



## Note on the revision of monetary aggregates

by Money and Banking Division<sup>1</sup>

<sup>1</sup> The Reserve Bank wishes to express its sincere appreciation to all the reporting banks for their co-operation in furnishing the data used for the revisions.

<sup>2</sup> Removal of duty on negotiable certificates of deposit was only announced in the 2004/05 Budget and will be effected on 1 April 2004.

With the release of this *Quarterly Bulletin* the South African Reserve Bank introduces revised values of the broader monetary aggregates. This note discusses the background to, reasons for and the impact of the revision of the monetary aggregates released by the Bank.

In the 2003/04 Budget the removal of stamp duty on fixed deposits was announced. In practice promissory notes were exempted from stamp duty, while negotiable certificates of deposit remained subject to such duty<sup>2</sup>. In taking advantage of the cost implications of this announcement, banks have increased their issues of negotiable promissory notes (NPNs) at the expense of negotiable certificates of deposit (NCDs). These instruments, although not absolutely identical, are extremely close substitutes.

Prior to the removal of stamp duty on promissory notes, the amount of such notes issued in South Africa was fairly limited. Both the amount in issue and the secondary market trading in NPNs rose sharply following removal of the stamp duty.

South Africa's current definition of broad money (M3) includes NCDs issued by banks and held by non-bank domestic private-sector parties, but does not include NPNs, since the focus is on *deposits*. Consequently, the increased substitution between the two instruments in favour of NPNs led to the level of deposits at banks as measured by M3, reduced by the magnitude of this substitution effect. After careful observation of this trend and consideration of the extreme closeness of the two instruments, it was concluded that in substance the shift to NPNs does not signal a true reduction in the public's underlying holdings of monetary deposits. Although not technically deposits in a narrow legal sense, NPNs were deemed close enough substitutes to deposits to warrant inclusion in the monetary aggregates.

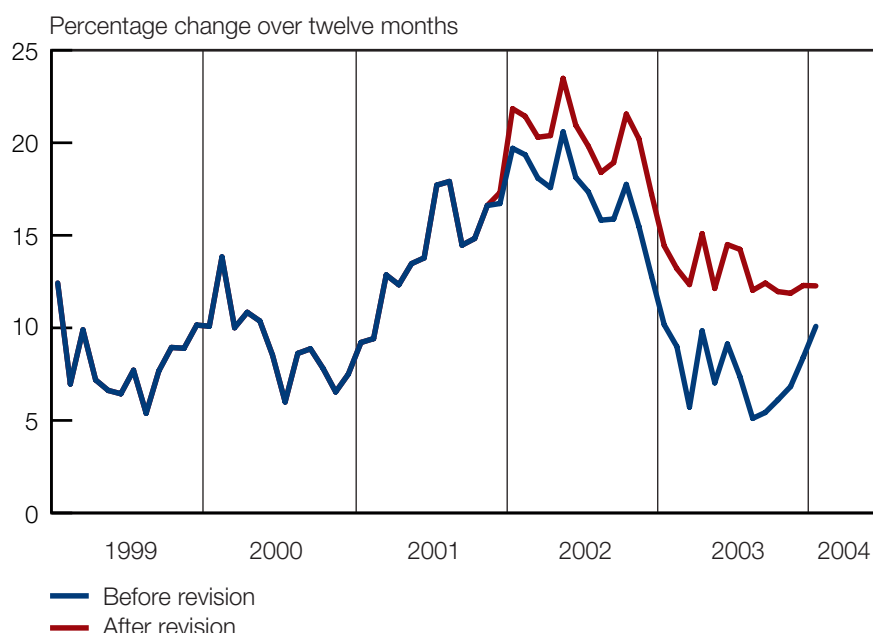
To obtain the building block data necessary to include NPNs held by non-bank private-sector domestic parties in M3, banks were requested to revise their balance sheet data in order to correctly identify the holding sectors of NPNs in South Africa's financial statistics. The revisions were made from December 2001 up to January 2004.

The NPNs that were reclassified have all along formed part of *other liabilities* in the monetary analysis. Focusing on data at the end of December 2003 to illustrate the magnitude of the revision, it may be noted that a total amount of around R74 billion in NPNs was taken out of *other liabilities* and reclassified as part of deposits with banks. Of the total amount of NPNs reclassified, around 70 per cent was issued to non-bank domestic private-sector parties; around 20 per cent was issued to other banks; and around 10 per cent was in the books of the Public Investment Commissioners and are classified as part of the government sector.

Following the revisions, the average twelve-month growth rate in M3 for 2002 amounted to 20,4 per cent against 17,4 per cent previously. For 2003 this rate was similarly raised from 7,5 per cent to 13,0 per cent. A graphical representation of the divergence between the revised and the original growth rates in M3 is provided in Graph 1. It is evident from the graph that twelve-month growth in M3 accelerated during 2002 and

reached an upper turning point of 23,5 per cent in May as opposed to 20,6 per cent as previously reported. Also clear from the graph is that growth in M3 remained above the 10 per cent mark throughout 2003. For the latest data point – January 2004 – the revised twelve-month growth rate is 12,3 per cent against an original rate of 10,1 per cent.

**Graph 1: Growth in M3**



Most of the NPNs issued were in the three-to-six-month maturity area. M1A and M1 were not affected by the revision, but M2 and M3 were both revised upward to a significant extent. The divergence between the revised and the original numbers for the average twelve-month growth in M2 amounted to 2 percentage points for 2002 and 5,1 percentage points for 2003, broadly similar to the divergence relating to M3.

The impact of the revisions on the statistical counterparts of change in M3 during 2003 is presented in the table below.

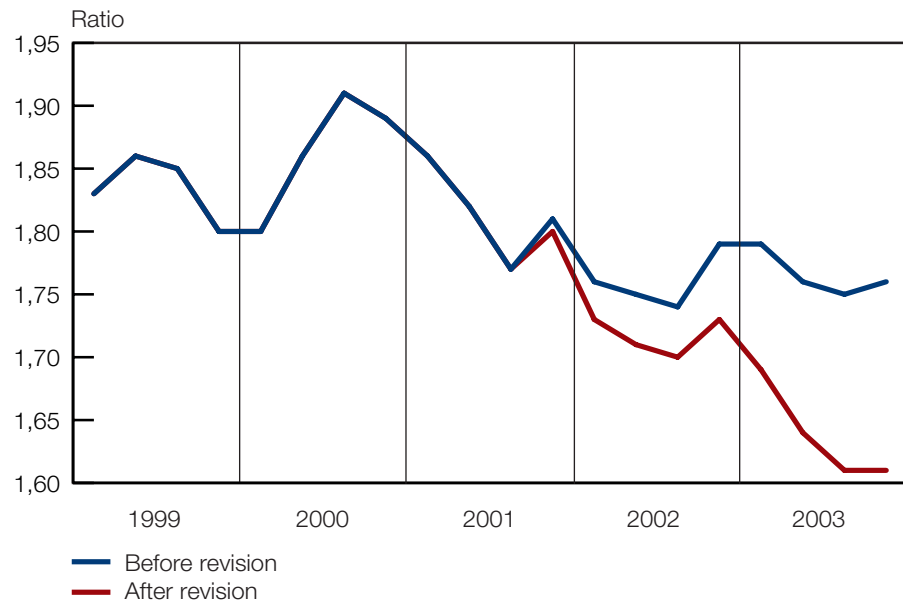
### Counterparts of change in M3

R billions

| Counterparts                                      | 2003            |                |
|---|-----------------|----------------|
|   | Before revision | After revision |
| Net foreign assets.....                           | 61,7            | 61,7           |
| Net claims on the government sector.....          | -19,2           | -19,2          |
| Gross claims.....                                 | 19,3            | 19,3           |
| Government deposits (+ decrease; - increase)..... | -38,5           | -38,5          |
| Claims on the private sector.....                 | 130,8           | 130,8          |
| Net other assets and liabilities .....            | -117,1          | -87,5          |
| <b>Total change in M3.....</b>                    | <b>56,2</b>     | <b>85,8</b>    |

The revisions to the level of deposits of the non-bank domestic private-sector parties also affected the income velocity of circulation of M2 and M3. The impact of the revision on the income velocity of circulation of M3 is presented in Graph 2. From the graph it is clear that the revised income velocity of M3 declined significantly below the original data and reached low values of 1,61 in both the third and the fourth quarters of 2003, suggesting the availability of ample liquidity in the economy.

Graph 2: Income velocity of circulation of M3



For ease of comparison, an addendum is provided on the following page showing the original and revised data for M2 and M3.

## Addendum

### Original and revised data for M2 and M3

R billions

| Period |           | M2              |                | M3              |                |
|--------|-----------|-----------------|----------------|-----------------|----------------|
|        |           | Before revision | After revision | Before revision | After revision |
| 2001:  | Jan ..... | 459,6           | 459,6          | 505,9           | 505,9          |
|        | Feb ..... | 467,3           | 467,3          | 515,1           | 515,1          |
|        | Mar ..... | 479,6           | 479,6          | 529,3           | 529,3          |
|        | Apr ..... | 479,3           | 479,3          | 529,7           | 529,7          |
|        | May ..... | 479,3           | 479,3          | 533,0           | 533,0          |
|        | Jun ..... | 478,8           | 478,8          | 538,2           | 538,2          |
|        | Jul ..... | 485,7           | 485,7          | 546,8           | 546,8          |
|        | Aug ..... | 498,2           | 498,2          | 559,2           | 559,2          |
|        | Sep ..... | 496,9           | 496,9          | 561,7           | 561,7          |
|        | Oct ..... | 497,9           | 497,9          | 560,6           | 560,6          |
|        | Nov ..... | 510,9           | 510,9          | 576,3           | 576,3          |
|        | Dec ..... | 532,7           | 535,1          | 592,5           | 595,5          |
| 2002:  | Jan ..... | 545,0           | 551,2          | 605,6           | 616,4          |
|        | Feb ..... | 552,7           | 558,8          | 614,8           | 625,5          |
|        | Mar ..... | 564,9           | 571,6          | 625,0           | 636,8          |
|        | Apr ..... | 558,7           | 567,2          | 622,8           | 637,7          |
|        | May ..... | 573,3           | 581,8          | 642,7           | 658,2          |
|        | Jun ..... | 560,6           | 568,0          | 635,8           | 651,0          |
|        | Jul ..... | 556,5           | 563,7          | 641,6           | 655,1          |
|        | Aug ..... | 568,2           | 577,2          | 647,7           | 662,1          |
|        | Sep ..... | 574,9           | 585,7          | 650,9           | 668,1          |
|        | Oct ..... | 584,2           | 597,8          | 660,1           | 681,4          |
|        | Nov ..... | 590,5           | 610,1          | 665,5           | 692,8          |
|        | Dec ..... | 597,6           | 618,7          | 668,2           | 698,0          |
| 2003:  | Jan ..... | 601,1           | 626,2          | 667,2           | 705,4          |
|        | Feb ..... | 602,0           | 628,4          | 670,0           | 708,1          |
|        | Mar ..... | 594,5           | 632,7          | 660,8           | 715,3          |
|        | Apr ..... | 617,8           | 654,8          | 684,1           | 733,9          |
|        | May ..... | 624,1           | 660,8          | 687,9           | 738,0          |
|        | Jun ..... | 627,1           | 665,6          | 693,9           | 745,4          |
|        | Jul ..... | 621,1           | 668,8          | 688,7           | 748,4          |
|        | Aug ..... | 617,8           | 668,7          | 680,8           | 741,7          |
|        | Sep ..... | 624,1           | 678,9          | 686,3           | 751,0          |
|        | Oct ..... | 639,5           | 692,2          | 700,4           | 762,8          |
|        | Nov ..... | 646,1           | 699,5          | 710,9           | 775,1          |
|        | Dec ..... | 662,9           | 713,2          | 724,3           | 783,8          |
| 2004:  | Jan ..... | 672,0           | 716,7          | 734,4           | 791,9          |