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THE USE OF LIQUIDITY REQUIREMENTS

BY

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THE USE OF LIQUIDITY REQUIREMENTS

Introduction

This paper outlines the use made of liquidity requirements to redress fiscal and payments imbalance in Belize. A significant tightening of these requirements formed an integral part of the IMF Stand-by programme for Belize of SDR 7.125 million approved December 3, 1984. The paper looks at the structure of the cash reserve and liquid assets requirements as specified in the Central Bank of Belize Act, 1982 and discusses the problems encountered in the implementation of the various monetary measures adopted. These measures have met with some modicum of success but how long lasting the effect will be without further fiscal adjustment remains in doubt.

THE ECONOMY HIT BY FALLING SUGAR REVENUES
ENTERS A PERIOD OF BALANCE OF PAYMENTS
AND FISCAL IMBALANCE

The early 1980's represent an era of deteriorating fiscal performance in Belize. The overall deficit of the nonfinancial public sector increased from 4 percent of GDP in FY 1980/81 to 8 percent of GDP in FY 1983/84. Decreasing government revenues and the poor operating results of the public sector agencies were two major contributing factors. In particular, tax collections fell as the economy slowed while current expenditure increased. The latter was due especially to the salary increases by both the public and private sectors in mid-1981 and defence related expenditure. These pay awards contributed to a 13 percent increase (in 1981) in domestic prices and a further

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increase of 8 percent in 1982.

The balance of public sector current operations reversed from a surplus of $4\frac{1}{2}$ percent of GDP in FY 1980/81 to a deficit of 2 percent of GDP in FY 1983/84. This situation would have been worse were it not for new revenue measures that were introduced during this three year period. (Additionally, strict expenditure control and the increasing surpluses of the Social Security Board, established in mid-1981, helped to ease the situation. The rest of the public sector evinced a decline in public sector investment.) The financing requirements of the public sector were met largely by domestic bank credit (i.e. the Central Bank and commercial banks) which was $5\frac{3}{4}$ percent of GDP in FY 1983/84. Commercial bank holdings of Treasury bills, however, were drastically reduced from \$16.6 million at December 31, 1983 to \$5.4 million at December 31, 1984; suggesting that the banks preferred to invest their excess liquidity in more profitable private sector loans. This compares with a \$22.2 million or 140.5 percent increase in Treasury bill holdings by the Central Bank of Belize over the same time period.

The current account deficit of the balance of payments increased from 2 percent of GDP in 1980 to an estimated high of 11 percent of GDP in 1982. There were no serious financing problems though since official and private capital inflows prevented an overall balance of payments deficit. In 1983 the deficit on the current account dropped to 4 percent of GDP due to a record sugar crop but sharp decreases in

net official capital inflows and net outflows of private capital resulted in a US\$4.3 million loss in net international reserves. This was despite the accumulation of external arrears. The current account deficit increased to 5 percent of GDP in 1984. This increased current account deficit resulted in a net reserve loss of US\$7.3 million as net official capital inflows was offset by net private capital outflows.

During this period (1980/81 to 1983/84), Belize suffered from deteriorating terms of trade. Large contractions in the major sectors like manufacturing, construction and commerce were recorded. The slow-down of the economy in 1984 was principally as a result of falling sugar prices. The depreciation of the Mexican peso since mid-1982 was also a key variable in this scenario. This depreciation virtually brought to a stand-still the previously flourishing re-export trade which was one of the mainstays of the small economy.

POLICY OBJECTIVES CRYSTALLISED ...

The need for strong fiscal and monetary measures to counter the deteriorating fiscal and balance of payments position was recognised. To support an adjustment programme, Belize entered into a Stand-by Arrangement with the Fund. On December 6, 1984 a programme extending to March, 1986, for SDR 7.125 million, was approved.

The main objective of the programme is to ensure that the expansion of the supply of credit is not out of line with the growth of the demand for that credit so as to ensure that inflationary/

deflationary pressures do not build-up in the economy. The variation of the cash reserve and liquid assets requirements of the commercial banks and, more importantly, direct control of the supply of these assets (including Central Bank credit to the commercial banks) were seen as "potentially" powerful policy instruments that could be used to achieve this end and formed an important part of the programme.

THE GOVERNMENT WORKING IN CLOSE CO-OPERATION
WITH OFFICIALS FROM THE CENTRAL BANK AND THE
FUND INTRODUCES A PACKAGE OF MONETARY MEASURES ..

The policy measures introduced recognised the need for action to improve the public sector's fiscal performance, but at this stage in the programme the main emphasis was placed on monetary adjustment to curb excess credit creation and improve the balance of payments and official reserves. The commercial banks holdings of excess liquid assets was identified as a major problem. At December, 1984, the commercial banks' excess cash reserves stood at \$0.5 million and excess liquid asset holdings at \$13.7 million (Table 1). (This pool of ready liquidity posed a major threat to the international reserves as the banks could use the funds available to finance an increase in loans and advances to the private sector of the economy.) Further the banks' excess liquid assets holdings meant that they were in a position to further divest themselves of Government of Belize (GOB) Treasury bill holdings and still remain well in excess of the statutory requirements. Any such move would put severe pressures on the Government

TABLE 1

Liquidity Position Of Commercial Banks

BZ \$M

	Outstanding Position			Change in Period	Change in Year
	1983 Dec.	1984 Jul.	1984 Dec.		
<i>Approved Liquid Assets</i>	46.3	41.0	41.9	+0.9	-4.4
<i>Cash in Vault</i>	3.7	4.3	3.7	-0.6	-
<i>Balances with CBB</i>	8.1	9.5	10.5	+1.0	+2.4
<i>Money at call and foreign balance (due within 90 days)</i>	9.7	9.1	11.5	+2.4	+1.8
<i>Belize Government Treasury Bills and Securities maturing within 90 days</i>	17.8	13.3	5.6	-7.7	-12.2
<i>Other approved assets</i>	7.0	4.8	10.6	+5.8	+3.6
<i>Required Liquid Assets</i>	28.0	28.2	28.2	-	+0.2
<i>Required Cash Reserves</i>	7.0	7.0	9.9	+2.9	+2.9
<i>+ Excess/Deficiency Liquid Assets</i>	+18.3	+12.8	+13.7	+0.9	-4.6
<i>+ Excess/Deficiency Cash Reserves</i>	+0.7	+2.0	+0.5	-1.5	-0.2

Excess cash reserves are equal to the average cash reserves for the month on a daily basis less the required cash reserves. The balances with Central Bank for approved liquid assets are calculated as the average of the four Wednesdays of the month.

Source: Central Bank of Belize.

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finances and result in a further switch in the Central Bank's asset portfolio from foreign assets (i.e. foreign exchange reserves) to domestic assets (i.e. GOB advances and Treasury bill holdings).

It was with these considerations upper-most that the government introduced the following package of monetary measures.

On November 1, 1984 under the provisions of Section 42 of the Central Bank of Belize Act, 1982 the cash reserve ratio was increased by 2 percentage points from 5 percent to 7 percent. A further increase in the cash reserve ratio by 2 percentage points from 7 percent to 9 percent was effected March 1, 1985 under the provisions of Section 42 on the Central Bank of Belize Act, 1982. Two increases of the liquid assets ratio of the commercial banks as provided for under Section 43 of the Central Bank of Belize Act, 1982 were also introduced. The first increase of 5 percentage points was effective March 1, 1985 and moved the ratio from 20 to 25 percent. The second increase was effected April 1, 1985 and increased the ratio another 5 percentage points from 25 to 30 percent.

Then effective January 28, 1985 under the provisions of Section 46 of the Central Bank of Belize Act, 1982 the following changes were made: -

- 1) an increase by 2 percentage points on the minimum lending rate from 12 percent to 14 percent, and

- 2) an increase by 3 percentage points on commercial banks savings and term deposits interest rates on the existing minimum deposit rates.

In addition to this, there was an increase of 3 percentage points on Treasury bill sales from the rate on the normal issue for December 28, 1984 of 9.75673 percent - subject to bank bids.

The commercial banks were also informed that the Central Bank would consider loans to them only where it was the view of the Board that failure to approve the loans would seriously harm the banking system.

These changes were necessary to arrest the fall in commercial bank holdings of Treasury bills and to check credit expansion. It was hoped that the increased interest rates and tighter liquidity would dampen import demand and hopefully lead to an improvement in the balance of payments and foreign exchange reserves compared with a situation where no change had been made.

THE MEASURES HAVE HAD THE INTENTIONED IMPACT
BUT CERTAIN FEATURES OF THE REQUIREMENTS
HINDERED IMPLEMENTATION

Holdings of approved liquid assets by the banks expanded by 26.7 percent between December, 1984 and July, 1985 (Table 2). At

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TABLE 2

LIQUIDITY POSITION OF COMMERCIAL BANKS

BZ \$M

	Outstanding Position			Change in Period	Change in Year
	1984 July	1984 Dec.	1985 July		
Approved Liquid Assets	41.0	41.9	53.1	+11.2	+12.1
Cash in Vault	4.3	3.7	3.5	-0.2	-0.8
Balances with CBB	9.5	10.5	15.6	+5.1	+6.1
Money at call and and foreign blances (due within 90 days)	9.1	11.5	15.5	+4.0	+6.4
Belize Government Treasury Bills and Securities maturing within 90 days	13.3	5.6	11.2	+5.6	-2.1
Other approved assets	4.8	10.6	7.3	-3.3	+2.5
Required Liquid Assets	28.2	28.2	43.7	+15.5	+15.5
Required Cash Reserves	7.0	9.9	13.1	+3.2	+6.1
+ - Excess/Deficiency Liquid Assets	+12.8	+13.7	+9.4	-4.3	-3.4
+ - Excess/Deficiency Cash Reserves	+2.0	+0.5	+2.3	+1.8	+0.3

Excess cash reserves are equal to the average cash reserves for the month on a daily basis less the required cash reserves. The balances with Central Bank for approved liquid assets are calculated as the average of the four Wednesdays of the month.

Source: Central Bank of Belize.

\$53.1 million, these assets are \$9.4 million in excess of the required

minimum of \$43.7 million. This position, however, represents a reduction in excess liquidity of some \$4.3 million or 31.3 percent to \$9.4 million.

The categories of approved assets which brought about this increase in holdings were balances with the Central Bank, money at call and foreign balances (due within 90 days) and Government of Belize Treasury bills. They increased by \$5.1 million to \$15.6 million; \$4.0 million to \$15.5 million and \$5.6 million to \$11.2 million, respectively. Other approved assets fell by \$3.3 million to \$7.3 million.

Cash reserves at July, 1985 were in excess of the required minimum by \$2.3 million and represented an increase in excess cash reserves of \$1.8 million or 360.0 percent.

The monetary measures had an initial once-and-for-all effect on credit creation. Meeting the new liquidity requirements meant that the banks had to reduce outstanding loans and advances in an effort to marshal the necessary funds. Total outstanding loans and advances from the commercial banks contracted by \$16.7 million or 10.3 percent to \$144.8 million between December, 1984 and July, 1985. The highest recorded level of outstanding loans and advances during this period was \$164.6 million in January, 1985. The largest reduction in outstanding loans and advances was seen in the first quarter of 1985 (an \$18.4 million reduction). The July, 1985 figure of \$144.8 million

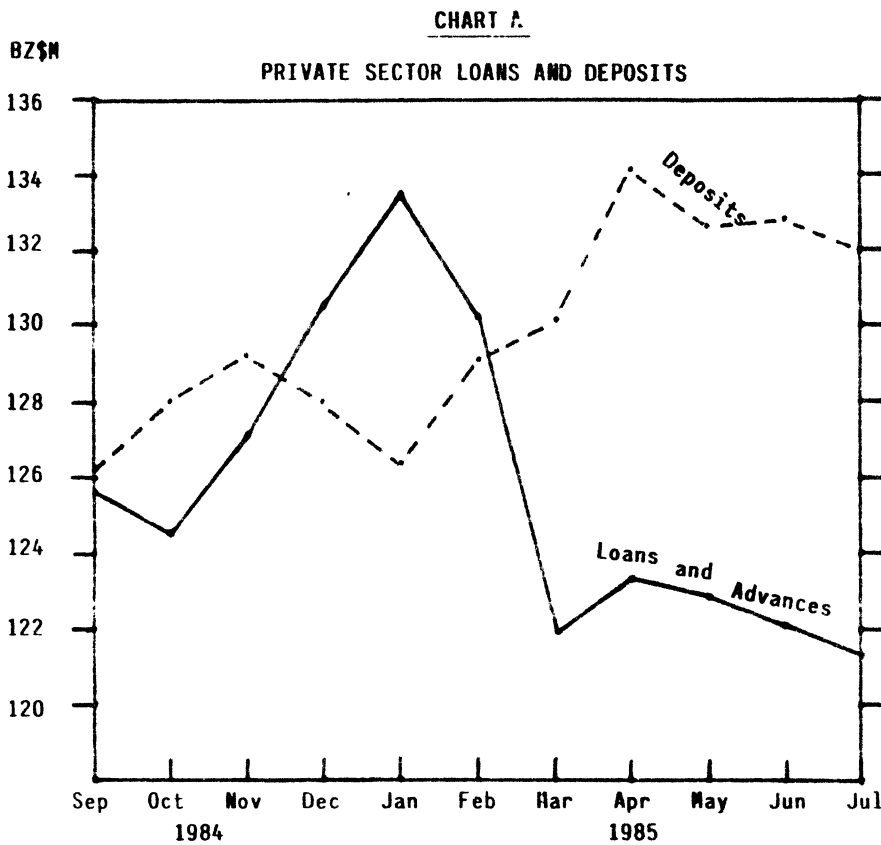
remains the lowest total outstanding loans and advances have fallen during the period December, 1984 to July, 1985.

Much of this adjustment has, however, been in the private sector. Total outstanding loans and advances to the private sector decreased by \$9.2 million or 7.0 percent to \$121.3 million between December, 1984 and July, 1985 (Chart A). The lowest level this figure reached was \$121.1 million on July 3, 1985. This compares with total outstanding loans and advances to the nonfinancial public sector equivalent to \$21.0 million at July, 1985 which was \$1.5 million less than end December, 1984.

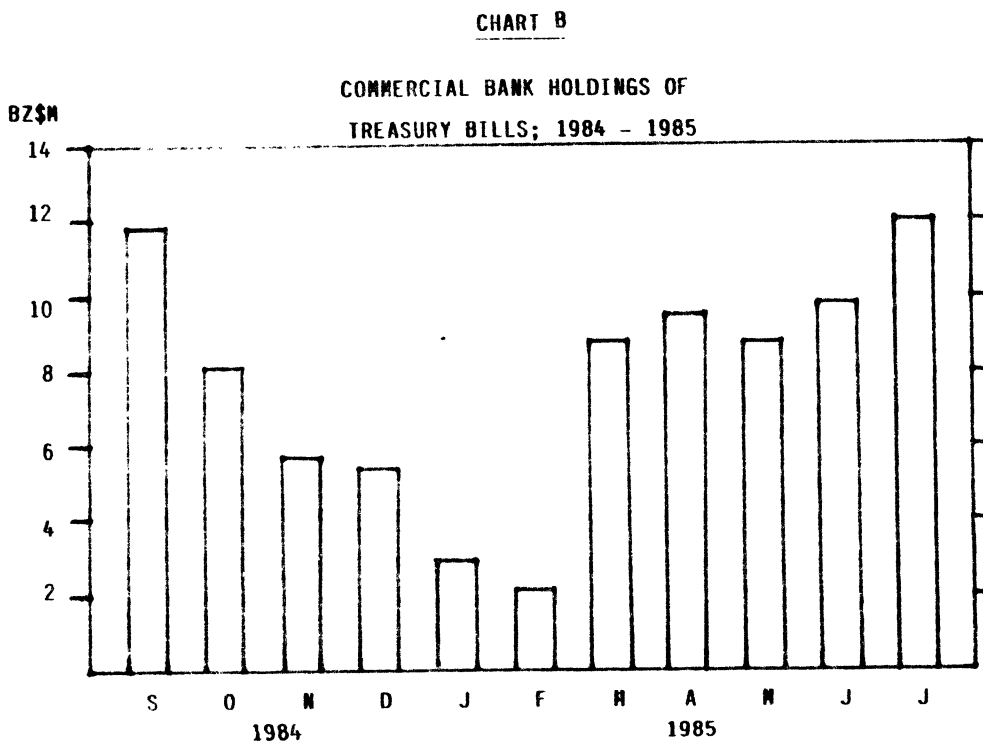
The interest rate increases which were designed to improve the supply of loanable funds also met with some initial success. Private sector deposits expanded to \$132.0 million at July, 1985: a 3.1 percent increase over the December, 1984 position (Chart A). On July 24, \$133.7 million in private sector deposits were recorded. This compares with an increase in the nonfinancial public sector deposits from \$13.3 million at December, 1984 to \$15.5 million at July, 1985.

The increase in the Treasury bill rate was effective in reversing the decreasing trend in holdings of Treasury bills. Actual holdings of Treasury bills increased by \$6.6 million to \$2.0 million between December, 1984 and July, 1985. This reversed the drastic fall

in holdings of Treasury bills which occurred between September 1984 and early 1985. At February, 1985 holdings stood at \$2.1 million (Chart B).



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On July 24, 1985 the holdings peaked at \$13.3 million and fell back slightly to \$12.0 million at end-July, 1985.

Although the monetary measures have resulted in a dampening of excess demand, at least in the short run, several problems faced the successful implementation of the liquidity requirements.

A. PENALTIES

If, the cash and liquid assets ratios are to be effective, the "penalties" for failing to meet the requirements must be high relative to loan rates. The penalties in Belize are relatively high compared with the rest of the Caribbean. If a licensed financial institution in Belize fails during any month to maintain the required average minimum cash balance on its account with the Central Bank, it is liable to a penalty of 5 percent (i.e. 79.6 percent on an annual rate) of the amount of the deficiency. The penalty for failing to meet the required minimum aggregate holding of liquid assets is higher, and is equal to 10 percent (i.e. 213.8 percent at an annual rate) of the shortfall.

The penalties for defaulting in Belize are, therefore, an effective deterrent. For example, the cash reserve ratio in Jamaica stood at 14.0 percent and the liquid assets ratio at 44.0 percent at January 18, 1985. Where a bank fails to maintain with the Bank of Jamaica the required minimum cash holding it is subject to a penalty computed at 2.6 percent of the deficiency based on an annual rate of 36.0 percent. The Central Bank discount rate then was 16.0 percent

compared with 20.0 percent in Belize. Barbados has a cash ratio of 8 percent and a liquid assets ratio of 19 percent. The penalty for failing to meet these requirements is an annual rate not exceeding twice the discount rate at the time of failure (at January 16, 1985 the discount rate was 16.0 percent).

B) NO-FUNDS-FROM-BANK

Even before the new measures, some banks had experienced problems in meeting the required minimum requirements and had to resort to borrowing from the Bank. This method of primary reserve creation is highly inflationary. However, with the implementation of the "no-funds-from-the-Bank" policy, there was a marked decrease in loans from the Central Bank to the commercial banks. At July, 1984 loans to commercial banks stood at \$3.5 million. Loans increased, at December 31, 1984, to a record high of \$7.8 million but since March 6, 1985 have been zero. This situation is reflected in the composition (between July, 1984 and July, 1985) of the consolidated average cash balances of the commercial banks (Chart C).

C) AVERAGE RESERVE ACCOUNTING

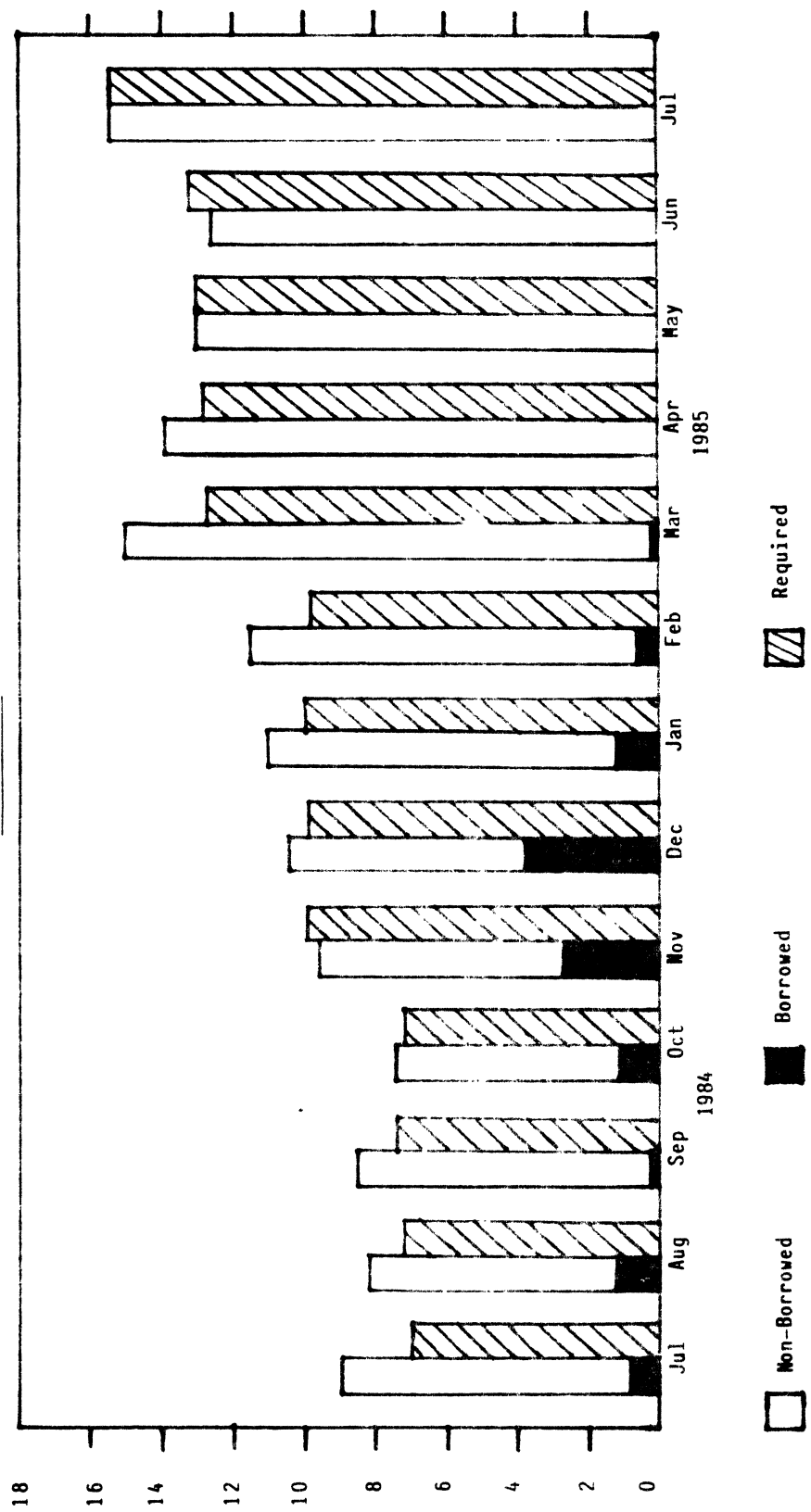
"Average reserve accounting" has posed some problems. In Belize the liquidity requirements are specified in the Banking Ordinance as an average over a specified four week period and any change in this requirement would require an amendment to that Ordinance. Thus, the commercial banks are free to vary their cash and liquid assets holdings subject to the constraint that their

CHART C

Consolidated

Average Cash Balances
1984 - 1985

BZ\$M



Borrowed cash reserves consist of advances from the Central Bank of Belize.

Source: Central Bank of Belize.

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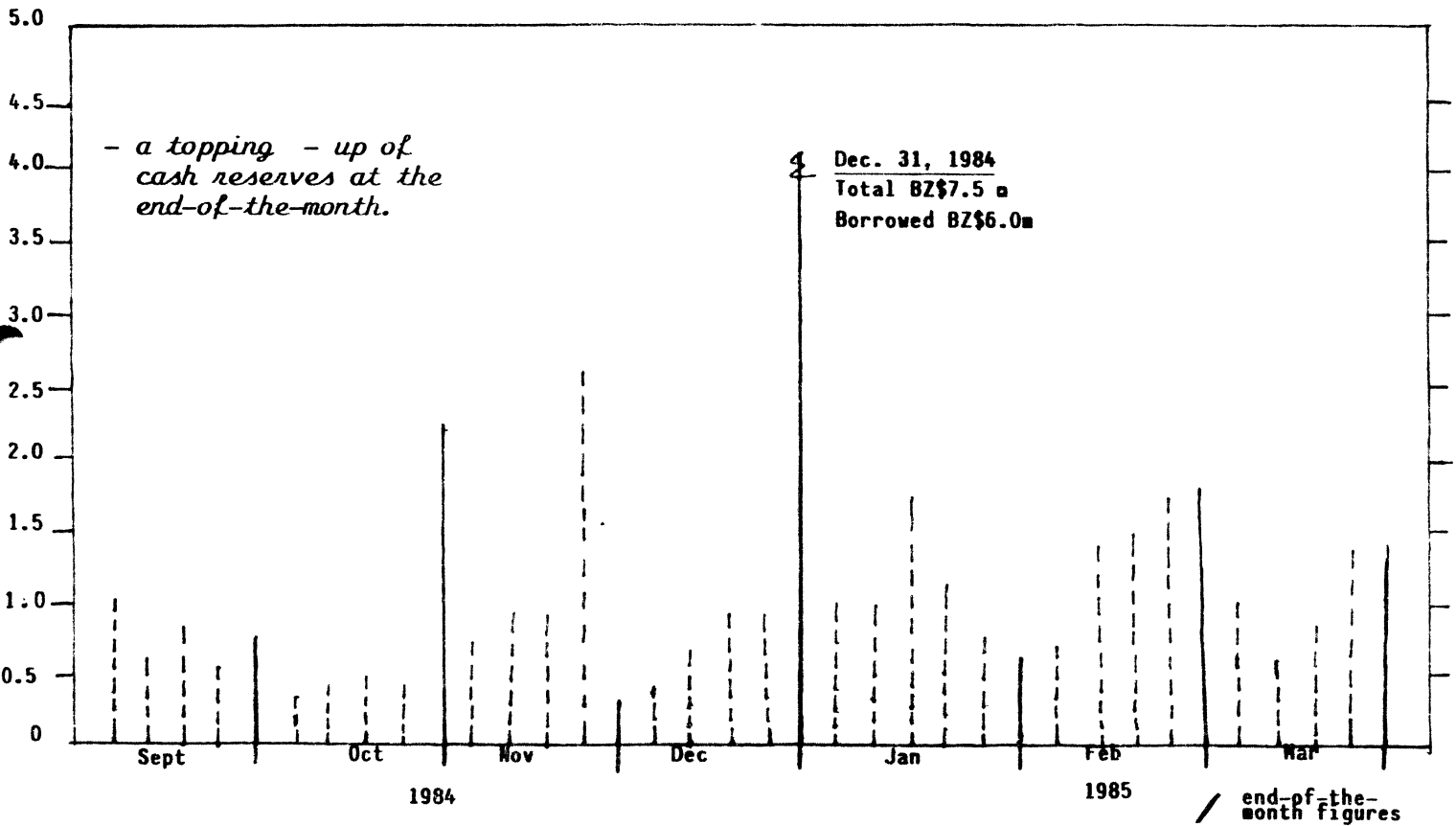
average holdings do not fall below the stipulated minimum holding for that period. Some banks have typically operated with low levels of cash holdings during the accounting month and then borrowed heavily from the Central Bank at end-month in order to meet the minimum cash requirements. The example shown in Chart D (for one bank) illustrates the problem associated with this form of accounting.

Monthly
CENTRAL BANK OF BELIZE

CHART D

THE CASH BALANCES OF A
COMMERCIAL BANK AT THE
CENTRAL BANK OF BELIZE

BZ\$M



Source: Central Bank of Belize.

Other banks have also, from time to time, varied their cash balances with the Bank during the accounting period, both to accommodate variations in loan demand and to economise on their holdings of a non-interest bearing asset. One positive benefit of this arrangement (average reserve accounting) is that it increases the liquidity of the banking system in that the banks are better able to meet temporary and reversible fluctuations in loans and deposits.

D) THE COMPOSITION OF APPROVED LIQUID ASSETS

One of the more serious hindrances to the implementation of the package has been the composition of approved liquid assets. The inclusion of net foreign balances due within 90 days poses three major problems. First, there is a need to maintain an internationally competitive interest rate if the banks are not to divest themselves of domestic Treasury bills. The second problem affects one of the major objectives of the programme, that of trying to provide the incentive for the banks to bring in reserves. Unfortunately, by its very definition, net foreign balances due within 90 days act as a disincentive for banks to incur foreign liabilities thus negating the above objective. Lastly, the ingenuity of the banks in attempting to circumvent the requirements should not be underestimated. One bank in Belize attempted to increase its holdings of approved liquid assets simply by recording an increase in its authorised capital. This "artificial" increase was recorded by the bank as an increase in its net foreign balances due within 90 days. This book-entry resulted in an "improvement" in that bank's holdings of approved assets of \$3.3 million. Since then, however, the banks have been informed that

the monetary authorities would not entertain such overtures!

E) DEFINITION OF LIQUID ASSETS

A further problem relates to the definition of liquid assets. Liquidity refers to a bank's ability to meet withdrawals on demand. A number of considerations govern the definition of approved liquid assets. Commercial banks should be able to convert such assets into cash without great loss and at short notice. (Thus, a principal feature of a liquid asset is its "capital" certainty when it has to be sold at short notice.) This does not apply to the long-term loans from the banks to the public sector which are included within the list of other approved assets. These include loans to the Banana Control Board (BCB), Reconstruction and Development (Recondev), Belize beef, Belize Marketing Board (BMB) and, at one time, a US\$ balance of payments support loans from the commercial banks.

Liquid ~~assets~~ are normally defined as public and private sector liabilities of the commercial banks which have a maximum maturity date of 90 days. The usual rationale is that there is a ready market for such assets so that they can be turned into cash without delay. This does not apply to the long-term liabilities of the public sector even if guaranteed by the Central Government. (The inclusion of these liabilities, as approved assets, can only result in a reduction of the impact of the adjustment process on the public sector.) This was high-lighted earlier in the section describ-

ing the outturn of outstanding loans and advances and deposits. It must be pointed out, however, that it is difficult, if government relies heavily on long-term domestic financing, for it to renege on earlier agreements to include such assets as "liquid". Such "fine-tuning" must be left for the better days.

Finally fiscal adjustment is necessary, if the monetary policies are to be successful. Public sector credit demand is still too high and needs to be reduced if the desired effect on net international reserves is to be achieved. The monetary policies have so far, affected mostly private sector credit demand and even though adjustment has been significant to date further action on the fiscal front is vital if stability is to be fully restored to the Belizean economy.

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