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South African Reserve Bank

Minimum reserve requirements

by H F Nel

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Minimum reserve requirements

by H F Nel 1

Introduction

Central banks became custodians of the cash reserves of commercial banks by a process of evolution, which was closely associated with their functions as sole issuer of notes and coin and as banker for government. Over time, it became the practice in many countries for banks to entrust their surplus cash to the central bank, partly because the latter issued notes that could be bought by using part of these reserve balances. Similarly, keeping reserve balances with central banks became convenient, since the latter took on the responsibility of being the banker for government and since the purchase of government securities could be facilitated by tapping reserve balances held with the central bank. This practice of maintaining reserve balances with central banks developed further as central banks assumed the function of being settlement banks, that is the settlement of the clearance differences between banks.

1 Valuable assistance in the article's preparation by J A Hattingh of the Bank Supervision Department, as well as helpful comments and suggestions by other colleagues in the Reserve Bank are gratefully acknowledged. The views expressed are those of the author and do not necessarily reflect those of the South African Reserve Bank.

Central banks originally became the custodian of banks' cash reserves partly for prudential reasons, in other words, to protect the liquidity, solvency and safety of banks, and partly to safeguard their own financial position. The money-creating capacity of banks is also materially influenced by the amount of reserve balances that the banks keep with the central bank. Consequently, adjustments in the minimum required reserve balances of banks have been widely used as an instrument of monetary policy. Nevertheless, as countries placed more emphasis on market-related instruments of monetary policy during the 1980s, minimum reserve requirements did diminish in importance as a monetary-policy instrument. Since the 1980s there has, however, been a general tendency towards simplifying the calculation of reserve requirements and lowering reserve ratios.

Historical development

During the course of the early part of the 1900s, many of the central banks that were established then, were given legal powers to require commercial banks to keep reserve balances at the central banks. In other words, statutory provisions were introduced compelling commercial banks to maintain, with their respective central banks, minimum reserve balances depending upon the amount of the commercial banks' time and demand liabilities. In many countries, however, the practice by commercial banks of voluntarily keeping significant balances with central banks continued. Part of these balances served as working balances for clearing purposes, whereas the remainder served as minimum reserve balances. Commercial banks saw this arrangement as convenient and mutually advantageous.

Since 1921, the South African Reserve Bank has acted as custodian of the reserve balances of the country's banking institutions and, from November 1986, of the former building societies. This action was based on the legal minimum reserve requirements that were in force at different times. Until March 1993, such balances had to be maintained in terms of the Banks Act of 1990, or its precursors. In March 1993, it was decided that the minimum reserve requirements would be included in the requirements stipulated in section 10A of the South African Reserve Bank Act of 1989. This step further demonstrated that minimum reserve requirements were no longer seen primarily as a prudential measure, but as a monetary-policy instrument.

2 Non-interest bearing minimum reserve requirements constitute a 'tax' on the banking system and therefore act as an incentive for the non-bank intermediation of credit arrangements. During the course of the 1980s, minimum reserve requirements in South Africa were lowered on more than one occasion. The impact of these measures was small in the context of overall monetary control, but the measures did diminish the incentive for the disintermediation of credit.² The creation of a fairer competitive environment for the entire financial system was also facilitated in the sense that the lower minimum reserve ratios diminished the extent of discrimination between the financial institutions that were subject to the requirements and those that escaped such requirements.

In the 1990s, the minimum reserve requirements to be held by banks in South Africa were changed from a fixed proportion of the value of short-term liabilities to a fixed proportion of the value of total liabilities (see Annexure). Banks are, however, not required to hold reserves against their issued share capital and accumulated reserves. In February 1994, a new requirement came into effect. Initially, the minimum reserve balance was fixed at 1 per cent of total liabilities, but, in March 1995, this requirement was doubled to 2 per cent. No interest was paid on these balances. In addition, a supplementary reserve requirement of 1 per cent of banks' short-term liabilities was introduced in 1992, on which interest was paid by the Reserve Bank at a rate of 50 basis points below the weekly tender rate for Treasury bills.

As part of the changes made to the monetary-policy operational procedures and Reserve Bank accommodation practices during March 1998, an averaging provision in the application of the minimum reserve balances that banks have to maintain at the Reserve Bank was introduced. To simplify the current minimum reserve requirements, the Reserve Bank then introduced one reserve ratio of 2,5 per cent on the total liabilities of banks. This led to a slight reduction in the amount of the reserve balances held by banks, which did not have any serious effect, since interest was no longer paid on these balances. Banks, however, are allowed to draw funds from their reserve accounts to meet daily settlement shortages, as long as sufficient amounts are redeposited to meet the requirement on a monthly average basis.

Banks may at times place relatively small amounts of 'free' reserves with the Reserve Bank, in the form of current accounts. Such 'free' reserves serve as a first line of liquidity and can be used for purposes of acquiring banknotes for issuance to the public, and for effecting the settlement of claims between banks arising from the daily clearing of cheques. Often, however, the holding of an excess reserve balance is found to be incidental, rather than deliberate. Normally, banks will endeavour not to hold reserve balances with the Reserve Bank in excess of the minimum requirements. The reason is that the Reserve Bank, although allowed to pay interest on its deposit liabilities, has not yet done so. Therefore, banks normally prefer to invest excess cash balances in the interbank market, where such investments can readily be converted into cash balances with the Reserve Bank, as and when required.

Arguments for and against enforcement

The centralisation of reserve balances in a central bank is a source of strength for the banking system of a country, for a number of reasons. Firstly, when reserve balances are pooled in a central bank that has the responsibility for monitoring the stability of the banking system of a country, such reserves can be employed effectively to meet seasonal fluctuations, or during a financial crisis. For instance, if circumstances arise where a particular bank needs additional funds, the central bank can utilise part of the cash reserves of that bank to tide the bank over the period during which the circumstances prevail. Secondly, centralised reserve balances facilitate the role of the central bank in supplying currency to banks. Thirdly, centralised reserve balances provide a

central bank with a certain amount of funds with which it can operate, and also strengthen its financial position. Statutory provisions for banks to hold minimum reserve balances with central banks were introduced to secure such advantages of centralised cash reserves.

The present position is that, in many countries, irrespective of whether or not they have prescribed minimum reserve balances, commercial banks have grown accustomed to keeping most, if not all, of their cash requirements with the central bank. Commercial banks regularly draw currency from the central bank as required for operational purposes, and they deposit surplus currency as it accumulates.

The maintenance of minimum reserve requirements laid down by law is also a source of controversy. It is argued that such requirements promote the disintermediation of credit. The abolition of such requirements would allegedly create a more level playing field for the entire financial system. Low or zero cash-reserve ratios diminish or remove the discrimination between the financial institutions subject to the requirements and those that escape such requirements. In the South African context, the prudential need for minimum reserve balances has arguably become imperative as a result of the development of more sophisticated financial markets, the enhanced ability of banks to raise short-term funds, and the role of the Reserve Bank as the supervisor of the banking system.

In view of these drawbacks, some analysts argue that minimum reserve requirements should be abolished. The maintenance of such requirements can be supported, however, on the grounds that banks differ in one important respect from other financial institutions. The argument for the retention of minimum reserve requirements is linked to banks having access to assistance in the form of overnight loans at the discount or accommodation window of central banks.

Banks that are subject to minimum reserve requirements, will try to avoid tying up significant amounts of funds in central-bank balances earning no, or minimal, interest. In countries where legal minimum reserve requirements are not enforced, voluntary balances held by commercial banks with central banks could well decline over time as payment systems develop further. Instead of cash balances, an accommodation facility could be used. The banks would still require 'perfectly safe assets', for example Treasury bills, as collateral but would not need cash reserve balances with the central bank.

Payment of interest on reserve requirements

Originally, when central banks became the bankers of commercial banks, it was argued that no interest on such deposits should be paid for various reasons. Firstly, it was argued that it was important to be able to distinguish clearly the different natures of central banking and commercial banking. Secondly, it was argued that central banks should not compete with commercial banks for deposits and in the process, become a player in the market. When central banks did pay interest on these balances, an unhealthily competitive situation often developed between commercial banks and the central bank, particularly if the interest rates paid were market-related. Thirdly, few central banks could afford to pay interest to banks on their reserve balances. For many central banks, these reasons are still valid today.

In the case of South Africa, the De Kock Commission recommended that the Reserve Bank should be authorised to pay interest on reserve balances. This recommendation

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gave rise to the South African Reserve Bank Act being amended accordingly in 1984. The Reserve Bank, however, did not apply this new arrangement until 1992, and then only on a limited basis. Apart from considerations of profitability, the central bank did not regard itself as being in competition for deposits with private banks, causing the Reserve Bank to be somewhat reluctant to pay interest on such funds. Moreover, the burden on banks in meeting the minimum reserve requirements had diminished substantially, for the reasons set out below.

Firstly, the minimum reserve requirements of banks had been reduced on more than one occasion since 1963 (see Annexure), relieving the burden significantly. Secondly, in 1985, banks were granted a concession that they could include vault cash in their minimum reserve requirements, similarly relieving the burden. This concession represents a substantial advantage to the South African banking sector, since vault cash, for example, represented more than 50 per cent of the total minimum reserve requirement at the end of December 1999.

Thirdly, upon the introduction of the new accommodation procedures by the Reserve Bank in 1998, and in an effort to simplify the cash reserve requirements, a single reserve ratio (2,5 per cent of total liabilities) was announced. The supplementary requirement of 1 per cent of short-term liabilities was abolished in the process, implying that the Reserve Bank had to do away with the payment of interest on the reserve balances of banks. Banks were, however, compensated partially for the loss of interest that they had earned on part of their cash reserves before the above changes, because the Reserve Bank decided to issue South African Reserve Bank debentures for the management of bank liquidity. This implied that, instead of, for example, increasing minimum reserve requirements to reduce market liquidity, the Reserve Bank could issue debentures on which banks could earn a market-related interest rate.

The majority of the countries listed in Table 1 and Table 2 do not pay interest on the reserve balances of banks. The countries that form part of the Group of Seven (G7) that do pay interest on these balances, namely France, Germany and Italy, fall under the European Central Bank (ECB). The ECB takes responsibility for deciding on the reserve requirements of its member countries, as well as on the rate of remuneration, if any. Currently all ECB member countries' reserve balances are fully remunerated, with interest paid at the end of the maintenance period at the repurchase rate for that week. France and Germany did not pay interest on the reserve balances of banks before they joined the European Union (EU).

Of the countries listed as 'other countries', in Table 2, only Chile, India, Israel and Portugal pay interest on the reserve balances of banks. Portugal pays interest as a result of its membership of the EU (reserve balances were unremunerated before Portugal became an EU member), whereas Indian banks receive interest payment only on the reserves that they maintain in excess of the statutory minimum of 3 per cent specified by the Banking Regulation Act in India. Indian banks, therefore, earn interest on 5,5 per cent (8,5 per cent less 3 per cent) of their total reserve balances. Similarly, the Bank of Israel pays no interest on the reserve requirement of banks, but has been paying a below-market-interest rate on the deposits held in excess of their requirement since the middle of 1996. In Chile the central bank pays interest on both the local and foreign-currency reserves maintained by banks.

Table 1 Required minimum reserve ratios - G7 countries

	Required minimum reserve ratio	Interest paid on reserves	id on minimum product		Domestic credit extension		Required minimum reserves as percentage of gross domestic product		Required minimum reserves as pecentage of domestic credit extension			
	Per cent		Billio	ns*	Billic	ns*	Billio	ns*	Per	cent	Per (cent
			1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
United States United	3 to 10	No	171,4	189,8	8300,8	8759,9	5444,5	6082,5	2,1	2,2	3,1	3,1
Kingdom	0,15	No	2,8	3,0	803,9	843,7	973,4	1016,2	0,3	0,4	0,3	0,3
Germany	1,5 to 2,0	Yes	41,0	45,8	3667,2	3784,4	4137,6	4471,9	1,1	1,2	1,0	1,0
France	1	Yes	134,3	n.a	8224,9	8564,7	6671,0	6804,0	1,6	-	2,0	-
Italy	15	Yes	31444,5	31948,5	195070,0	203460,0	1123530,0	1224360,0	16,1	15,7	2,8	2,6
Japan	1,3	No	19310,7	19337,6	507852,0	495211,0	578790,0	583350,0	3,8	3,9	3,3	3,3
Canada	0	-	0,0	0,0	874,0	895,7	772,4	789,8	0,0	0,0	0,0	0,0
Russia	9 to 14	No	38,6	48,3	2521,9	2684,5	236,7	346,4	1,5	1,8	16,3	14,0

^{*} In each country's own currency

Sources: International Financial Statistics, March 2000 Annual Report of various central banks Kamin, Turner & Van't Dack, Central Banks, 1998 Davies, H., Bank of England, 1998

BIS, Payment of interest on minimum reserve balances, September 2000

Table 2 Required minimum reserve ratios - other countries

	Required minimum reserve ratio	Interest paid on reserves	Required minimum reserves		Gross domestic product		Domestic credit extension		Required minimum reserves as percentage of gross domestic product		Required minimum reserves as pecentage o domestic credit extension	
	Per cent		Billi	ons*	Billi	ons*	Billio	ons*	Per o	cent	Per	cent
			1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
Australia	0	-	0	0	549,3	579,1	427,3	477,2	0	0	0	0
Argentina Brazil	10 to 20 55	No	12,6	13,9	292,9	298,1	64,2	72,2	4,3	4,6	19,6	19,2
	(demand)	No	15,4	16,0	864,1	899,8	266,6	311,7	1,8	1,8	5,8	5,1
Chile	3,6 to 9,0	Yes	862,1	911,2	31774,0	33577,7	19886,8	21631,0	2,7	2,7	4,3	4,2
India	8,5	Yes	497,1	595,2	15635,5	n.a.	3640,0	4196,4	3,2	-	13,7	14,2
Israel	8	Yes	29,9	35,2	340,0	370,4	254,9	303,4	8,8	9,5	11,7	11,6
Singapore Switzerland	3	No	6,6	7,1	142,5	141,3	143,4	154,9	4,6	5,0	4,6	4,6
Switzeriariu	2,5 (short term)	No	2,6	2,8	371,6	380,0	625,7	635.7	0.7	0.7	0,4	0,4
Portugal	2	Yes	535,9	596,3	17859,0	19246.0	15812.6	19747,7	3,0	3,1	3,4	3,0
South Africa	2,5	No	5,8	6,5	683,7	740,6	420,1	490,1	0.8	0.9	1,4	1,3
South Africa: including												
vault cash	2,5	No	12,1	13,6	683,7	740,6	420,1	490,1	1,8	1,8	2,9	2,8

^{*} In each country's own currency

Sources: International Financial Statistics, March 2000 Annual Report of various central banks Kamin, Turner & Van't Dack, Central Banks, 1998 Davies, H., Bank of England, 1998 BIS, Payment of interest on minimum reserve balances, September 2000

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Minimum reserve requirements in South Africa compared with some other countries

Group of Seven countries

Canada is the only G7 country in which banks are no longer required to hold minimum reserve balances with the central bank. The United Kingdom, France, Japan, Germany and the United States of America all have relatively low percentage requirements. South Africa's current minimum reserve requirement of 2,5 per cent of total bank liabilities, excluding issued capital and reserves, is broadly similar to that of G7 countries. When the required reserves are expressed as a percentage of gross domestic product (GDP), Italy stands out with very high percentages of 16,1 in 1997 and 15,7 in 1998. These percentages reflect Italy's high required reserve ratio of 15 per cent. The other G7 countries (including Russia) all have fairly low ratios, with Japan's at the upper end of the range. South Africa compares fairly well with a ratio of 0,8 in 1997 and 0,9 in 1998. Without the vault-cash concession, these ratios would have been 1,8 per cent in both years, which is broadly consistent with the ratio in some of the G7 countries.

When the required minimum reserves are expressed as percentages of domestic credit extension, Russia had the highest ratio of 16,3 per cent in 1997 and 14,0 per cent in 1998. The other G7 countries all have relatively low ratios. The United Kingdom, with a required reserve ratio of 0,15 per cent and a ratio of required reserves to domestic credit extension of 0,3 per cent in both 1997 and 1998, was at the lowest end of the range. For South Africa the ratios were 1,4 per cent in 1997 and 1,3 per cent in 1998. Excluding the vault-cash concession, these ratios would have been 2,9 and 2,8 per cent, respectively, comparing favourably with countries such as the United States of America, Italy and Japan.

Other countries

Among other countries, Argentina, Brazil, Chile and Israel have relatively high percentage requirements. Portugal, with a ratio of 2 per cent, has a lower required reserve ratio than South Africa.

When the required reserves are expressed as a percentage of GDP, Israel (8,8 and 9,5) and Singapore (4,6 and 5,0) have the highest ratios, whereas the rest of the selected 'other countries' (including South Africa) compare well with the G7 countries. Expressed as a percentage of domestic credit extension, Argentina (4,0 and 3,7), Israel (11,7 and 11,6), Brazil (5,8 and 5,1) and Chile (4,3 and 4,2) have relatively high required reserves. South Africa (1,4 and 1,3) and Switzerland (0,4) again compare favourably with the ratios of the G7 countries.

Conclusion

In general, the evolution and application of minimum reserve requirements in South Africa compare well with international best practice.

Internationally, the payment of interest on minimum reserve balances cannot be seen as the norm, but rather the exception. This may be attributed partly to the fact that the burden on banks in meeting the minimum reserve requirement diminished as the required ratios were reduced over time. South Africa applied this practice to a limited extent between 1992 and 1998. The practice of allowing banks to include their

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vault cash in fulfilling their minimum reserve requirements, as currently applied in South Africa, is only practised to a fairly limited extent internationally, for example in Switzerland, Singapore and the United States of America. However, the proposed changes to the South African Reserve Bank Act, 1989 could reduce the amount of vault cash allowed to be included in banks' reserve requirements in future.

The South African Reserve Bank Amendment Bill, 2000, has gone through the Parliamentary process and is poised for promulgation during November 2000. The Amendment Bill empowers the Governor of the South African Reserve Bank to determine what percentage of banks' holdings of Reserve Bank notes and subsidiary coin may be taken into account for the purpose of calculating the minimum reserve balances required to be maintained by banks in their accounts with the Reserve Bank.

Finally, a comparison of the reserve ratio of 2,5 per cent in South Africa with that in the G7 and other selected countries proves that South Africa is not out of step with international practice, although it is stricter than some leading banking centres. The required reserves as a percentage of GDP and of domestic credit extension also compare favourably with those of the advanced economies, even when the vault-cash concession is not taken into account.

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Annexure: South African cash reserve requirements since 1969

Cash reserve requirements	Effective date	Reference	Remarks
8 per cent of short-term liabilities, interest-free with the Reserve Bank, plus additional 7 per cent of increase in short-term liabilities since 31 March 1968, also interest-free with the Reserve Bank.	Aug 1969	Government Gazette 2089, Notice 1004.	
An interest-bearing call deposit consisting of 25 per cent of the above-mentioned increase must be kept with the National Finance Corporation (NFC).			
Additional requirement of 7 per cent abolished.	30 Mar 1971	Government Gazette, 14 April 1974, Notice 600.	
25 per cent interest-bearing deposit with the NFC is abolished and replaced with a supplementary cash requirement, amounting to 10 per cent of all short-term liabilities, to be held with the NFC.	1 Nov 1972	Government Gazette 3697, 1 November 1972, Notice R2008.	
Interest-bearing deposit with the NFC lowered to 7 per cent.	21 Apr 1973	Government Gazette, 11 April 1973, Notice 617.	
Increase in additional requirements and new classification of banks. Class A (Total assets exceeding R800 million): 7 per cent of short-term liabilities, interest-free with the Reserve Bank. 5 per cent of medium-term liabilities, interest-bearing with the NFC.	11 Apr 1980	Government Gazette 6940, 11 April 1980, Notice 723.	The basic requirement of 8 per cent of short-term liabilities, interest-free with the Reserve Bank, still exists. Together with the basic requirement, the additional requirements apply as
Class B (Total assets less than R800 million): 7 per cent of short-term liabilities, interest-free with the Reserve Bank. 3 per cent of medium-term liabilities, interest-bearing with the NFC.			indicated.
Increase in additional requirements Class A: 10 per cent of short-term liabilities, interest-free with the Reserve Bank. 3 per cent of medium-term liabilities, interest-free with the Reserve Bank. 2 per cent of medium-term liabilities, interest-bearing with the NFC. Class B: 7 per cent of short-term liabilities, interest-free with the Reserve Bank. 3 per cent of medium-term liabilities, interest-free with the Reserve Bank. 3 per cent of medium-term liabilities, interest-bearing	12 Sep 1980	Government Gazette 7214, 12 September 1980, Notice 1905.	
with the NFC. Decrease in additional requirements	31 Mar 1982	Government	
Class A: 4 per cent of short-term liabilities, interest-free with the Reserve Bank. 3 per cent of medium-term liabilities, interest-free with the Reserve Bank. 2 per cent of medium-term liabilities, interest-bearing with the NFC.	Jd. 1732	Gazette 8147, 31 March 1982, Notice 699.	
Class B: 4 per cent of short-term liabilities, interest-free with the Reserve Bank. 3 per cent of medium-term liabilities, interest free with the Reserve Bank. 3 per cent of medium-term liabilities, interest-bearing with the NFC.			

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Cash reserve requirements	Effective Date	Reference	Remarks
Decrease in additional requirements All banks: 2 per cent of medium-term liabilities, interest-free with the Reserve Bank. 2 per cent of medium-term liabilities, interest-bearing with the NFC.	27 Sep 1982	Government Gazette 8406, 8 October 1982, Notice 2169.	All banks are treated equally.
Additional requirements change to basic requirements Basic requirements: 8 per cent of short-term liabilities, interest-free with the Reserve Bank. 2 per cent of medium-term liabilities, interest-free with the Reserve Bank. 2 per cent of medium-term liabilities, interest-bearing with the NFC.	30 Sep 1983	Government Gazette 8906, 30 September 1983, Notice 2149.	
The requirement for holding 2 per cent of medium-term liabilities with the NFC is abolished.	15 Mar 1984	Government Gazette 9140, 23 March 1984, Notice 603.	
Banks' vault cash will qualify as part of required cash reserves.	31 Jul 1985	Government Gazette 9904, 30 August 1985, Notice 1942.	From the effective date interest-free cash reserves can be held in the form of any combination of vault cash and deposits in an interest-free reserve account with the Reserve Bank.
Decrease in basic requirements 5 per cent of short-term liabilities, interest-free. 2 per cent of medium-term liabilities, interest-free.	1 Apr 1986	Government Gazette 10184, 11 April 1986, Notice 675.	
Decrease in basic requirements Abolishment of basic requirement of 2 per cent of medium-term liabilities, interest-free, whereas the basic requirement against short-term liabilities is lowered to 4 per cent.		Government Gazette 3092, 22 March 1991, Notice 632.	At the same time the definition of short-term liabilities is modified to include certain types of repurchase agreements and other liabilities, previously not included.
The introduction of an additional requirement of 1per cent against short-term liabilities, kept in an interest-bearing account with the Reserve Bank.	21 Jul 1992	Government Gazette 14161, 15 July 1992, Notice 67/1992.	
Decrease in basic requirements The basic requirement against short-term liabilities is immediately lowered from 4 per cent to 3 per cent, with a further programme to lower the basic requirement against short-term liabilities to 1,5 per cent and to increase the requirement against all other liabilities from 0 per cent to 1,5 per cent (phasing-in period of 15 months).	26 Apr 1993	Government Gazette 14763, 28 April 1993, Notice R696.	The 1 per cent additional requirement against short-term liabilities, interest-bearing with the Reserve Bank, is maintained.

Gazette 15060, tional requirement	Cash reserve requirements	Effective Date	Reference	Remarks
The basic minimum reserve balance requirement is increased from 1 per cent to 2 per cent. Deductions against total liabilities are the average daily amount of: Loans received under repurchase agreements or granted under reseal agreements with the Reserve Bank and the Corporation for Public Deposits (CPD); Loans received under repurchase agreements in liquid assets, other than (i) and (ii), for readily marketable interest-bearing securities of public sector bodiles; varied agreements, other than (i) to (iii) above; Loans received under matched repurchase agreements, other than (i) to (iii) above; in readily marketable interest-bearing securities of the lot (iv) (iii) palowe; in readily marketable interest-bearing securities of public sector bodiles; and agreements, other than (ii) to (iii) above; in readily marketable interest-bearing securities of public sector bodiles, approved by the Registrar. The following deductions against liabilities (of repurchase agreement funding) for calculating the cash reserve requirements will no longer apply; Loans received under repurchase agreements or granted under respace agreements with the Reserve Bank and the CPD. Loans received under repurchase agreements in liquid assets. Loans received under repurchase agreements for readily marketable lixed interest-bearing securities of public sector bodies. The only deduction against liabilities (of repurchase agreement funding) for the purposes of calculating the minimum cash reserve requirements, is: Loans received under matched repurchase agreements with a term of 31 days and shorter with Government loan stock and Treasury bills as underlying security. The basic minimum reserve balance requirement (percentage) is determined as 2.5 per cent of total liabilities is determined as 2.5 per cent of total liabilities as adjusted.	Final percentage of 1,5 per cent lowered to 1 per cent of all liabilities. The immediate lowering of the 2,5 per cent of short-term liabilities which would have been effective under the previous programme to 1,5 per cent with a further lowering by 0,1 per cent each month to reach 1 per cent by January 1994. The continuation of the monthly 0,1 per cent increase from the existing 0,5 per cent of all other	Aug 1993	Gazette 15060, 12 August 1993,	bearing with the Reserve Bank, is
chase agreement funding) for calculating the cash reserve requirements will no longer apply: i Loans received under repurchase agreements or granted under resale agreements with the Reserve Bank and the CPD. ii Loans received under repurchase agreements in liquid assets. iii Loans received under repurchase agreements for readily marketable fixed interest-bearing securities of public sector bodies. iv Loans received under matched repurchase agreements. The only deduction against liabilities (of repurchase agreement funding) for the purposes of calculating the minimum cash reserve requirements, is: i Loans received under repurchase agreements with a term of 31 days and shorter with Government loan stock and Treasury bills as underlying security. The basic minimum reserve balance requirement (percentage) is determined as 2,5 per cent of total liabilities as adjusted. Apr 1998 Government Gazette 18809, 1 April 1998, Notice 497. The supplementary interest-bearing cash-reserve requirement of 1 per cent of short-term liabilities is	The basic minimum reserve balance requirement is increased from 1 per cent to 2 per cent. Deductions against total liabilities are the average daily amount of: i Loans received under repurchase agreements or granted under resale agreements with the Reserve Bank and the Corporation for Public Deposits (CPD); ii Loans received under repurchase agreements in liquid assets, other than (i) above; iii Loans received under repurchase agreements, other than (i) and (ii), for readily marketable interest-bearing securities of public sector bodies; iv Loans received under matched repurchase agreements, other than (i) to (iii) above, in readily marketable interest-bearing securities; v Amounts owing by banks and mutual banks. Deductions against short-term liabilities are the average daily amount of: i Short-term loans received under matched agreements in readily marketable interest-bearing securities other than those of public sector	Feb 1995	<i>Gazette</i> 16315, 15 March 1995, Notice 425 and	
(percentage) is determined as 2,5 per cent of total liabilities as adjusted. Gazette 18809, 1 April 1998, Notice 497. The supplementary interest-bearing cash-reserve requirement of 1 per cent of short-term liabilities is Government Gazette 18810,	chase agreement funding) for calculating the cash reserve requirements will no longer apply: i Loans received under repurchase agreements or granted under resale agreements with the Reserve Bank and the CPD. ii Loans received under repurchase agreements in liquid assets. iii Loans received under repurchase agreements for readily marketable fixed interest-bearing securities of public sector bodies. iv Loans received under matched repurchase agreements. The only deduction against liabilities (of repurchase agreement funding) for the purposes of calculating the minimum cash reserve requirements, is: i Loans received under repurchase agreements with a term of 31 days and shorter with Government loan stock and Treasury bills as		Circulars 11/96	
ννιτιαιανντι. ΤΑΡΙΙΙ 1770,	The basic minimum reserve balance requirement (percentage) is determined as 2,5 per cent of total liabilities as adjusted. The supplementary interest-bearing cash-reserve requirement of 1 per cent of short-term liabilities is	Apr 1998	Gazette 18809, 1 April 1998, Notice 497. Government Gazette 18810,	

Source: Money and banking statistics of South Africa 1973–1992. Supplement to the South African Reserve Bank Quarterly Bulletin. September 1993.