# CONSOLIDATED GOVERNMENT AND RESERVE BANK ACCOUNTS

## INTRODUCTION

The Government has an impact on the economy in a variety of ways. For instance, it stakes a claim on the real resources of the economy in the form of the people it employs and the plant, buildings and equipment with which they work. The Government also redistributes income within the economy through the tax system and through social welfare and other transfer payments. Thirdly, the Government has an important influence on financial markets through the way it finances its activities.

A variety of information is published from which it is possible to analyse the Government's activities. The most commonly used source of financial information on Government's economic activities is table number 2 in the Budget headed 'Financing of Government Expenditure'. This table sets out on the basis of net cash flows, the expenditure items, revenue items, and the amount to be financed by borrowing including a breakdown of the borrowing into borrowing in New Zealand and borrowing overseas. The balancing item, the cash surplus or deficit, represents the change in the balance of the Public Account held at the Reserve Bank.

However, the information provided in this table is not suitable for all analytical purposes. For instance, on the expenditure side it does not differentiate between those expenditures which represent a claim on resources and those which are transfers. Additionally, some of the outlays classified as expenditure comprise loans made to private sector enterprises. Accordingly, to gauge the Government's contribution to, and claim on the economic output of the nation, it is better to refer to the analysis of the public accounts on a national accounting basis prepared by the Department of Statistics. (See appendix 2 to Monthly Abstract of Statistics April 1983 for recent data.)

The Budget table 2 information is more relevant for assessing the impact of the Government on financial markets, although it is not entirely adequate for this purpose since it gives an incomplete picture of Government's financing transactions. To understand fully the Government's influence on financial markets, and the nature of the Government's financing transactions more generally, it is necessary to take account of the nature of the financing transactions undertaken between the Government and the Reserve Bank. It is this area which is the focus of this article.

## GOVERNMENT — RESERVE BANK FINANCING TRANSACTIONS

The Reserve Bank does not come within the ambit of the formal public accounts, and thus is not covered by Budget table 2. However, its special relationship with the Government, which stems from its role as the Government's banker, means that for at least some purposes, the Bank should be considered as if it were part of the Public Account. In its capacity as the Government's banker, the Reserve Bank undertakes borrowing transactions on behalf of the Government, and on-lends to the Government. In other areas it makes loans on behalf of the Government which are effectively funded by the Government. In essence the Bank acts as a financial intermediary.

One of the more important implications of this role that the Bank plays, in terms of Budget table 2, is that some of the financing transactions undertaken by the Government are related not to the Government's own deficit, but to the financing of the balance of the Reserve Bank's lending and borrowing transactions with the private sector. The process by which this occurs is as follows: When the Reserve Bank funds a private sector customer (say, to a producer board on account of SMPs), it injects cash into the private sector. To be more specific, it provides the producer board with a cheque drawn on the board's loan account at the Reserve Bank. The producer board on presenting the cheque at its trading bank is credited with the funds, and the trading bank on producing the same cheque to the Reserve Bank is likewise credited with funds, i.e. the Reserve Bank has accepted a deposit in the form of the funds credited to the trading bank's current account held at the Reserve Bank. The banks, however, do not leave large balances in their current accounts at the Reserve Bank because balances in these accounts earn no interest. Rather, they typically invest in government securities — usually short-dated securities such as Treasury bills. These can be acquired directly from the Government as new issue securities in which event the banks' cash is transferred from their accounts held at the Reserve Bank to the Government's account held at the Reserve Bank, i.e. the Public Account. Alternatively the securities can be purchased from the Reserve Bank's portfolio. In this case there is no immediate direct effect on the Public Account, but as the Reserve Bank needs to maintain a portfolio of government securities for ongoing trading needs, it usually has to purchase additional securities from the Government, at which time funds are credited to the Public Account.

The end result of the above transactions, in both cases, is that the Reserve Bank balance sheet shows an advance to the producer boards on the assets side and a deposit from the Government on the liabilities side. Whilst the transactions are not arranged as such, the effect is that the Bank funds the private sector (the producer boards) and borrows from the Government. At the same time, the Government borrows from the private sector — in this case from the trading banks who have invested in government securities. These government borrowing transactions appear in Budget table 2 under the heading 'Borrowing in New Zealand' and are shown as financing the fiscal deficit. As will be clear from the preceding description of the transactions involved, however, the Government borrowing finances the Reserve Bank's lending rather than the fiscal deficit. Indeed, the Reserve Bank relies on the Government to undertake virtually all of its domestic funding. It does not fund itself from domestic sources other than through the issue of its bank notes. The bank note issue, however, cannot be considered as contributing to the overall borrowing requirement in anything other than a narrow technical sense, in that it represents outright monetary financing and if extensively relied on would undermine monetary policy objectives.

Given that the net domestic lending transactions of the Reserve Bank do not appear in Budget table 2 as an item of government expenditure, the effect of the above funding arrangements for the Reserve Bank is that the fiscal deficit as such appears to be over financed when the Reserve Bank is a net lender and vice versa. To illustrate, in the year ended March 1983 when the Reserve Bank lent nearly $900 million (net) to the domestic private sector, the fiscal deficit was 'over financed' by nearly $560 million — this being the cash surplus in the Public Account held at the Reserve Bank for the year. (The bulk of this surplus, $554 million, did not appear in the Public Account as such on balance day, but was held in a term deposit at the Reserve Bank and accounted for in Budget table 2 as an application of funds to the purchase of an investment.) The difference between the Reserve Bank's financing requirement on account of its net private sector transactions and the increase in the deposit balances held by the Government with the Bank was represented by a reduction in the Bank's holdings of government securities over the year. This reflects, inter alia, that at least some of the cash injection resulting from the Reserve Bank's lending was used by the trading banks to purchase government securities from the Reserve Bank's portfolio, and that this portfolio was not fully replenished.

The preceding discussion has focused on the role of the Reserve Bank as an intermediary which lends on behalf of the Government and in return is funded by the Government. In addition to these functions, the Bank on occasions borrows overseas on behalf of the Government and, indirectly, on-lends to the Government.

Considering again the mechanics of the arrangements the following steps are usually involved. Firstly, the Bank receives the proceeds of its overseas borrowings in the form of foreign currency assets. In the normal course of events it holds these assets in its portfolio of liquid foreign reserves pending forthcoming sales of foreign exchange to the private sector. When the foreign exchange is sold to the private sector, it is usually necessary for government securities of one form or another to be sold back to the Bank. This is the usual means through which the banks obtain the funds required to clear their accounts at the Reserve Bank, which will have been debited for the amount of foreign exchange they have purchased for their customers. At this point the Bank has effectively switched its foreign investments for government security investments. In other words the Bank has borrowed overseas and lent to the Government.

The implication of these Reserve Bank external borrowing arrangements for Budget table 2 is essentially that some of what is labelled as internal borrowing is effectively external borrowing. In other words, to the extent that the Reserve Bank holds internal government securities as a counterpart to the external borrowings on the liabilities side of its balance sheet, it would perhaps be more meaningful to reclassify the amounts concerned in Budget table 2 as external borrowings.

## CONSOLIDATED ACCOUNTS

The description of the financing transactions undertaken between the Government and the Reserve Bank as set out above indicates that for monetary analysis neither the Government's accounts nor the Reserve Bank accounts can be considered independently from the other. Reserve Bank transactions with both the domestic private sector and the external sector usually have implications for the government accounts and vice versa. This being the case, it would seem sensible to bring the two sets of accounts together if a complete picture of government and Reserve Bank financing transactions is to be provided.

Before such a consolidation can be prepared, however, it is necessary to ensure that the two sets of accounts themselves are prepared on a consistent basis. In this regard, three issues need to be addressed.

First, the Reserve Bank accounts are prepared according to the rules of double entry accrual accounting. The government accounts, on the other hand, are prepared simply as a cash book. Ideally, both sets of accounts should be prepared according to the same accounting rules before being consolidated. However, for the purposes of this article, the reconstruction of the Reserve Bank's accounts to put them on a cash basis (it would not be possible to convert the government accounts to accrual accounts owing to a lack of source information) has been considered to be unnecessary. As accrual entries on one side of the Reserve Bank's books are matched by accrual entries on the other side of the books, then the accrual dimension to the Reserve Bank accounts does not pose any problems since the net cash effect of the accrual entries in the Reserve Bank accounts will always be nil.

The second issue relates to different accounting treatments in the Reserve Bank accounts as compared with the government's accounts for the same transactions. The major item involved here is the 'Reserve Bank indemnity'. This item represents the amount paid by the government to the Reserve Bank to indemnify the Bank against losses incurred on foreign currency transactions undertaken on behalf of the Government. In recent years the Government has settled the Bank's claim under this indemnity by issuing the Bank with special government securities which have been contemporaneously redeemed. In the Public Accounts these transactions have been recorded as a receipt in the Loans Account and as a loan repayment in both the Loans Account and the Loans Redemption Account. These entries result in a net repayment of internal borrowings being shown, and this is the way in which the item has been recorded in Budget table 2. In the Reserve Bank balance sheet, on the other hand, the relevant foreign exchange losses incurred by the Bank are recorded as a claim on the Treasury separate from the Bank's government security investments, which is discharged each year by way of a payment received from the Public Account. The Bank's holdings of government securities are not affected. While an accounting justification can be provided for each of these treatments, it is not possible to consolidate the two sets of accounts without adopting a uniform accounting treatment. For the purposes of the consolidation exercise described in this article, the Reserve Bank accounting treatment has been adopted.

The third issue concerns the basis on which financing transactions are recorded in Budget table 2, and related to this, the basis on which government security holdings are recorded on the Bank's balance sheet. Given that the Bank's holdings of government securities is one of the two points at which the two sets of accounts interface (the other being the balances of the Public Accounts held at the Reserve Bank) it is important that this item should be consistently valued and accounted for in both sets of accounts before the consolidated accounts are prepared. This requires that adjustments be made to both the Budget table 2 accounts and the Reserve Bank's accounts. In Budget table 2, financing transactions are shown on a net cash basis, i.e. after discounts/premia and loan raising expenses have been allowed for. For the purposes of the consolidation exercise, and in terms of working towards an overall gross borrowing requirement, a preferred approach is to include expenses related to financing transactions in the amount to be financed. Adjusting the Budget table 2 deficit for this results in the borrowing transactions being presented on the basis of the nominal 'face value' amounts. This however still does not correspond with the way in which government securities are recorded in the Reserve Bank's balance sheet where market values are used. Accordingly, for this exercise the Bank's accounts have also been adjusted to show government security holdings at nominal valuation (with corresponding adjustments to the Bank's revenue reserves accounts).

Set out as tables A and B[1] are the Government accounts and the Reserve Bank's accounts recast in a format to facilitate consolidation. The recast Budget table 2 accounts reflect the adjustments described above for the Reserve Bank indemnity payment and for the reclassification of loan charges and expenses and discounts on loan raisings. The deficit derived after making these adjustments (along with some other minor adjustments stemming from a reclassification of, inter alia, changes in investment balances) corresponds with the 'deficit on operations' as shown in table 2 of the report of the Controller and Auditor-General on the Public Accounts for the year ended 31 March 1984 [page 75 of Parliamentary Paper B1 (part II)]. The recast Reserve Bank accounts are based, subject to the adjustments to government security valuations mentioned above, on the table headed 'Reserve Bank activities' as set out on page 19 of the Report and Statement of Accounts of the Reserve Bank for the year ended 31 March 1984 (page 19 of Parliamentary paper B16).

The consolidation of the recast Government and Reserve Bank accounts has been effected by substituting for those Reserve Bank items appearing in the financing transactions of budget table 2 the counterpart items from the Bank's balance sheet. The results of this exercise are set out in table C.

## DISCUSSION

While the consolidation exercise is merely an accounting one, it nevertheless throws up information not apparent in the individual sets of accounts. This has significant implications for how the information contained in the separate sets of accounts should be used for assessing the impact of the Government and Reserve Bank on monetary conditions.

First, the consolidated accounts make it clear that the amount to be financed by borrowing is the combined Government and Reserve Bank funding requirement. Moreover, they, together with an understanding of the institutional arrangements for meeting this combined funding requirement, suggest that it is not possible to identify separately how the fiscal deficit and the Reserve Bank's activities are financed. There is a combined funding requirement which is met through a combination of Government and Reserve Bank loan raisings.

Secondly, the consolidated accounts demonstrate that the Reserve Bank is not (subject to some minor qualifications) an alternative source of domestic finance for the Government, at least not under existing institutional arrangements. Fiscal deficits can ultimately be financed only by borrowing from the domestic economy outside of the Reserve Bank or by borrowing from overseas. While technically the Government borrows from the Reserve Bank when the Bank borrows overseas on its behalf, this borrowing is really an item of external financing. A corollary is that to the extent that the net internal borrowing figures in Budget table 2 include borrowing from the Reserve Bank, internal borrowing will generally be overstated and external borrowing understated.

The only situation in which the Government can borrow from the Reserve Bank to finance its deficit arises where the cash injections through the Government accounts are taken up as Reserve Bank notes or cash deposits at the Reserve Bank. But given current institutional arrangements and the range of short-term government security investment facilities currently available, the Government does not use borrowing from the Reserve Bank or the 'printing of money' as the residual means of financing its deficits. It is always able to raise the money through its own debt issues to the domestic banking system. It does not, however, necessarily follow that deficits are always financed in an appropriate manner. When the banking system absorbs government injections in the form of liquid government securities then similar monetary policy implications arise as would have occurred had the Government borrowed from the Reserve Bank. If, however, Government wished to maintain firm monetary conditions then it would need to adopt a public debt policy that sold illiquid debt.

Thus, the consolidated accounts show how the overall combined funding requirement (from the fiscal deficit and the Reserve Bank's net lending activities) will always be financed irrespective of the borrowing programme the Government adopts. There cannot be any under-financing or over-financing of the combined deficit. In short, any excess of government expenditure over revenue, or Reserve Bank lending over its domestic deposit raisings, will result in official borrowings of one form or another. Apart from the small amount of the deficit injection taken up in the form of an increase in Reserve Bank notes on issue, virtually the whole of the amount to be financed is at least initially absorbed into Government securities. This happens automatically.

In terms of monetary policy the main concern is that the borrowing should be on such terms and conditions as to maintain firm monetary conditions. This requires that the interest rates on the securities offered for sale must be sufficiently attractive for the domestic private sector to hold the securities on a voluntary basis and beyond just a temporary period pending the application of the funds to an increase in private expenditures. If this is not achieved, then the funds injected into the economy through the combined deficit will fuel an increase in domestic expenditures and lead to a deterioration in the external accounts. This, in turn, will result in internal government debt securities being sold back to the Bank and a corresponding increase in the official overseas borrowing requirements. These considerations apply as much to borrowing to fund Reserve Bank lending as they do to borrowing to fund Government deficits.

[1] The tables in this article should not be treated as definitive, either as to format or to content. Work is continuing on the subject of the consolidation and it is likely that some presentational changes will be made when the tables are published regularly in the *Bulletin*. In addition, there have been some changes in the approach taken to some Budget tables made in the 1984 Budget — these changes have not been taken account of in this article, which was written before the 1984 Budget was brought down.

## TABLE A
## RE-FORMULATED BUDGET TABLE 2

| ($ million) | Years Ended 31 March 1980 | 1981 | 1982 | 1983 | 1984 |
|---|---|---|---|---|---|
| 1. **EXPENDITURE** | | | | | |
| 2. Administration | 692.6 | 785.8 | 914.2 | 832.5 | 841.1 |
| 3. Foreign relations | 451.5 | 577.9 | 719.9 | 808.2 | 834.1 |
| 4. Developments of Industry | 714.2 | 797.1 | 1,391.4 | 1,820.9 | 1,997.8 |
| 5. Education | 1,009.3 | 1,292.0 | 1,493.2 | 1,638.8 | 1,674.3 |
| 6. Social Services | 2,175.0 | 2,589.7 | 3,042.3 | 3,744.2 | 4,049.6 |
| 7. Health. | 1,136.2 | 1,356.3 | 1,601.2 | 1,766.1 | 1,804.9 |
| 8. Transport & Communication | 265.0 | 332.6 | 460.6 | 495.6 | 537.0 |
| 9. Debt Services & Misc. Investment Trans. | 756.0 | 1,015.7 | 1,393.8 | 1,646.7 | 2,378.9 |
| 10. Sub-Total | 7,199.8 | 8,747.1 | 11,016.6 | 12,753.0 | 14,126.4 |
| 11. Misc. Financing Trans. | 372.3 | 411.1 | 406.5 | 407.9 | 381.9 |
| 12. Total Expenditure: | 7,572.1 | 9,158.2 | 11,423.1 | 13,160.9 | 14,508.3 |
| 13. **Taxation** | | | | | |
| 14. Income Tax | 4,465.6 | 5,298.9 | 6,514.7 | 7,455.5 | 7,453.3 |
| 15. Customs, Sales Tax, and Beer Duty | 1,013.9 | 1,189.2 | 1,633.5 | 1,872.7 | 2,117.9 |
| 16. Highway Tax | 139.5 | 189.3 | 211.6 | 233.0 | 242.3 |
| 17. Motor Spirits Tax | 177.6 | 139.5 | 147.2 | 184.4 | 224.1 |
| 18. Other Taxation | 223.4 | 233.9 | 291.0 | 351.9 | 393.7 |
| 19. Total Taxation: | 6,020.0 | 7,050.8 | 8,798.0 | 10,097.5 | 10,431.2 |
| 20. Interest, Profits and Misc. Receipts | 529.3 | 560.0 | 568.3 | 813.6 | 822.2 |
| 21. Total Revenue: | 6,549.3 | 7,610.8 | 9,366.3 | 10,911.1 | 11,253.4 |
| 22. Deficit on Operations to be Financed from Borrowing | 1,022.8 | 1,547.4 | 2,056.8 | 2,249.8 | 3,254.9 |
| **FINANCED BY:** | | | | | |
| 23. Borrowing in NZ | 1,470.9 | 852.5 | 2,284.3 | 4,025.5 | 5,181.3 |
| 24. Less Repayments in NZ | 591.5 | 253.3 | 852.4 | 1,889.7 | 2,497.0 |
| 25. Plus Sales (less purchase) of Investments | − 180.8 | + 171.3 | − 11.7 | − 530.2 | − 174.8 |
| 26. Net Borrowing (+) Lending (−) in NZ | + 698.6 | + 770.5 | + 1,420.2 | + 1,605.6 | + 2,509.5 |
| 27. Internal Surplus (+) Deficit (−) | − 324.1 | − 777.2 | − 636.6 | − 644.2 | − 745.5 |
| 28. Borrowing Overseas | 669.3 | 1,519.8 | 2,120.0 | 2,829.4 | 1,609.5 |
| 29. Less Repayments o/seas | 324.0 | 761.2 | 1,342.9 | 1,574.8 | 902.8 |
| 30. Plus Sales (less purchase) of o/seas Investments | − 9.4 | + 4.5 | − 149.3 | − 580.9 | 37.5 |
| 31. Net Borrowing Overseas | + 335.9 | + 763.1 | + 627.8 | + 673.7 | + 744.2 |
| 32. Cash Surplus (+) Deficit (−) from Operations | + 11.7 | − 13.8 | − 8.8 | + 29.5 | − 1.2 |
| 33. **ADJUST FOR CHANGES IN CASH BALANCES OF:** | | | | | |
| 34. Trust Account | − 7.1 | + 17.8 | + 11.6 | − 26.2 | + 3.7 |
| 35. Suspense Account | + 0.1 | − 0.3 | + 0.2 | + 0.2 | − 0.3 |
| 36. Public Account Cash Surplus (+) Deficit (−) | + 4.7 | + 3.7 | + 3.0 | + 3.5 | + 2.2 |

## TABLE B
## RE-FORMULATED RESERVE BANK BALANCE SHEET

| ($ million) | Years Ended 31 March 1980 | 1981 | 1982 | 1983 | 1984 |
|---|---|---|---|---|---|
| 1. **PRIVATE SECTOR TRANSACTIONS** | | | | | |
| 2. **Increase in advances to private sector** | | | | | |
| 3. Marketing Organisations | 88.3 | 28.1 | − 8.1 | 337.1 | −195.7 |
| 4. Stabilisation Accounts | — | 0.3 | 108.0 | 285.1 | 19.4 |
| 5. Compensatory Deposits | 206.9 | − 78.0 | 106.5 | 306.5 | − 79.9 |
| 6. Other | 9.1 | 1.9 | 27.3 | − 2.1 | 2.6 |
| | 304.3 | − 47.7 | 233.7 | 926.6 | −253.6 |
| 7. Increase in other (non-Public Account) domestic assets | 30.1 | 24.6 | 177.9 | 121.8 | − 86.4 |
| 8. Gross Farming Requirement | 334.4 | − 23.1 | 411.6 | 1,048.4 | −340.0 |
| 9. Less Increase in Other Domestic (non-Public Account) Liabilities[1] | −209.0 | −(−24.4) | −242.4 | −174.0 | −(−7.6) |
| 10. **Finance Requirement from Private Sector Activities** | 125.4 | 1.1 | 169.1 | 874.4 | −332.4 |
| 11. **FINANCED BY:** | | | | | |
| 12. Increase in RB Note Issue | 37.2 | 44.8 | 50.7 | 41.5 | 3.0 |
| 13. Overseas: | | | | | |
| 14. Increase in overseas borrowing[2] | 67.3 | − 75.2 | 670.7 | 287.5 | −326.2 |
| 15. Sale of o/seas investments | 13.1 | 95.6 | 42.3 | −540.2 | 540.3 |
| 16. Net change in o/seas position with Bank | 80.4 | 20.4 | 713.0 | −252.7 | 214.1 |
| 17. Government: | | | | | |
| 18. Increase in Public Account deposits at RB: | | | | | |
| 19. — Current Account Deposits | 4.7 | 3.7 | 3.0 | 3.5 | 2.2 |
| 20. — Term Deposits | 207.0 | −207.0 | — | 554.0 | 186.0 |
| 21. Less Increase in Govt. Security holdings | −203.9 | −(−139.2) | −597.6 | −(−528.1) | −737.7 |
| 22. Net change in Government position with Bank | 7.8 | − 64.1 | −594.6 | 1,085.6 | −549.5 |
| 23. Total Financing: | 125.4 | 1.1 | 169.1 | 874.4 | −332.4 |

[1] Includes changes in Reserve Accounts
[2] Includes changes in SDR allocation

## TABLE C
## CONSOLIDATED GOVERNMENT AND RESERVE BANK ACCOUNTS

| ($ million) | Source | Years Ended 31 March 1980 | 1981 | 1982 | 1983 | 1984 |
|---|---|---|---|---|---|---|
| 1. Govt. Expenditure | A 12 | 7,572.1 | 9,158.2 | 11,423.1 | 13,160.9 | 14,508.3 |
| 2. Govt. Revenue | A 21 | 6,549.3 | 7,610.8 | 9,366.3 | 10,911.1 | 11,253.4 |
| 3. Govt. Deficit on Operations | A 22 | 1,022.8 | 1,547.4 | 2,056.8 | 2,249.8 | 3,254.9 |
| 4. Add RB financing requirement | B 10 | 125.4 | 1.1 | 169.1 | 874.4 | −332.4 |
| 5. Combined amount to be financed | | 1,148.2 | 1,548.5 | 2,225.9 | 3,124.2 | 2,922.5 |
| 6. **Financed by Internal Borrowing:** | | | | | | |
| 7. Govt. borrowing in New Zealand (net) | A 26 | 698.6 | 770.5 | 1,420.2 | 1,605.6 | 2,509.5 |
| 8. Less Govt. borrowing from (−) lending to (+) Reserve Bank | B 22 | + 7.8 | −64.1 | −594.6 | +1,085.6 | −549.5 |
| 9. Govt. borrowing in NZ other than from Reserve Bank | | 706.4 | 706.4 | 825.6 | 2,691.2 | 1,960.0 |
| 10. RB financing in NZ — increase in not issue | B 12 | 37.2 | 44.8 | 50.7 | 41.5 | 3.0 |
| 11. Combined internal financing | | 743.6 | 751.2 | 876.3 | 2,732.7 | 1,963.0 |
| 12. **Financed by External Borrowing:** | | | | | | |
| 13. Govt. borrowing (+) lending (−) overseas | A 31 | 335.9 | 763.1 | 627.8 | 673.7 | 744.2 |
| 14. RB borrowing (+) lending (−) overseas | B 16 | 80.4 | 20.4 | 713.0 | −252.7 | 214.1 |
| | | 416.3 | 783.5 | 1,340.8 | 421.0 | 958.3 |
| 15. Govt. cash surplus (−) deficit (+) operations | A 32 | −11.7 | +13.8 | + 8.8 | − 29.5 | + 1.2 |
| 16. Combined Financing | | 1,148.2 | 1,548.5 | 2,225.9 | 3,124.2 | 2,922.5 |