

# Chapter 4: Banking-sector overview

## 4.1 Introduction

This chapter provides an overview of financial and risk information, compiled by means of the aggregation of data submitted during 2010 from individual South African-registered banks, including domestic branches of international banks (offshore branches and subsidiaries of South African banks are excluded). Information mostly represents aggregated solo bank information, except where indicated that it represents consolidated banking groups (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). Furthermore, it should be noted that information presented on credit risk does not in all instances represent aggregated total banks data but rather the aggregated amount representing groupings of banks that adopted certain approaches to calculate minimum capital requirements.

Information in this chapter is presented for 2008, 2009 and 2010, except in areas where smoothed ratios are calculated (12-month moving averages), in which instances these ratios are provided for 2009 and 2010.

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 total banking sector at the end of December 2010. 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

The number of entities that have been registered or licensed with the Department since 2001 is presented in Table 4.1. During 2010, the number of banks reduced from 18 to 17 due to a transaction whereby the assets and liabilities of Imperial Bank Limited (Imperial) were sold and transferred to Nedbank Limited. The registration of Imperial was cancelled with effect from 1 October 2010.

The number of branches of foreign banks remained at 13 at the end of 2010. During the year, ABN AMRO Bank NV, Johannesburg Branch, was acquired by The Royal Bank of Scotland NV and its name was changed to The Royal Bank of Scotland NV South Africa Branch. Furthermore, the number of representative offices declined from 42 in December 2009 to 41 in December 2010. Refer to Appendices 2, 3, 4, 5 and 8 for further information regarding the entities registered or licensed with the Office of the Registrar of Banks at the end of 2010.

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Banks*	41	30	22	20	19	19	19	19	18	17
Mutual banks	2	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	13
Representative offices	56	52	44	43	47	43	46	43	42	41
Controlling companies	37	27	19	16	15	15	15	15	15	15
Banks under curatorship	1	1	1	0	0	0	0	0	0	0
Banks in receivership	0	2	2	0	0	0	0	0	0	0
Banks in final liquidation	1	1	1	2	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



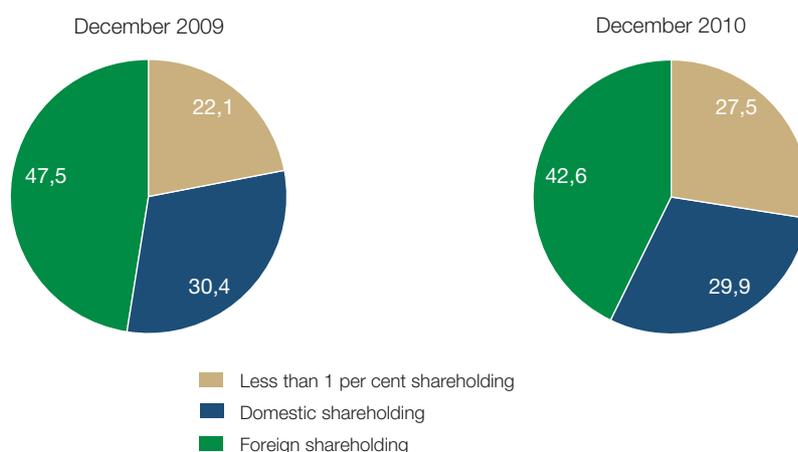
South African banking-sector dominated by the four largest banks

the number of branches of foreign banks remained at 13

## 4.2.2 Shareholding structure

The shareholding structure of South African banks is set out in Figure 4.1. Foreign shareholders held 42,6 per cent of the nominal value of the South African banking sector's shares in issue at the end of December 2010; lower than the 47,5 per cent recorded at the end of December 2009. The foreign shareholding of 55,5 per cent in Absa Bank Limited, one of the largest banks registered in South Africa, contributes significantly to the high percentage of banking-sector shares held by foreign shareholders. Domestic shareholders accounted for 29,9 per cent and minority shareholders 27,5 per cent of the nominal value of banking-sector shares in issue at the end of December 2010 (December 2009: 30,4 per cent and 22,1 per cent respectively).

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 (including the establishment of cross-border operations) by a bank or a bank controlling company against prescribed criteria. 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 written approval of the Registrar to establish or acquire 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 has been approved by the Department since 2001. The vast majority of applications processed by the Department are submitted by the five largest banking groups.

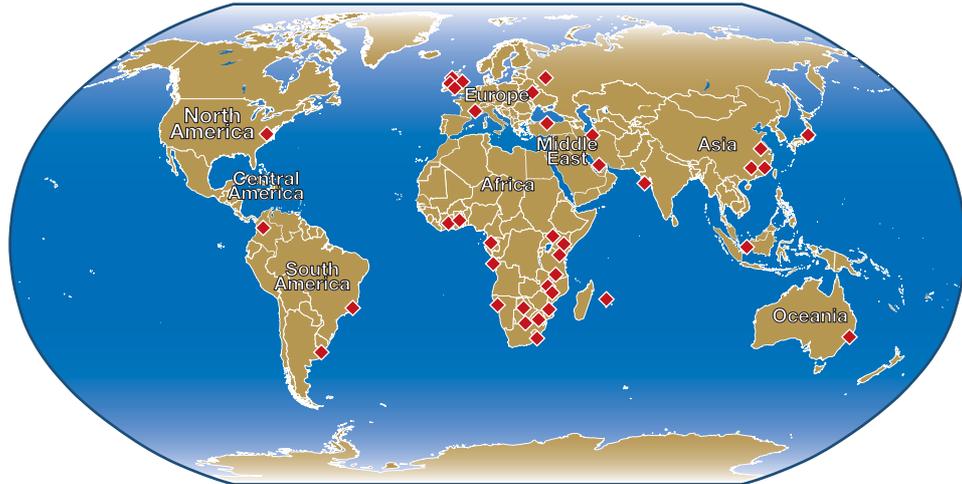
Table 4.2 South African banking sector: Number of approvals for local and international expansions granted in terms of section 52 of the Banks Act, 1990

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Local .....	72	47	28	16	29	16	12	15	10	16
Foreign .....	44	43	31	20	17	8	25	19	26	22
Total .....	116	90	59	36	46	24	37	34	36	38

## 4.2.4 Banking-sector global presence

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

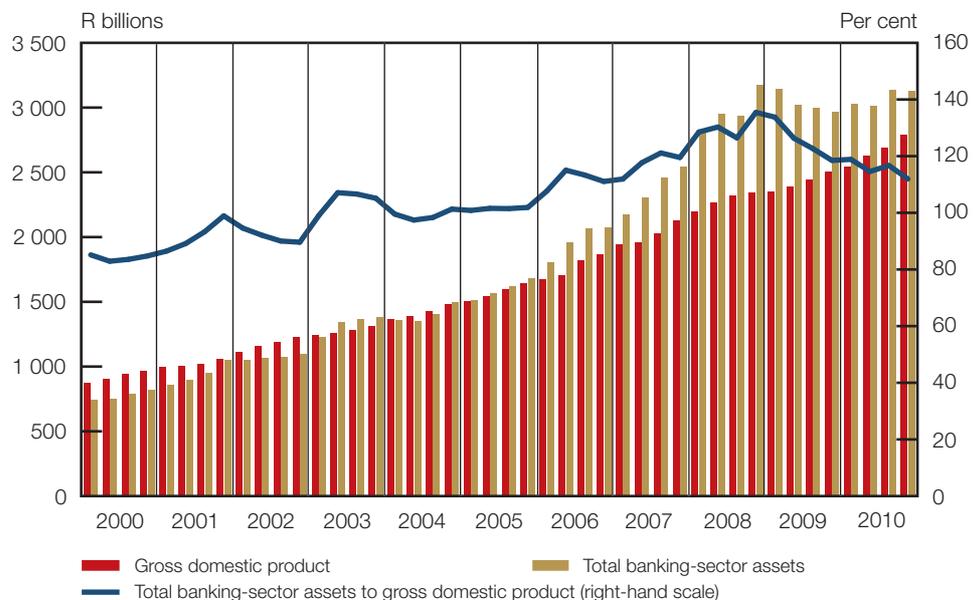
Figure 4.2 Global presence of South African banks



## 4.2.5 Banking-sector assets to gross domestic product

Figure 4.3 depicts the balance-sheet size of the banking sector relative to that of the GDP.<sup>10</sup> The banking-sector balance-sheet size peaked at R3 207 billion in January 2009, mainly due to a substantial increase in the nominal value of derivative financial instruments in October 2008. During 2010, banking-sector assets increased marginally and amounted to R3 126 billion at the end of December 2010 (111,9 per cent of GDP). Total assets grew year on year by 5,3 per cent during 2010, mainly due to a 3,8 per cent increase in homeloans and an increase in government securities held by the banking sector (refer to Figure 4.4).

Figure 4.3 Total banking-sector assets to gross domestic product



<sup>10</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, March 2011, p. S-108.



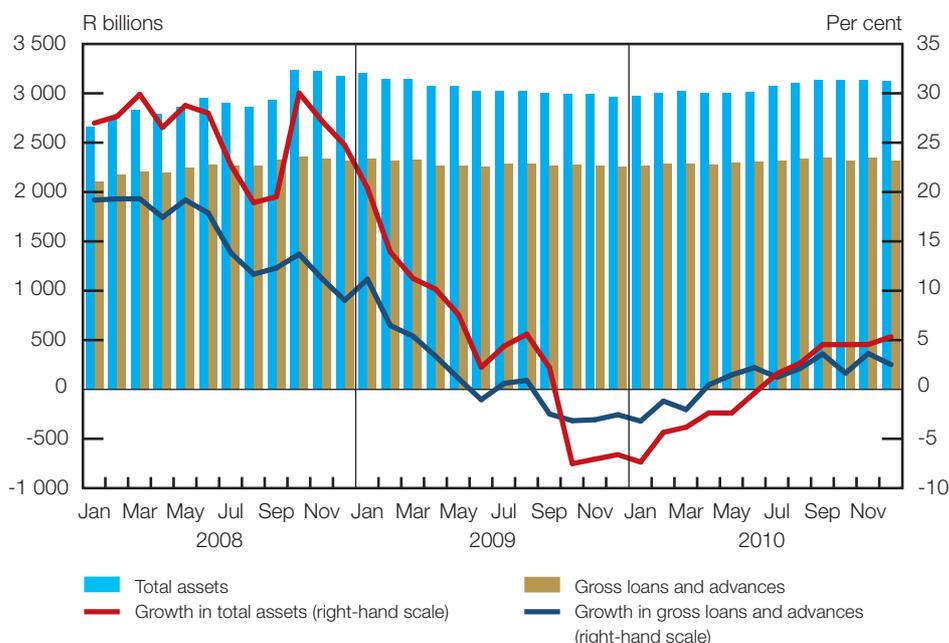
banking-sector assets increased marginally and amounted to R3 126 billion

## 4.3 Balance sheet

### 4.3.1 Assets

Figure 4.4 depicts the growth in banking-sector assets, and gross loans and advances from January 2008 to December 2010. There was a moderate improvement in the growth of total assets during 2010 compared to a considerable decline during 2009 at the height of the international financial crisis.

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



The improvement occurred within the second half of 2010, following a period of decline during the first six months of the year. Year-on-year growth in banking-sector assets at the end of December 2010 was 5,3 per cent, increasing from R2 967 billion in December 2009 to R3 126 billion in December 2010. The growth in assets during the third and fourth quarters of 2010 was mainly due to the modest recovery in gross loans and advances growth<sup>11</sup> and an increase in the holding of government securities. The recovery in gross loans and advances was largely due to modest growth in homeloans and other assets. Gross loans and advances increased by 2,5 per cent to R2 314 billion at the end of December 2010 (December 2009: R2 257 billion). The growth in gross loans and advances remained low during 2010 due to restrained customer demand and banks' lower-risk appetite.

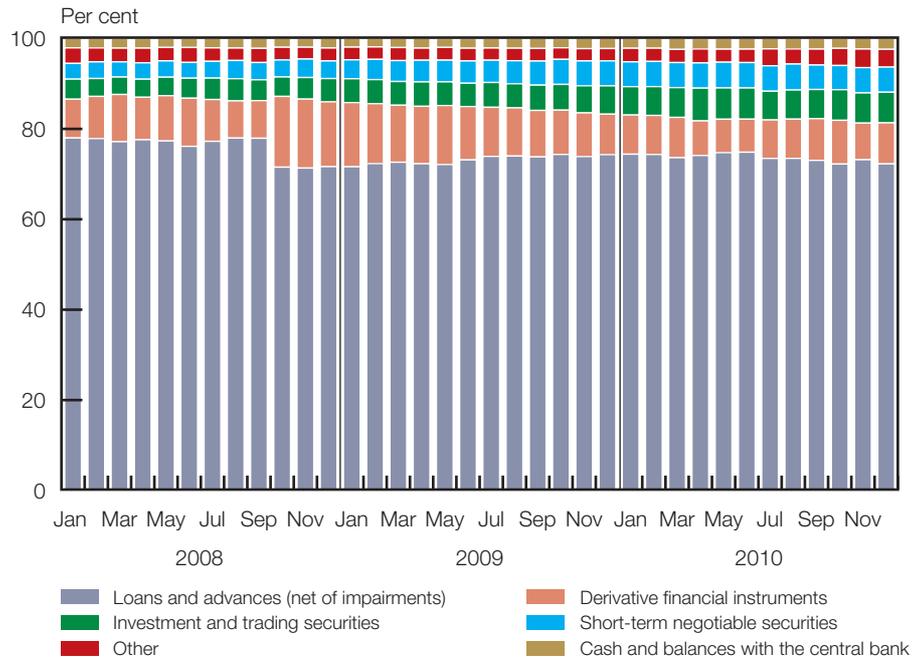
As portrayed in Figure 4.5, loans and advances represented, on average, 74 per cent of banking-sector total assets during 2010 (2009: 73 per cent), followed by derivative financial instruments averaging 8,5 per cent (2009: 11,5 per cent). The year-on-year decline in derivative financial instruments was less pronounced compared with the previous year. The aforementioned increase in government securities is mainly due to the banking sector's preparations for the increased liquidity requirements to be implemented as part of Basel III<sup>12</sup> and due to the subdued lending environment experienced during 2010. By the end of December 2010, derivative financial instruments increased by 6,9 per cent to R284 billion (December 2009: R266 billion). The slight recovery in derivative financial instruments is attributable to mark-to-market adjustments on foreign-exchange and interest rate trades. Investment and trading securities and short-term negotiable securities increased their average contribution from 5,5 per cent and 5 per cent respectively in 2009 to 6,7 per cent and 5,6 per cent in 2010.

11 Refer to Figure 4.7

12 Refer to Figure 4.37.

gross loans and advances increased by 2,5 per cent

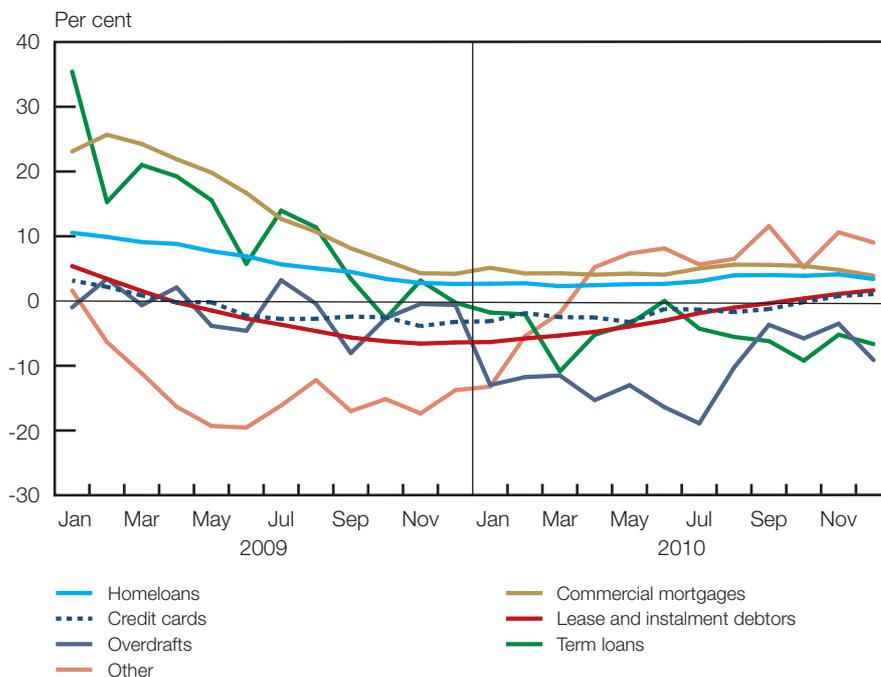
Figure 4.5 Composition of total assets



homeloans and commercial mortgages grew modestly

Figure 4.6 provides a detailed analysis of the growth rates of the different asset classes within loans and advances. Homeloans and commercial mortgages grew modestly yet continuously throughout the year, increasing, on average, by 3,6 per cent and 5,1 per cent respectively. Homeloans and commercial mortgages amounted respectively to R817 billion and R278 billion at the end of December 2010 (December 2009: R787 billion and R218 billion). The growth rate of other loans accelerated during the second quarter of 2010, remaining above 5 per cent for the second half of 2010. The main drivers of the growth in other assets were interbank call loan balances and higher overnight balances. Other loans amounted to R518 billion at the end of December 2010 (December 2009: R474 billion). Credit cards, and lease and instalment debtors increased year on year by 1,5 per cent and 2,1 per cent respectively, and amounted to R57 billion and R242 billion respectively at the end of December 2010 (December 2009: R57 billion and R242 billion respectively at the end of December 2009:

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



R56 billion and R238 billion respectively). Overdrafts and term loans amounted to R97 billion and R355 billion respectively at the end of December 2010 (December 2009: R107 billion and R378 billion respectively).

Figure 4.7 shows that the composition of gross loans and advances remained largely unchanged from December 2009 to December 2010. Homeloans and term loans remained the major constituents of gross loans and advances, accounting for 35,3 per cent and 15,3 per cent respectively at the end of December 2010 (December 2009: 34,9 per cent and 16,8 per cent respectively).

homeloans and term loans remained the major constituents of gross loans and advances

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

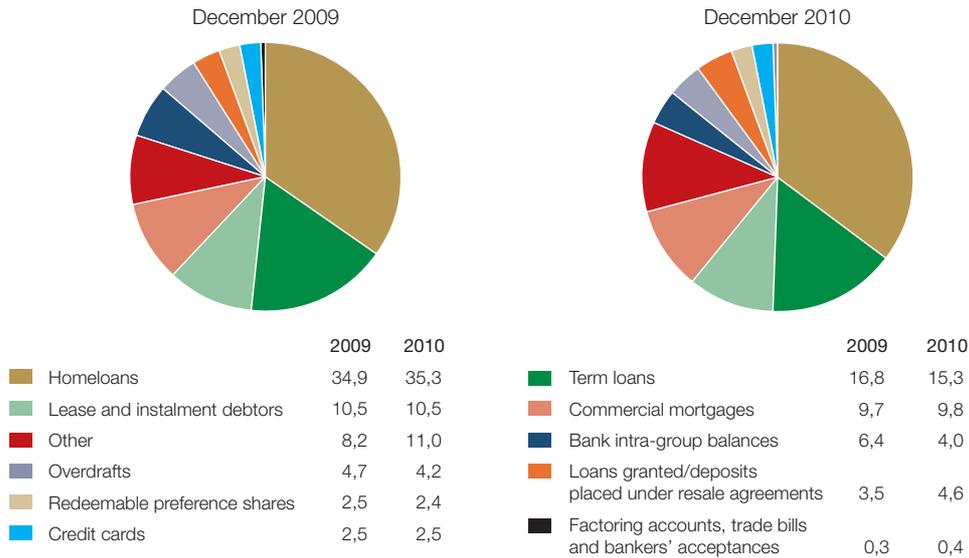
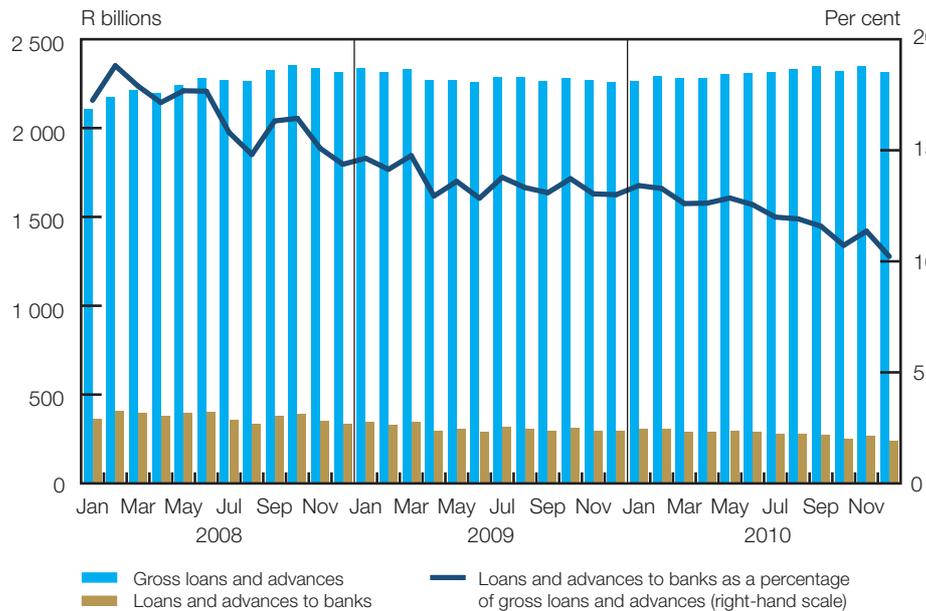


Figure 4.8 indicates that loans and advances to banks decreased by 19,4 per cent (year on year) to R236 billion at the end of December 2010 (December 2009: R293 billion). Expressed as a percentage of gross loans and advances, the ratio of loans to banks decreased during 2010 to 10,2 per cent at the end of December 2010 (December 2009: 13 per cent).

loans and advances to banks decreased

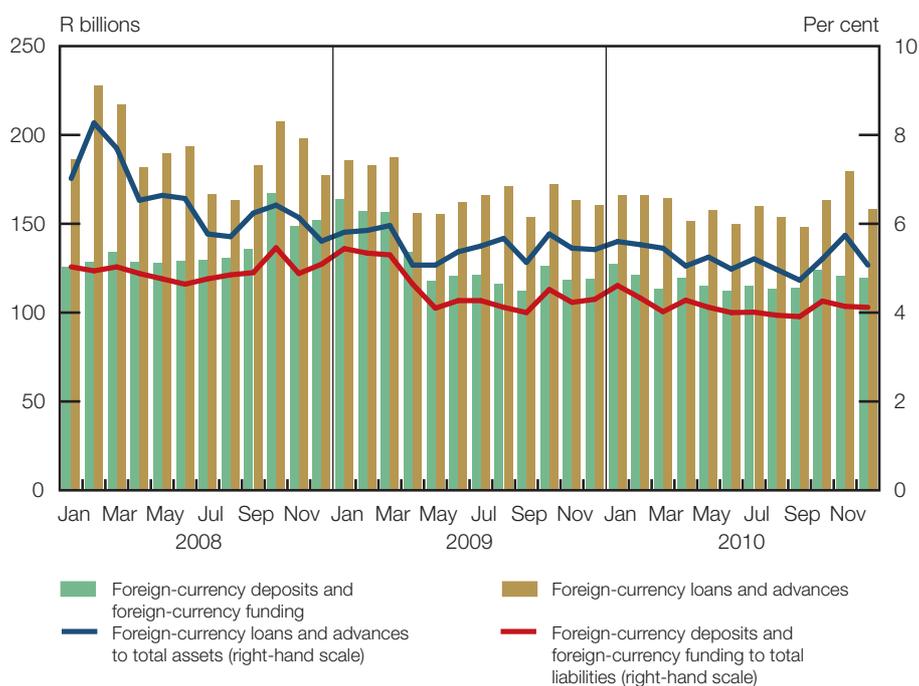
Figure 4.8 Loans and advances to banks



low dependency on foreign funding and foreign advances

Figure 4.9 depicts foreign-currency loans and advances, and foreign-currency deposits and funding since January 2008. Foreign-currency loans and advances amounted to R158 billion at the end of December 2010 (December 2009: R161 billion). Expressed as a percentage of total assets, the ratio of foreign-currency loans and advances decreased slightly during the second and third quarter of 2010 but then increased in the fourth quarter of 2010, peaking at 5,7 per cent in November 2010. The ratio of foreign-currency deposits and funding to total liabilities fluctuated between 3,9 per cent and 4,6 per cent during 2010. The ratios reflect the low dependency South African banks have on foreign funding and foreign advances. Furthermore, Figure 4.9 indicates that foreign-currency loans and advances exceeded foreign-currency funding received throughout 2010. Foreign-currency deposits and funding amounted to approximately R119 billion at the end of December 2009 and at the end of December 2010.

**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)



banking-book assets constituted 85,2 per cent of total banking-sector assets

Figure 4.10 on page 89 depicts the split in total banking-sector assets between banking-book and trading-book assets. As at December 2010, banking-book assets constituted 85,2 per cent, and trading-book assets 14,8 per cent of total banking-sector assets (December 2009: 85,9 and 14,1 per cent respectively).

### 4.3.2 Liabilities

The composition of banking-sector liabilities is depicted in Figure 4.11. Deposits continued to comprise the majority of banking-sector liabilities, accounting for approximately 85,8 per cent of banking-sector liabilities throughout 2010 (2009: 82,9 per cent on average).<sup>13</sup> Derivative financial instruments and other trading liabilities comprised approximately 9,1 per cent of banking-sector liabilities during 2010 (2009: 12,7 per cent on average). Term debt instruments and other liabilities each represented less than 5 per cent of banking-sector liabilities throughout 2010.<sup>14</sup>

<sup>13</sup> A detailed composition of deposits is shown in Figure 4.14.

<sup>14</sup> Refer to Figure 4.13 for further detail on term debt instruments.



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

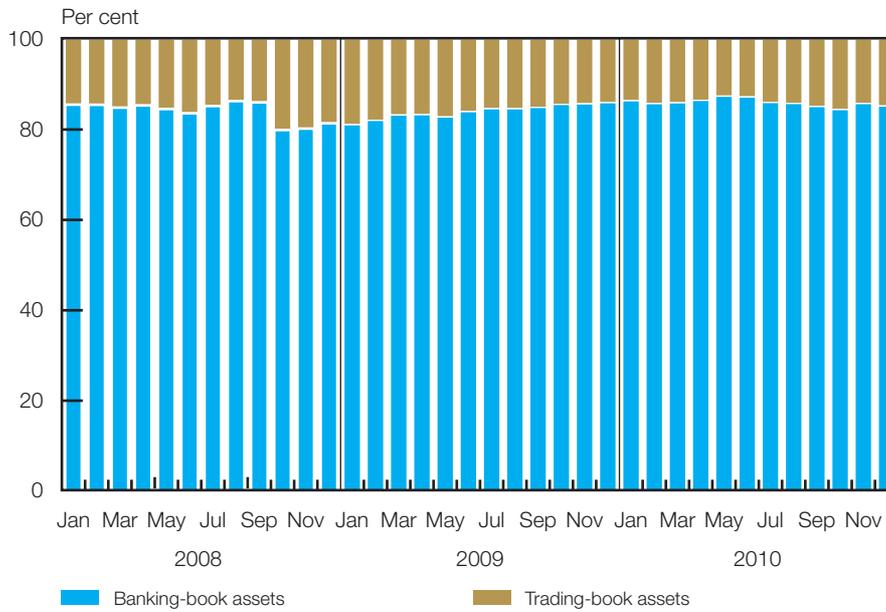


Figure 4.11 Composition of liabilities

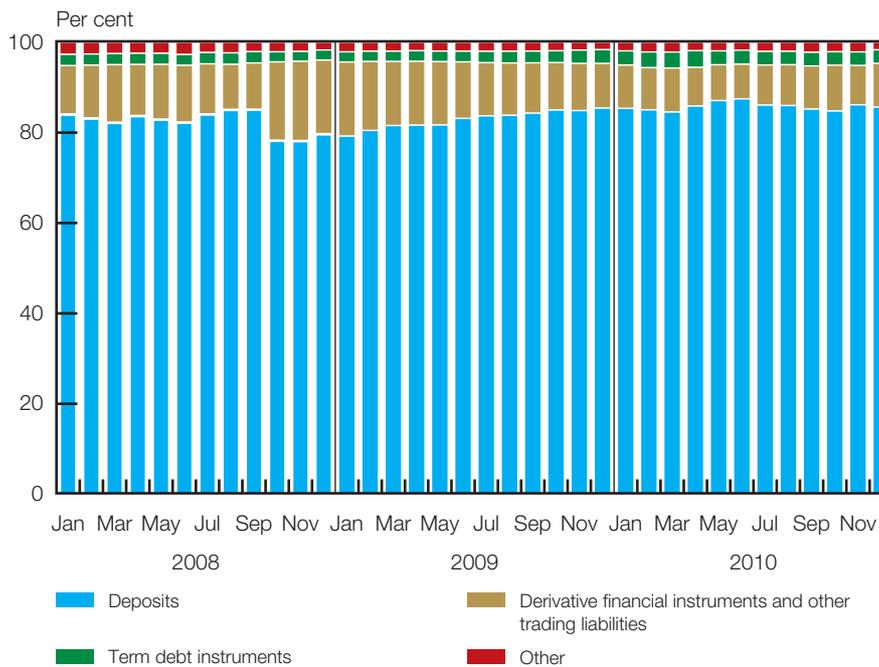


Figure 4.12 shows the asset and liability position in derivative financial instruments relative to equity attributable to equity holders. The decrease in the respective ratios during the period 2009 to 2010 is mainly due to the increase in equity attributable to equity holders. There was a slight increase in both ratios during the second half of 2010, largely due to a slowdown in the rate of the year-on-year decline in derivative financial instruments. Notwithstanding the aforesaid increase, the asset and liability positions were fairly matched throughout 2010, with the net mismatch between the ratios averaging 7,9 per cent (2009: 7,0 per cent).

As depicted in Figure 4.13, term debt amounted to R87,7 billion at the end of December 2010 (December 2009: R84,7 billion). During 2010, 64,0 per cent of term debt instruments qualified as regulatory capital compared to 73,8 per cent during 2009.

64,0 per cent of term debt instruments qualified as regulatory capital



Figure 4.12 Asset and liability position in derivative financial instruments (as a percentage of equity attributable to equity holders)

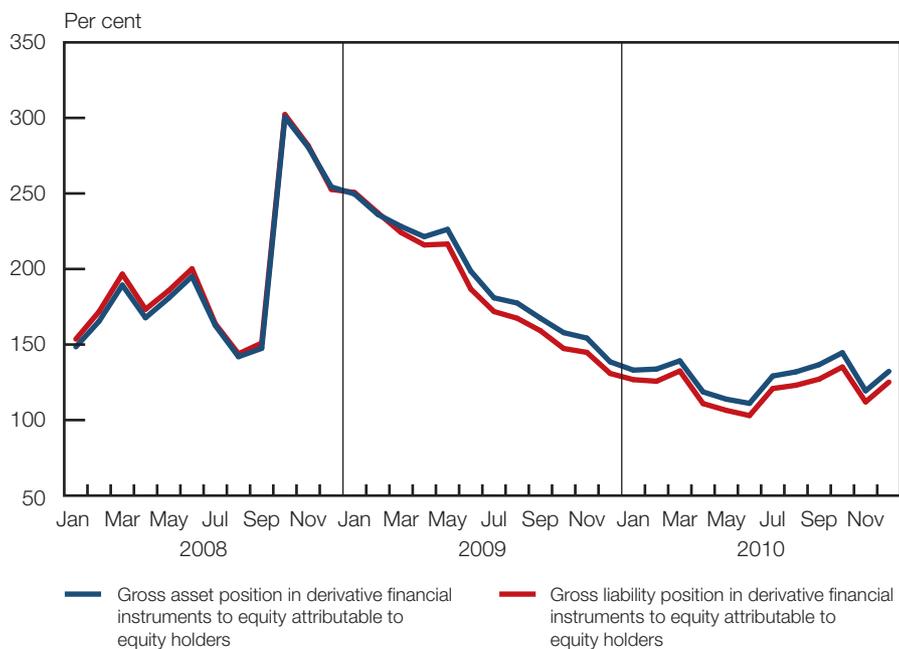
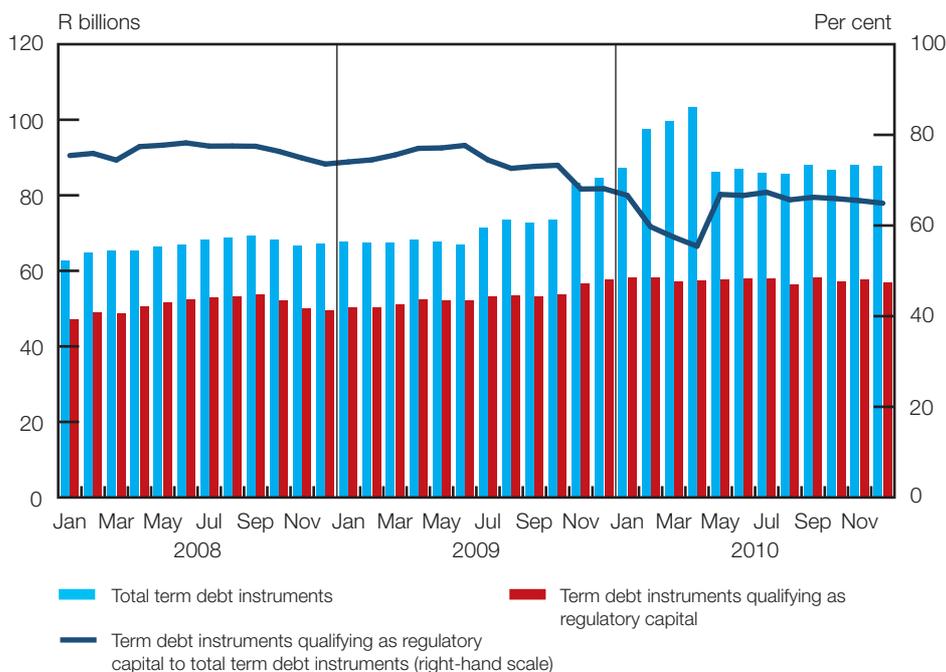


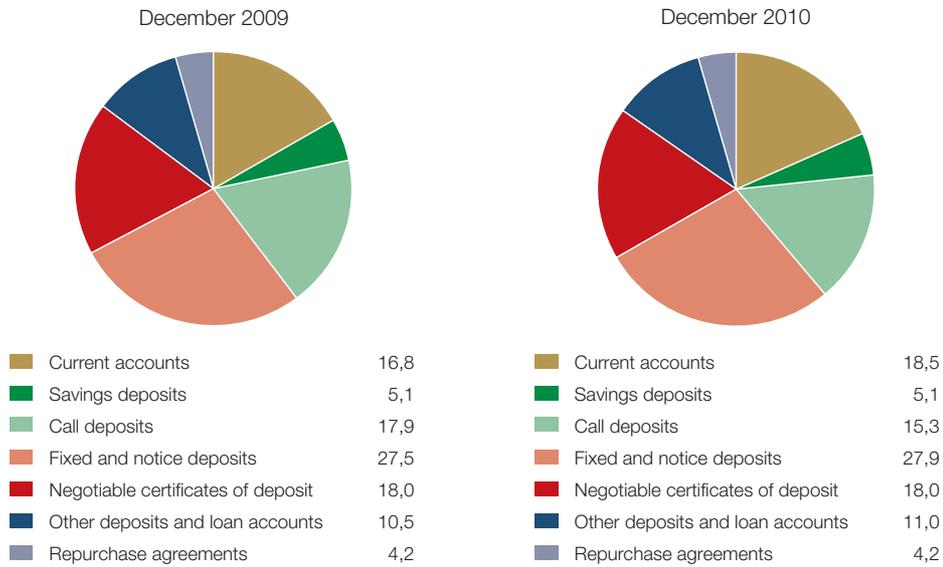
Figure 4.13 Term debt instruments qualifying as regulatory capital (as a percentage of total term debt instruments)



composition of banking-sector deposits remained relatively stable

Figure 4.14 shows the composition of banking-sector deposits. The composition of banking-sector deposits remained relatively stable during the first three quarters of 2010 but changed in the fourth quarter of 2010 due to a R61 billion increase in NCDs, coupled with a R70 billion decline in call deposits at the end of October 2010. This change in composition was due to the change in the reporting of floating rate notes by one of the large banks. Fixed and notice deposits remained a large component of banking-sector deposits, on average representing 28,4 per cent of total deposits during 2010 (2009: 26,1 per cent).

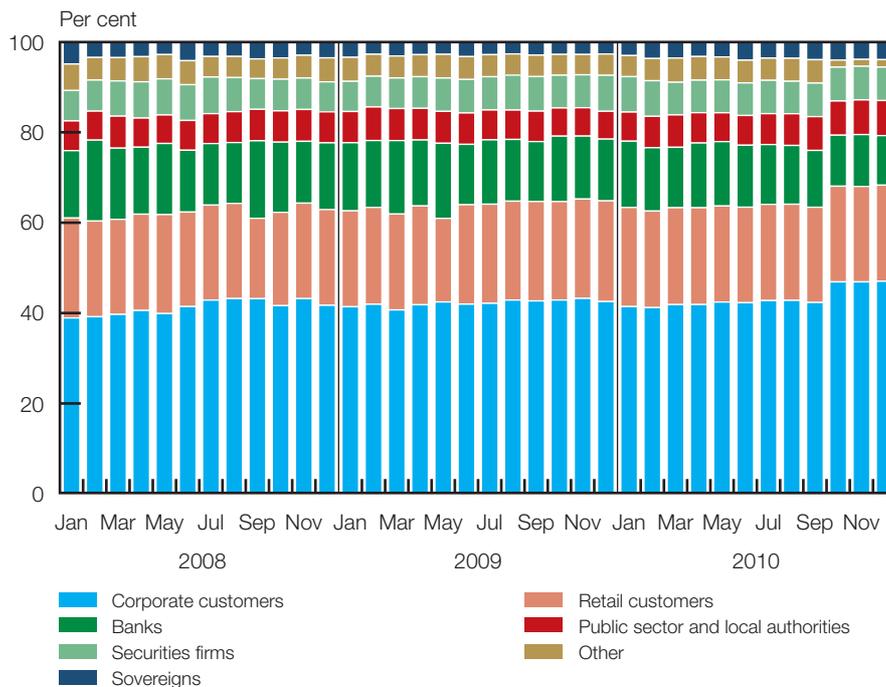
Figure 4.14 Composition of deposits (per cent)



Corporate and retail customers, as illustrated in Figure 4.15, were the main sources of banking-sector deposits throughout 2010, and comprised an average of 43,3 per cent and 21,3 per cent of total deposits respectively (2009: an average of 42,2 per cent and 21,5 per cent respectively). Deposits from corporate customers increased by R107 billion and deposits from other customers decreased by R90 billion at the end of October 2010, mainly due to the aforementioned change in the reporting of floating rate notes by one of the large banks. Deposits from banks constituted, on average, 13,1 per cent of banking-sector deposits in 2010 compared with 14,5 per cent in 2009. Apart from the aforementioned sources, the banking sector also received deposits from securities firms, public sector and local authorities, sovereigns, and other sources, averaging 7,4 per cent, 7,0 per cent, 3,7 per cent and 4,2 per cent respectively of total deposits during 2010.

corporate customers comprised 43,3 per cent of banking-sector deposits

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

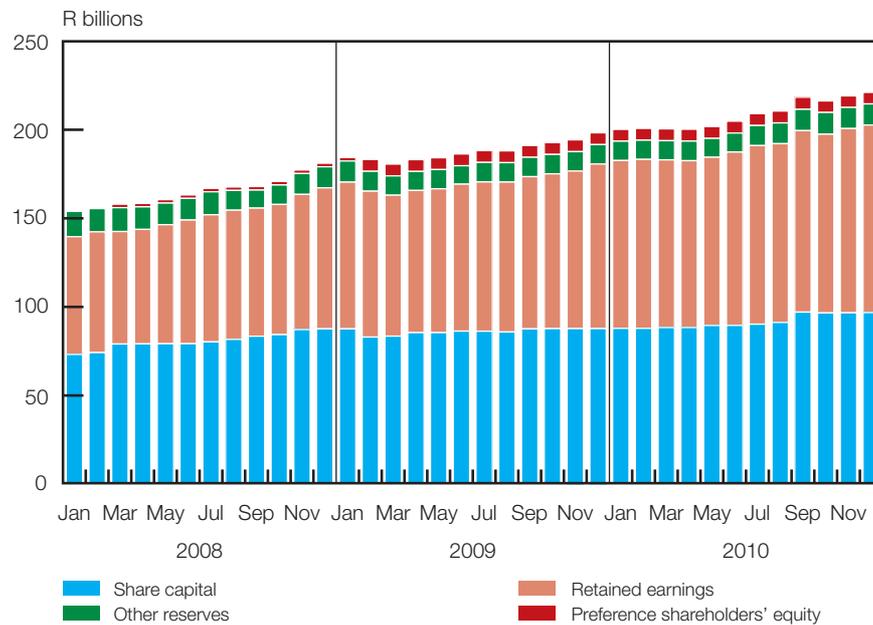


### 4.3.3 Equity

The composition of total equity is outlined in Figure 4.16. Total equity primarily comprised retained earnings and share capital throughout 2010, accounting for 91,7 per cent of total equity at the end of December 2010 (December 2009: 91,1 per cent). Total equity increased by 11,5 per cent (year on year) to R221,1 billion at the end of December 2010 (December 2009: R198,3 billion) mainly due to an increase in share capital and retained earnings. Share capital increased by R5,8 billion from August 2010 to R97,1 billion at the end of September 2010 mainly due to an increase in share premium. Retained earnings increased from R92,9 billion at the end of December 2009 to R105,9 billion at the end of December 2010. Other reserves and preference shareholders' equity constituted 5,4 per cent and 2,9 per cent respectively of total equity at the end of December 2010 (December 2009: 5,4 per cent and 2,9 per cent respectively).

share capital increased by R5,8 billion

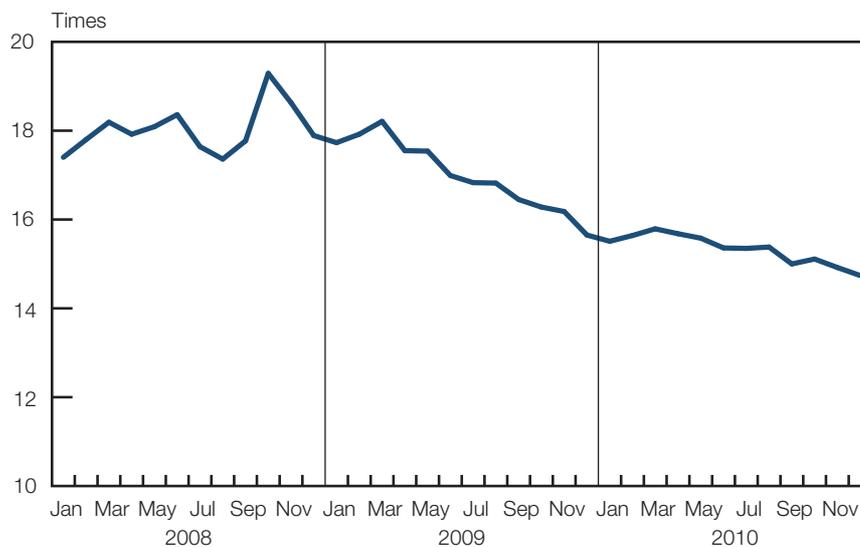
Figure 4.16 Composition of total equity



financial leverage multiple continued to decline

Figure 4.17 portrays the financial leverage multiple for the banking sector and is calculated by dividing total assets by total equity attributable to equity holders. The financial leverage multiple continued to decline during 2010, amounting to 14,7 times at the end of December 2010

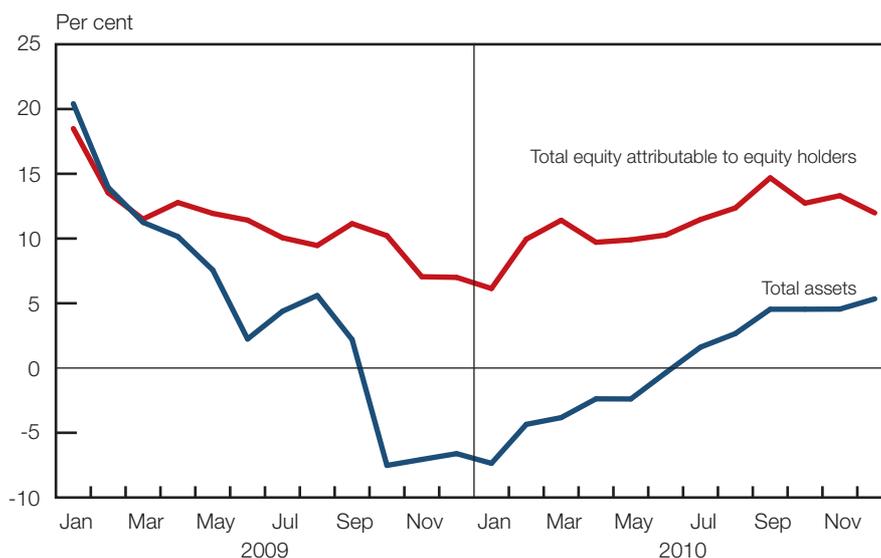
Figure 4.17 Financial leverage multiple



(December 2009: 15,7 times). This decrease in leveraging is attributable to the higher rate of growth in equity attributable to equity holders relative to the rate of growth in total assets. Equity attributable to equity holders grew by 11,5 per cent (year on year) compared to 5,3 per cent (year on year) growth in total assets as at December 2010, as shown in Figure 4.18.

equity attributable to equity holders grew by 11,5 per cent

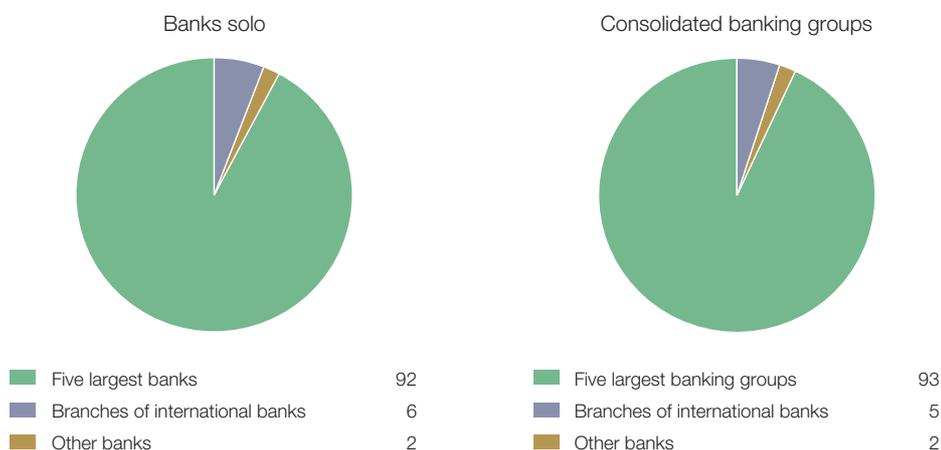
Figure 4.18 Growth rates of total assets and equity attributable to equity holders (year on year)



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

Consolidated banking groups<sup>15</sup> assets grew by 3,3 per cent to R3 914 billion at the end of December 2010 (December 2009: R3 790 billion), which was slightly less than the 5,3 per cent growth in banking-sector assets in respect of banks solo.<sup>16</sup> The composition of total

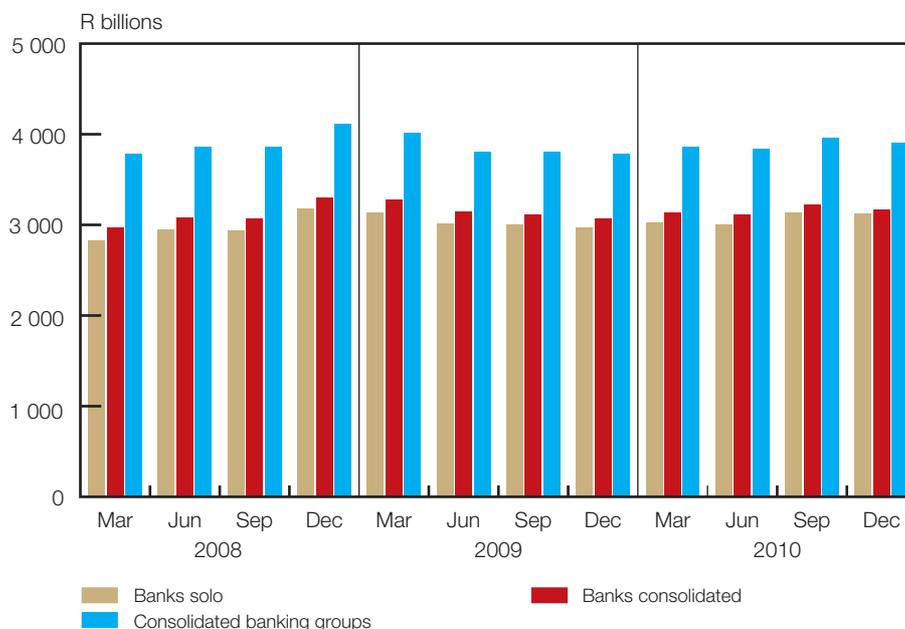
Figure 4.19 Composition of total banking-sector assets in respect of the five largest banks, branches of international banks and other banks (per cent)



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

16 '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.

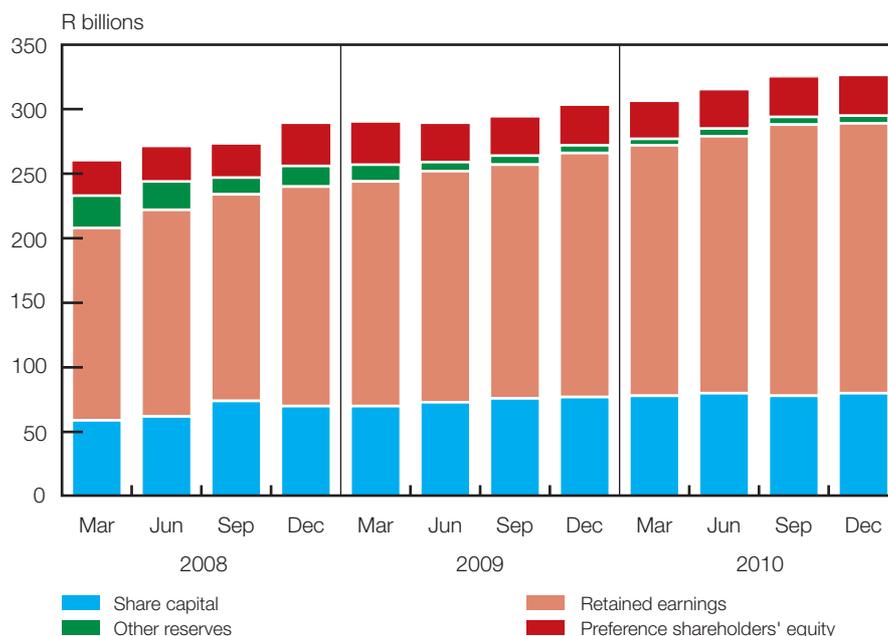
Figure 4.20 Banking-sector assets for banks solo, banks consolidated and consolidated banking groups



banking-sector assets in respect of banks solo was largely similar to that of consolidated banking groups as at December 2010, with the majority of banking-sector assets being held by the five largest banking groups (refer to Figure 4.19). Figure 4.20 reflects total banking-sector assets aggregated for banks solo (excluding their foreign branches), banks consolidated<sup>17</sup> (including their foreign branches) and consolidated banking groups.

Figure 4.21 reflects the composition of total equity for consolidated banking groups, comprised mainly of share capital, retained earnings, other reserves and preference share capital. The total equity of consolidated banking groups increased by 7 per cent from R303 billion at the end of

Figure 4.21 Composition of total equity for consolidated banking groups



<sup>17</sup> Banks consolidated' includes the aggregate of banks incorporated in South Africa together with their foreign branches, subsidiaries and associates, as well all local branches of international banks.



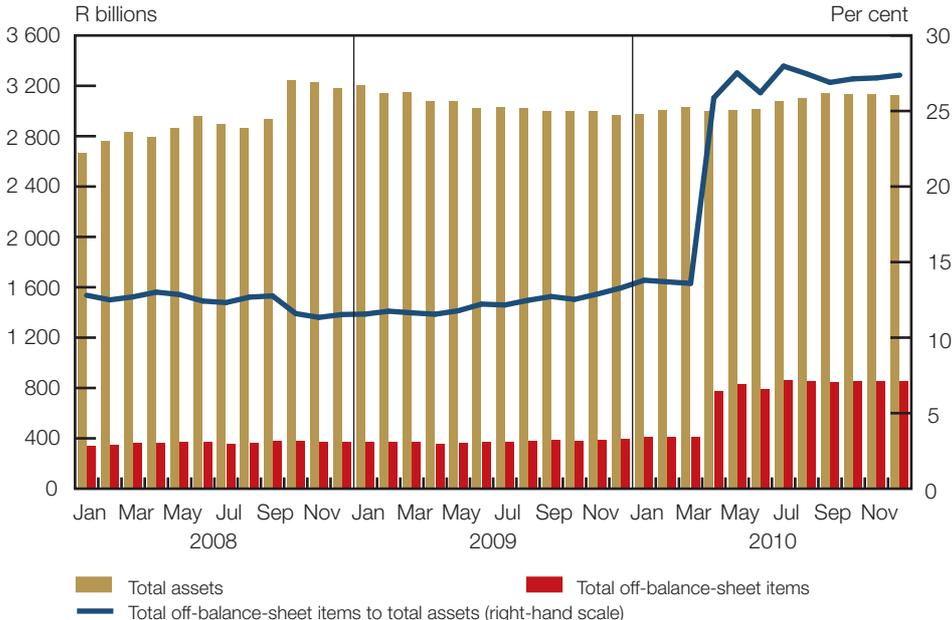
December 2009 to R324 billion at the end of December 2010, due to growth in share capital and retained earnings. Retained earnings represented 63,8 per cent of total equity at the end of December 2010, amounting to R207 billion (December 2009: 62,3 per cent or R189 billion).

### 4.4 Off-balance-sheet activities

Figure 4.22 shows a comparison between total assets and total off-balance-sheet items, including the ratio of off-balance-sheet items to total assets. The ratio of off-balance-sheet items to total assets increased considerably from 13,8 per cent in January 2010 to 25,9 per cent at the end of April 2010, and remained above 25 per cent for the remainder of the year. The increase in the ratio was due to a change in regulatory reporting of off-balance-sheet items to include the banking sector’s revocable facilities, which resulted in an 88,9 per cent increase from March to April 2010. Off-balance-sheet items amounted to R856 billion at the end of December 2010 (December 2009: R394 billion).

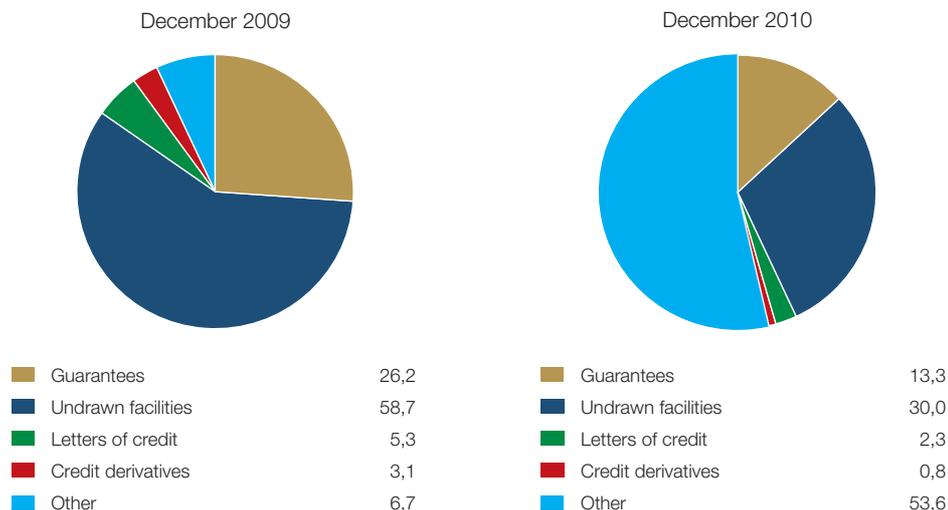
ratio of off-balance-sheet items to total assets increased

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



The composition of off-balance-sheet items, as portrayed in Figure 4.23, changed materially when comparing December 2010 to December 2009. There was a substantial increase in other off-balance-sheet items during 2010 due to the aforementioned change in the reporting of revocable facilities.

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



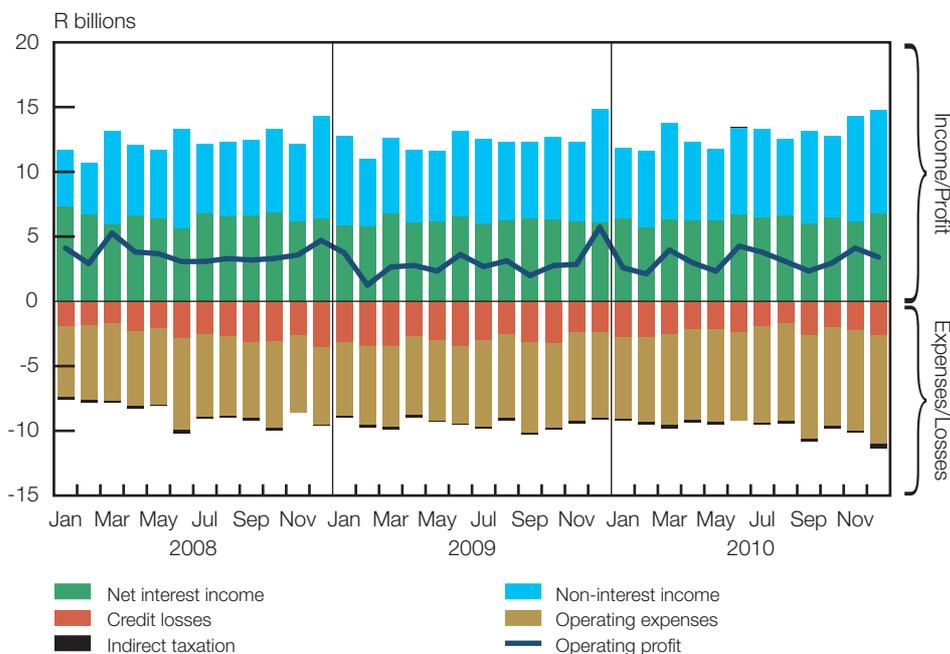
## 4.5 Profitability

credit losses decreased by R8 billion

The banking sector's operating profit increased by 6,4 per cent (year on year) to R37,9 billion for the year ending December 2010 (December 2009: R35,5 billion). The increase in operating profit was mainly due to increases in both net interest and non-interest income, and a decrease in credit losses. Credit losses decreased by R8 billion to R27,5 billion for the year ending December 2010 (December 2009: R35,5 billion). Credit losses averaged R2,3 billion per month during 2010 compared with almost R3 billion per month during 2009, indicating a slight recovery in the credit risk environment.<sup>18</sup> Operating expenses increased by R11,1 billion to R87,7 billion for the year ending December 2010 (December 2009: R76,6 billion). The increase in operating expenses was mainly due to an increase of R6,3 billion in staff expenses during 2010.

A detailed monthly breakdown of the income statement is illustrated in Figure 4.24.

Figure 4.24 Composition of the income statement (unsmoothed)



<sup>18</sup> Refer to section 4.8.

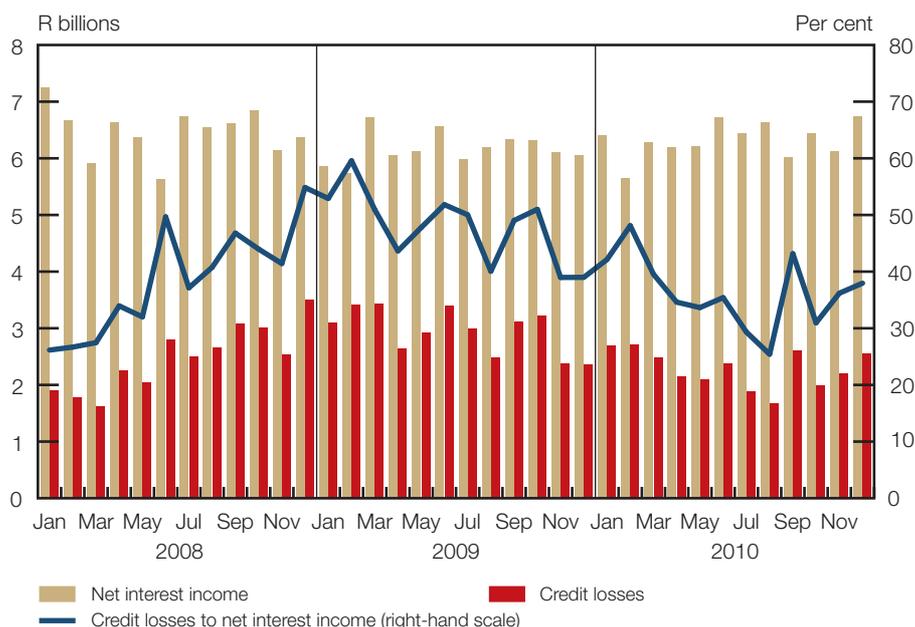


Gross operating income (i.e., sum of net interest income and net non-interest income) increased by R5,8 billion to R155,6 billion for the year ending December 2010 (December 2009: R149,7 billion). Net interest and non-interest income increased to R75,9 billion and R79,7 billion respectively for the year ending December 2010 (December 2009: R74,1 billion and R75,6 billion respectively). The increase in non-interest revenue relates to an increase in net fee and commission income, coupled with fair value adjustments, while the increase in net interest income was mainly due to a decline in interest expense on term deposits, current accounts and NCDs.

net interest and non-interest income increased

Figure 4.25 depicts credit losses as a percentage of net interest income earned on a month-to-month basis since January 2008. The ratio declined from a peak of almost 60 per cent at the end of February 2009 to 38,0 per cent at the end of December 2010. The average ratio during 2010 reduced to 36,2 per cent (2009: 47,9 per cent) mainly due to the aforementioned decline in credit losses during 2010.

Figure 4.25 Credit losses to net interest income (unsmoothed)



The composition of gross operating income as reflected in Figure 4.26, remained largely unchanged between 2009 and 2010. Gross operating income primarily comprised net interest income, and net fee and commission income, which accounted for 48,8 per cent and 34,2 per cent respectively during 2010 (2009: 49,5 per cent and 33,9 per cent respectively). As shown in Figure 4.27, approximately 94 per cent of gross operating income was derived from banking-book transactions during 2010 (2009: 93,8 per cent).

gross operating income remained largely unchanged



Figure 4.26 Composition of gross operating income (per cent)

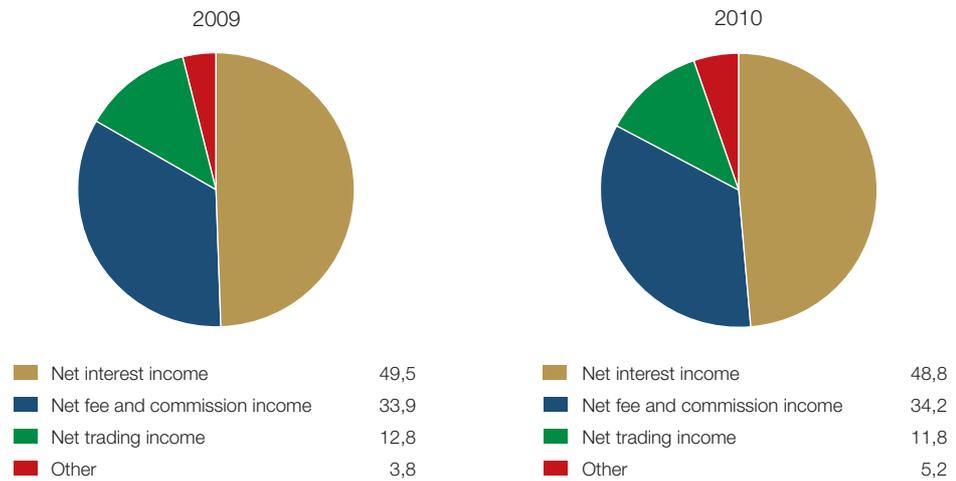
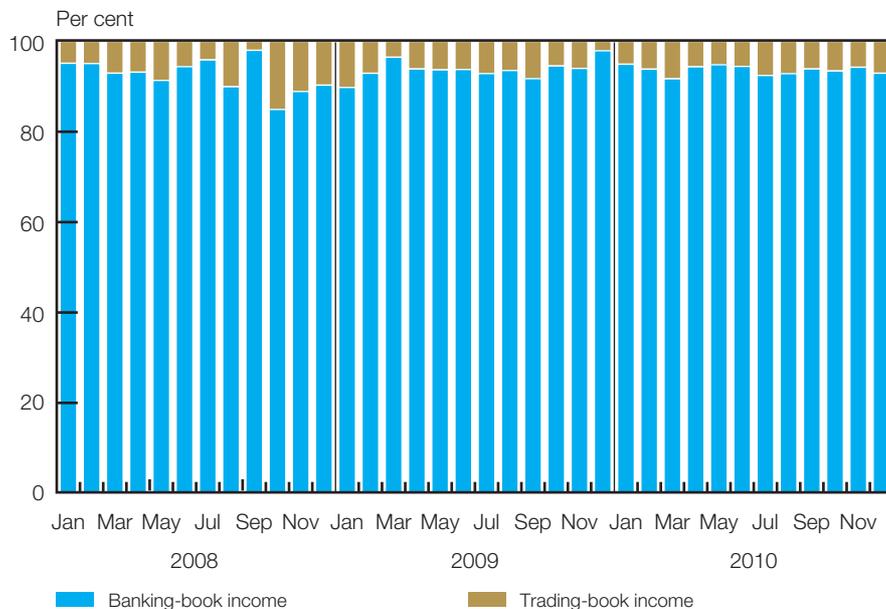


Figure 4.27 Banking-book income versus trading-book income (unsmoothed) (as a percentage of gross operating income)



staff expenses accounted for 53,8 per cent of banking sector operating expenses

The composition of operating expenses is depicted in Figure 4.28. Staff expenses represented more than half of the banking sector's operating expenses and accounted for 53,8 per cent during 2010 (2009: 53,4 per cent).

The net interest income ratio, portrayed in Figure 4.29, averaged 3,4 per cent during 2010 (2009: 3,4 per cent). The ratio of interest and similar income to interest-earning assets decreased during the first half of 2010, averaging 9,5 per cent, and remained stable at an average of 8,9 per cent during the second half of the year. The 12-month moving average ratio amounted to 8,8 per cent in December 2010 (December 2009: 10,4 per cent). Expressed as a percentage of funding liabilities, interest expenses and similar charges amounted to 5,4 per cent in December 2010 (December 2009: 7,0 per cent 12-month moving average). This ratio mirrored the trend in the ratio of interest and similar income to interest-earning assets throughout 2010. During 2010 the Bank's Monetary Policy Committee reduced the repurchase rate by 150 basis points.

Figure 4.28 Composition of operating expenses (per cent)

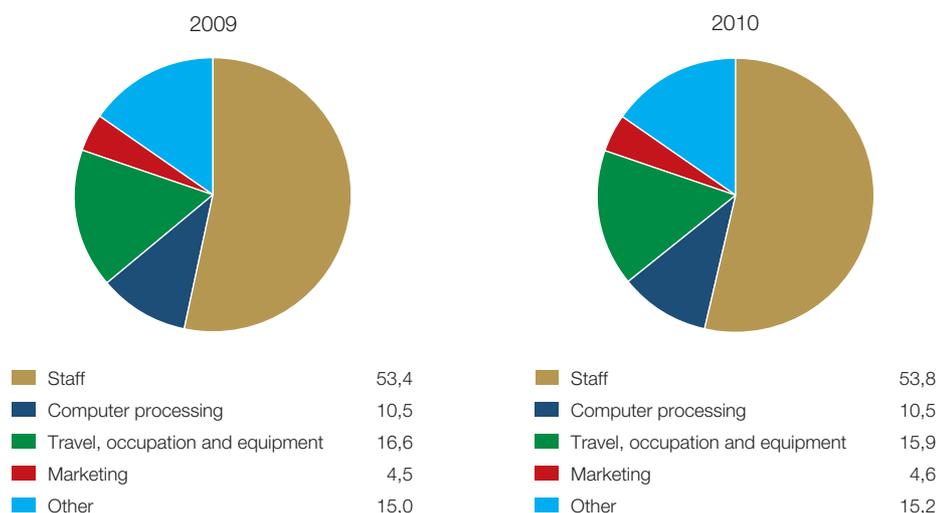


Figure 4.29 Net interest income ratio (smoothed, i.e., 12-month moving average)

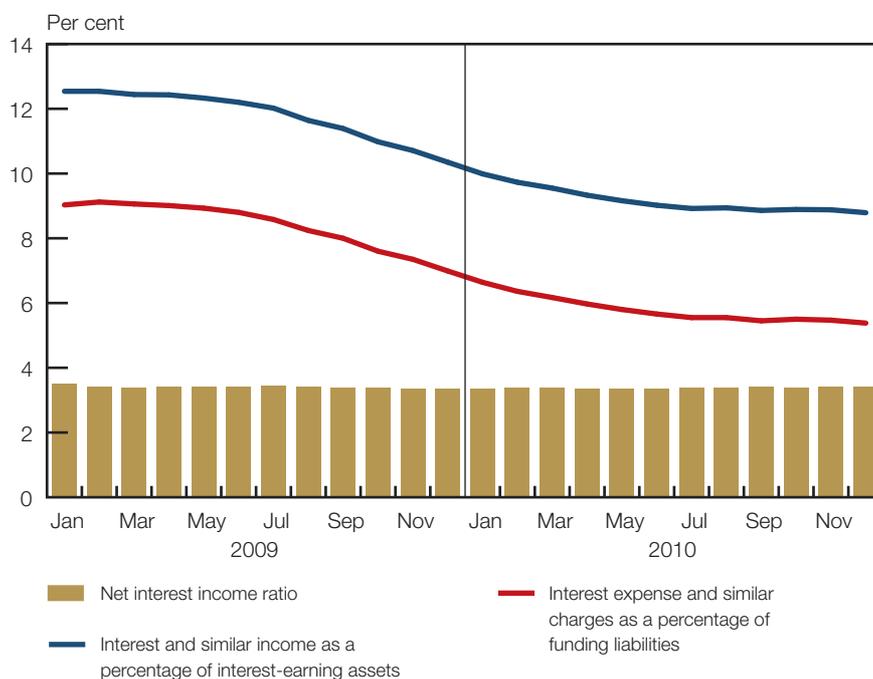
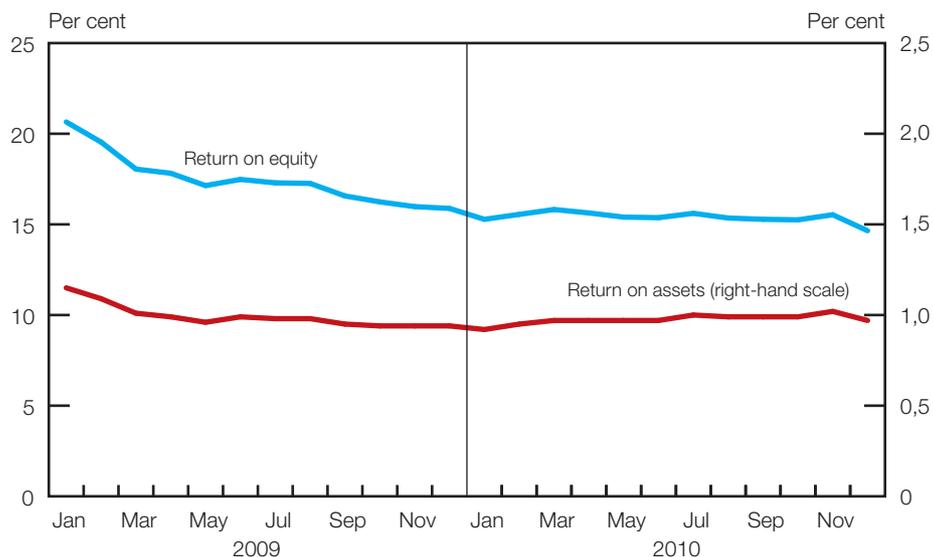


Figure 4.30 depicts the 12-month moving average return on equity (ROE) and return on assets (ROA) for the banking sector. The ROE amounted to 14,7 per cent in December 2010 (December 2009: 15,9 per cent). The ROA remained at approximately 1 per cent throughout 2010 (2009: 0,99 per cent). ROE and ROA dropped slightly in December 2010 due to a decline in operating profit, mainly as a result of increased staff expenses.

ROA remained at approximately 1 per cent



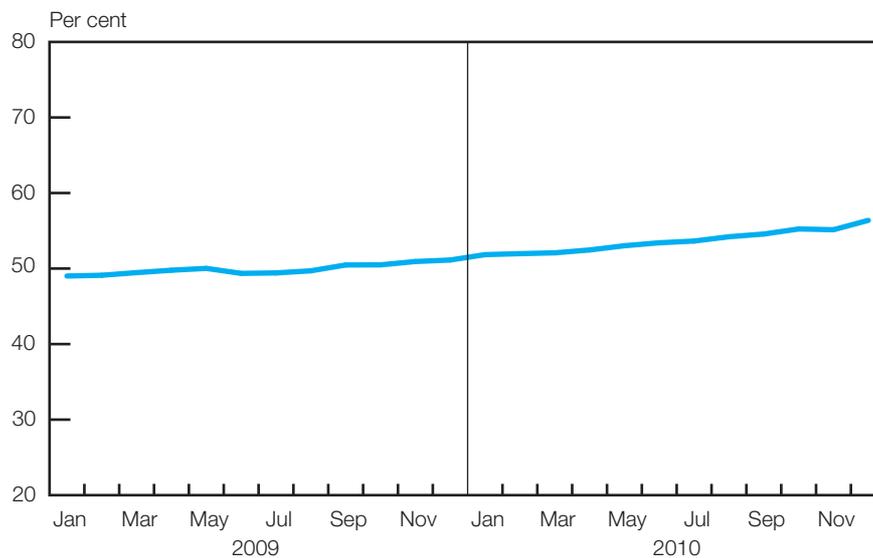
Figure 4.30 Profitability ratios (smoothed, i.e., 12-month moving average)



cost-to-income ratio deteriorated steadily during 2010

The 12-month moving average cost-to-income ratio, as shown in Figure 4.31, deteriorated steadily during 2010, ending the year at 56,4 per cent (December 2009: 51,1 per cent). The increase in the ratio during 2010 is mainly attributable to the higher growth rate of operating expenses relative to that of gross operating income.

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



## 4.6 Capital adequacy

The minimum required CARs applicable to all banks registered in South Africa has been 7,0 per cent in respect of the Tier 1 ratio and 9,5 per cent for the total CAR, 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 supervisory review and evaluation process in terms of Pillar 2, to maintain CARs above these minimum requirement levels based on systemic risk and banks' idiosyncratic risk assessments.

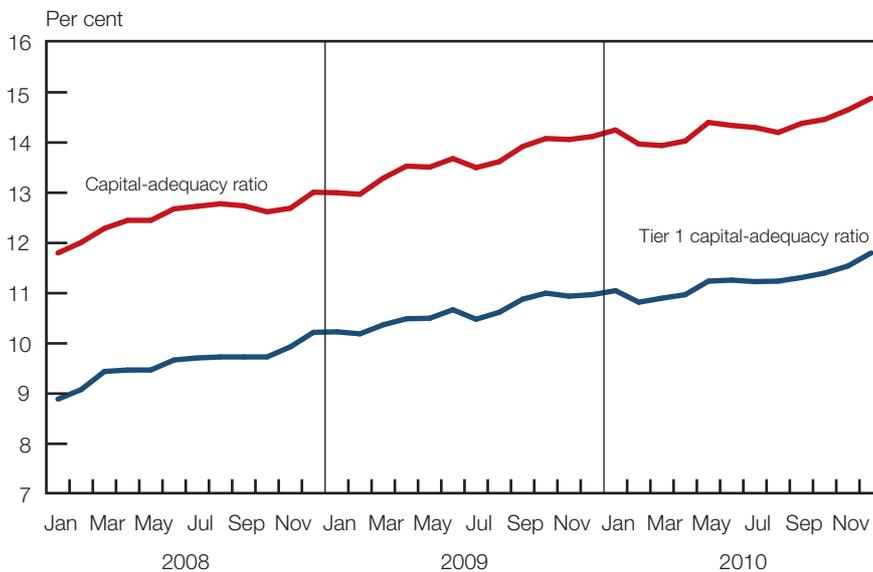


## 4.6.1 Capital adequacy for banks solo

Figure 4.32 depicts the total banking-sector CAR and the Tier 1 CAR for banks solo. The total CAR improved to 14,9 per cent at the end of December 2010 (December 2009: 14,1 per cent). The improvement in the ratio is due to the 12,7 per cent year-on-year increase in primary qualifying capital and reserve funds. The Tier 1 CAR improved to 11,8 per cent at the end of December 2010 (December 2009: 11,1 per cent). Banks' operations in South Africa remained adequately capitalised.

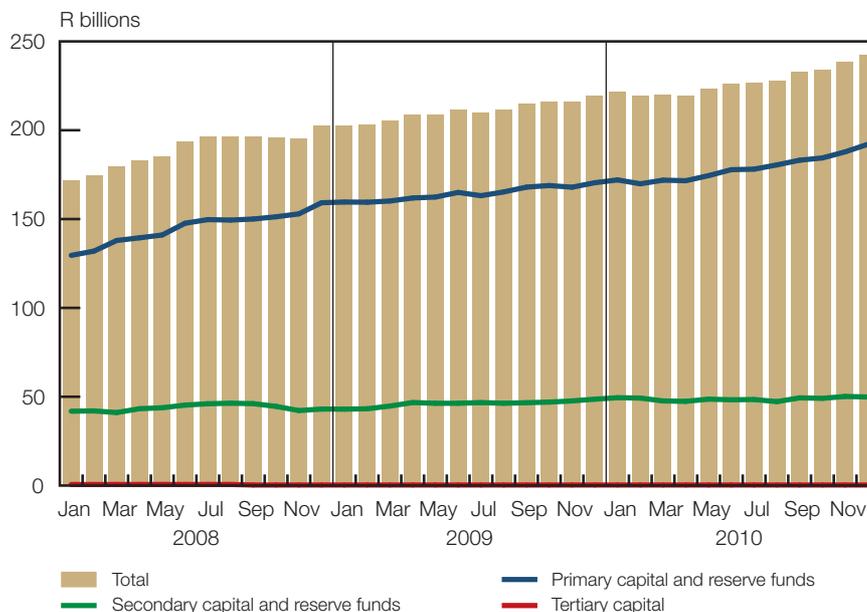
Tier 1 CAR improved to 11,8 per cent

Figure 4.32 Capital-adequacy ratios (solo)



The composition of qualifying regulatory capital and reserve funds on a solo basis is reflected in Figure 4.33. Total qualifying regulatory capital and reserve funds increased by R22,9 billion during 2010, mainly as a result of an increase in primary qualifying capital and reserve funds. The increases in primary qualifying capital across the banks are indicative of the build-up of surplus capital given the Basel III focus on common equity Tier 1 capital. Primary qualifying

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

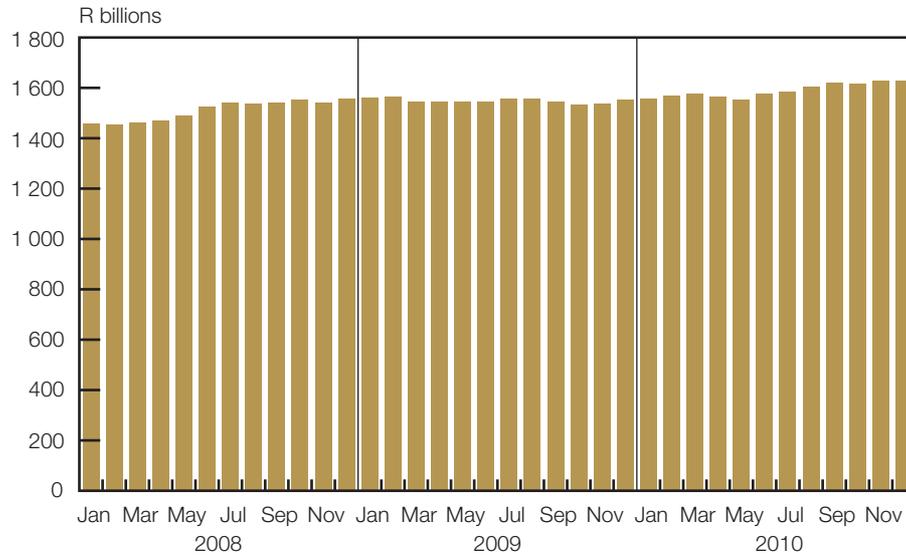


secondary capital and reserve funds remained stable

capital and reserve funds amounted to R192,1 billion at the end of December 2010 (December 2009: R170,5 billion). The total qualifying regulatory capital and reserve funds amounted to R242,3 billion at the end of December 2010 (December 2009: R219,4 billion). Secondary capital and reserve funds remained stable during 2010 and amounted to R49,9 billion at the end of December 2010 (December 2009: R48,6 billion). Tertiary capital amounted to R300 million throughout 2010 and 2009.

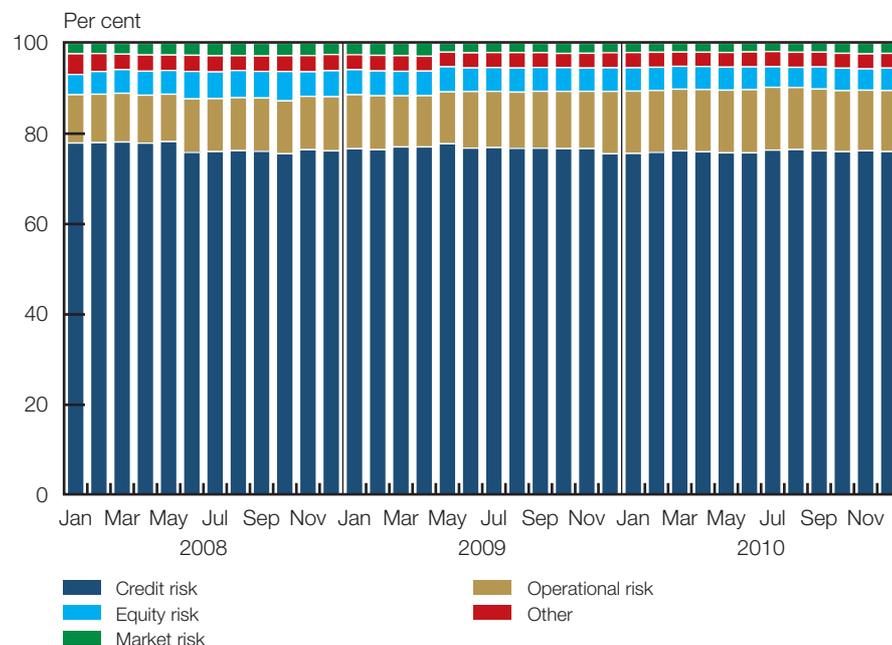
Figure 4.34 illustrates the 4,7 per cent growth in the banking sector's total risk-weighted exposure during 2010 which amounted to R1 628 billion at the end of December 2010 (December 2009: R1 554 billion). The increase was mainly due to the growth in credit risk-weighted exposures, which constitute the majority of the total risk-weighted exposure of the sector.

Figure 4.34 Total risk-weighted exposure (solo)



The composition of the regulatory capital requirement per major risk category for banks solo, as shown in Figure 4.35, remained fairly stable during 2010. The majority of the regulatory

Figure 4.35 Composition of total regulatory capital requirement (solo)



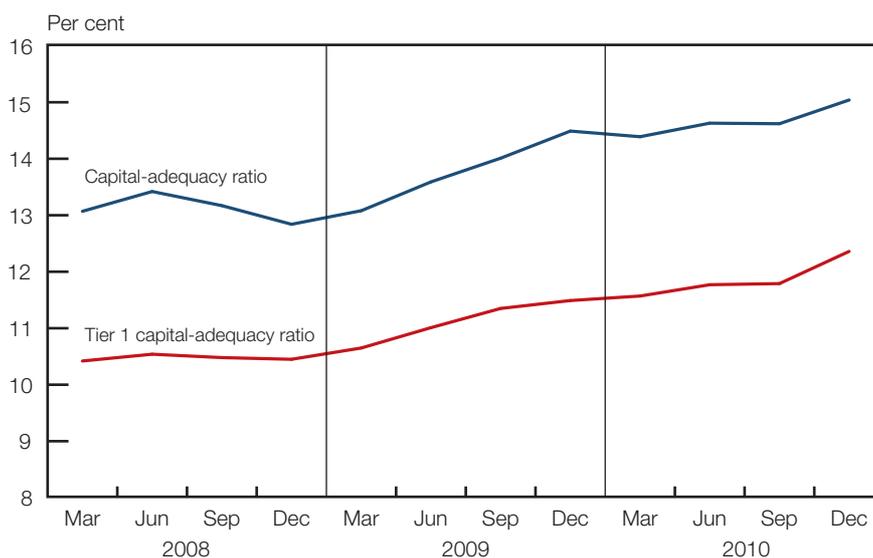
capital requirement during 2010 related to credit risk, amounting to 76,0 per cent at the end of December 2010 (December 2009: 75,5 per cent), followed by operational risk, which accounted for 13,5 per cent of the total regulatory capital requirement at the end of December 2010 (December 2009: 13,8 per cent). The equity risk in the banking book, market risk and other risk categories each constituted less than 5 per cent of the total regulatory capital requirement at the end of December 2010.

## 4.6.2 Capital adequacy for total consolidated banking groups

The CARs for the banking sector on a consolidated basis is shown in Figure 4.36. The total banking-sector consolidated CAR increased to 14,9 per cent at the end of December 2010 (December 2009: 14,5 per cent). At the end of December 2010, the consolidated Tier 1 CAR was 12,0 per cent (December 2009: 11,5 per cent).

total banking-sector consolidated CAR increased to 14,9 per cent

Figure 4.36 Capital-adequacy ratios (consolidated banking groups)



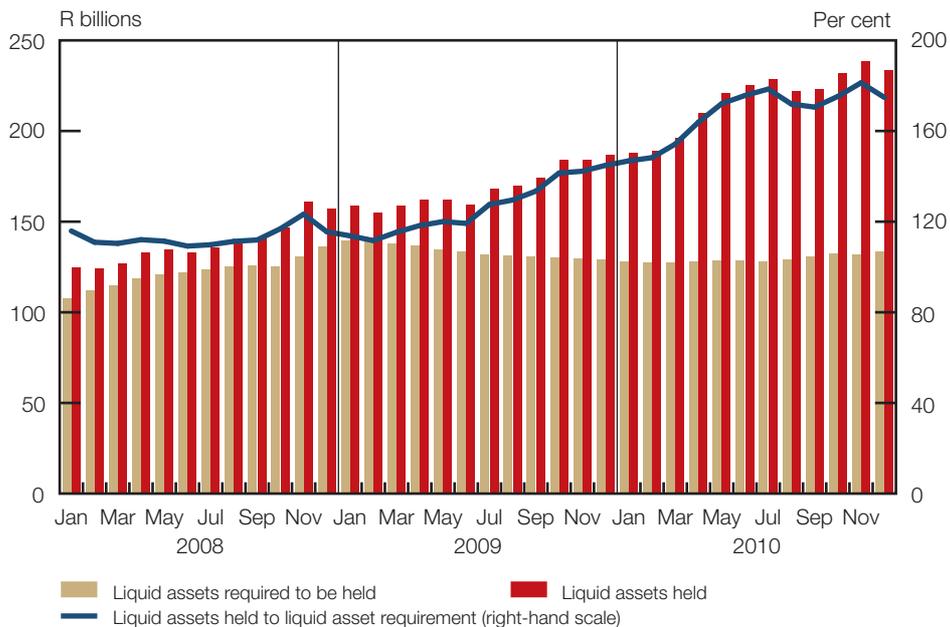
## 4.7 Liquidity risk

Figure 4.37 illustrates the average liquid assets held as a percentage of liquid assets required to be held since January 2008. Liquid assets held exceeded liquid assets required throughout 2010, recording year-on-year growth of 25,2 per cent at the end of December 2010. Liquid assets held peaked at R239 billion in November, declining to R234 billion at the end of December 2010 (December 2009: R187 billion). The banking sector holds liquid assets in excess of the statutory requirement as part of its liquidity risk management. The ratio of liquid assets held as a percentage of liquid assets required increased to 174,8 per cent at the end of December 2010 (December 2009: 144,8 per cent).

liquid assets in excess of the statutory requirement



Figure 4.37 Statutory liquid assets (actual versus required)



39 per cent of total contractual liabilities classified as maturing the next day

Figure 4.38 illustrates that, as at the end of December 2010, 39 per cent of total contractual liabilities were classified as maturing the next day (December 2009: 36,2 per cent). This is significantly higher in comparison to the 3,9 per cent “business-as-usual” liabilities classified as maturing the next day (refer to Figure 4.39). This significant difference in the two ratios is due to the “business-as-usual” assumptions that take into consideration the historical behaviour of funding or deposits on maturity or roll-over dates, notwithstanding the contractual arrangements pertaining to such funding or deposits.

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

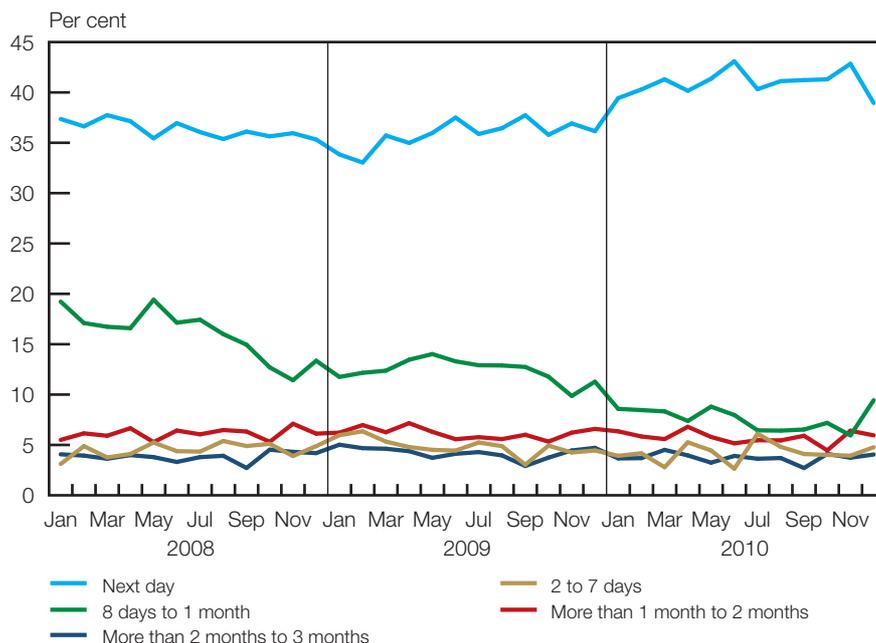
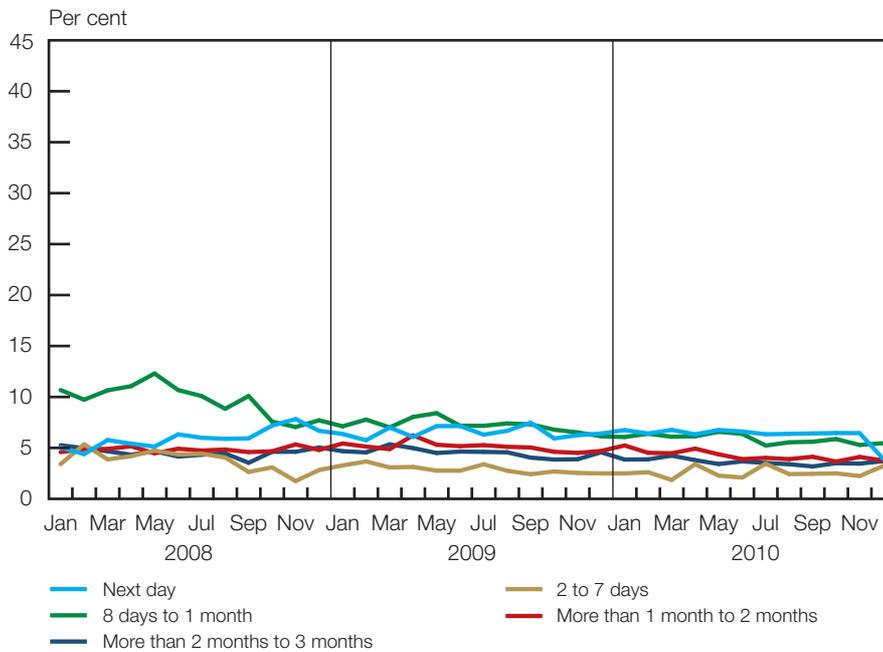


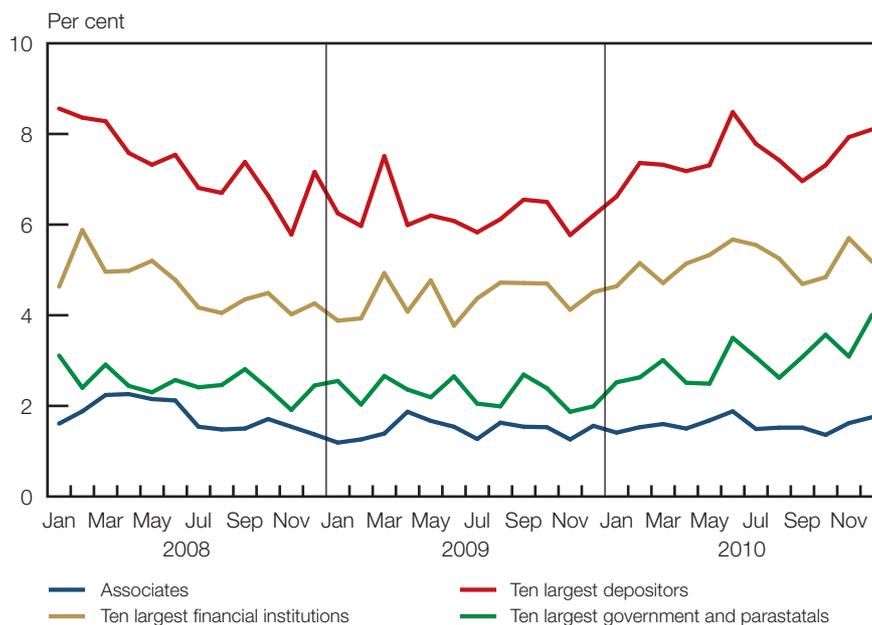
Figure 4.39 “Business-as-usual” maturity of liabilities (as a percentage of total liabilities)



The banks' short-term deposit funding<sup>19</sup> from different categories of depositors is presented in Figure 4.40. The average amount of funding (as a percentage of total liabilities) received from the ten largest depositors increased to 7,5 per cent (2009 average: 6,2 per cent). The ten largest financial institutions supplied, on average, 5,2 per cent of total liabilities, with government and parastatals and associates supplying, on average, 3 per cent and 1,6 per cent respectively (averages for 2009: 4,4 per cent, 2,3 per cent and 1,5 per cent respectively).

ten largest depositors increased to 7,5 per cent of total liabilities

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



19 Short-term funding has a duration of one month or less.



## 4.8 Credit risk

Banks continued to operate in tough economic conditions and further debt needed to be written down during 2010. Loan growth was modest against subdued levels of economic activity. However, some banks started to see signs of recovery in certain retail portfolios during the last quarter of 2010.

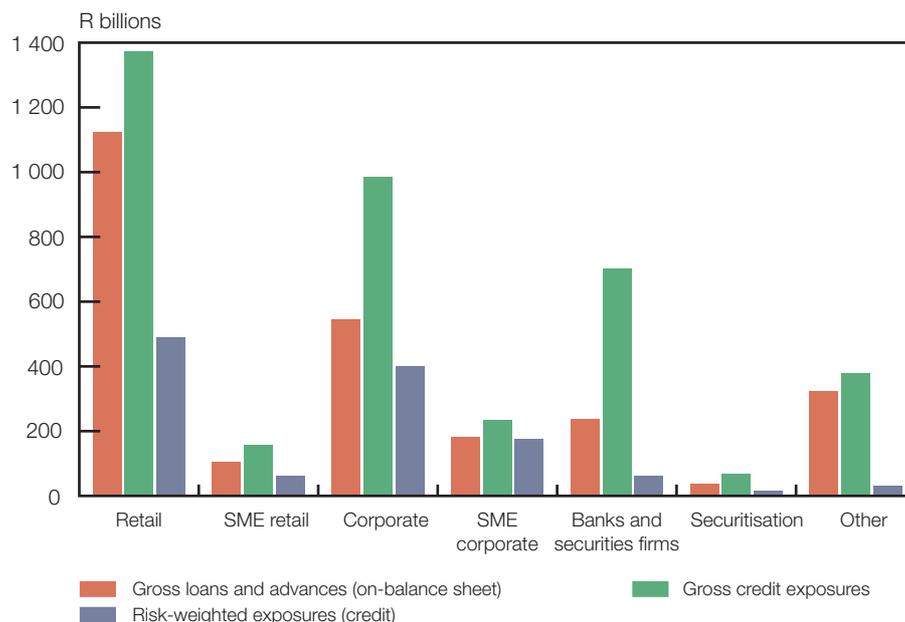
During 2010, banks maintained their focus on proactive credit risk management processes, including in-depth reviews of industries and clients, stricter lending criteria and management of highly indebted consumers. A number of larger banks consequently revised and recalibrated existing credit risk models to take into account actual experiences during the recent financial downturn.

Following discussions between the banking industry and the NCR, the banking industry implemented a conditional temporary moratorium on enforcement action against certain customers under debt review who were making partial payments. The impact of the moratorium will be monitored in the year to come.

Figure 4.41 provides a more granular breakdown in respect of gross loans and advances, gross credit exposures, and risk-weighted exposures per asset class as at December 2010. The difference between gross credit exposures, and gross loans and advances (on-balance sheet) reflects off-balance-sheet credit exposures, repurchase or resale agreements, and derivative financial instruments in the various asset classes. The difference between gross credit exposures and risk-weighted exposures reflects the application of the risk weightings applied to a bank's total credit exposures in each asset class. At the end of December 2010 the

- banks and securities firms category constituted the highest ratio of credit risk exposure to off-balance-sheet items;
- highest risk-weighting percentage related to the SME corporate asset class in terms of both gross credit exposure and gross loans and advances; and
- exposures to the other asset class (which consists mainly of public-sector entities, local government and municipalities, and sovereign counterparties) had the lowest credit risk-weightings compared to their respective gross credit exposures.

Figure 4.41 Gross credit exposures and risk-weighted exposures per asset class

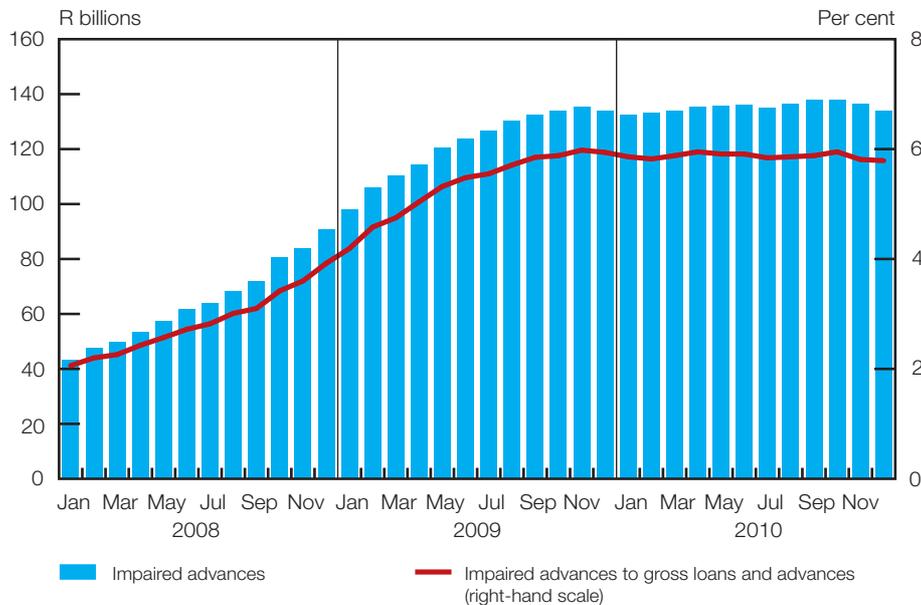


recalibration of credit risk models to account for actual experiences during the financial downturn

## 4.8.1 Total impaired advances

The ratio of impaired advances to gross loans and advances, a key indicator of credit risk in the banking sector, remained largely unchanged at an average of 5,9 per cent during 2010 and amounted to 5,8 per cent as at December 2010 (December 2009: 5,9 per cent) (refer to Figure 4.42). Generally, movements in impaired advances during 2010 were mirrored by corresponding movements in gross loans and advances. From January 2010, impaired advances continued to grow slowly, peaking at R138 billion (5,95 per cent) during October 2010 and declining to R134 billion in December 2010 (December 2009: R134 billion). The high levels of impaired advances continue to be an active focus area for the banking sector.

Figure 4.42 Impaired advances to gross loans and advances

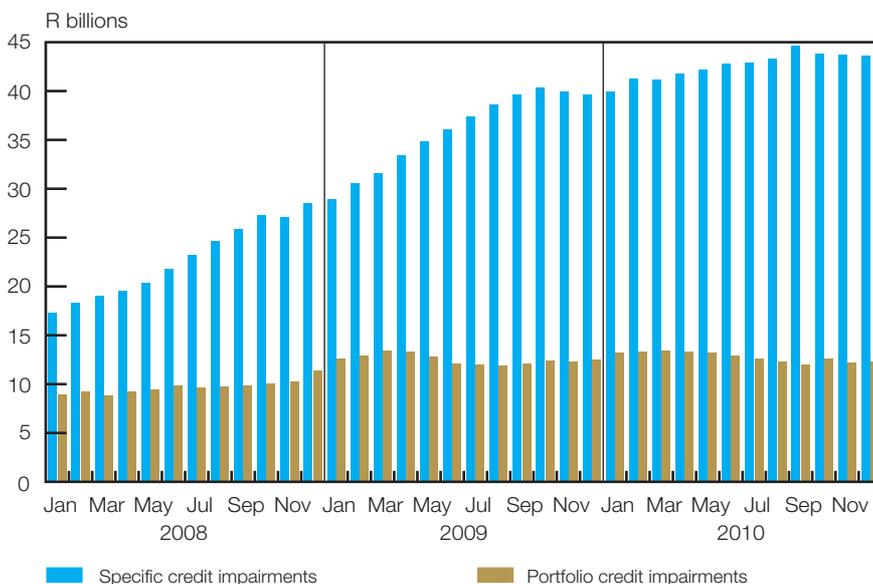


## 4.8.2 Credit impairments

Credit impairments continued to increase during 2010, albeit at a lower rate than during the previous two years (refer to Figure 4.43). Specific credit impairments grew year on year by

credit impairments continued to increase during 2010

Figure 4.43 Specific and portfolio credit impairments

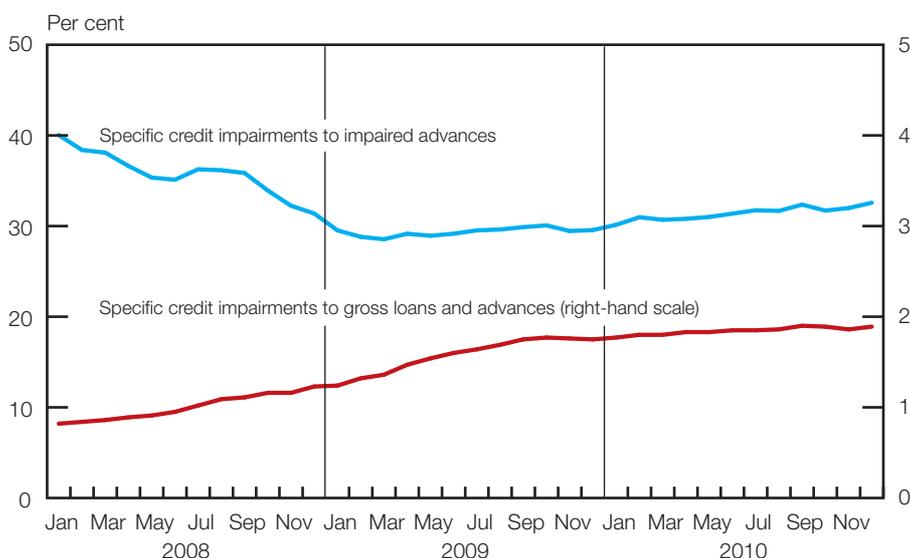


specific credit impairments increased marginally

10,1 per cent at the end of December 2010 (December 2009: 39,0 per cent), reaching a peak of R44,6 billion in September 2010 and declining to R43,6 billion at the end of December 2010 (December 2009: R39,6 billion). Portfolio credit impairments declined year on year by 1,5 per cent (2009: growth of 9,4 per cent). Banks reallocated portfolio credit impairments to specific credit impairments as increased stress in terms of specific customers became evident. The average monthly growth rate in total credit impairments during 2010 slowed to 0,6 per cent from an average monthly growth rate of 2,3 per cent during 2009.

Specific credit impairments as a percentage of impaired advances, and as a percentage of gross loans and advances is illustrated in Figure 4.44. Both ratios reflect steady, yet low, growth during 2010. Specific credit impairments as a percentage of impaired advances increased by 300 basis points to 32,6 per cent at the end of December 2010 (December 2009: 29,6 per cent). Banks increased specific impairments specifically for residential mortgage advances mainly because the recovery in the property market and house prices was lower than expected. Specific credit impairments as a percentage of gross loans and advances increased marginally to 1,89 per cent at the end of December 2010 (December 2009: 1,75 per cent), mainly due to the growth rate of specific impairments exceeding the rate of growth in gross loans and advances.

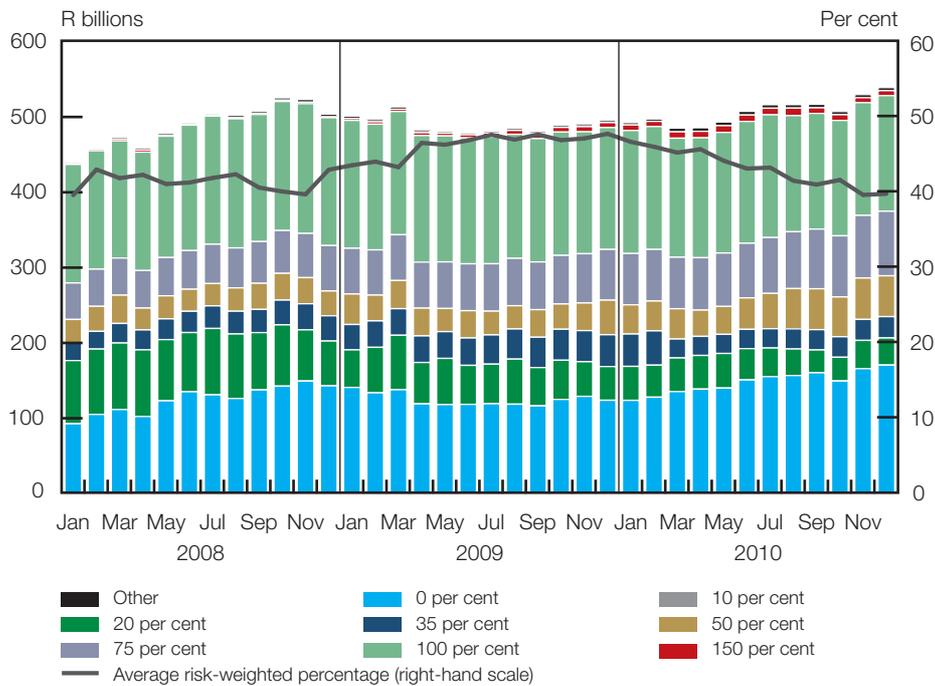
Figure 4.44 Specific credit impairment ratios



### 4.8.3 The standardised approach banks

The STA banks represented 17,8 per cent of the total banking sector's gross credit exposure at the end of December 2010 (December 2009: 16,1 per cent). The average risk-weighted percentage declined continually during 2010, from a peak of 47,7 per cent in December 2009 to 39,7 per cent in December 2010 (refer to Figure 4.45). This was mainly due to the reporting of revocable commitments, to which a zero per cent credit conversion factor is applied and due to increased liquid asset holdings, which are risk-weighted at zero per cent. Revocable commitments are obligations of the reporting bank that may be cancelled at the discretion of the bank without prior notice or that provide for automatic cancellation due to deterioration in the creditworthiness of the obligor.

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

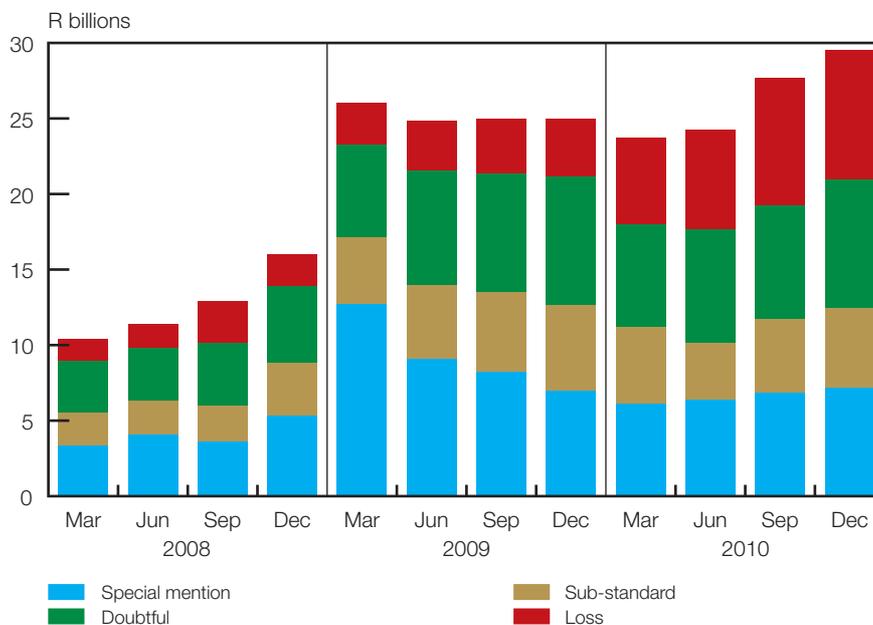


#### 4.8.4 Classification of credit risk exposures under the standardised approach

Classified credit risk exposures are reported quarterly as either “standard”, “special mention”, “sub-standard”, “doubtful” or “loss”. There was a steady increase in credit exposures classified as “loss” during the year, as illustrated in Figure 4.46. Credit exposures classified as “loss” are considered to be uncollectable once collection efforts, such as the institution of legal proceedings, have been unsuccessful.

a steady increase in credit exposures classified as “loss”

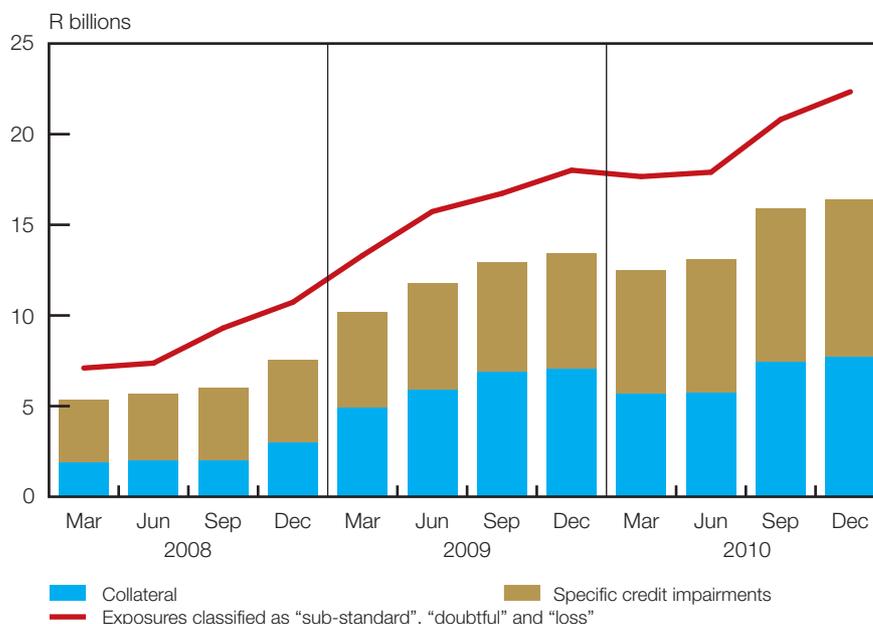
Figure 4.46 Classification of credit risk exposures under the standardised approach



banks with significant unsecured lending portfolios to adhere to higher minimum CARs

Figure 4.47 gives an indication of the exposures classified as “substandard”, “doubtful” or “loss” measured against specific credit impairments raised and collateral held. The “gap” or shortfall between the classified exposures and the related collateral and specific credit impairments can be attributed to, among other things, unsecured lending. The Registrar may require banks with significant unsecured lending portfolios to adhere to higher minimum CARs. Although there was a significant increase in the classified categories during 2010 (as shown in Figure 4.46), the “gap” as a percentage of the classified exposures remained largely unchanged at 26,6 per cent as at December 2010 (December 2009: 25,5 per cent).

Figure 4.47 Exposures classified as “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”, issued in July 2005, banks can estimate expected losses based on three key drivers:

- i 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.
- ii Exposure at default (EAD), which gives an estimate of the amount outstanding (drawn amounts plus likely future draw-downs of yet undrawn lines) in case the borrower defaults.
- iii Loss given default (LGD), which gives the percentage of exposure the bank might lose should the borrower default.

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.

Banks that utilised the IRB approach for calculating minimum capital requirements for credit risk represented 82,2 per cent of the total banking sector’s gross credit exposure at the end of December 2010 (December 2009: 83,9 per cent). Table 4.3 provides a summary of the key risk drivers of credit risk, as primary inputs to the capital calculation reported by IRB banks. Total EAD comprises credit exposures reported in standard PD bands, specialised lending (which

exposures were mapped into standardised rating categories) and securitisation exposures. The majority of IRB credit exposures are reported in standard PD bands. Of these, total retail and total corporate form the main components.

Table 4.3 Key credit risk indicators reported by internal ratings-based banks

	Dec 2008	Dec 2009	Dec 2010
Total exposure at default (R billions).....	2 578	2 597	2 611
Exposure at default analysed by PD band (R billions) .....	2 578	2 533	2 547
Average probability of default (per cent).....	5,8	7,4	6,9
Of which:			
– Retail .....	10,0	12,4	11,5
– Corporate .....	2,5	3,6	3,8
Average loss given default (per cent) .....	27,8	28,4	28,7
Of which:			
– Retail .....	24,6	24,2	25,7
– Corporate .....	34,9	34,4	33,6
Expected loss as a percentage of exposure at default (per cent).....	1,6	2,0	2,0
Risk-weighted exposure as a percentage of exposure at default (per cent).....	35,0	35,0	37,0
Advances in default as a percentage of exposure at default (per cent).....	3,1	4,7	4,7

Against the backdrop of subdued economic growth and credit demand, total EAD increased by less than 1 per cent to R2,611 billion at the end of December 2010 (2009: 0,7 per cent). The average PD for all categories, excluding specialised lending and securitisation, reduced to 6,9 per cent at the end of December 2010 (December 2009: 7,4 per cent) due to a slight recovery in retail exposures, specifically residential mortgages. Recovery in corporate exposures has lagged retail exposures, and underlying stress is still prevalent in those portfolios.

recovery in corporate exposures has lagged retail exposures

Banks updated their internal models with downturn data from the past year and, as a result, reported slight increases in total LGDs of 28,7 per cent at the end of December 2010 (December 2009: 28,4 per cent), driven by the increase in LGDs reported for the retail portfolios.

Since all key risk drivers remained largely unchanged during 2010, total expected loss also remained stable. However, the mix between retail and corporate exposures changed, with a decreased contribution from retail exposures and an increased contribution from corporate exposures. Defaulted advances appeared to be stable at 4,7 per cent at the end of December 2010 (December 2009: 4,7 per cent).

As with STA banks, IRB banks continued to refine credit risk frameworks, and specifically model inputs, which resulted in increased average risk weight percentages.

Figures 4.48 and 4.49 show the total retail and corporate distributions of EAD in standard PD bands, and gives an indication of PD migration and credit quality from 2008. The lower PD bands of 0 per cent to 8,611 per cent would generally include higher-quality credit exposures. As the credit quality (or credit rating) of the exposures decrease, the exposures migrate towards the higher PD bands (i.e., towards 100 per cent). “In default” generally comprises credit exposures that are overdue for more than 90 days or which display certain weaknesses, as defined in regulation 65 of the Regulations relating to Banks.



Figure 4.48 Distribution of retail exposures at default in standard probability of default bands

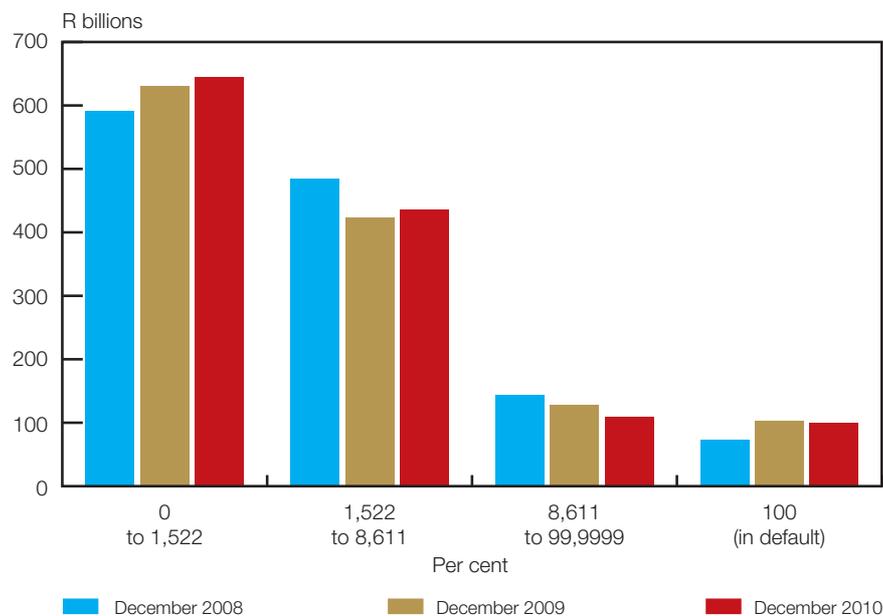
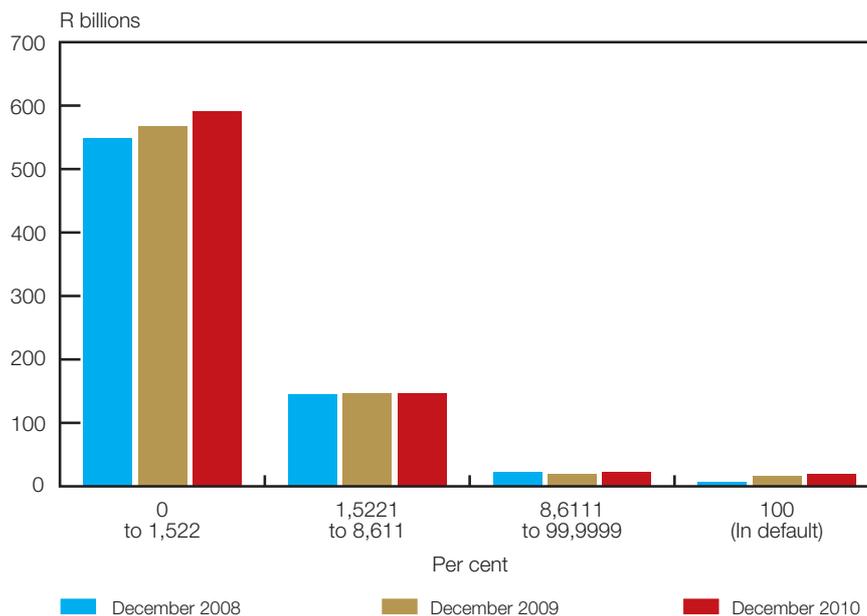


Figure 4.49 Distribution of corporate exposures at default in probability of default ranges

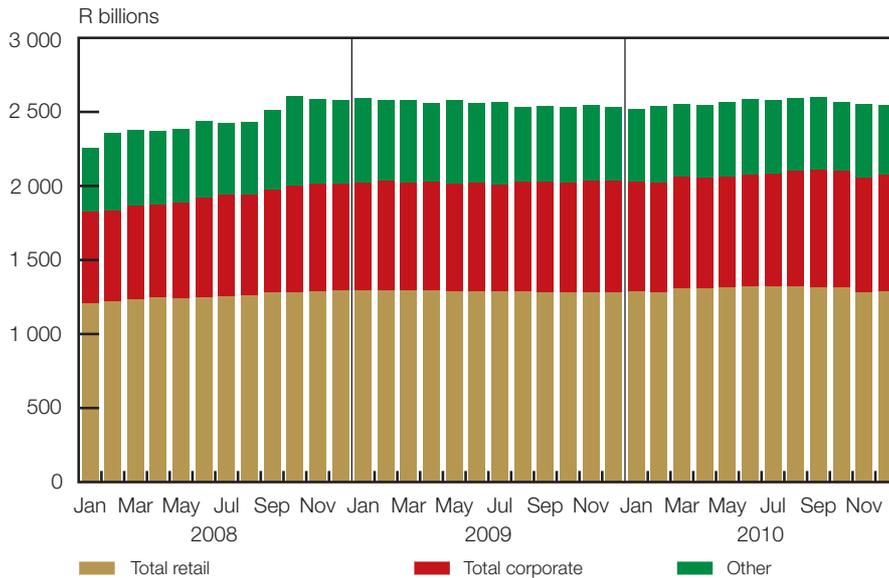


## 4.8.6 Exposure at default

Figure 4.50 presents credit exposure (i.e., EAD) per standard PD bands, classified per asset category, since January 2008. Total gross credit exposure for IRB banks increased by 0,6 per cent to R2 547 billion at the end of December 2010 (December 2009: R2 533 billion). Both the corporate and retail asset categories reflected slight year-on-year increases, which were offset by a 3,9 per cent decline in the other asset category. The composition of total credit exposures remained largely unchanged, with retail credit exposures constituting 50,7 per cent (December 2009: 50,7 per cent), corporate credit exposures constituting 30,7 per cent (December 2009: 29,7 per cent) and other credit exposures constituting 18,6 per cent (December 2009: 19,6 per cent).

the composition of total credit exposures remained largely unchanged

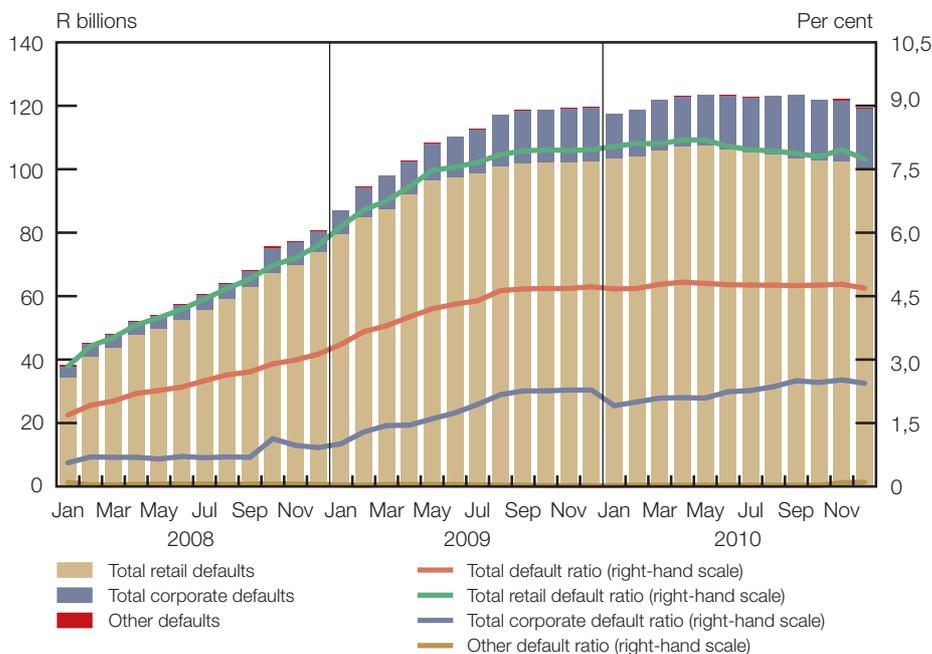
Figure 4.50 Total exposure at default



Total default exposures continued to grow in the first half of 2010, peaking at R123,4 billion in May 2010 (refer to Figure 4.51). During the second half of the year, growth in defaults tapered off, with the defaults declining during the last quarter of 2010 to R119,4 billion at the end of December 2010 (December 2009: R119,6 billion). The decline in total defaults was largely due to a 2,4 per cent decline in retail defaults, following the effect of the reducing interest rate cycle on credit consumers, and proactive credit risk management by the banking sector. The retail default exposures accounted for 83,6 per cent of the total default exposures (December 2009: 85,5 per cent), amounting to R99,9 billion at the end of December 2010 (December 2009: R102,3 billion). Total corporate default exposures (which include corporate, specialised lending, SME corporate and purchased receivables from corporations) increased to almost 16 per cent of total defaults (December 2009: 14,4 per cent) and amounted to R19,1 billion at the end of December 2010 (December 2009: R17,2 billion). Defaults accounted for 4,7 per cent of total credit exposures at the end of December 2010 (December 2009: 4,7 per cent). The decline in the total retail default ratio to 7,7 per cent (December 2009: 8,0 per cent) was largely offset by the growth in the corporate default ratio to 2,4 per cent (December 2009: 2,3 per cent).

retail default exposures accounted for 83,6 per cent of total default exposures

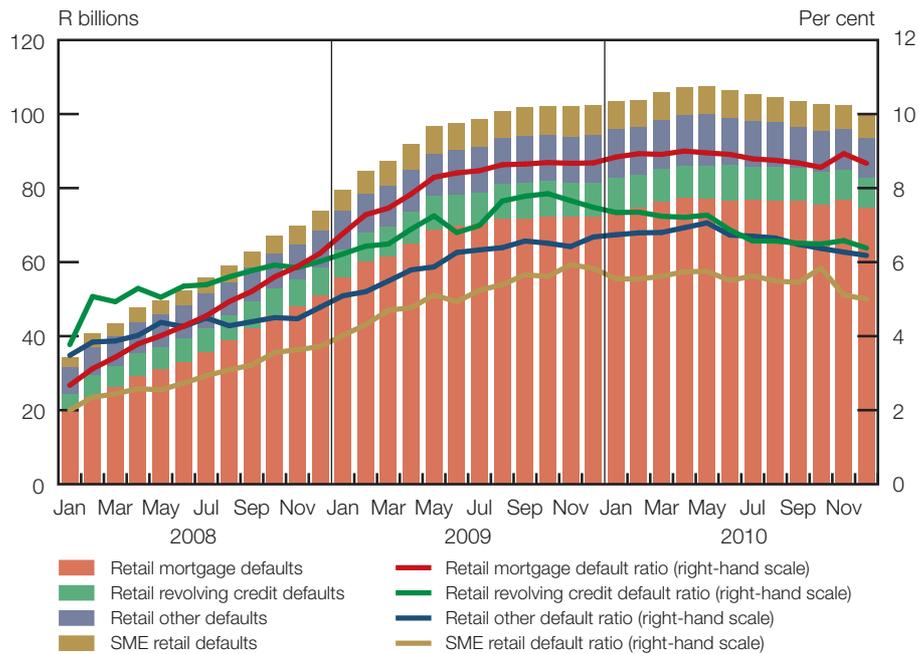
Figure 4.51 Total default exposure and default ratio per asset class



retail mortgage default ratio generally flat during 2010

A breakdown of retail defaults and default ratios into the four retail asset categories from 2008 is provided in Figure 4.52. Retail mortgage defaults continued to constitute the majority of retail defaults, amounting to R74,6 billion at the end of December 2010 (December 2009: R72,4 billion). The retail mortgage default ratio was generally flat during 2010. The retail other defaults (including vehicle and asset finance), retail revolving credit defaults (including credit cards) and SME retail defaults declined year on year by 16,2 per cent, 10,7 per cent and 19,4 per cent respectively.

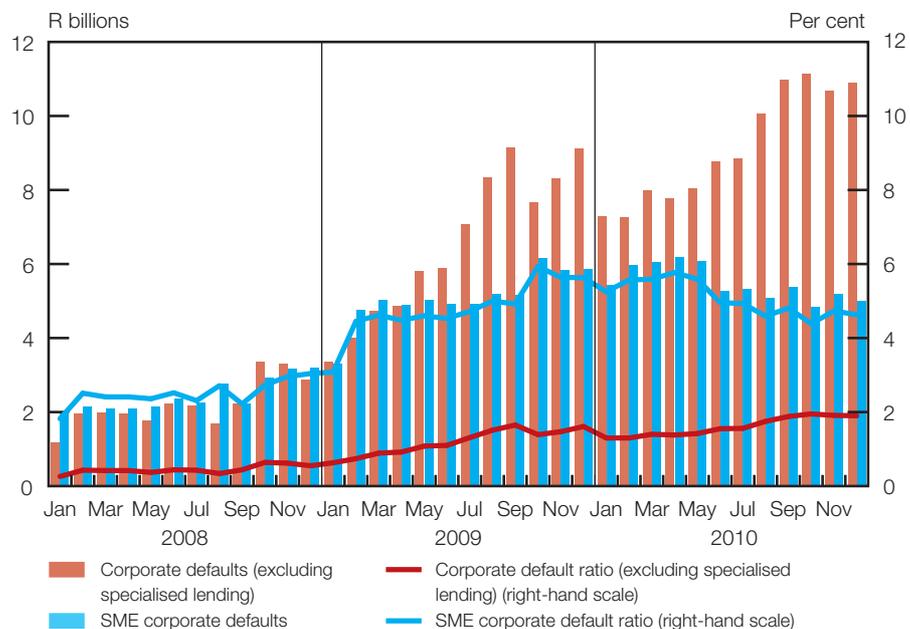
Figure 4.52 Composition of retail default exposures and their respective default ratios



20 per cent year-on-year growth in corporate defaults

Although corporate defaults (excluding specialised lending, SME corporate and purchased receivables from corporations) accounted for less than 10 per cent of total defaults, the almost 20 per cent year-on-year growth recorded at the end of December 2010 is indicative of the

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



continued stress in credit exposures reported in this asset class (refer to Figure 4.53). SME corporate defaults decreased by 14,5 per cent during 2010, mainly as a result of banks writing off debt.

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

The breakdown of credit exposures according to the sectors and geographic areas is depicted in Tables 4.4 and 4.5 respectively. As at the end of December 2010, private household, and finance and insurance amounted to 35,2 per cent and 24,8 per cent respectively of the banking sector's total credit exposures, representing the majority of the sector's credit exposure (December 2009: 39,2 per cent and 22,6 per cent respectively). Advances to other, real estate, and community and personal services categories contributed 6,8 per cent, 6,4 per cent and 5,2 per cent respectively at the end of December 2010 (December 2009: 6,2 per cent, 5,5 per cent and 4,8 per cent respectively). The remaining sectors of the economy each amounted to less than 5 per cent of the total banking sector's credit exposures.

Table 4.5 shows that 89,4 per cent of the banking sector's credit exposure is concentrated in South Africa, followed by Europe and North America, representing 7,6 per cent and 1,7 per cent respectively at the end of December 2010 (December 2009: 90,6 per cent, 7,1 per cent and 1,3 per cent respectively).

the banking sector's credit exposure is concentrated in South Africa

Table 4.4 Sectoral distribution of credit exposures (as a percentage of total credit exposure)

	Dec 2008*	Dec 2009*	Dec 2010*
Agriculture .....	1,21	1,61	1,72
Mining .....	2,70	3,19	2,93
Manufacturing .....	4,42	3,67	4,09
Electricity .....	0,71	0,69	0,91
Construction.....	1,28	1,30	1,22
Wholesale and retail trade .....	3,60	3,83	3,86
Transport and communication .....	2,36	2,88	3,58
Finance and insurance .....	25,36	22,58	24,82
Real estate .....	4,83	5,46	6,41
Business services .....	5,67	4,65	3,35
Community and personal services.....	4,15	4,81	5,16
Private households.....	36,46	39,16	35,15
Other .....	7,25	6,17	6,80
Total .....	100,00	100,00	100,00

\* Differences may occur due to rounding

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

	Dec 2008*	Dec 2009*	Dec 2010*
South Africa.....	89,06	90,63	89,35
Other African countries.....	0,51	0,50	0,53
Europe .....	8,35	7,06	7,57
Asia .....	0,16	0,31	0,56
North America.....	1,61	1,27	1,72
South America.....	0,11	0,11	0,20
Other .....	0,21	0,12	0,08
Total .....	100,00	100,00	100,00

\* Differences may occur due to rounding



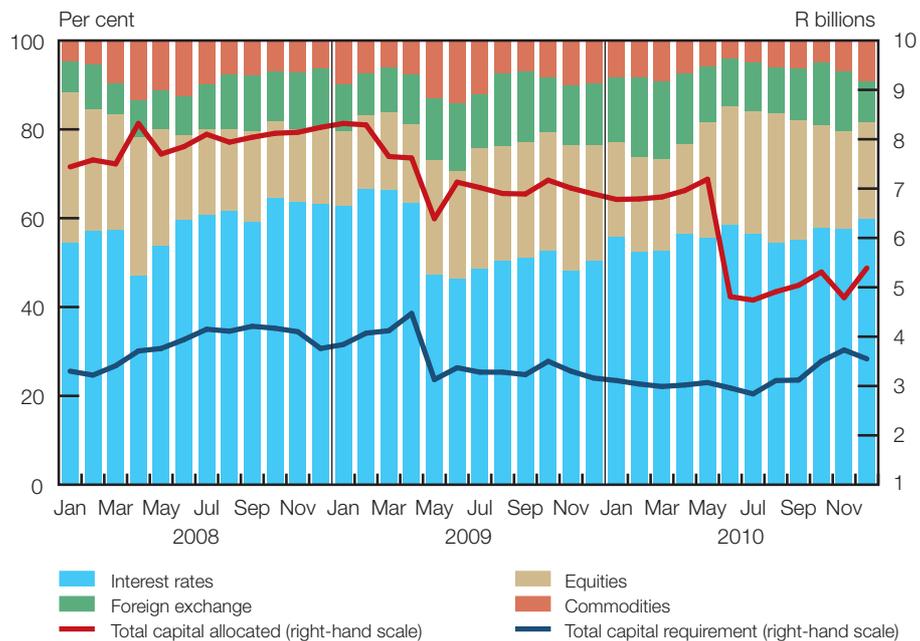
## 4.9 Market risk

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

total capital allocated for market risk decreased

Illustrated in Figure 4.54 is the composition of the market risk regulatory capital requirement. While the total capital allocated for market risk decreased from R6,8 billion at the end of January 2010 to R5,4 billion at the end of December 2010 (December 2009: R6,9 billion), the total capital requirement for market risk increased from R3,1 billion at the end of January 2010 to R3,6 billion at the end of December 2010 (December 2009: R3,2 billion). The total capital allocated for market risk decreased from R7,2 billion at the end of May 2010 to R4,8 billion at the end of June 2010, as a result of a bank aligning its regulatory reporting to the way it managed its capital internally.

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



The capital requirement in respect of interest rate instruments remained the biggest contributor to the composition of total market risk capital requirements during 2010 and amounted to 59,7 per cent at the end of December 2010 (December 2009: 50,4 per cent). The market risk capital requirement in respect of equity positions amounted to 21,8 per cent at the end of December 2010 (December 2009: 26,1 per cent). Market risk capital requirements in respect of foreign-exchange instruments decreased from 14,5 per cent at the end of January 2010 to 9,2 per cent at the end of December 2010 (December 2009: 13,6 per cent). Commodities risk contributed 9,3 per cent to the total capital requirement at the end of December 2010 (December 2009: 9,6 per cent)

### 4.9.2 Derivative instruments

increase in interest rate derivative contracts turnover

The composition of monthly turnover in derivative contracts is illustrated in Figure 4.55. 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 remained above R4,8 trillion during 2010 and reached a peak of R7,8 trillion in November 2010 as a result of the increase in turnover of interest rate derivative contracts. At the end of December 2010 the turnover in derivative instruments amounted to R5,2 trillion (December 2009: R4,3 trillion).

Foreign-exchange and interest rate derivative contracts constituted a large portion of derivative turnover activities during 2010 and at the end of December 2010 amounted to R3,1 trillion (December 2009: R2,8 trillion) and R1,6 trillion (December 2009: R1,1 trillion) respectively.



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

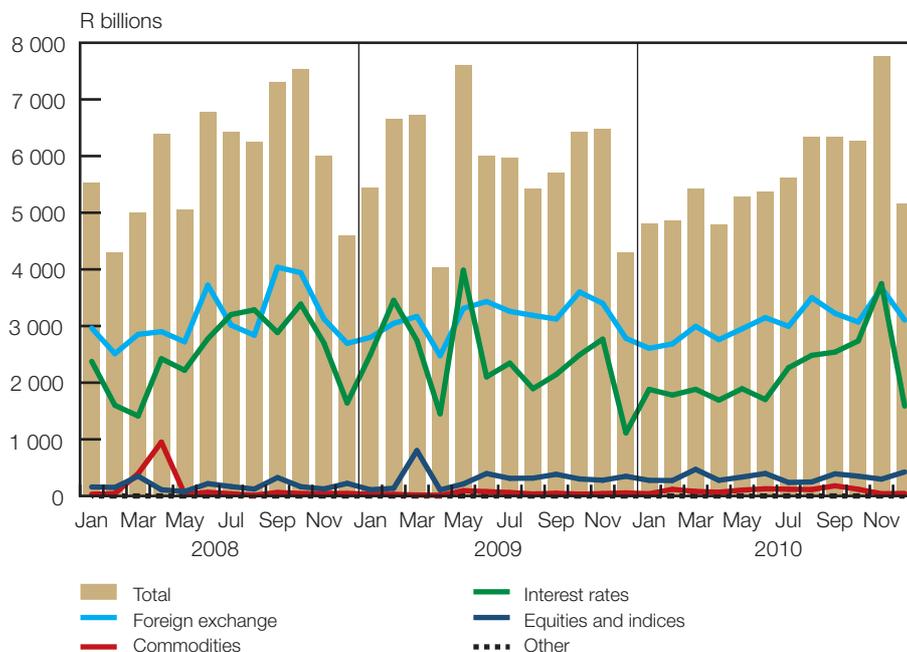
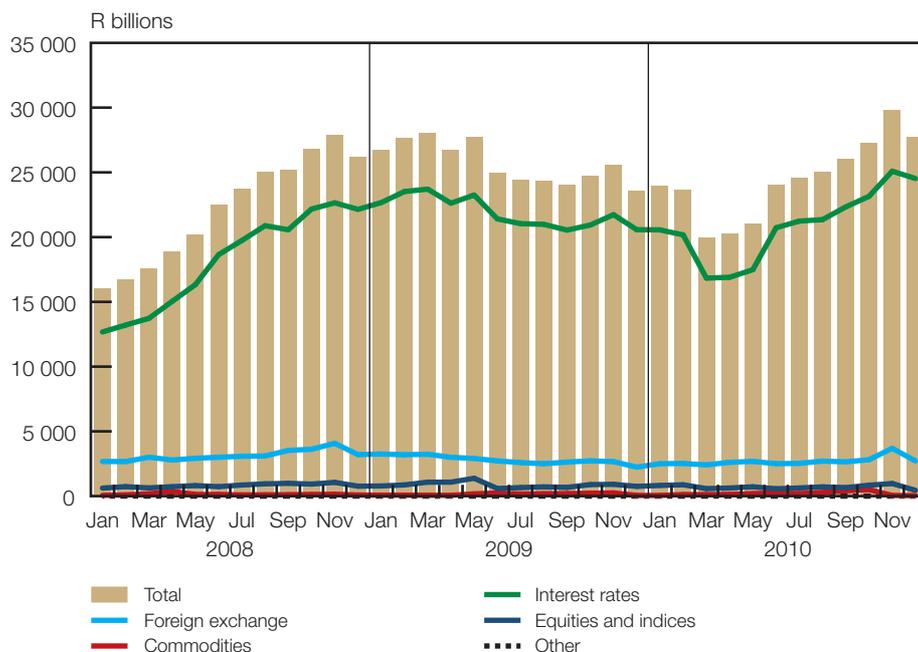


Figure 4.56 depicts the composition and total gross notional value of all unexpired derivative contracts since January 2008. The total gross notional value of unexpired contracts decreased from R23,9 trillion at the end of January 2010 to R19,9 trillion at the end of March 2010. From June, the gross notional value of unexpired derivative contracts grew significantly, peaking at almost R30,0 trillion at the end of November, before declining marginally to R27,7 trillion at the end of December 2010. Unexpired interest rate derivative contracts represented the majority of the total unexpired derivative contracts throughout 2010, and amounted to R24,5 trillion (88,5 per cent) at the end of December 2010 (December 2009: R20,5 trillion or 87,1 per cent).

interest rate derivative contracts represented the majority of total unexpired derivative contracts

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



OTC-traded, unexpired derivative transactions represented 98,3 per cent of the total unexpired derivative contracts

Figures 4.57 and 4.58 present a breakdown of total unexpired derivative contracts at month-end, as shown in Figure 4.56, into exchange-traded unexpired derivative contracts and OTC-traded, unexpired derivative contracts. OTC-traded, unexpired derivative transactions represented 98,3 per cent of the total unexpired derivative contracts at the end of December 2010 (December 2009: 95,6 per cent). Interest rate derivative contracts contributed 89,7 per cent of the total unexpired OTC-traded derivative contracts at the end of December 2010 (December 2009: 89,6 per cent).

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

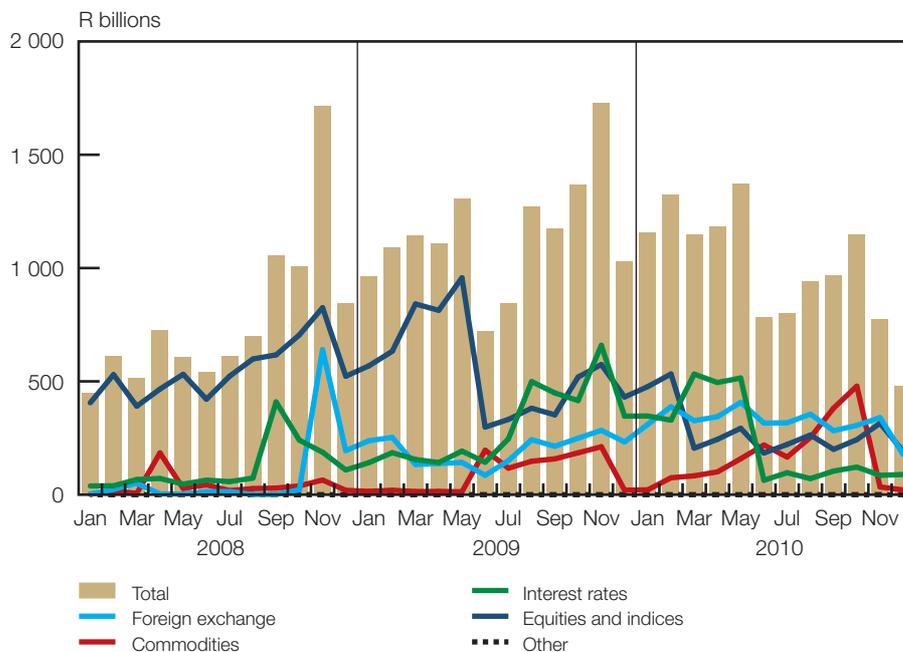
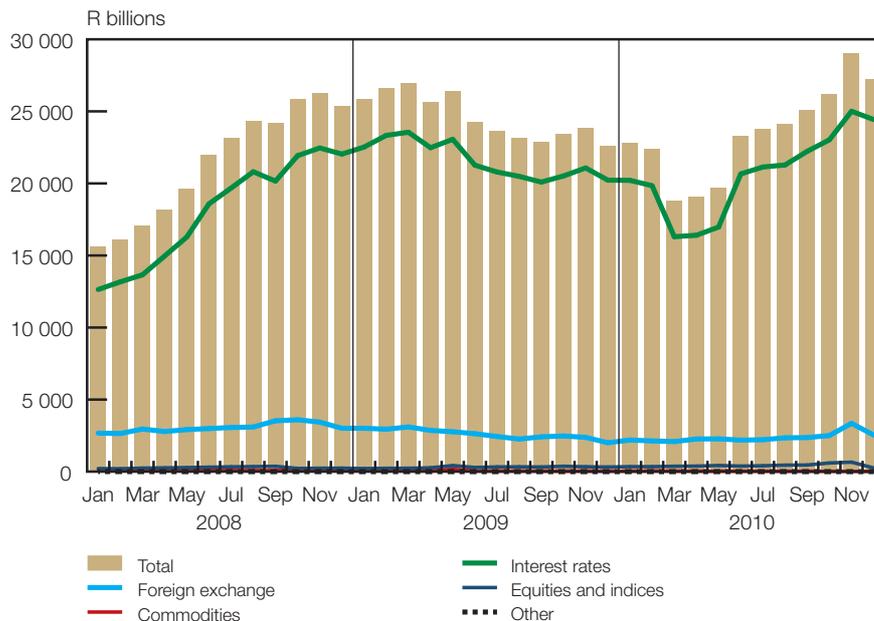


Figure 4.58 Composition of unexpired derivative contracts at month-end: Over-the-counter traded (gross notional value)



### 4.9.3 Currency risk

The aggregated effective net open foreign-currency position (FX NOP) is presented in Figure 4.59. The aggregated effective FX NOP 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 effective FX NOP remained within the regulatory limit of 10 per cent of qualifying regulatory capital and reserve funds throughout 2010. The aggregated effective FX NOP expressed as a percentage of qualifying regulatory capital and reserve funds amounted to 0,3 per cent at the end of December 2010 (December 2009: 0,6 per cent). The aggregated effective FX NOP was negative for the most part of 2010, as a result of the decrease in commitments to purchase foreign currency.

the aggregated effective FX NOP remained within the regulatory limit

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

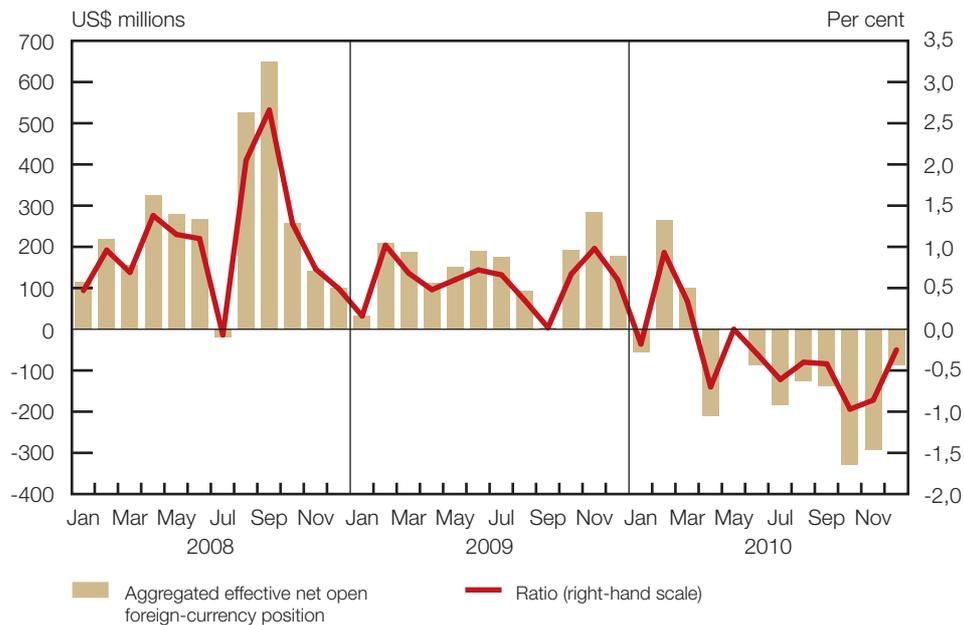
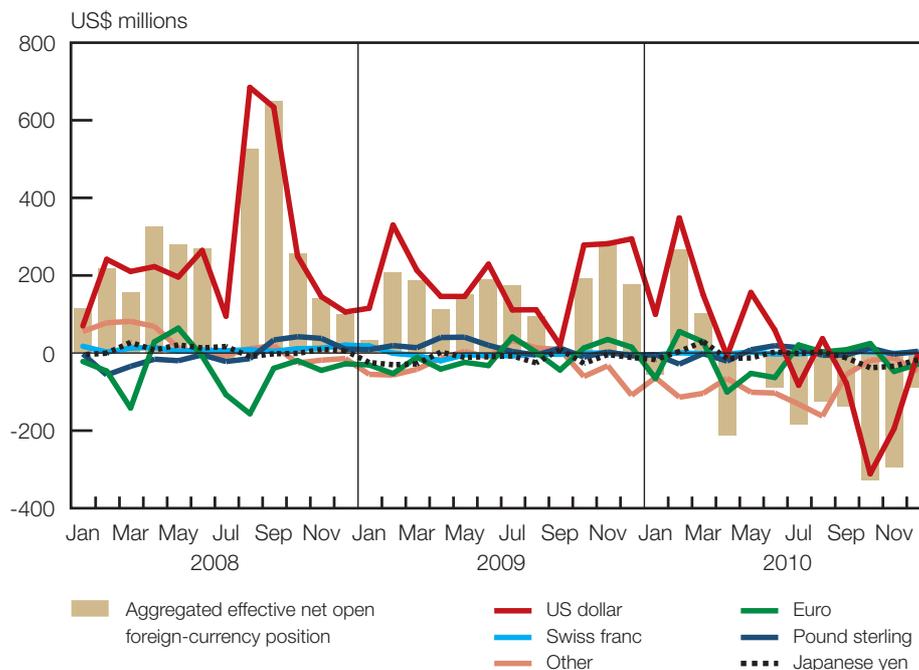


Figure 4.60 indicates the contributions of each currency to the aggregated effective FX NOP. The US dollar dominated the positions and remained the main constituent to the fluctuations during 2010.



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



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 increased from US\$6,7 billion at the end of January 2010 to US\$8,8 billion at the end of December 2010 (December 2009: US\$6,4 billion). The net forward position increased from US\$6,8 billion at the end of January 2010 to US\$8,8 billion at the end of December 2010 (December 2009: US\$6,3 billion) as illustrated in Figure 4.61.

Figure 4.61 Position in foreign-currency instruments

