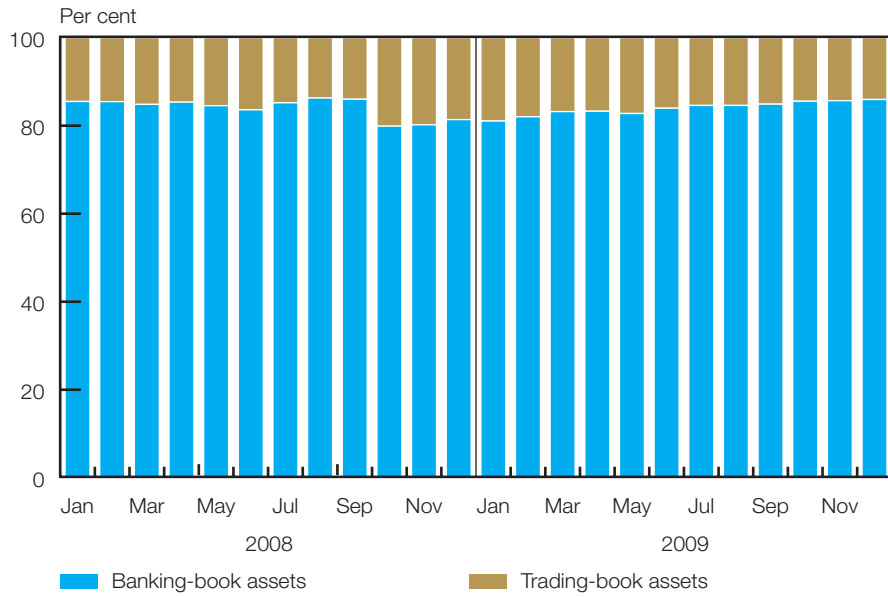


Figure 4.10 illustrates the composition of banking-sector assets in terms of banking-book and trading-book assets. Trading-book assets increased from 14,0 per cent at the end of September 2008 to 20,1 per cent at the end of October 2008 due to an increase in derivative activities and the value thereof, as mentioned in Figure 4.5 above. The trading-book assets have since been declining and represented 14,0 per cent of banking-sector assets (December 2008: 18,6 per cent), while banking-book assets represented 86,0 per cent of banking-sector assets at the end of 2009 (December 2008: 81,4 per cent).



Figure 4.10 Banking-book versus trading-book assets (as a percentage of total assets)

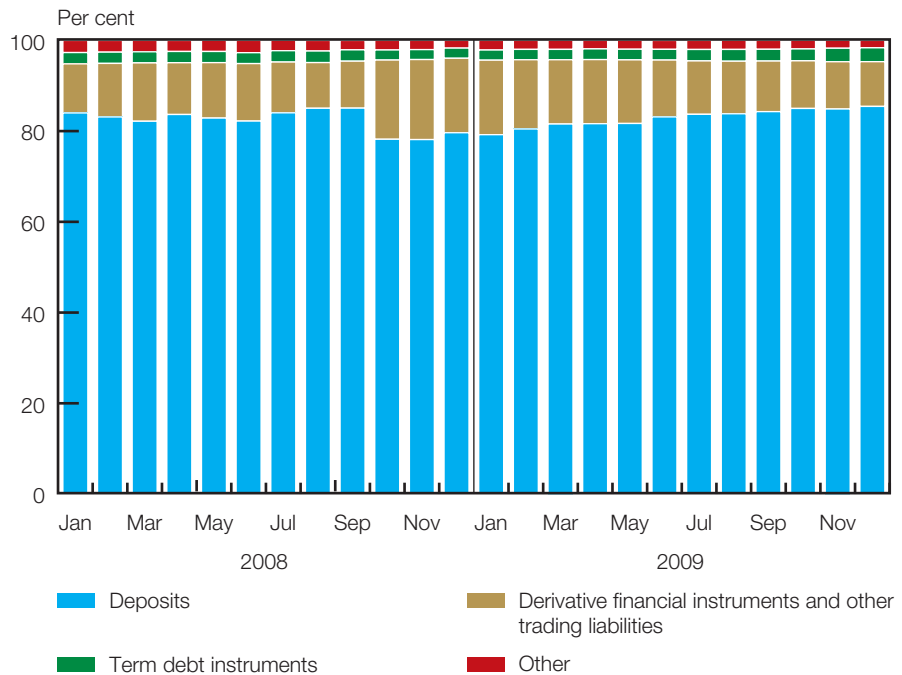


### 4.3.2 Liabilities

deposits constitute a significant percentage of banking-sector liabilities

The composition of banking-sector liabilities is shown in Figure 4.11. Deposits continued to constitute a significant percentage of banking-sector liabilities throughout 2009, amounting to 85,4 per cent at the end of December 2009 (December 2008: 79,6 per cent). Derivative financial instruments and other trading liabilities amounted to 9,9 per cent of banking-sector liabilities at the end of December 2009 (December 2008: 16,4 per cent). The liability position in derivative financial instruments mirrored the month

Figure 4.11 Composition of liabilities



on month movements of the asset position in derivative financial instruments as discussed above (refer to Figure 4.5). Term debt instruments and other liabilities represented a small portion, 3,1 per cent and 1,6 per cent respectively, of banking-sector liabilities at the end of December 2009 (December 2008: 2,2 per cent and 1,7 per cent respectively).

The asset and liability positions in financial derivatives, expressed as a percentage of equity attributable to equity holders, are depicted in Figure 4.12. The asset and liability positions remained fairly matched throughout the period under review. The ratios at the end of December 2009 were at levels similar to those reflected in January 2008.

asset and liability positions remained fairly matched

**Figure 4.12 Asset and liability position in financial derivatives (as a percentage of equity attributable to shareholders)**

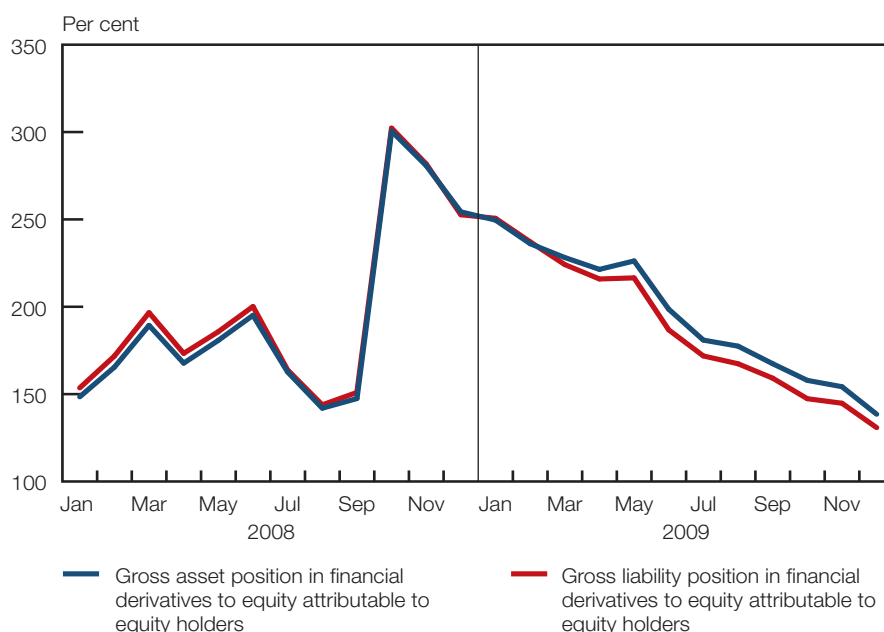


Figure 4.13 illustrates total term debt instruments and term debt instruments qualifying as regulatory capital. While term debt instruments remained fairly stable during the first half of 2009, at approximately R68 billion, they increased during the second half of 2009 to R84,7 billion at the end of December 2009 (December 2008: R67,2 billion). The increase in November 2009 was mainly due to the issue of term debt instruments by two of the large banks.

By the end of 2009, 68,1 per cent of total term debt instruments qualified as regulatory capital (December 2008: 73,6 per cent).

68,1 per cent of total term debt instruments qualified as regulatory capital

The composition of deposits, as shown in Figure 4.14, remained fairly stable between December 2008 and December 2009. By the end of December 2009, deposits amounted to R2 366 billion, of which fixed and notice deposits accounted for 27,4 per cent (December 2008: 24,9 per cent). Negotiable certificates of deposit represented 18,0 per cent, call deposits 18,0 per cent, current accounts 16,8 per cent and other deposits 10,5 per cent of deposits at the end of December 2009 (December 2008: 16,2 per cent, 22,0 per cent, 17,4 per cent and 10,2 per cent, respectively). Savings deposits and repurchase agreements, combined, constituted approximately 10 per cent of deposits.

Figure 4.13 Term debt instruments qualifying as regulatory capital (as a percentage of total term debt instruments)

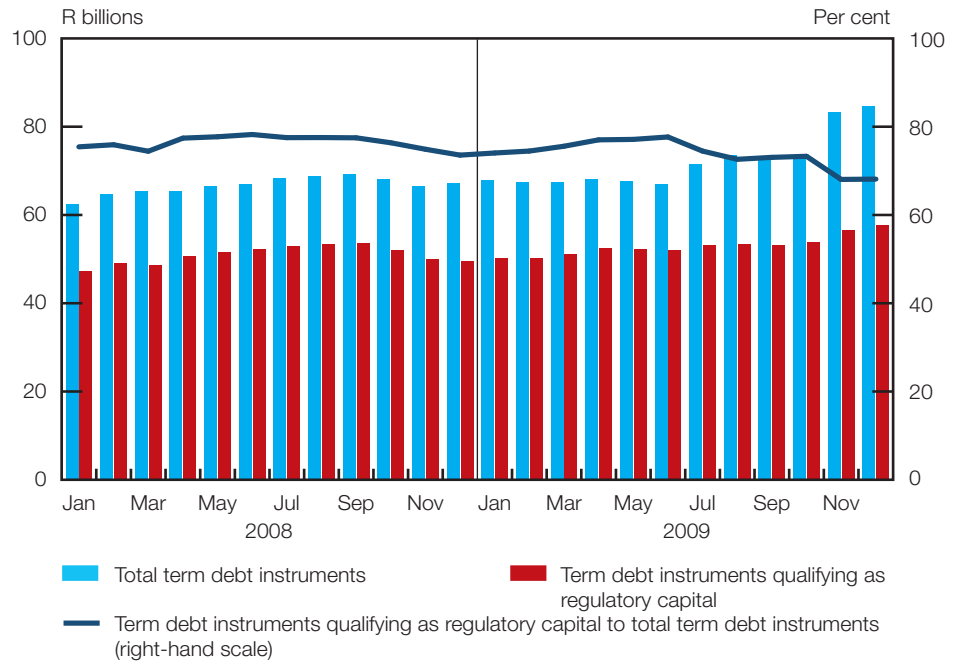
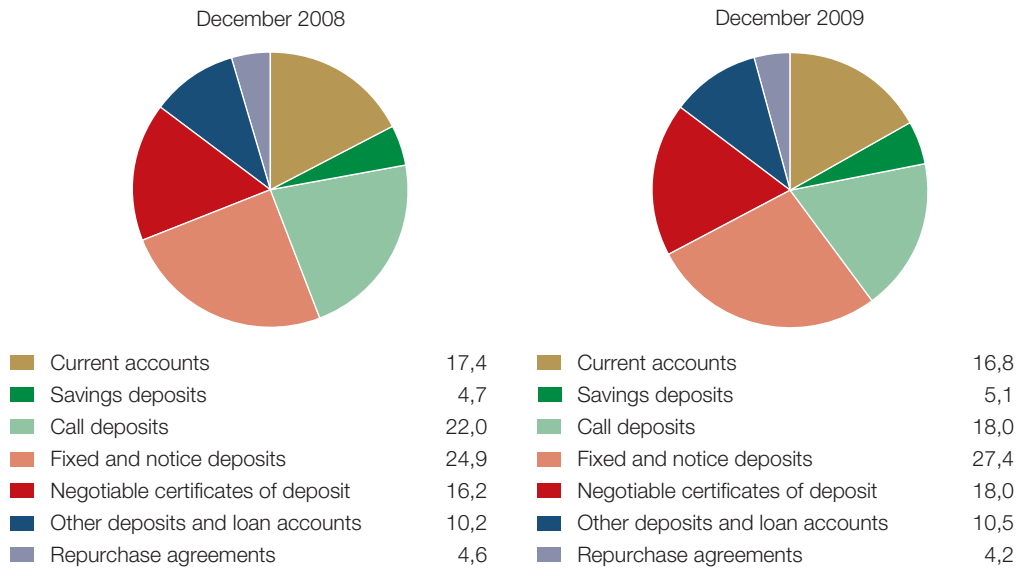


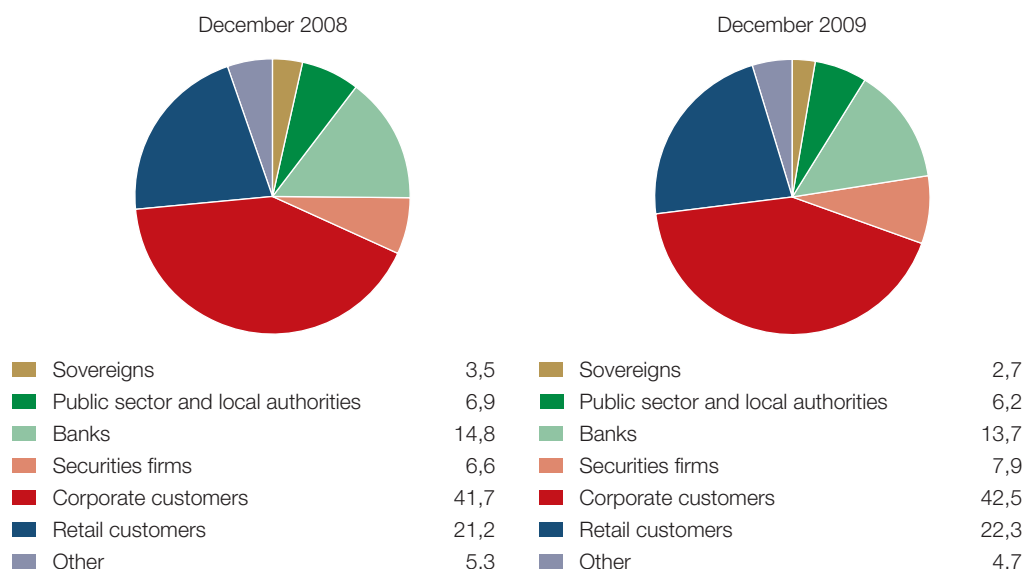
Figure 4.14 Composition of deposits (per cent)



sources of deposits remained fairly stable

Sources of banking-sector deposits are reflected in Figure 4.15. As shown, the sources of deposits between December 2008 and December 2009 remained fairly stable. Deposits by corporate customers constituted the larger portion of banking-sector deposits amounting to 42,5 per cent at the end of December 2009, followed by retail customers and bank deposits, which accounted for 22,3 per cent and 13,7 per cent respectively, at the end of December 2009. The banking sector also received deposits from securities firms, public sector and local authorities, sovereigns and other sources, which represented 7,9 per cent, 6,2 per cent, 2,7 per cent and 4,7 per cent respectively at the end of December 2009.

Figure 4.15 Sources of total deposits (as a percentage of total deposits)

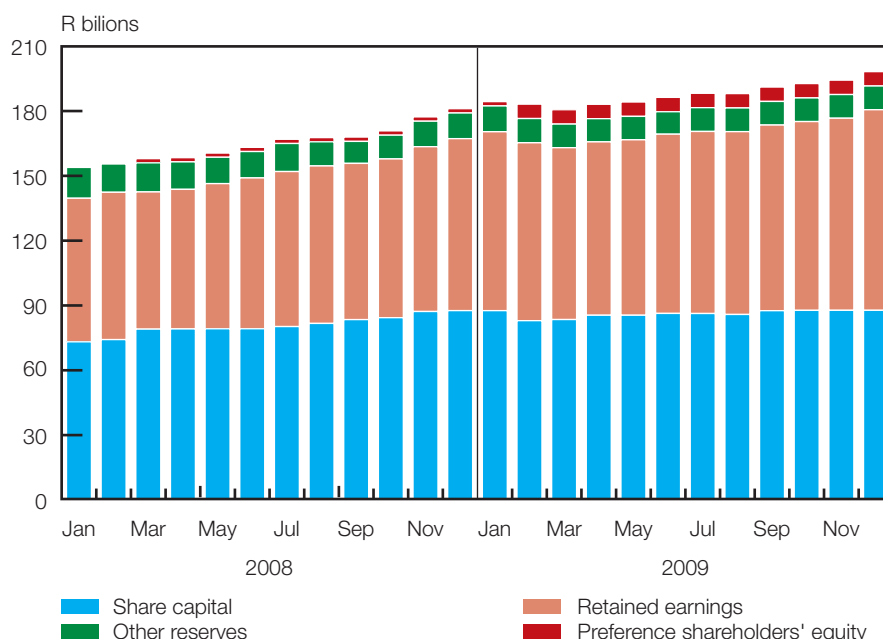


### 4.3.3 Equity

Figure 4.16 provides a breakdown of total equity. Total equity amounted to R198,2 billion at the end of December 2009 (December 2008: R181,1 billion), representing an annual increase of 9,5 per cent. Share capital and retained earnings cumulatively constituted approximately 91 per cent of total equity throughout 2009 (December 2009: share capital 44,3 per cent and retained earnings 46,8 per cent). Other reserves and preference shareholders' equity cumulatively accounted for less than 10 per cent of total equity during 2009 (December 2009: other reserves 5,5 per cent and preference shareholders' equity 3,4 per cent). Preference shareholders' equity increased from R2 billion at the end of January 2009 to R6,6 billion at the end of February 2009, and remained at this level throughout 2009.

share capital and retained earnings constituted 91 per cent of total equity throughout 2009

Figure 4.16 Composition of total equity



financial leverage ratio improved during 2009

During 2009, the Basel Committee proposed measures to strengthen the Basel II capital framework which included, *inter alia*, the introduction of a leverage ratio as an additional prudential tool to limit excessive leverage in a banking system, as was evident in some jurisdictions during the international financial market crisis. The financial leverage ratio for the South African banking sector is illustrated in Figure 4.17, and is calculated using total assets divided by total equity attributable to equity holders. The financial leverage ratio improved during 2009, ending the year at 15,7 times (December 2008: 17,9 times). The lower financial leverage ratio during 2009 may be attributed mainly to the decline in banking-sector asset growth (December 2009: 6,6 per cent decrease measured year on year) and the strong growth in total equity attributable to equity holders, which remained above 10 per cent year on year, during the first three quarters of 2009, before declining to 7,0 per cent at the end of December 2009. The respective growth rates in banking-sector assets and total equity attributable to equity holders are reflected in Figure 4.18.

Figure 4.17 Financial leverage ratio

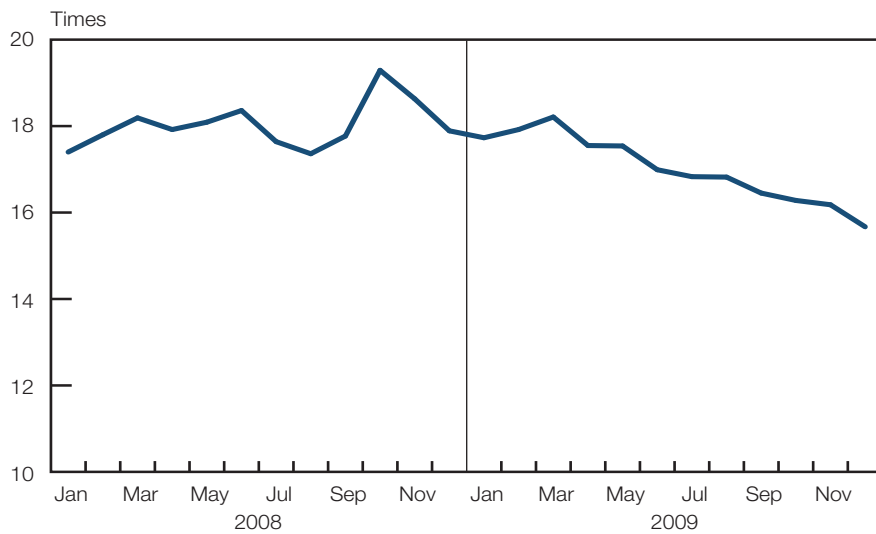
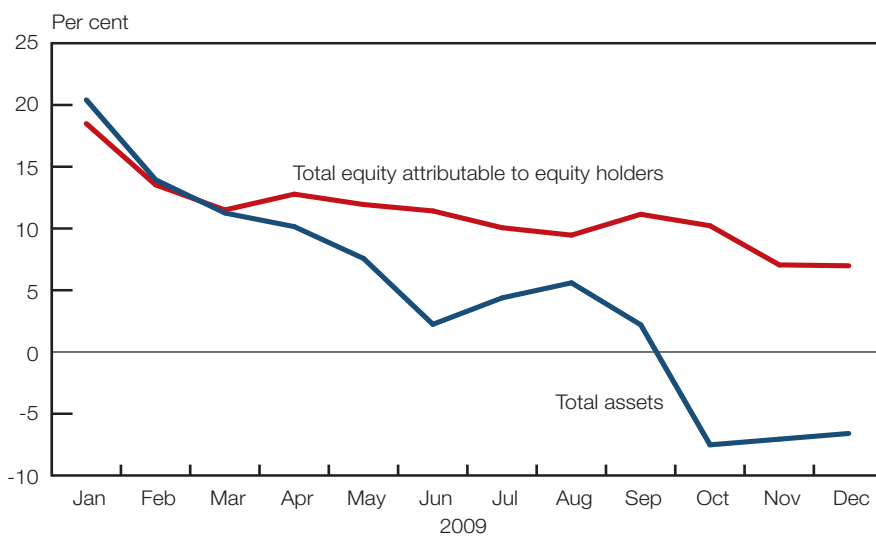


Figure 4.18 Growth rates of total assets and equity attributable to equity holders (year on year)

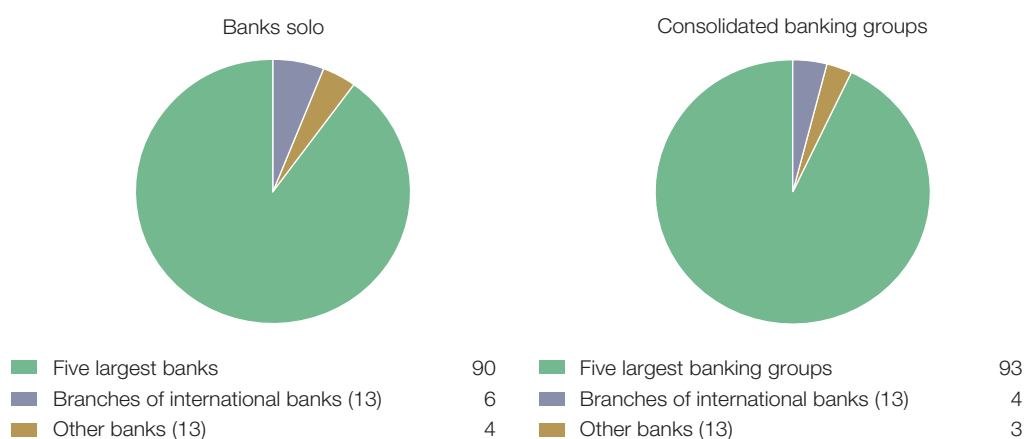


#### 4.3.4 Balance-sheet information of the total consolidated banking groups

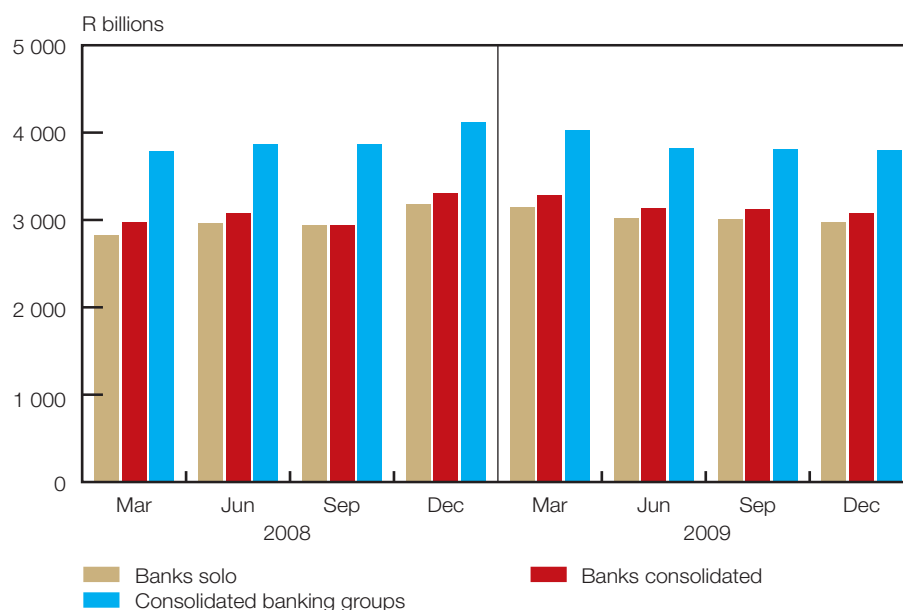
Similar to banking-sector assets in respect of banks solo, banking-sector assets in respect of consolidated banking groups also experienced negative annual growth, declining by

8,0 per cent to R3 790 billion at the end of December 2009 (December 2008: R4 118 billion). Figure 4.19 presents total assets in respect of banks' solo and consolidated banking groups, and the respective percentages relating to the five largest banks, branches of international banks and other banks. Figure 4.20 reflects the aggregated total of banking-sector assets for banks solo<sup>31</sup> (excluding their foreign branches), banks consolidated<sup>32</sup> (including their foreign branches) and consolidated banking groups.<sup>33</sup>

**Figure 4.19** Composition of total banking-sector assets in respect of the five largest banks, branches of international banks and other banks (per cent)



**Figure 4.20** Banking-sector assets for banks solo, banks consolidated and consolidated banking groups



As illustrated in Figure 4.21, the total equity of consolidated banking groups increased by 4,7 per cent from R289 billion at the end of December 2008 to R303 billion at the end of December 2009. Retained earnings amounting to R189 billion (December 2008: R170 billion), represented 62,3 per cent of total equity at the end of December 2009.

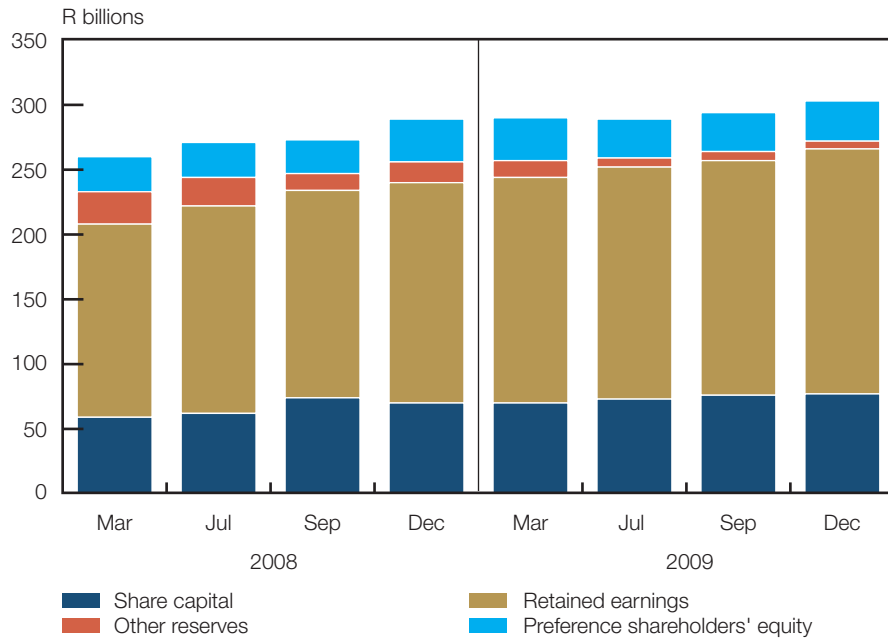
total equity of consolidated banking groups increased by 4,7 per cent

31 'Banks solo' includes the aggregate of banks incorporated in South Africa (excluding their foreign branches, subsidiaries and associates), and all local branches of international banks.

32 'Banks consolidated' includes the aggregate of banks incorporated in South Africa together with their foreign branches, subsidiaries and associates, as well as all local branches of international banks.

33 'Consolidated banking groups' includes the aggregate of registered bank controlling companies, the remaining registered banks incorporated in South Africa (that do not have registered controlling companies) and local branches of international banks.

Figure 4.21 Composition of total equity for consolidated banking groups

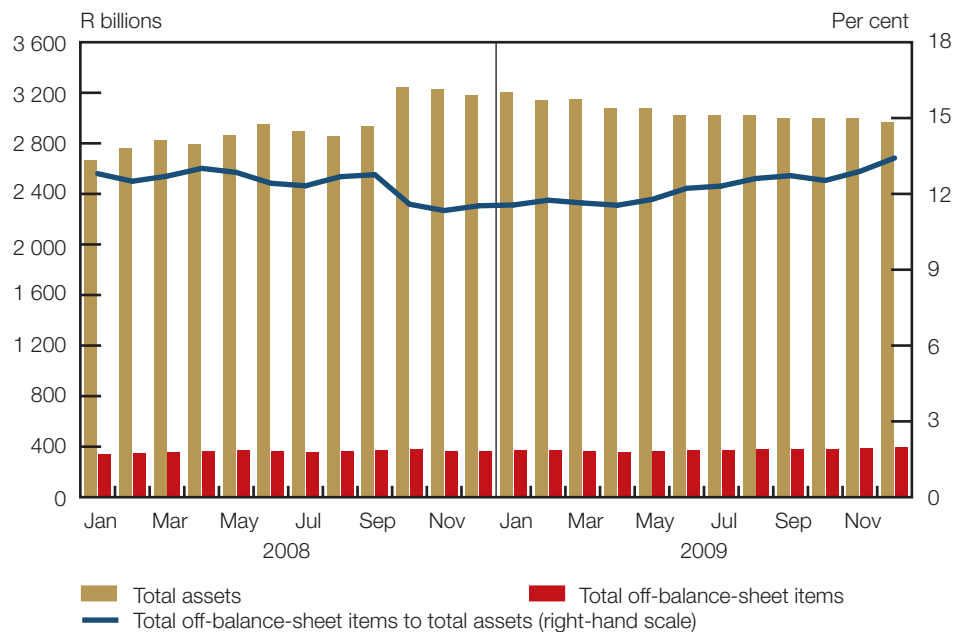


#### 4.4 Off-balance-sheet activities

ratio of off-balance-sheet items to banking-sector assets increased during 2009

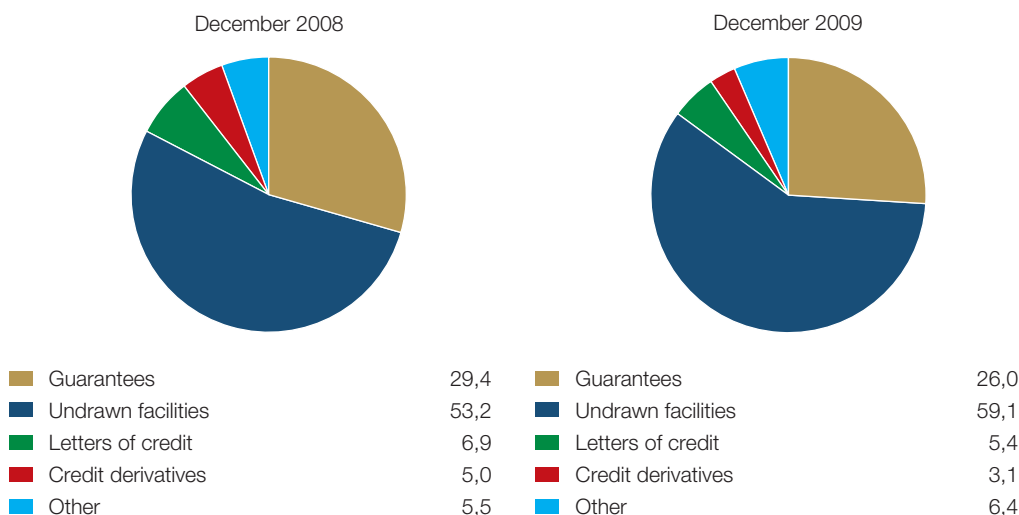
As illustrated in Figure 4.22, off-balance-sheet items increased with 8,7 per cent during 2009 and amounted to R398,3 billion at the end of December 2009 (December 2008: R366,4 billion). The ratio of off-balance-sheet items to banking-sector assets increased during 2009 mainly due to a slowdown in the growth of banking-sector assets. The ratio was 13,4 per cent at the end of December 2009 (December 2008: 11,5 per cent).

Figure 4.22 Total off-balance-sheet items to total assets



As illustrated in Figure 4.23, undrawn facilities at 59,1 per cent represented a larger portion of off-balance-sheet items at the end of 2009 when compared to 53,2 per cent at the end of December 2008.

Figure 4.23 Composition of total off-balance-sheet items (per cent)



## 4.5 Profitability

The banking sector's operating profit amounted to R35,5 billion for the year ending December 2009 (December 2008: R44,0 billion). The decline in profitability during 2009 may be ascribed mainly to a rise in credit losses and operating expenses. For the year ending December 2009, credit losses and operating expenses rose to R35,5 billion and R76,5 billion respectively (December 2008: R29,7 billion and R73,4 billion respectively).

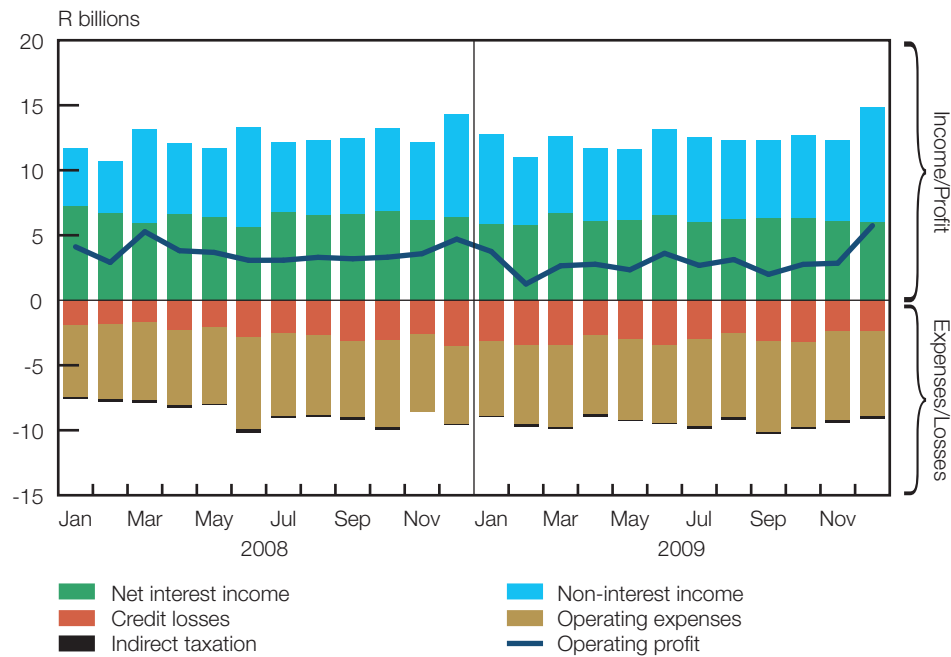
credit losses and operating expenses rose to R35,5 billion and R76,5 billion respectively

Gross operating income (i.e., the sum of net interest income and non-interest income) amounted to R149,7 billion for the year ending December 2009 (December 2008: R149,2 billion). Non-interest income increased during the year ended December 2009 to R75,6 billion (December 2008: R71,4 billion) mainly due to higher net fee and commission income and net trading income. Net interest income decreased from R77,8 billion for the year ending December 2008 to R74,1 billion for the year ending December 2009, mainly due to a decline in interest and similar income.

Figure 4.24 provides a breakdown of the income statement on a month to month basis. Operating profit increased from R2,9 billion in November 2009 to R5,7 billion in December 2009 due to an increase in net fee and commission income reported by two of the large banks, and an increase in net trading income from derivative financial instruments reported by one of the large banks. There was a significant decline in operating profit to R1,3 billion in February 2009 mainly due to a decrease in net trading income related to debt securities reported by two of the large banks and a branch of an international bank, as well as a decrease in other gains due to fair value adjustments reported by one of the large banks. This decline in operating profit was further exacerbated by a R318,8 million increase in credit losses to R3,4 billion for February 2009. Credit losses fluctuated between R2,4 billion and R3,4 billion per month during 2009 and amounted to R2,4 billion in December 2009 (December 2008: R3,5 billion). Operating expenses remained in excess of R6 billion per month throughout 2009, ending the year at R6,5 billion for December 2009 (December 2008: R6,0 billion).

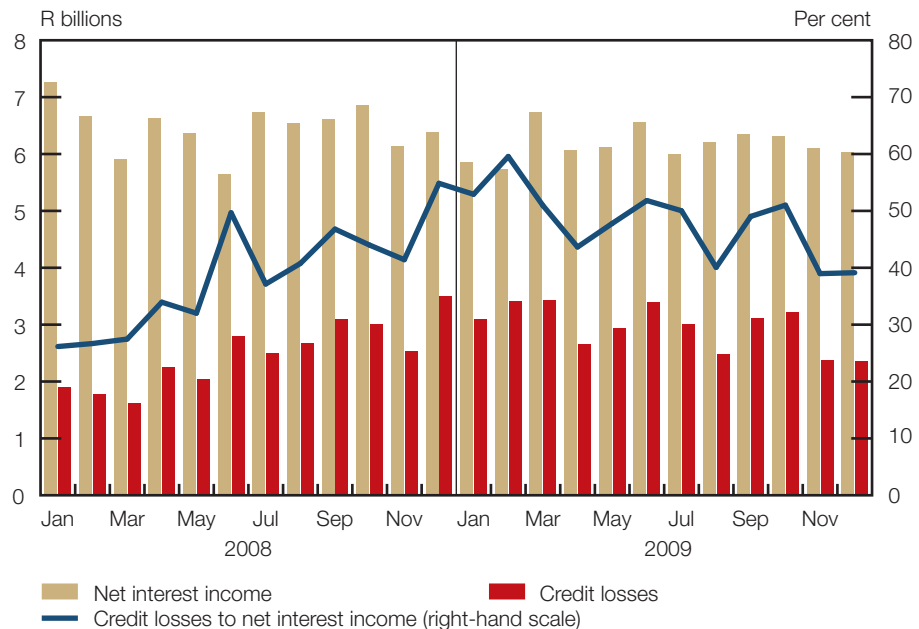


Figure 4.24 Composition of the income statement (unsmoothed)



As illustrated in Figure 4.25, credit losses expressed as a percentage of net interest income, remained high – above 40 per cent – reaching a peak of almost 60 per cent at the end of February 2009, mainly due to an increase in credit losses (as also depicted in Figure 4.24). However, the ratio dropped to just below 40 per cent for the last two months of 2009 due to a decline in credit losses (possibly indicating a turning point with regards to the growth rate of credit losses).

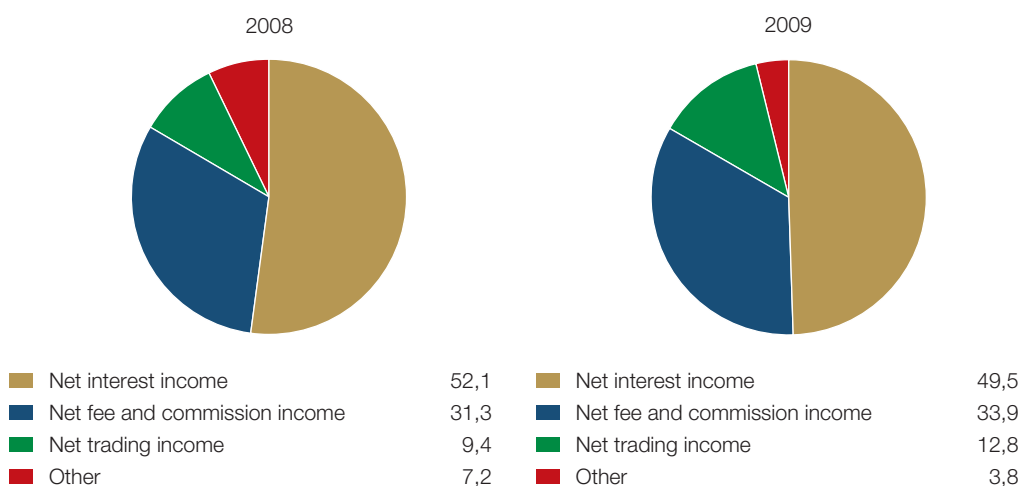
Figure 4.25 Credit losses to net interest income (unsmoothed)



The composition of gross operating income for the years ending December 2008 and December 2009 is reflected in Figure 4.26. For the year ending December 2009, net interest income and net fee and commission income accounted for 49,5 per cent and 33,9 per cent respectively of gross operating income (December 2008: 52,1 per cent and 31,3 per cent respectively). Expressed as a percentage of gross operating income,

net trading income increased from 9,4 per cent for the year ending December 2008 to 12,8 for the year ending December 2009 owing to an increase in income from derivative financial instruments, debt securities and equities. Other income amounted to 3,8 per cent of gross operating income for the year ending December 2009 (December 2008: 7,2 per cent).

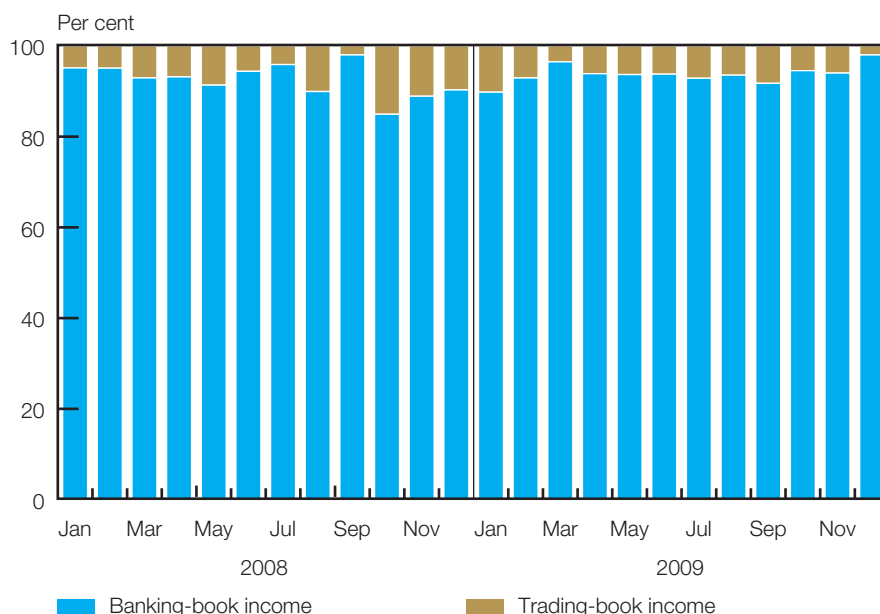
Figure 4.26 Composition of gross operating income (per cent)



A split of gross operating income into banking-book and trading-book income is shown in Figure 4.27. The banking sector derived in excess of 90 per cent of its income from banking-related activities during 2009. In respect of December 2009, banking-book income constituted 98 per cent of gross operating income (December 2008: 90,3 per cent).

90 per cent income derived from banking-related activities

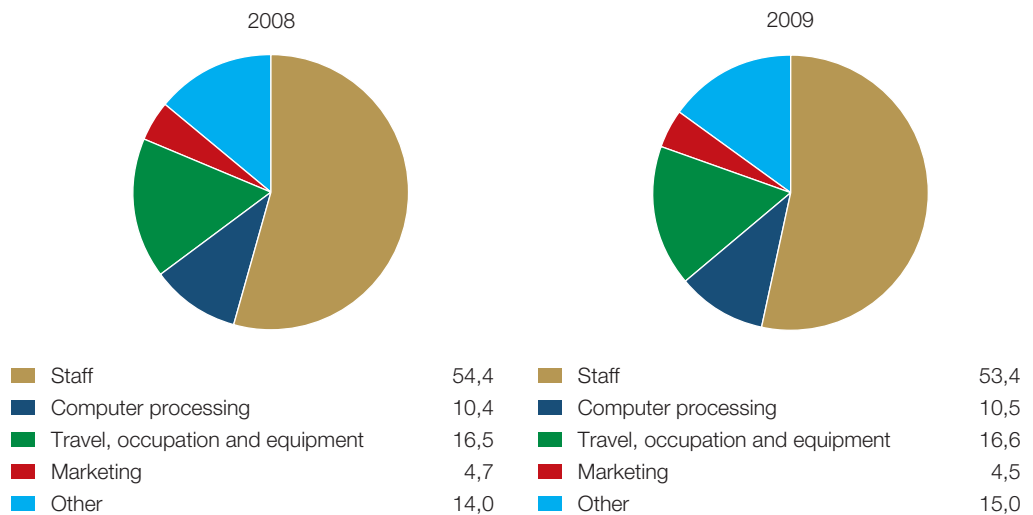
Figure 4.27 Banking-book income versus trading-book income (unsmoothed) (as a percentage of gross operating income)



The composition of operating expenses for the years ending December 2008 and December 2009 is shown in Figure 4.28. For the year ending December 2009, operating expenses amounted to R76,5 billion, of which staff expenses accounted for 53,4 per

cent (December 2008: 54,4 per cent). Travel, occupation and equipment and other expenses constituted 16,6 per cent and 15,0 per cent respectively for the year ending December 2009 (December 2008: 16,5 per cent and 14,0 per cent respectively). Expenses in respect of computer processing represented 10,5 per cent of the banking sector's operating expenses for the year ending December 2009 (December 2008: 10,4 per cent). Finally, marketing expenses remained just below 5 per cent of operating expenses, amounting to 4,5 per cent for the year ending December 2009 (December 2008: 4,7 per cent).

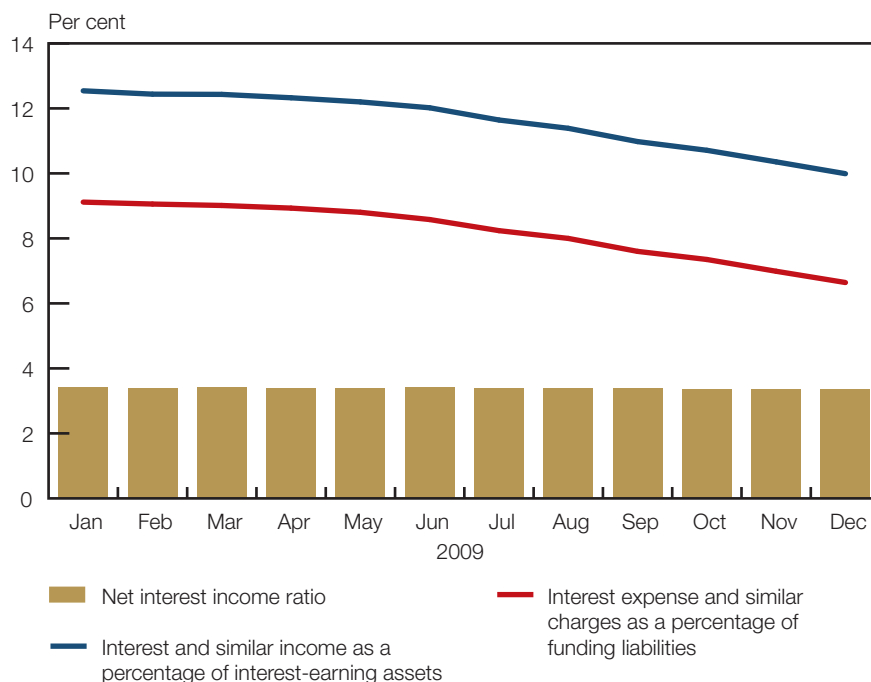
Figure 4.28 Composition of operating expenses (per cent)



net interest income ratio remained fairly stable

The net interest income ratio, as illustrated in Figure 4.29, remained fairly stable at approximately 3,4 per cent throughout 2009 (calculated on a smoothed basis, i.e., 12-month moving average). The ratio is the difference between interest and similar

Figure 4.29 Net interest income ratio (smoothed, i.e., 12-month moving average)

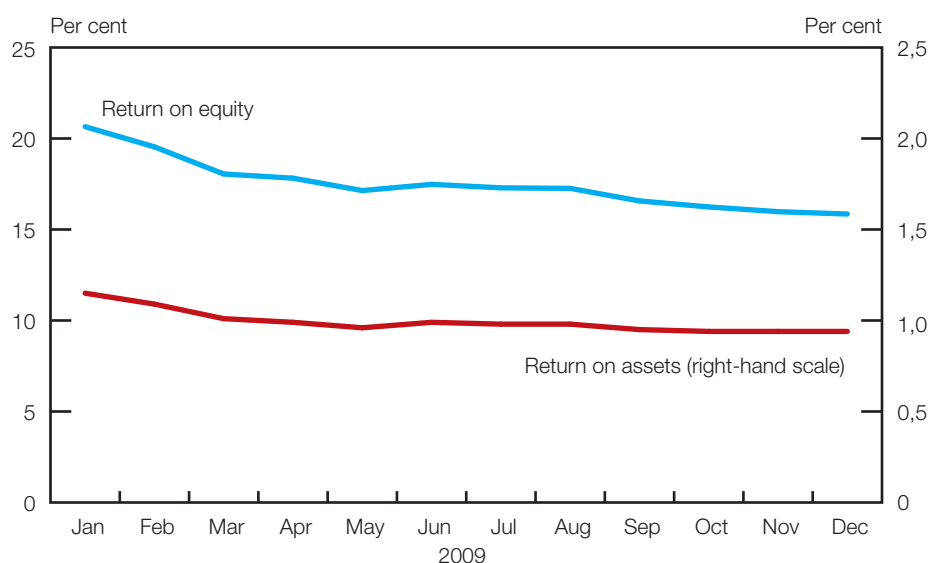


income (expressed as a percentage of interest-earning assets) and interest expenses and similar charges (expressed as a percentage of funding liabilities). Expressed as a percentage of interest-earning assets, interest and similar income declined during 2009, reaching 10,0 per cent at the end of December 2009 compared with 12,5 per cent at the end of January 2009. Interest expenses and similar charges (expressed as a percentage of funding liabilities), also decreased during 2009, from 9,1 per cent at the end of January 2009 to 6,6 per cent at the end of December 2009 due to a decline in interest expenses and similar charges relating to term and other deposits and current accounts. During 2009 the Bank's Monetary Policy Committee reduced the repurchase rate by 450 basis points.

Figure 4.30 sets out the ROE and ROA ratios, calculated on a smoothed basis (i.e., utilising a 12-month moving average), for 2009. The ROE deteriorated during 2009, from 20,7 per cent at the end of January 2009 to 15,9 per cent at the end of December 2009. The decline in ROE during 2009 was the result of a combination of lower operating profit (due to high credit losses and operating expenses) and strong growth in total equity attributable to equity holders (as mentioned in Figures 4.17 and 4.18). The deterioration in ROA from 1,2 per cent at the end of January 2009 to 0,94 per cent at the end of 2009 was due to the increase in operating expenses and high credit losses.

decline in ROE during 2009 due to high credit losses and operating expenses

**Figure 4.30 Profitability ratios (smoothed, i.e., 12-month moving average)**



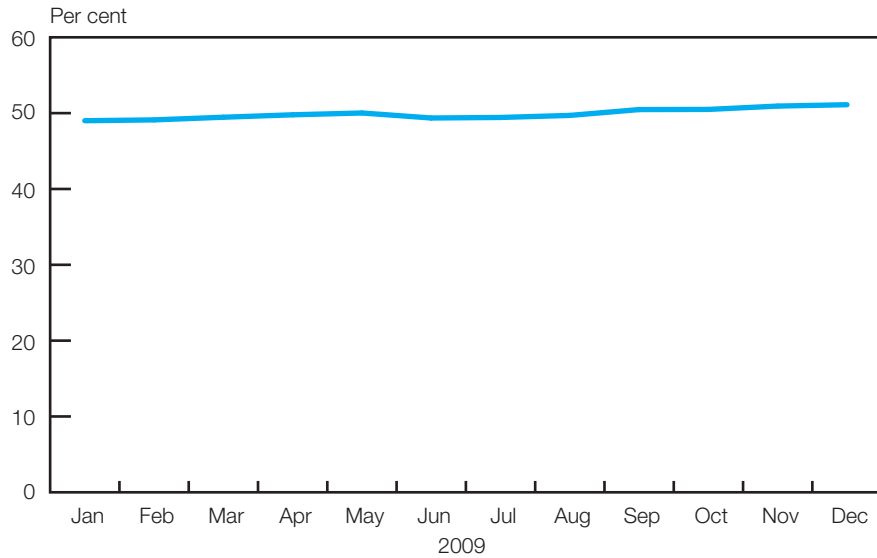
The cost-to-income-ratio, as shown in Figure 4.31 on page 118, deteriorated marginally during 2009, to 51,1 per cent in December 2009 compared with 49,0 per cent at the end of January 2009.

## 4.6 Capital adequacy

Since the implementation of Basel II (on 1 January 2008), the minimum required capital-adequacy ratios applicable to all banks registered in South Africa have been 7,0 per cent in respect of the Tier 1 ratio and 9,5 per cent for the total capital-adequacy ratio, as calculated for banks on a solo and a consolidated banking group basis. In addition, the Registrar may require banks (and banking groups), as part of the Pillar 2 process, to maintain capital-

adequacy ratios above these minimum requirement levels based on systemic risk and banks' idiosyncratic risk assessments.

Figure 4.31 Cost-to-income ratio (smoothed, i.e., 12-month moving average)



#### 4.6.1 Capital adequacy for banks solo

Tier 1 capital-adequacy ratio improved to 11,0 per cent

The banking-sector capital-adequacy ratio and the Tier 1 capital-adequacy ratio for banks solo are illustrated in Figure 4.32. The total capital-adequacy ratio improved during 2009, increasing to 14,1 per cent at the end of December 2009 (December 2008: 13 per cent). The increase in the ratio was mainly due to the increase in qualifying capital and reserve funds (8,3 per cent year on year, refer to Figure 4.33) and the decline in the rate of asset growth during 2009 (-6,6 per cent year on year). The Tier 1 capital-adequacy ratio also improved to 11,0 per cent at the end of December 2009 (December 2008: 10,2 per cent).

Figure 4.32 Capital-adequacy ratios (solo)

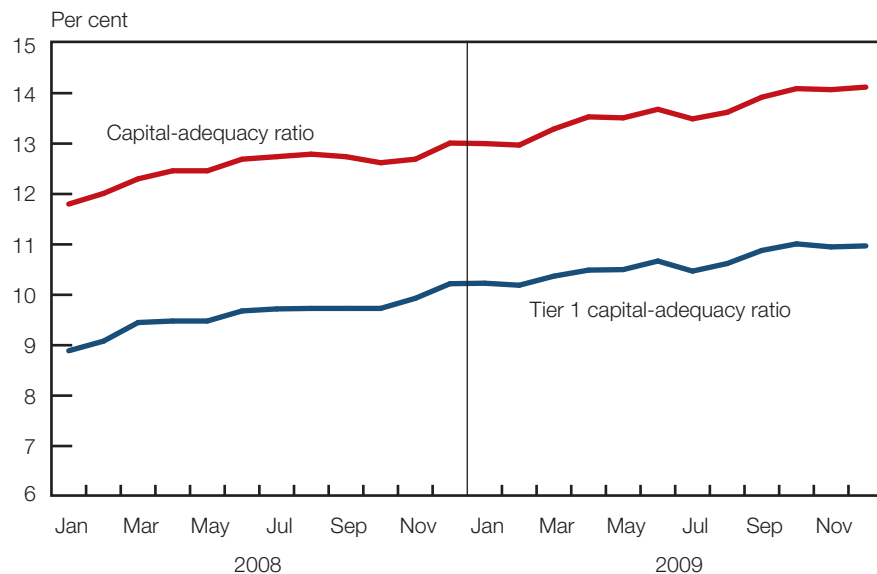
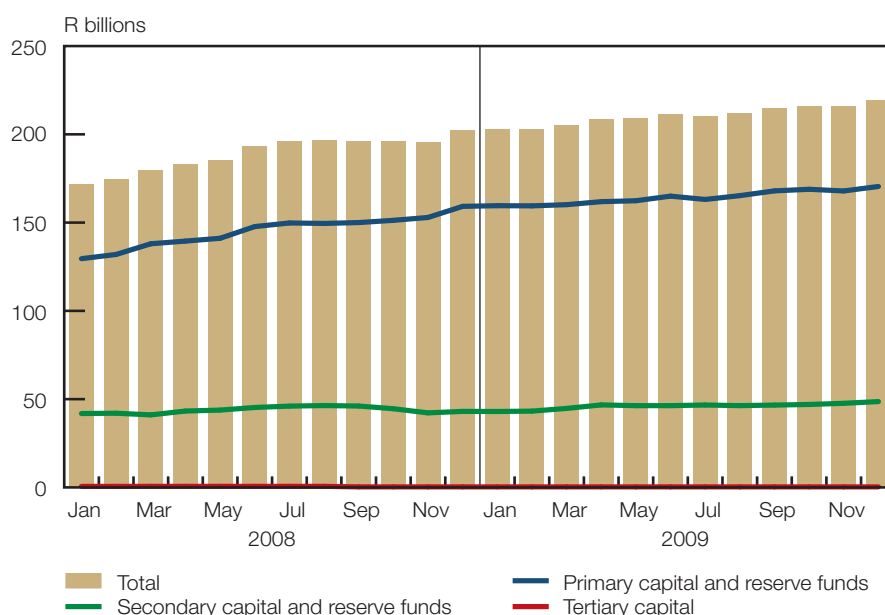


Figure 4.33 reflects the composition of qualifying regulatory capital and reserve funds on a solo basis. Total qualifying regulatory capital and reserve funds amounted to R219,4 billion at the end of December 2009 (December 2008: R202,6 billion), representing an increase of 8,3 per cent year on year. This increase was due to an increase of 7,1 per cent in qualifying primary capital and reserves (mainly due to the appropriation of profits) and an increase of 12,9 per cent in qualifying secondary capital and reserve funds over the period. Total qualifying tertiary capital amounted to only R300 million throughout the period under review.

increase of 7,1 per cent in qualifying primary capital and reserves

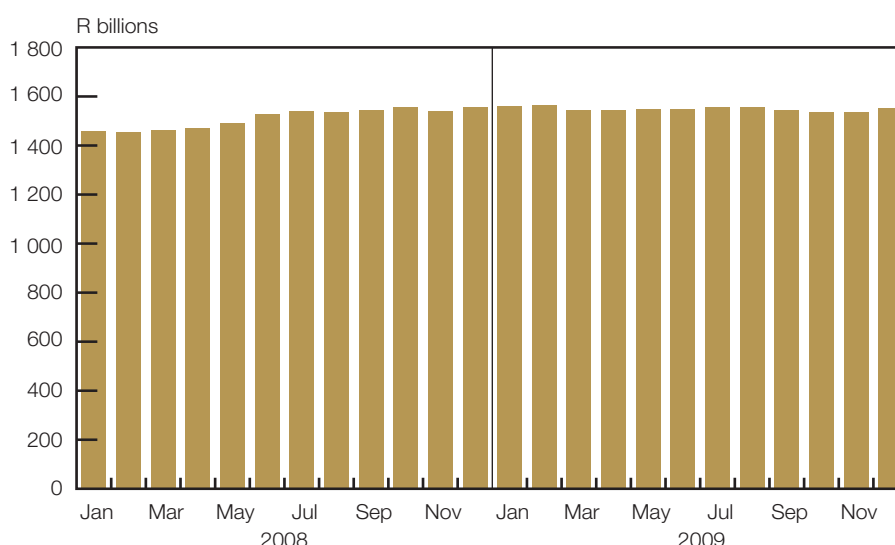
Figure 4.33 Composition of qualifying regulatory capital and reserve funds (solo)



Owing to the negative growth rate in total assets during 2009, the banking sector's total risk-weighted exposure (Figure 4.34) remained fairly stable, amounting to R1 554 billion at the end of December 2009 (December 2008: R1 557 billion).

banking sector's total risk-weighted exposure remained fairly stable

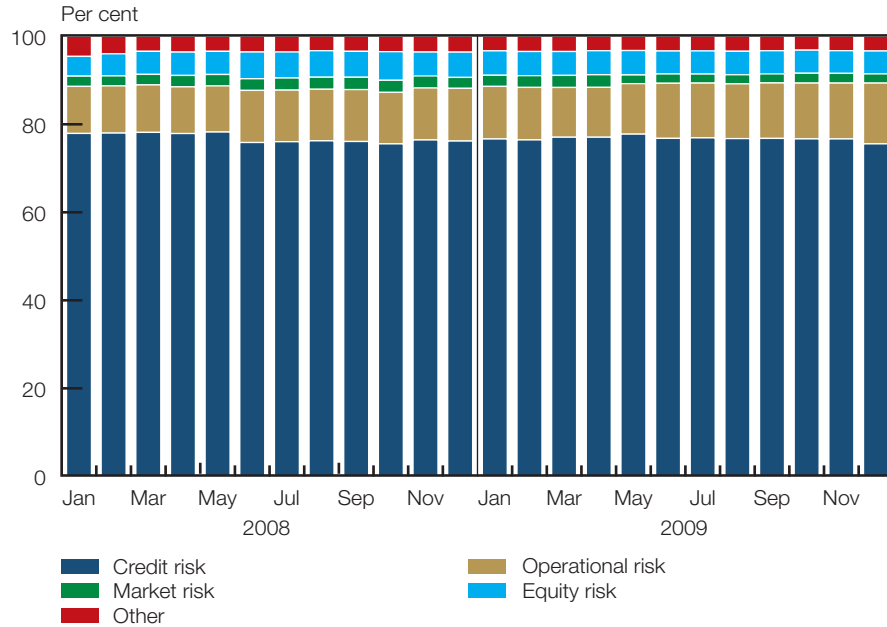
Figure 4.34 Total risk-weighted exposure (solo)



As illustrated in Figure 4.35, the composition of the total regulatory capital requirement remained fairly stable during 2009. At the end of December 2009 credit risk constituted the largest portion of the total regulatory capital requirement, namely 75,6 per cent

(December 2008: 76,2 per cent). Operational risk constituted 13,8 per cent at the end of December 2009 (December 2008: 12 per cent). Equity represented 5,2 per cent at the end of 2009 (December 2008: 5,8 per cent). Other constituted 3,3 per cent at the end of December 2009 (December 2008: 3,6 per cent) and market risk accounted for 2,1 per cent at the end of 2009 (December 2008: 2,5 per cent).

Figure 4.35 Composition of total regulatory capital requirement (solo)



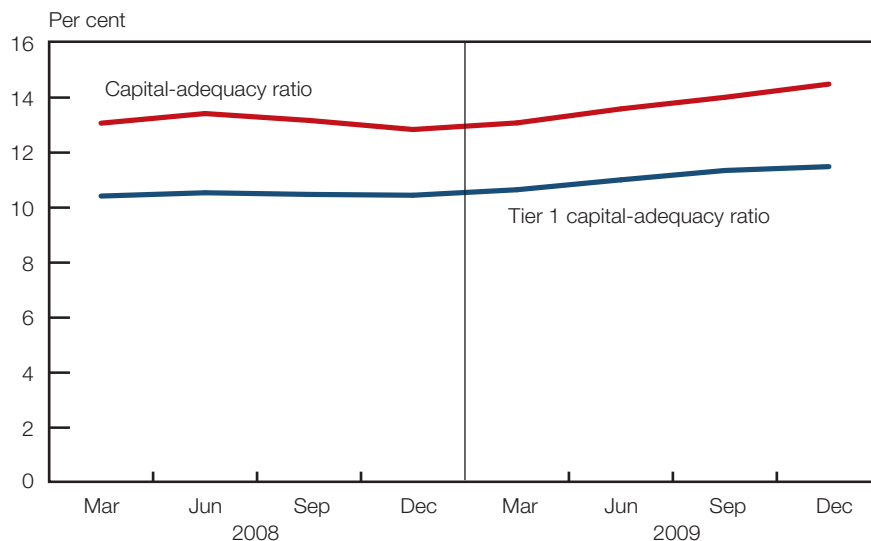
#### 4.6.2 Capital adequacy for total consolidated banking groups

The capital-adequacy ratios for the consolidated banking groups improved as follows (refer to Figure 4.36 and the explanations for banks solo discussed above):

total capital-adequacy ratio increased to 14,5 per cent

- The total capital-adequacy ratio increased to 14,5 per cent at the end of December 2009 (December 2008: 12,8 per cent).
- The Tier 1 capital-adequacy ratio strengthened to 11,5 per cent at the end of December 2009 (December 2008: 10,5 per cent).

Figure 4.36 Capital-adequacy ratios (consolidated banking groups)

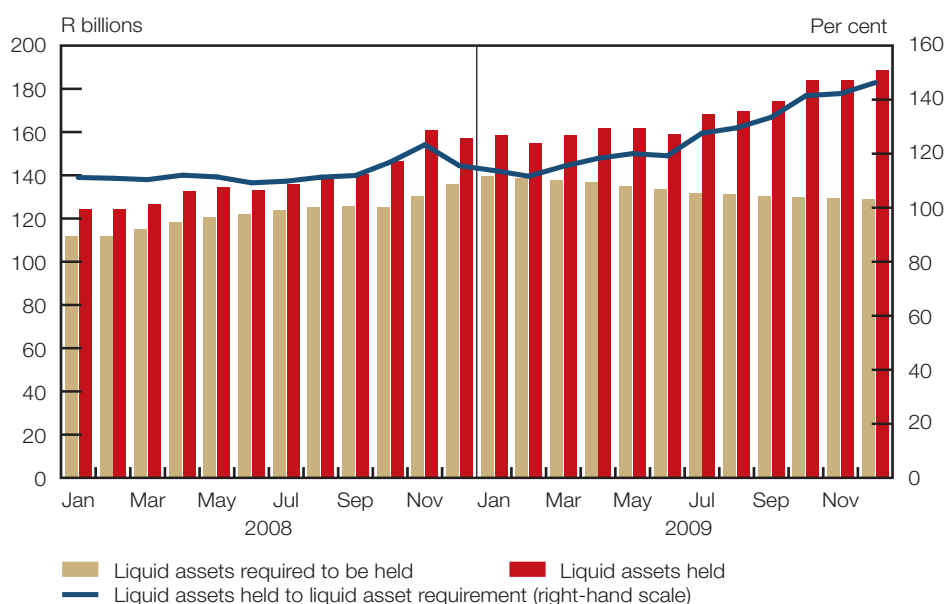


## 4.7 Liquidity risk

The average daily amount of liquid assets held by banks compared to the minimum requirement is presented in Figure 4.37. The liquid assets held by banks increased by 20 per cent during 2009 as banks increased their investments in instruments qualifying as liquid assets. During this period the statutory liquid assets required declined by 5,2 per cent owing to the decline in funding liabilities towards the end of 2009. At the end of December 2009 banks' statutory liquid asset holdings exceeded the minimum requirement by 46,3 per cent (December 2008: 15,5 per cent) The liquid assets held by banks exceeded the statutory liquid asset requirement throughout 2009.

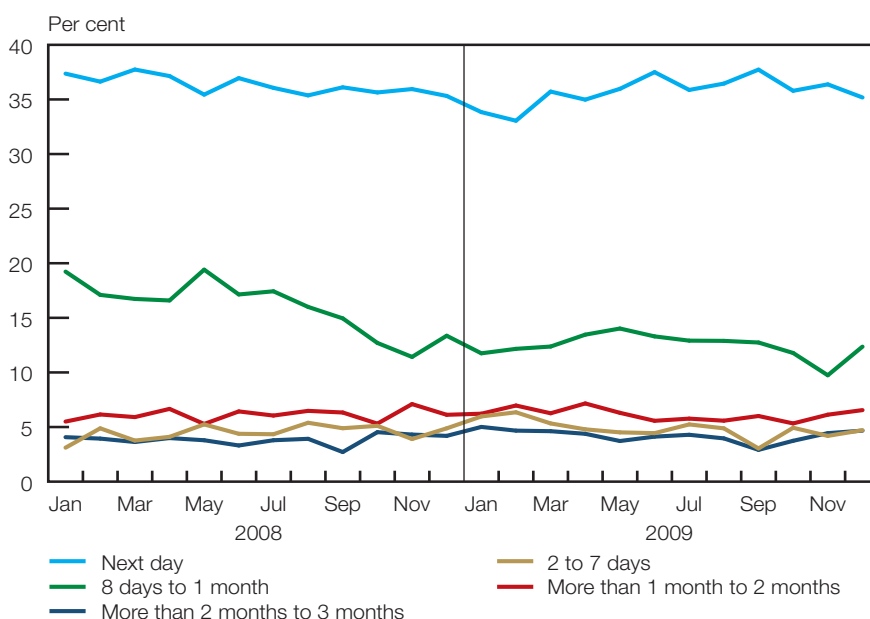
banks' statutory liquid asset holdings exceeded the minimum requirement by 46,3 per cent

Figure 4.37 Statutory liquid assets (actual versus required)



As shown in Figure 4.38, 35,2 per cent of contractual liabilities are classified to mature the “next day” at the end of December 2009 (December 2008: 35,3 per cent). However, banks reported that these liabilities, if considered on a “business-as-usual” assumptions

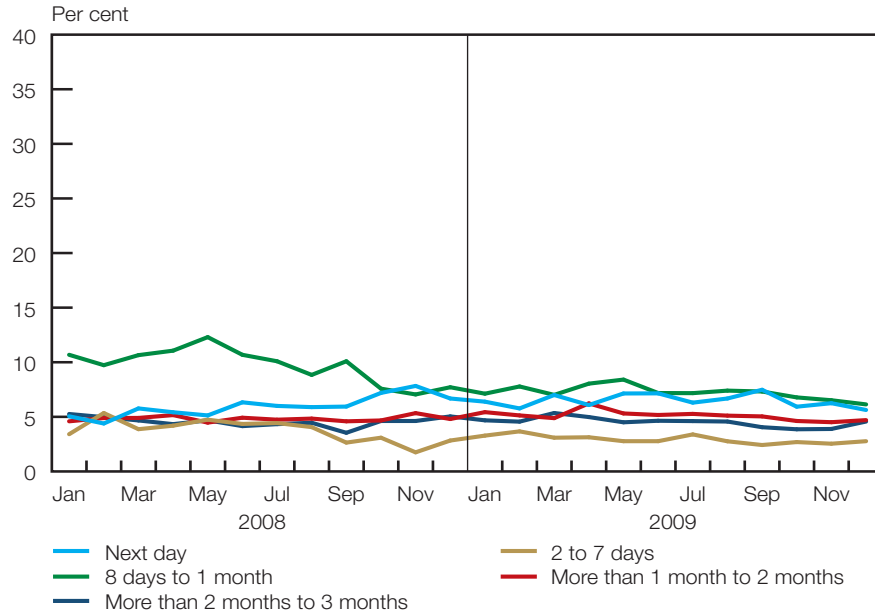
Figure 4.38 Contractual maturity of liabilities (as a percentage of total liabilities)





basis (Figure 4.39), only represented 5,6 per cent of total liabilities at the end of December 2009 (December 2008: 6,7 per cent). The substantial improvement in the ratio based on the “business-as-usual” assumptions is attributable to the ability of banks to retain funding or deposits on maturity or roll-over dates, notwithstanding the contractual arrangements pertaining to such funding or deposits.

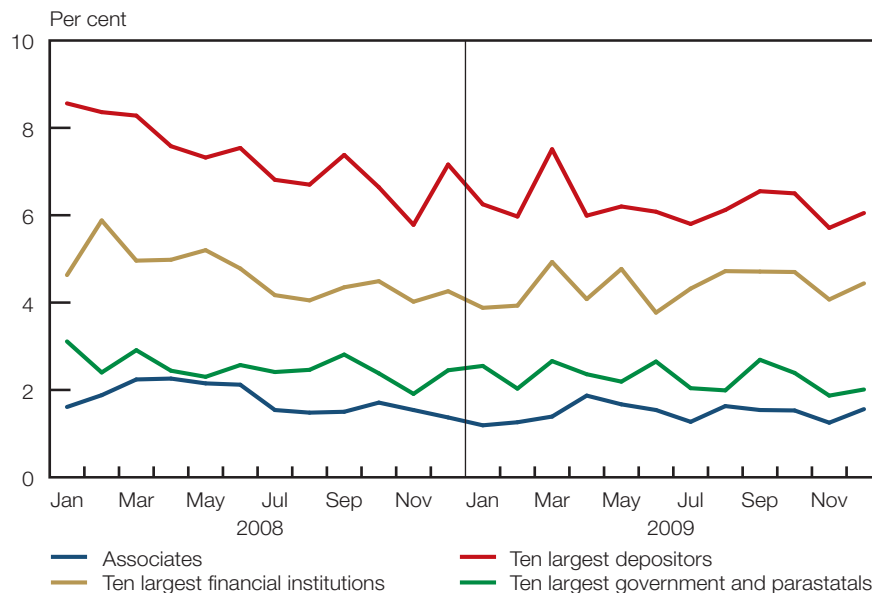
Figure 4.39 "Business-as-usual" maturity of liabilities (as a percentage of total liabilities)



short-term funding from banks' ten largest depositors decreased

Figure 4.40 illustrates the concentration of banks' short-term deposit funding. Short-term funding (as a percentage of total liabilities) received from banks' ten largest depositors, and ten largest government and parastatals decreased to 6,1 per cent and 2,0 per cent respectively at the end of December 2009 (December 2008: 7,2 per cent and 2,5 per cent respectively). Short-term funding from associates and the ten largest financial institutions increased to 1,6 per cent and 4,4 per cent respectively at the end of December 2009

Figure 4.40 Concentration of short-term deposit funding (as a percentage of total liabilities)



(December 2008: 1,4 per cent and 4,3 per cent respectively). Overall, short-term deposit funding from the above sources declined to 14,1 per cent of total liabilities at the end of December 2009, from 15,2 per cent at the end of December 2008.

## 4.8 Credit risk

The operating environment of the banking sector continued to be under pressure during 2009 as was evidenced by increased credit impairments and resultant lower profit levels. The banking sector continued to focus on the monitoring and management of asset quality, provisioning levels and providing assistance to highly indebted borrowers. Risk appetites were adjusted in line with more challenging economic and business cycles, and caution was exercised with regard to lending practices, in particular within the retail portfolios, and more specifically banks' residential mortgage portfolios. Traces of the relief brought about by the reduction in interest rates became evident only during the last quarter of 2009 and might support improved cash flows of banks' clients going forward. Segments other than retail appeared to have been impacted to a lesser extent, but it is acknowledged that these segments remain vulnerable.

risk appetites adjusted in line with challenging economic and business cycles

Table 4.3 provides the highlights in respect of credit risk indicators that are common to all banks, irrespective of the approach adopted for the calculation of the minimum capital requirement for credit risk (i.e., the SA or the IRB). Both gross loans and advances, and gross credit exposures experienced negative annual growth rates of 2,6 per cent and 6,3 per cent respectively at the end of December 2009. However, the total risk-weighted exposure of banks remained fairly stable, declining slightly by 0,6 per cent between December 2008 and December 2009, mainly as a result of banks' credit policies and strategies that were adapted to match the prevailing credit environment.

total risk-weighted exposure of banks remained fairly stable

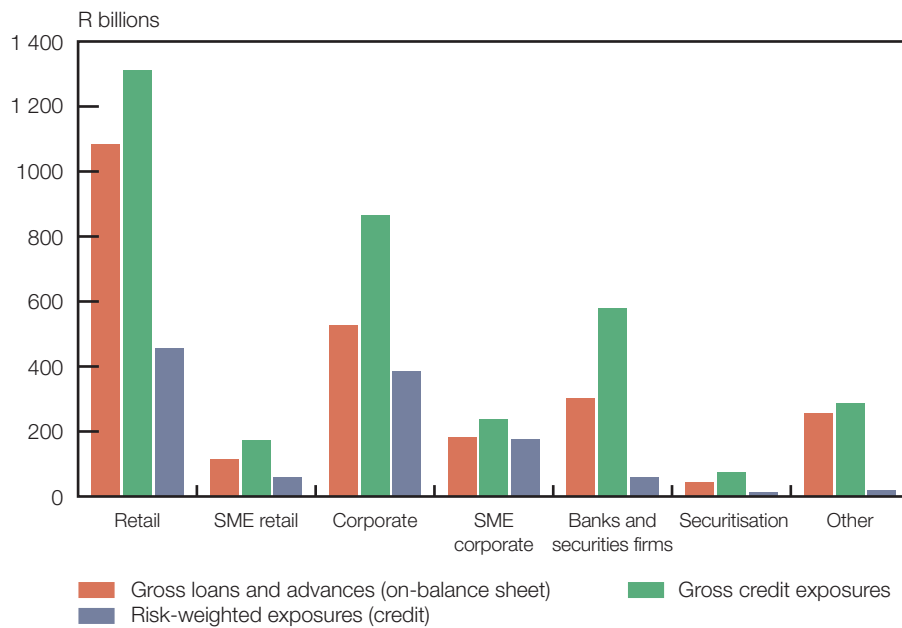
**Table 4.3 Salient banking-sector credit risk information**

	Dec 2008 (R billions)	Dec 2009 (R billions)	Year-on-year growth (Per cent)
Gross loans and advances (on-balance sheet) .....	2,316	2,257	-2,55
Gross credit exposures (including on- and off-balance sheet exposures, repurchase or resale agreements and derivative instruments).....	3,768	3,532	-6,28
Risk-weighted exposures (credit).....	1,178	1,171	-0,56
Impaired advances .....	91	134	47,5
Specific credit impairments.....	28	40	38,99
	Dec 2008 (Per cent)	Dec 2009 (Per cent)	
Average risk weight of gross credit exposures .....	31,3	33,2	
Impaired advances to gross loans and advances.....	3,9	5,9	
Specific credit impairments to impaired advances.....	31,4	29,6	
Specific credit impairments to gross loans and advances .....	1,2	1,8	

Impaired advances (i.e., advances in respect of which a specific credit impairment has been raised) increased by 47,5 per cent between December 2008 and December 2009 (also refer to Figure 4.42). Owing to, *inter alia*, the impact of the National Credit Act and banks' general attempts to assist or revive struggling borrowers, certain accounts remained in the impaired advances classification category for much longer periods than would have been expected under normal economic conditions. This led to a build-up in impaired advances and, taking into consideration the decline in gross loans and advances during 2009, brought about a significant deterioration in the impaired advances to gross loans and advances ratio.

Figure 4.41 provides a more granular picture in respect of gross loans and advances, gross credit exposures and risk-weighted exposures by providing the information per asset category (which includes retail, small and medium enterprise (SME) retail, corporate, SME corporate, banks and securities firms, securitisation and other). At the end of December 2009 the SME corporate asset category had the highest risk-weighting percentage if measured against its gross credit exposure (or alternatively, against its gross loans and advances), followed by the corporate category. The categories securitisation and other had the lowest risk-weightings.

**Figure 4.41 Credit exposures per asset category and respective risk-weighted exposures**

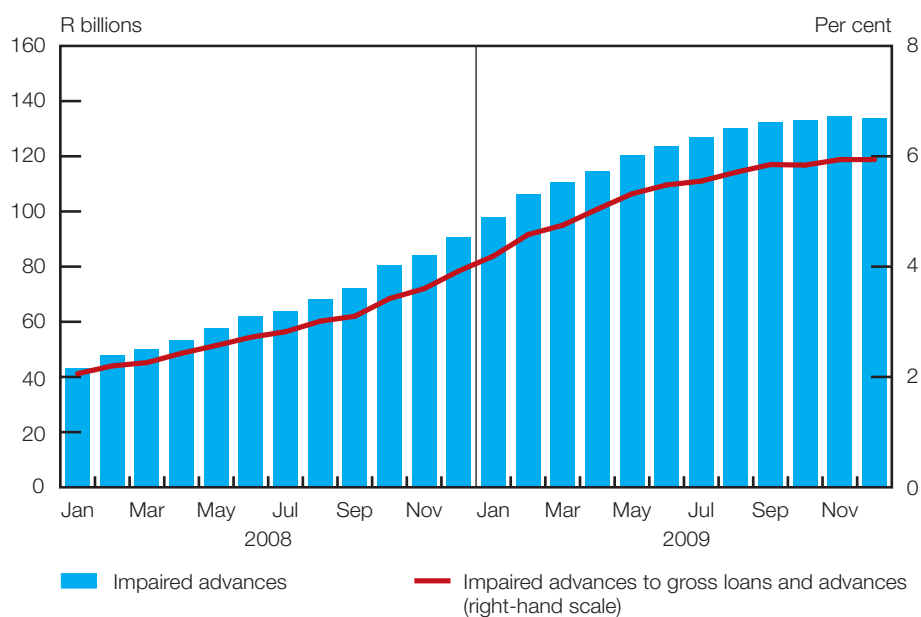


#### 4.8.1 Total impaired advances

impaired advances increased by 47,5 per cent

Impaired advances and the impaired advances to gross loans and advances ratio are set out in Figure 4.42. As mentioned above, impaired advances increased by 47,5 per cent during the period under review and amounted to R134,0 billion at the end of December 2009 (December 2008: R90,8 billion). Impaired advances to gross loans and advances deteriorated to 5,9 per cent at the end of December 2009 (December 2008: 3,9 per cent) due to the substantial increase in impaired advances and the negative rate of growth reported for gross loans and advances during the last quarter of 2009. During the period November 2009 to December 2009 impaired advances declined by 0,5 per cent, the first decline since the commencement of the credit down-cycle.

Figure 4.42 Impaired advances to gross loans and advances



### 4.8.2 Credit impairments

Figure 4.43 illustrates the increase in specific and portfolio credit impairments by 39,0 per cent and 10,3 per cent respectively, to R39,6 billion and R12,5 billion at the end of December 2009 respectively (December 2008: R28,5 billion and R11,3 billion). Specific credit impairments peaked at the end of October 2009, after which it declined slightly. Portfolio credit impairments have been relatively stable throughout 2009.

specific credit impairments peaked at the end of October 2009

Figure 4.43 Specific and portfolio credit impairments

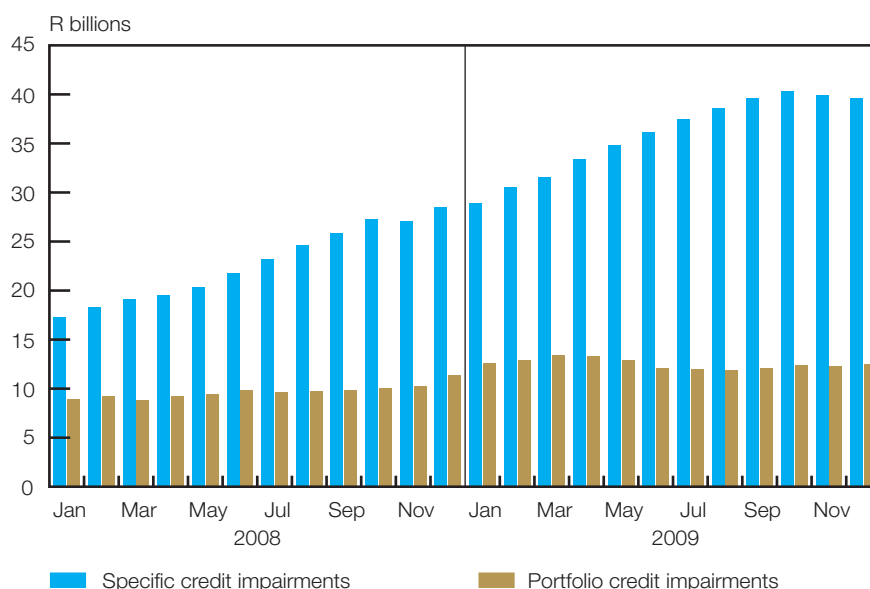
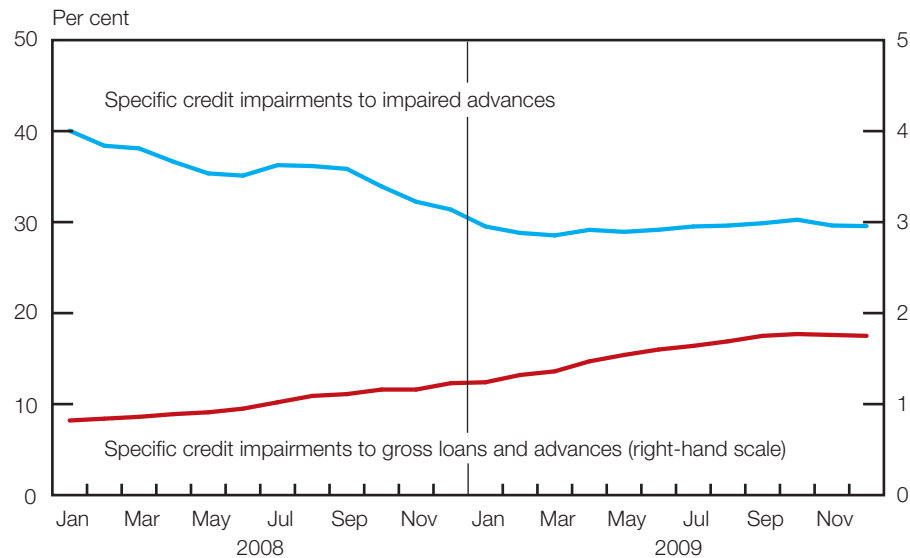


Figure 4.44 provides the ratios specific credit impairments to impaired advances and specific credit impairments to gross loans and advances. Specific credit impairments as a percentage of impaired advances decreased to 29,6 per cent at the end of December 2009 (December 2008: 31,4 per cent) and were stable for the last three quarters of 2009. Specific credit impairments as a percentage of gross loans and advances increased to 1,75 per cent at the end of December 2009 (December 2008: 1,23 per cent), mainly as a result of the decline in the rate of growth in gross loans and advances.

Figure 4.44 Specific credit impairment ratios



### 4.8.3 The standardised approach banks

SA banks represented 15,7 per cent of the total banking-sector's gross loans and advances

The SA banks represented 15,7 per cent of the total banking-sector's gross loans and advances at the end of December 2009 (December 2008: 15,6 per cent). The risk-weighting distribution in respect of SA banks that is presented in Figure 4.45 on page 127 has been stable during the period December 2008 to December 2009. The average risk weighting increased from 43 per cent at the end of December 2008 to 48 per cent at the end of December 2009 due to an increase in the 150 per cent risk-weighting category. This was largely caused by an increase in overdue advances which was not covered sufficiently by specific credit impairments.

### 4.8.4 The standardised approach banks: Classification of credit risk exposures

Credit risk exposures are classified as either "standard", "special mention", "sub-standard", "doubtful" or "loss" by SA banks and reported on a quarterly basis. As shown in Figure 4.46, there was a substantial increase in exposures classified as "special mention" between December 2008 and March 2009 due to one of the banks reclassifying its significant exposures to the financial and automotive sectors from "standard" to "special mention" at the height of the international financial market crisis.

Figure 4.45 Risk-weighting distribution of credit exposures under the standardised approach

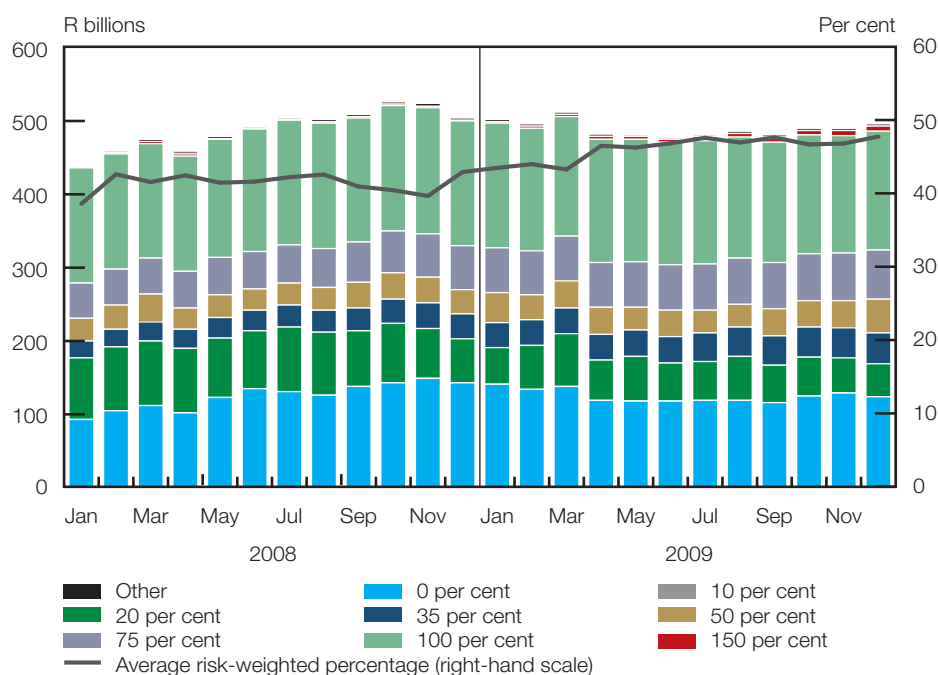


Figure 4.46 Classification of credit risk exposures under the standardised approach

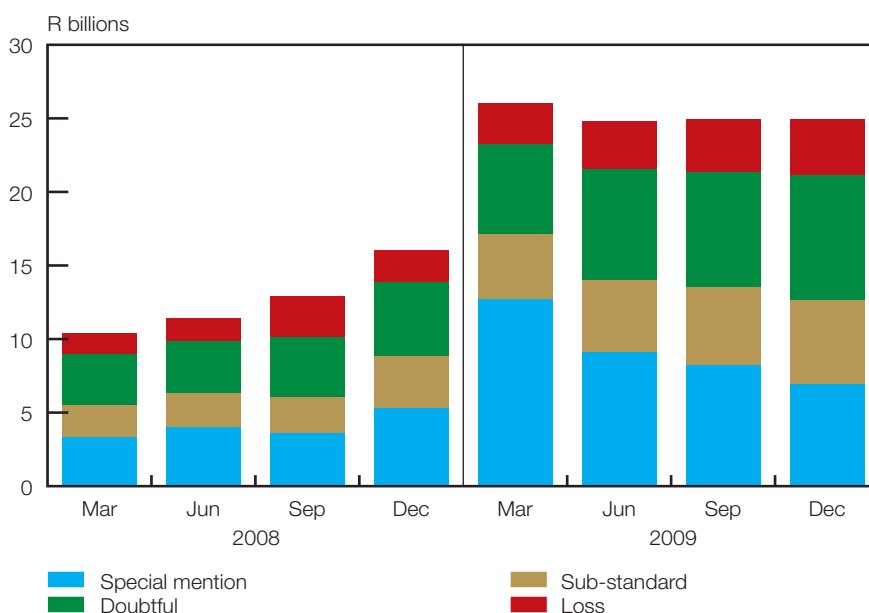
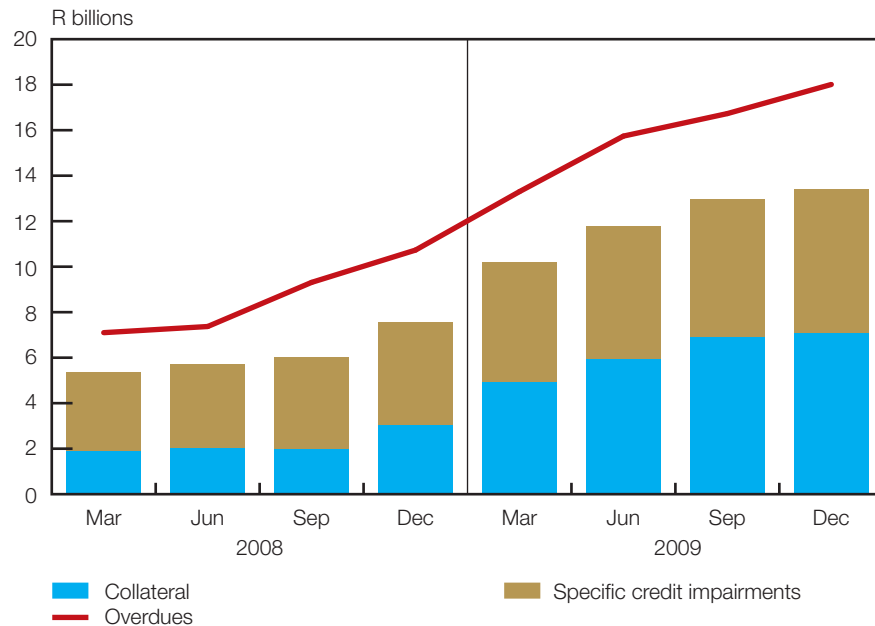


Figure 4.47 combines the classifications “sub-standard”, “doubtful” and “loss”, named “overdues”, which are then measured against the collateral held and specific credit impairments raised. The “gap” or shortfall can be attributed, *inter alia*, to unsecured lending in which instances banks may be required by the Registrar to adhere to higher minimum capital-adequacy ratios.

Figure 4.47 Overdues (includes classifications “sub-standard”, “doubtful” and “loss”) measured against specific credit impairments and collateral



#### 4.8.5 Internal ratings-based banks

##### Box 4.1 Calculation of expected loss for internal ratings-based banks

As set out in the Basel Committee document, *An Explanatory Note on the Basel II IRB Risk Weight Functions*,<sup>34</sup> issued in July 2005, banks can estimate expected losses based on three key drivers:

- Probability of default (PD) per rating grade, which gives the average percentage of obligors that default in this rating grade in the course of one year
- Exposure at default (EAD), which gives an estimate of the amount outstanding (drawn amounts plus likely future drawdowns of yet undrawn lines) in case the borrower defaults
- Loss given default (LGD), which gives the percentage of exposure the bank might lose in case the borrower defaults.

The expected loss is calculated as follows:

$$EL = PD * EAD * LGD$$

These risk drivers are converted into risk weights and regulatory capital requirements by means of risk weight formulas specified by the Basel Committee and incorporated accordingly into the Regulations relating to Banks.

IRB banks represented 84,3 per cent of the banking sector's gross loans and advances

Banks that utilised the IRB approach for calculating minimum capital requirements for credit risk represented 84,3 per cent of the banking sector's gross loans and advances at the end of December 2009 (December 2008: 84,4 per cent). Table 4.4 provides a summary of the key drivers of credit risk, as primary inputs to the capital calculation, reported by IRB banks. EAD increased by 0,7 per cent between December 2008 and December 2009 and is utilised in conjunction with the PD and the average LGD to calculate an expected loss in respect of defaulted exposures and the capital requirement through the calculation of an average risk weighting (refer to Box 4.1 for definitions and explanations):

34 [www.bis.org/bcbs/irbriskweight.htm](http://www.bis.org/bcbs/irbriskweight.htm).

- The average PD increased to 7,4 per cent at the end of December 2009 (December 2008: 5,8 per cent) due to increases in the retail and corporate asset categories. The retail PD ended 2009 at 12,4 per cent (December 2008: 10,0), and the corporate PD at 3,6 per cent (December 2008: 2,5 per cent); in other words, it is expected that 12,4 per cent of the value of retail borrowers will be in default over the following 12-month period, and 3,6 per cent of the value of corporate borrowers. As a result, fairly high levels of credit losses are still expected for 2010.
- In the event of retail and corporate borrowers actually defaulting, it is estimated that the average LGD would amount to 24,2 per cent and 34,6 per cent respectively of defaulted exposures (December 2008: 24,4 per cent and 34,8 per cent respectively). The LGD for both retail and corporate asset categories improved slightly during 2009 due to banks' increased focus on credit risk mitigation.
- Applying the PDs, LGDs and EADs, the expected loss as a ratio of the value of defaulted exposures for the IRB banks amounted to 2,0 per cent at the end of December 2009 (December 2008: 1,6 per cent). IRB banks had to make provision for these additional expected losses of defaulted exposures, which impacted negatively on profitability. Banks will therefore still be expected to set profits aside to cover these expected losses during 2010.
- The increase in defaulted exposures forced banks to absorb higher expected credit losses. This, coupled with the absence of growth in new loans, which is normally riskier than more mature loans, resulted in an improved average risk weighting of 34,7 per cent at the end of December 2009 (December 2008: 35,6 per cent).

average PD increased to 7,4 per cent

LGD for both retail and corporate asset categories improved slightly during 2009

**Table 4.4 Key features reported by internal ratings-based banks**

	Dec 2008	Dec 2009
Exposure at default (R billions) .....	2,578	2,597
Average probability of default (per cent) .....	5,8	7,4
Of which:		
Retail .....	10,0	12,4
Corporate .....	2,5	3,6
Average loss given default (per cent).....	27,8	28,4
Of which:		
Retail .....	24,4	24,2
Corporate .....	34,8	34,6
Expected loss as a percentage of exposure at default (per cent).....	1,6	2,0
Risk-weighted exposure as a percentage of exposure at default (per cent) .....	35,6	34,7
Advances in default as a percentage of exposure at default (per cent) .....	3,1	4,6

The EAD for the majority of credit exposures subject to the IRB approach is reported in standard PD bands. Of these, total retail and total corporate form the main components. Figures 4.48 and 4.49 provide the total retail and total corporate distributions of EAD in the standard PD bands, and how they migrated during the period December 2008 to the end of December 2009. From the retail and corporate PD distributions it is evident that the "in default" PD band increased as borrowers over-extended themselves. The impact of this was reduced by the migration of more mature loans to higher quality PD bands.



Figure 4.48 Distribution of retail exposures at default over the probability of default bands

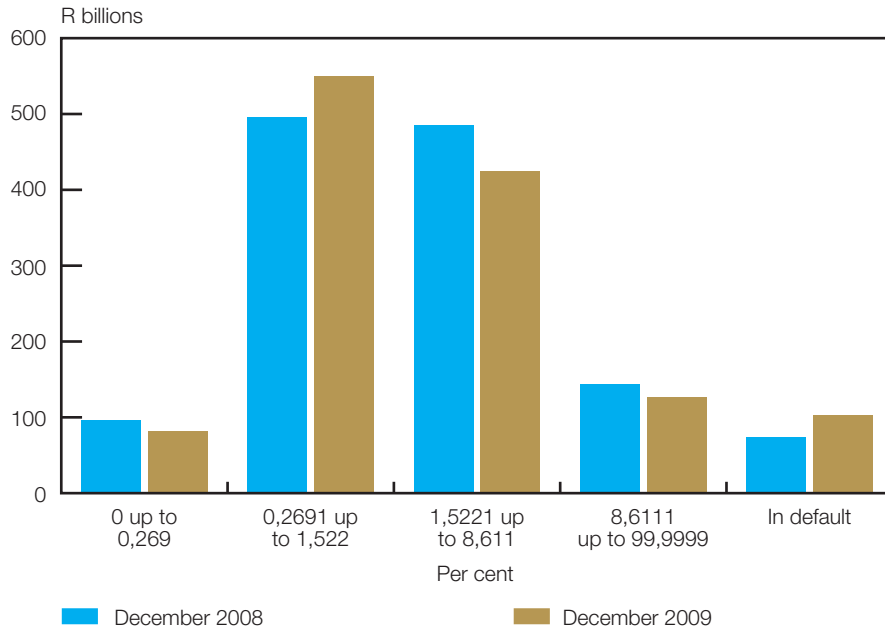
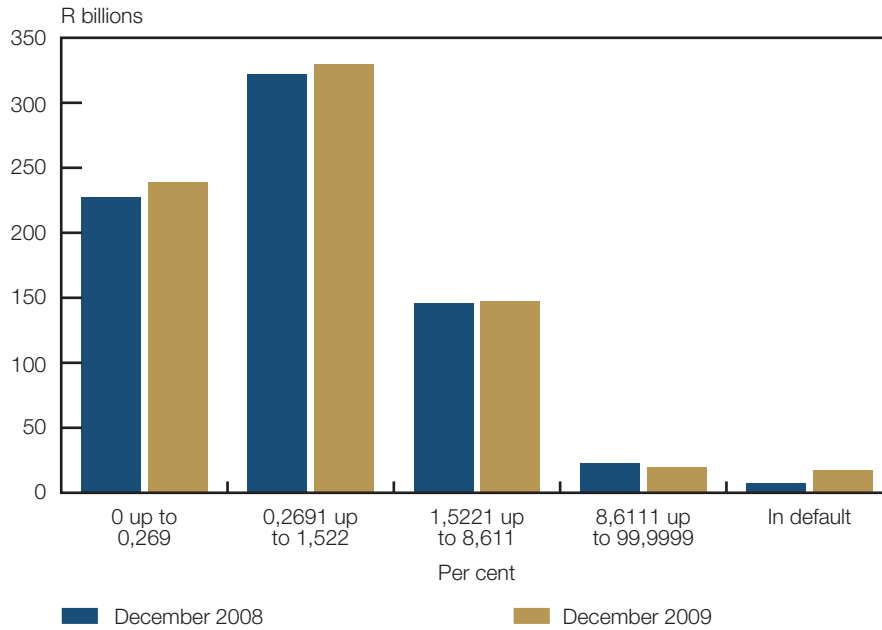


Figure 4.49 Distribution of corporate exposures at default over the probability of default bands



#### 4.8.6 Exposure at default

total default exposures increased by 48,1 per cent

Credit exposure (i.e., EAD) per asset category is presented in Figure 4.50, followed by the default exposure and the respective default ratios (Figure 4.51). Total credit exposure (as reflected in the standard PD bands) declined by 1,8 per cent to R2 533 billion at the end of December 2009 (December 2008: R2 578 billion) in a trend similar to that of gross loans and advances reported on balance sheet. The retail credit exposures accounted for 50,7 per cent of total credit exposure. Total default exposures increased by 48,1 per cent and amounted to R119,6 billion at the end of December 2009 (December 2008: R80,8 billion). The retail default exposures, following an increase of

38,7 per cent during 2009, contributed 85,5 per cent of the total default exposures, amounting to R102,3 billion at the end of December 2009 (December 2008: R73,8 billion). Total corporate default exposures (which includes corporate, specialised lending, SME corporate and purchase receivables-corporate) increased by 156,7 per cent to R17,2 billion at the end of December 2009 (December 2008: R6,7 billion). The default ratios for the total credit exposure, the retail exposure and the corporate exposure deteriorated substantially to 4,7 per cent, 8,0 per cent and 2,3 per cent respectively at the end of December 2009 (December 2008: 3,1 per cent, 5,7 per cent and 0,9 per cent respectively). In general, it would seem that the default ratios flattened out during the final quarter of 2009.

default ratios flattened out during the final quarter of 2009

Figure 4.50 Total exposure at default

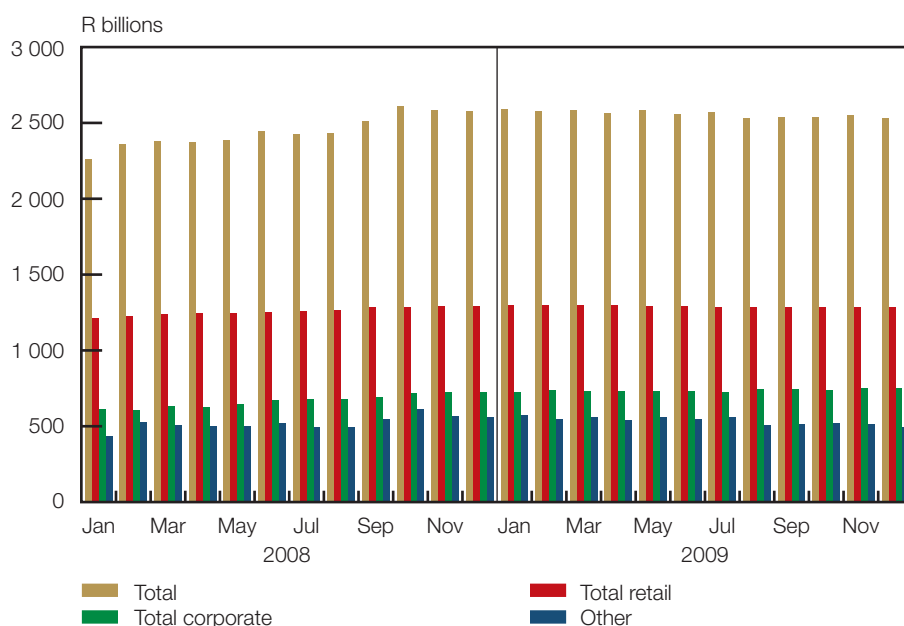
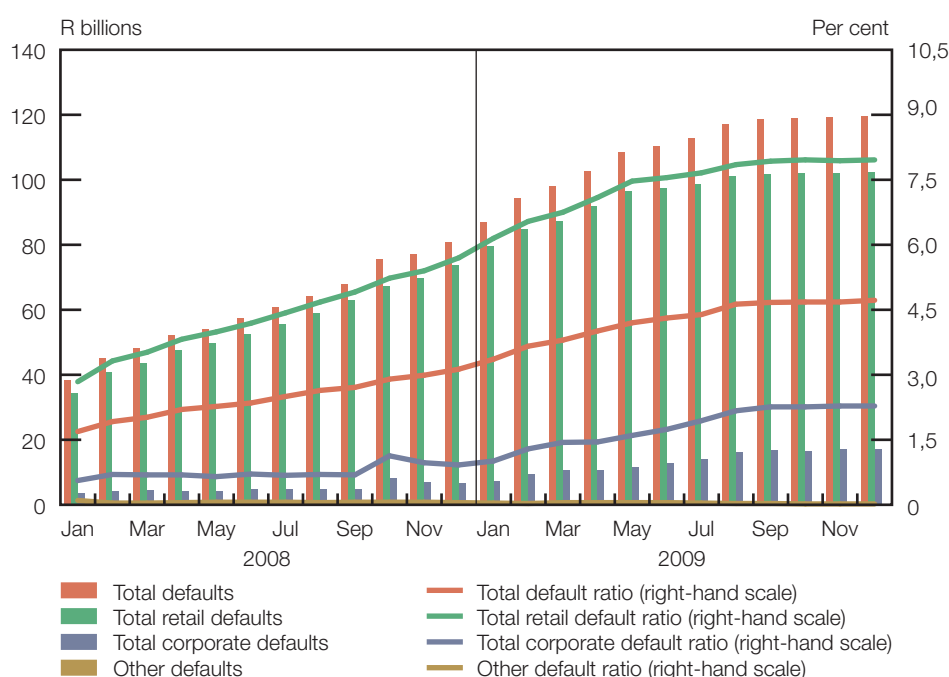
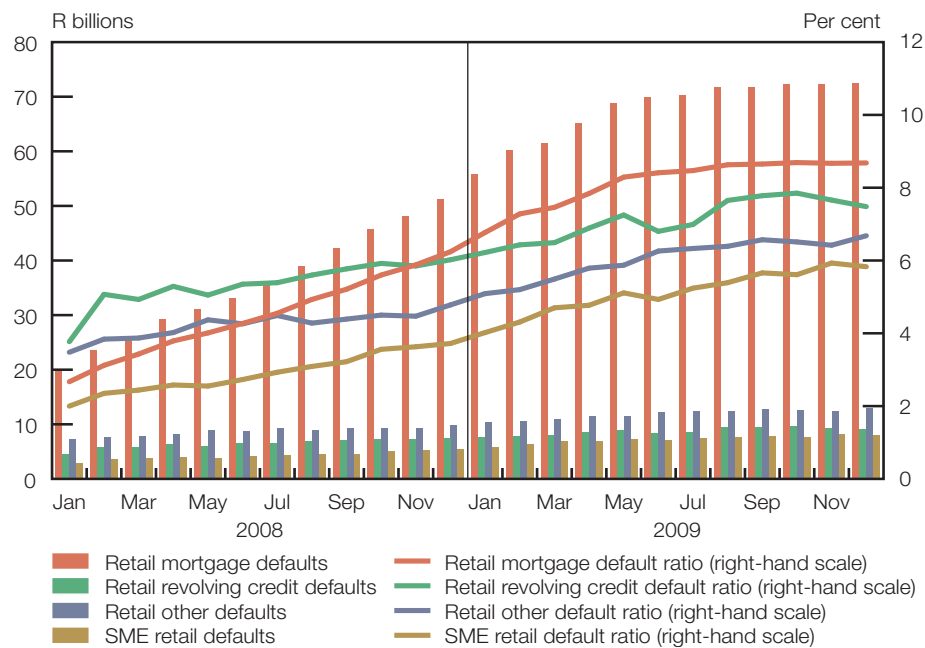


Figure 4.51 Total default exposure and default ratio per asset class



A breakdown of the respective retail defaults and retail default ratios is provided in Figure 4.52. During the first half of 2009 default ratios increased at a strong pace, but this trend slowed down during the second half of 2009. Retail mortgages contributed 70,7 per cent of total retail default exposures at the end of December 2009 (R72,4 billion mortgages in default). The default ratios for retail mortgages, retail revolving credit, retail other and SME retail increased to 8,7 per cent, 7,5 per cent, 6,7 per cent and 5,8 per cent respectively at the end of December 2009 (December 2008: 6,2 per cent, 6,0 per cent, 4,8 per cent and 3,7 per cent respectively) indicating a material deterioration in asset quality in these portfolios during 2009.

**Figure 4.52 Composition of retail default exposures and their respective default ratios**



Corporate and SME corporate default exposures (excluding specialised lending), and their default ratios, are presented in Figure 4.53 on page 133. Corporate defaults (excluding specialised lending) lagged retail defaults during 2008, but increased by 215,9 per cent during 2009 to R9,1 billion at the end of December 2009 (December 2008: R2,9 billion). The default ratios for corporate (excluding specialised lending) and SME corporate increased to 1,6 per cent and 5,6 per cent respectively at the end of December 2009 (December 2008: 0,6 per cent and 3,0 per cent respectively).

#### 4.8.7 Credit concentration risk: Sectoral and geographic distribution of credit exposures

advances to private households, and finance and insurance represented 62,1 per cent of the banking sector's total credit exposure

Tables 4.5 and 4.6 provide the sectoral and geographic distribution of credit exposures for the years ending December 2008 and 2009. Advances to private households, and finance and insurance represented more than half of the banking sector's total credit exposure and amounted to 39,4 per cent and 22,7 per cent respectively of the total credit exposure at the end of 2009 (December 2008: 36,5 per cent and 25,4 per cent respectively). Advances to the real-estate sector and other amounted to 5,5 per and 5,6 per cent respectively at the end of December 2009. The banking sector's credit exposure to the remaining sectors of the economy was less than 5 per cent at the end of 2009. As reflected in Table 4.6, approximately 91 per cent of the banking sector's total credit exposure remained within the borders of South Africa, while exposure to Europe and Northern America amounted to 7 per cent and 1,3 per cent respectively at the end of 2009. Advances to other parts of the world represented less than 1 per cent of the banking sector's total credit exposure at the end of December 2009.

Figure 4.53 Composition of corporate default exposures (excluding specialised lending) and small and medium corporate enterprises default exposures, and respective default ratios

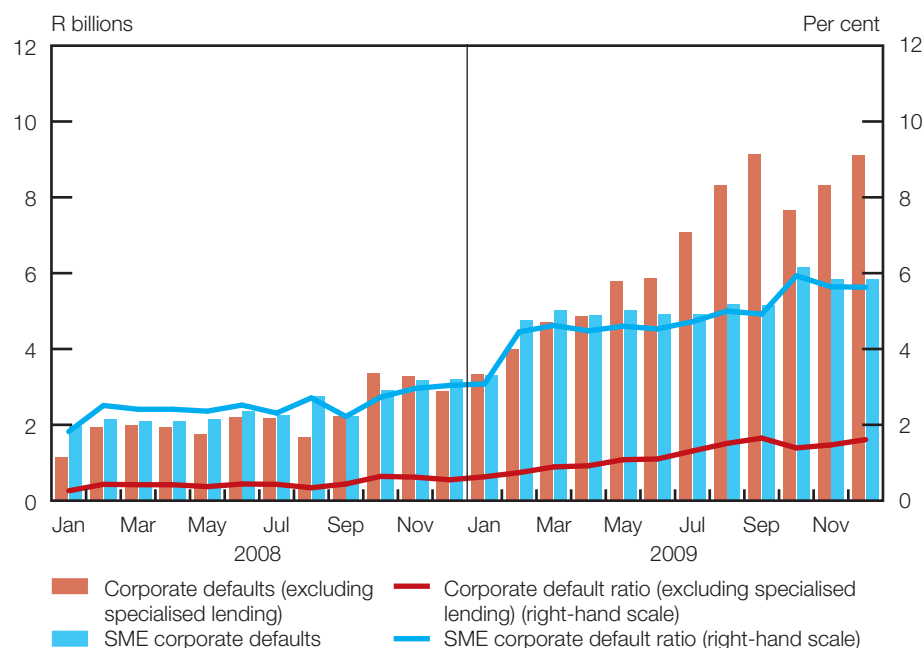


Table 4.5 Sectoral distribution of credit exposures (as a percentage of total credit exposure)

	Dec 2008	Dec 2009
Agriculture.....	1,21	1,62
Mining .....	2,70	3,21
Manufacturing .....	4,42	3,69
Electricity.....	0,71	0,70
Construction .....	1,29	1,31
Wholesale and retail trade.....	3,60	3,85
Transport and communication.....	2,36	2,90
Finance and insurance .....	25,37	22,70
Real estate.....	4,83	5,49
Business services.....	5,67	4,68
Community and personal services.....	4,14	4,83
Private households.....	36,46	39,41
Other.....	7,25	5,62
Total .....	100,00	100,00

Table 4.6 Geographic distribution of credit exposures (as a percentage of total credit exposure)

	Dec 2008	Dec 2009
South Africa .....	89,06	90,67
Other African countries.....	0,51	0,50
Europe .....	8,35	7,03
Asia.....	0,16	0,31
North America.....	1,61	1,27
South America .....	0,11	0,11
Other.....	0,21	0,12
Total .....	100,00	100,00

## 4.9 Market risk

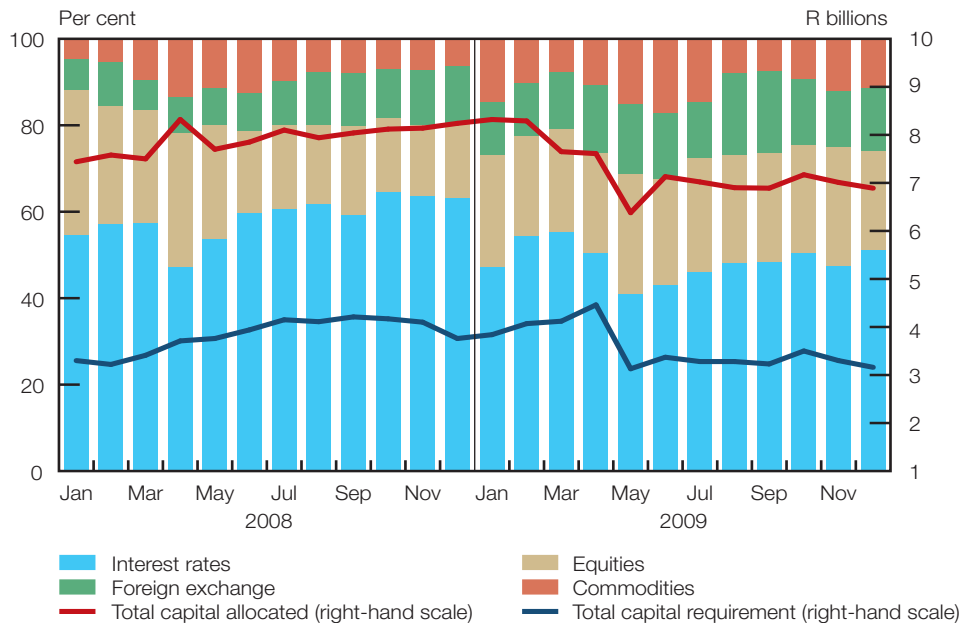
### 4.9.1 Regulatory capital requirement in respect of market risk

total capital allocated for market risk amounted to R6,9 billion

The composition of market risk regulatory capital requirement is illustrated in Figure 4.54. The total capital requirement for market risk increased from R3,8 billion at the end of January 2009 to R4,1 billion at the end of February 2009 and remained slightly above R4 billion for two successive months before declining to R3,2 billion at the end of December 2009 (December 2008: R3,8 billion). The total capital allocated for market risk amounted to R6,9 billion at the end of December 2009 (December 2008: R8,2 billion). The total allocated capital for market risk fluctuated between R6,4 billion and R8,3 billion during 2009. On average banks utilised 49,0 per cent of capital allocated for market risk during 2009.

The capital requirement in respect of interest rate contracts represented more than 40 per cent of the total market risk capital requirement during 2009. By the end of 2009 interest rate contracts amounted to 50,4 per cent of the market risk capital requirement (December 2008: 63,2 per cent). The capital requirement in respect of equity positions reached a high of 28,2 per cent at the end of November 2009, whereafter the ratio declined slightly to 26,1 per cent at the end of 2009 (December 2008: 17,3 per cent). The capital requirement for foreign exchange contracts and commodities constituted 14,0 per cent and 9,6 per cent respectively of total market risk capital at the end of 2009 (December 2008: 13,3 per cent and 6,2 per cent respectively).

Figure 4.54 Composition of regulatory capital requirement in respect of market risk



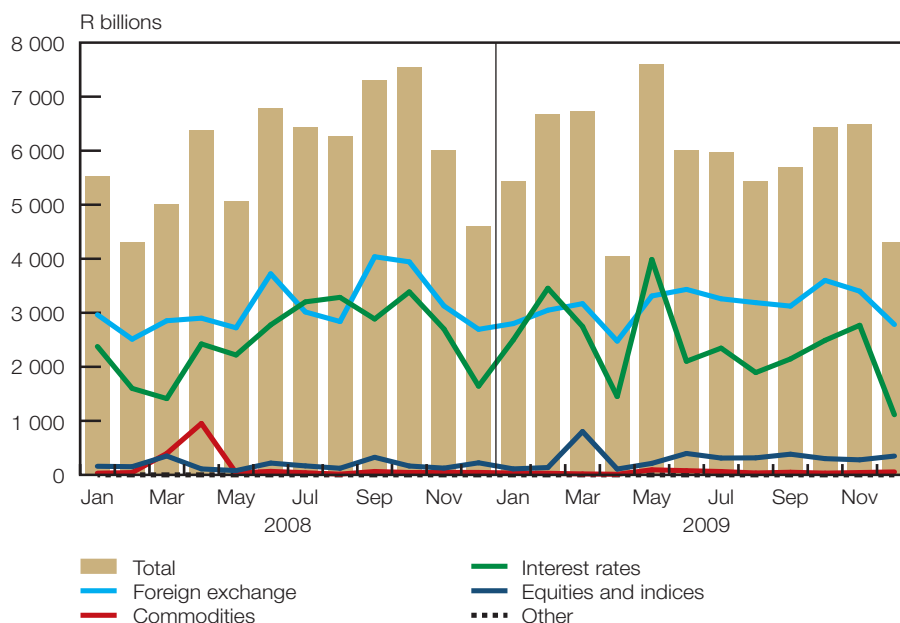
### 4.9.2 Derivative instruments

turnover in derivative instruments fluctuated between R4 billion and R7,6 billion per month

Figure 4.55 shows the monthly turnover in derivative contracts and their composition. The turnover is calculated by aggregating the gross notional values of all derivative purchases and sales that occurred during a specific month. The turnover in derivative instruments fluctuated between R4 billion and R7,6 billion per month throughout 2009. Monthly notional gross turnover dropped to R4 billion and R4,3 billion respectively at the end of April 2009 and December 2009, due to a decline in turnover of interest rate and foreign exchange contracts, reported by the larger banks and a few branches of

international banks. Interest rate and foreign exchange contracts constituted the major part of the turnover in derivative contracts during 2009. At the end of 2009 interest rate and foreign exchange contracts amounted to R1 114 billion and R2 783 billion respectively (December 2008: R1 642 billion and R2 694 billion respectively). Equities and commodities represented a small portion of the derivative turnover during 2009.

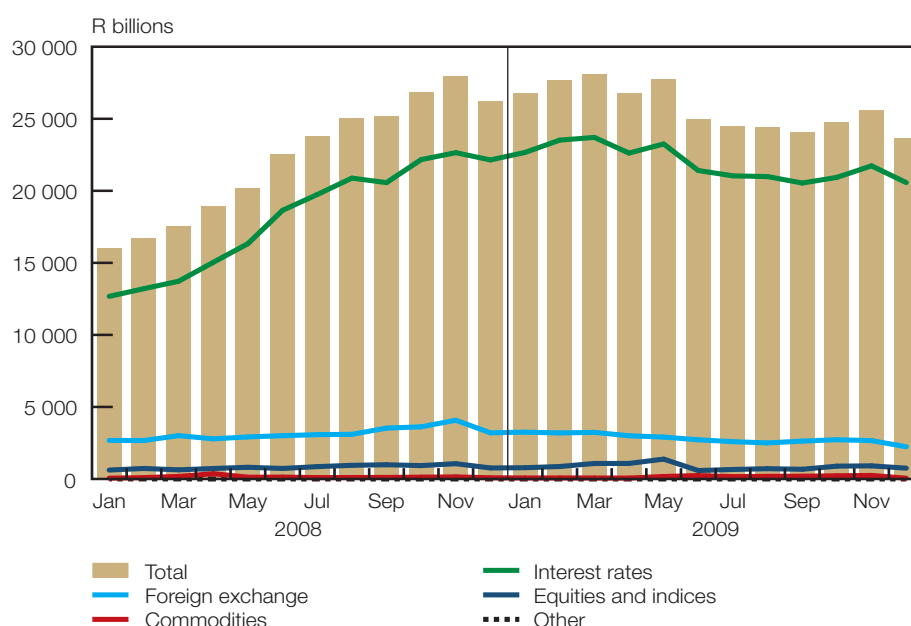
Figure 4.55 Composition of monthly turnover in derivative contracts (gross notional value)



The gross notional value of the total unexpired derivative contracts and the composition thereof are depicted in Figure 4.56. The gross notional value of the total unexpired derivative contracts amounted to R23 612 billion at the end of December 2009 (December 2008: R26 194 billion). Unexpired interest rate derivative contracts accounted for approximately 85 per cent of the total unexpired derivative contracts

interest rate derivative contracts accounted for approximately 85 per cent of the total unexpired derivative contracts

Figure 4.56 Composition of unexpired derivative contracts at month-end (gross notional value)

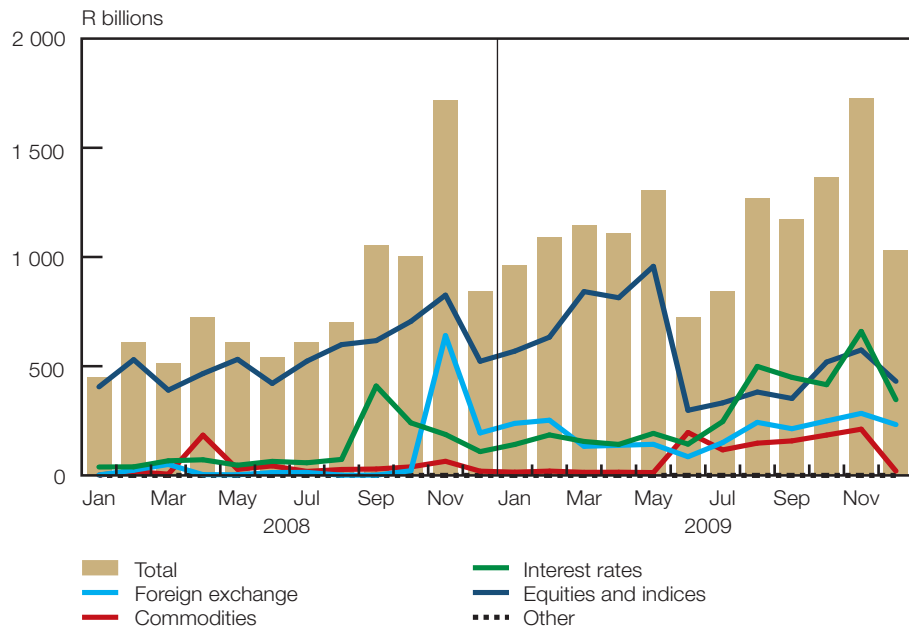


during 2009, amounting to R20 572 billion at the end of December 2009 (December 2008: R22 144 billion).

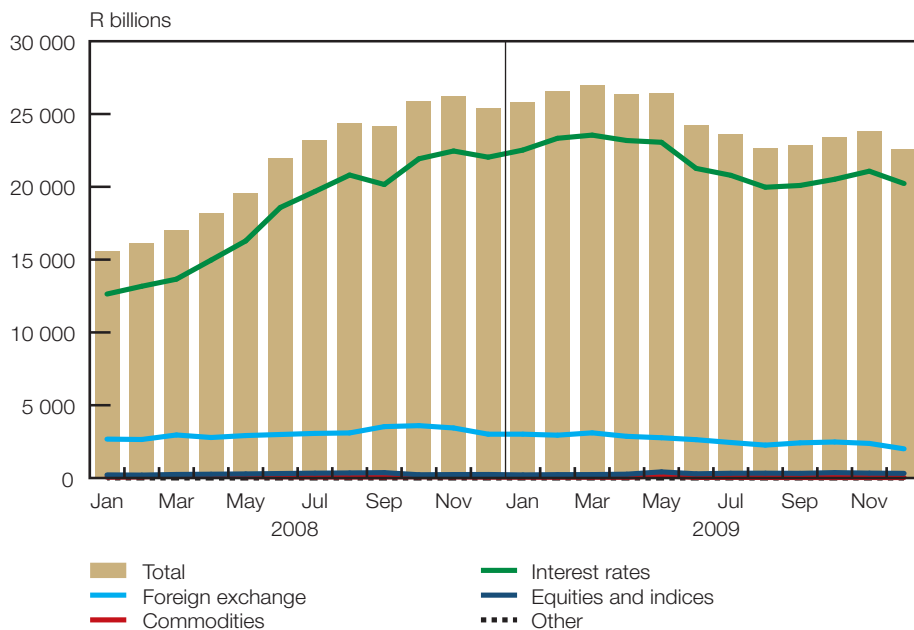
OTC-traded unexpired derivative transactions represented 95,6 per cent of the total unexpired derivative contracts

As already mentioned, Figure 4.56 illustrates the unexpired gross notional value of derivative contracts at month-end. Figures 4.57 and 4.58 present identical information to that of Figure 4.56, differentiating between exchange-traded (Figure 4.57) and OTC-traded derivative transactions (Figure 4.58). OTC-traded unexpired derivative transactions represented 95,6 per cent of the total unexpired derivative contracts at the end of December 2009 (December 2008: 96,8 per cent). Interest rate derivative contracts contributed to 89,6 per cent of the total unexpired OTC-traded derivative contracts at the end of December 2009 (December 2008: 86,9 per cent).

**Figure 4.57** Composition of unexpired derivative contracts at month-end: exchange traded (gross notional value)



**Figure 4.58** Composition of unexpired derivative contracts at month-end: over-the-counter traded (gross notional value)

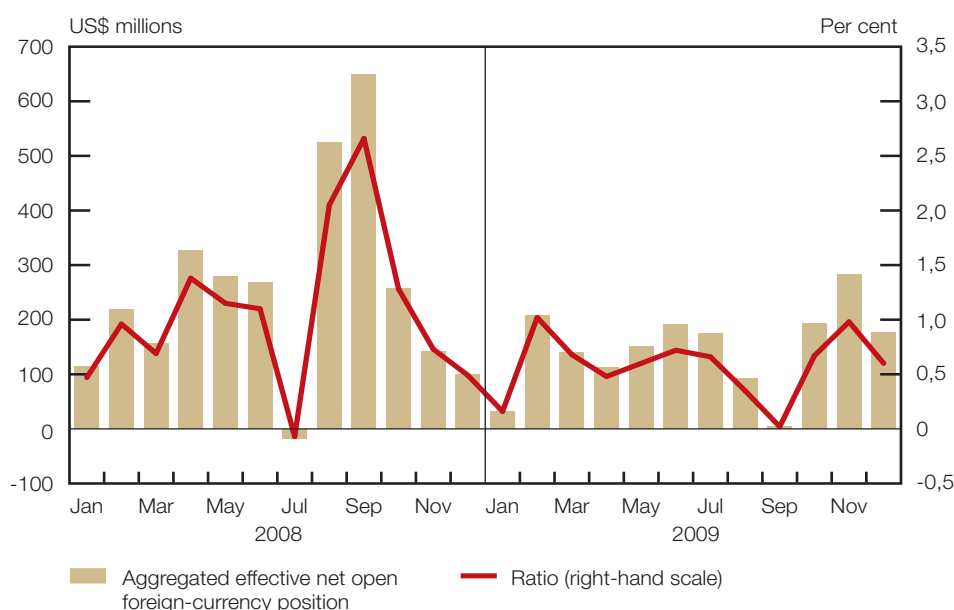


### 4.9.3 Currency risk

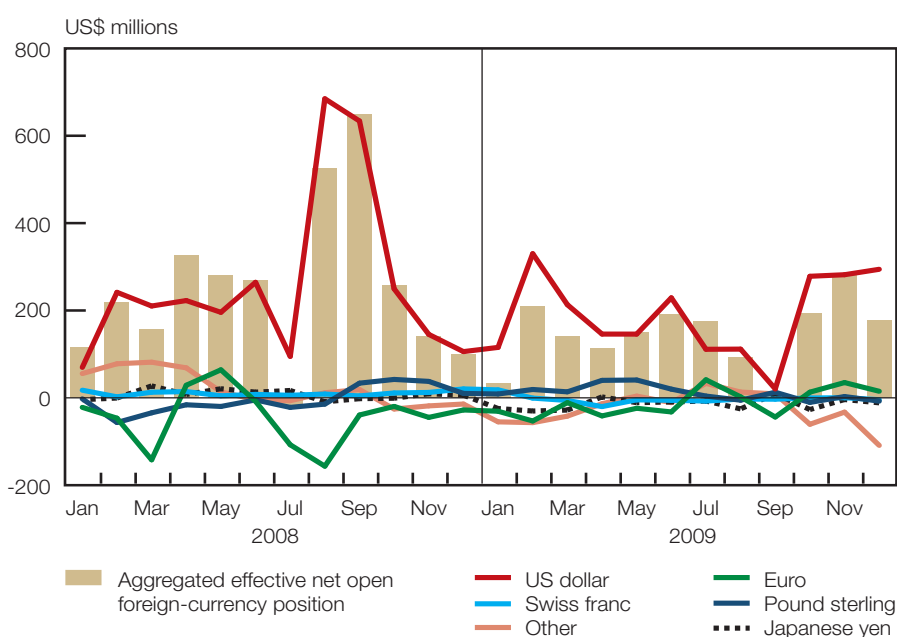
Figure 4.59 depicts the aggregated effective net open foreign-currency position (FX NOP) which is calculated by the netting of foreign-currency assets, foreign-currency liabilities, commitments to purchase foreign currency and commitments to sell foreign currency. The aggregated FX NOP remained below US\$300 million during 2009 and amounted to US\$177 million at the end of December 2009 (December 2008: US\$101 million). Expressed as a percentage of qualifying regulatory capital and reserve funds, the aggregated FX NOP remained below 1 per cent throughout 2009, except at the end of February 2009 and November 2009, when it increased in excess of 1 per cent, due to the depreciation of the US dollar. The composition of the aggregated FX NOP is reflected in Figure 4.60. The US dollar was the main contributor to the aggregated FX NOP and influenced most of the fluctuations during 2009.

aggregated FX NOP remained below US\$300 million during 2009

**Figure 4.59** Aggregated effective net open foreign-currency position (as a percentage of qualifying regulatory capital)



**Figure 4.60** Aggregated effective net open foreign-currency position per currency





The position in foreign-currency instruments is illustrated in Figure 4.61. The physical position is the difference between foreign-currency assets and foreign-currency liabilities, while the net forward position is the difference between commitments to sell foreign currency and commitments to purchase foreign currency. The physical position declined from US\$3,7 billion at the end of January 2009 to US\$1,9 billion at the end of April 2009, before increasing to US\$5,6 billion at the end of December 2009 (December 2008: US\$4,6 billion). The net forward position decreased from US\$3,7 billion at the end of January 2009 to US\$1,8 billion at the end of April 2009 and thereafter increased to US\$5,5 billion at the end of December 2009 (December 2008: US\$4,5 billion).

Figure 4.61 Position in foreign-currency instruments

