

Report No. 7819-GU

# Guatemala Financial Sector Report

July 16, 1990

Trade, Finance and Industry Division

Country Department II

Latin America and the Caribbean Regional Office

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## CURRENCY EQUIVALENTS

Currency Unit = Quetzal (Q)

### Exchange Rates:

July 1984 : US\$1.0 = 1.0 Quetzal

December 1984

Official Market : US\$1.0 = 1.0 Quetzal

Banking Market : US\$1.0 = 1.49 Quetzal

1985 Average

Official Market : US\$1.0 = 1.0 Quetzal

Banking Market : US\$1.0 = 2.77 Quetzal

July 1986

Official Market : US\$1.0 = 1.0 Quetzal

Regulated Market: US\$1.0 = 2.5 Quetzal

August 1988 : US\$1.0 = 2.7 Quetzal

March 1989 : US\$1.0 = 2.7 Quetzal

May 1989 : US\$1.0 = 2.7 Quetzal

December 6, 1989

Official Market : US\$1.0 = 1.0 Quetzal

Free Market Weighted Average

Purchase : US\$1.0 = 3.41 Quetzal

Sale : US\$1.0 = 3.43 Quetzal

January 9, 1990

Official Market : US\$1.0 = 1.0 Quetzal

Free Market Weighted Average

Purchase : US\$1.0 = 3.61 Quetzal

Sale : US\$1.0 = 3.63 Quetzal

May 30, 1990

Official Market : US\$1.0 = 1.0 Quetzal

Free Market Weighted Average

Purchase : US\$1.0 = 4.25 Quetzal

Sale : US\$1.0 = 4.30 Quetzal

LIST OF ABBREVIATIONS

<b>AITEC</b>	<b>Accion Internacional (International Action)</b>
<b>BANDESA</b>	<b>Banco Nacional de Desarrollo Agricola (National Agriculture Development Bank)</b>
<b>BANVI</b>	<b>Banco Nacional de la Vivienda (National Housing Bank)</b>
<b>BE</b>	<b>Banco del Ejercito (Bank of the Army)</b>
<b>BEST</b>	<b>Bonos de Estabilizacion (Stabilization Bonds)</b>
<b>BG</b>	<b>Banco de Guatemala (Central Bank)</b>
<b>BIm</b>	<b>Banco Inmobiliario (Real Estate Bank)</b>
<b>BIVA</b>	<b>Bonos del Tesoro, Reordenamiento Economico y Social 1986, Serie A (Bonos del Impuesto Valor Agregado) (Treasury Bonds, Economic and Social Reordering 1986, Serie A -- Value Added Tax Bonds)</b>
<b>BL</b>	<b>The Banking Law</b>
<b>BNV</b>	<b>Bolsa Nacional de Valores S.A. (National Stock Exchange Corporation)</b>
<b>BRL</b>	<b>Bank Rehabilitation Law</b>
<b>BT</b>	<b>Banco de los Trabajadores (Workers' Bank)</b>
<b>CACM</b>	<b>Central America Common Market</b>
<b>CAEM</b>	<b>Camara Empresarial de Guatemala (Guatemalan Trade Association)</b>
<b>CD</b>	<b>Certificate of Deposits</b>
<b>CELGUSA</b>	<b>Celulosas de Guatemala S.A. (Guatemalan Woodpulp Corporation)</b>
<b>CHN</b>	<b>Credito Hipotecario Nacional (National Mortgage Credit)</b>
<b>CIVAPU</b>	<b>Certificados de Inversion en Valores Publicos (Certificate of Investment in Public Debt)</b>
<b>CNV</b>	<b>Comision Nacional de Valores (National Securities Commission)</b>
<b>CORFINA</b>	<b>Corporacion Financiera Nacional (National Financial Corporation)</b>
<b>CV</b>	<b>Comision de Valores del BG (Securities Commission of BG)</b>
<b>DICA</b>	<b>CACM Trans-border Payment Instruments</b>
<b>D/E</b>	<b>Debt to Equity Ratio</b>
<b>FADES</b>	<b>Fundacion para el Analisis y el Desarrollo de Centroamerica (Foundation for the Analysis and Development of Central America)</b>
<b>FENACOAC</b>	<b>Federacion Nacional de Cooperativas Agricolas de Credito (National Federation of Agricultural Credit Cooperatives)</b>
<b>FHA</b>	<b>Insured Mortgage Certificate</b>
<b>FIGSA</b>	<b>Financiera Guatemalteca S.A. (Guatemalan Finance Corporation)</b>
<b>GAAP</b>	<b>Generally Accepted Accounting Principles</b>
<b>GDP</b>	<b>Gross Domestic Product</b>
<b>GNP</b>	<b>Gross National Product</b>
<b>IGSS</b>	<b>Instituto General de Seguridad Social (General Social Security Institute)</b>
<b>IPSH</b>	<b>Instituto de Promocion de Hipotecas Aseguradas (Institute for the Promotion of Insured Mortgages)</b>
<b>IRR</b>	<b>Internal Rate of Return</b>
<b>IVA</b>	<b>Value Added Tax</b>
<b>JM</b>	<b>Junta Monetaria (Monetary Board)</b>
<b>JV</b>	<b>Junta de Vigilancia (Board of Control)</b>
<b>MIS</b>	<b>Management Information System</b>
<b>ML</b>	<b>Monetary Law</b>

**ABBREVIATIONS** (Cont'd.)

M1	Money = Currency + Demand Deposit
M2	Money + Quasi Money
NFI	Nonregulated Financial Institutions
OMO	Open Market Operations
OLBG	Organic Law of BG
PVO	Private Voluntary Organization
ROA	Return on Assets
ROE	Return on Equity
SB	Superintendencia de Bancos (Bank Superintendency)
SIL	Securities Issuance Law
SML	Securities Market Law
USAID	United States Agency for International Development
USC	Universidad de San Carlos (University of San Carlos)



## PREFACE AND ACKNOWLEDGEMENTS

This report presents the findings and conclusions of a World Bank Mission to study the financial sector in Guatemala that visited the country in April 1988 and of an updating Mission in November 1989. The delay in completing this report was due to the unexpected increase in the work load in LA2TF. This report presents an analysis of the main issues impairing efficient resource mobilization and allocation. The policy recommendations are directed at increasing efficiency in financial intermediation and competitiveness of domestic financial assets. The Summary and Policy Recommendations presents the principal results and policy recommendations and is intended primarily for Guatemalan policy makers in their efforts to develop a medium-term financial sector policy framework. The report and its annexes provide an analytical discussion which is as comprehensive as possible given available information, and is intended for an audience that is also interested in the technical aspects of the analysis. This report incorporates the comments received during discussions with government officials on May 28-30, 1990.

The Bank team wishes to convey its appreciation to the Guatemalan authorities, specially to the Vice-President of the Republic, the Minister of Finance, the Minister of the Economy, the President and Vice-President of the Banco de Guatemala and the Superintendent of Banks and to their respective staff who provided information and support to our effort. The Mission also received valuable support from the management of commercial and public banks, financial companies and trade associations.

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# GUATEMALA

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GUATEMALA

FINANCIAL SECTOR REPORT

SUMMARY AND POLICY RECOMMENDATIONS

Overview

1. The financial sector in Guatemala, as in other small open economies, has been sensitive to macroeconomic disturbances arising from fiscal imbalances, exchange rate and monetary policies, and external shocks. The non-competitive structure and the poor performance of the financial sector are largely consequences of government borrowing mechanisms, tax treatment of financial instruments, restrictive regulations, and inadequate supervision of intermediaries and, until recently, interest rate ceilings and entry barriers. These policies have affected the efficiency of the financial sector and have fostered a flourishing and quite competitive informal financial system. Intermediation is dominated by the banking system, reflecting, in large part, the incentives implicit in these policies. Some intermediaries are facing solvency problems, so that clearer policies and stronger institutions are needed to deal with ailing banks.

2. During 1989, the authorities, responding to pressures from macroeconomic imbalances, liberalized interest and exchange rates without putting into place adequate regulations, reviewing the need for changes in the incentive system and developing an appropriate institutional support to ensure active monetary policy, competitive markets and the solvency of financial intermediaries. The Guatemala's financial sector is thus in a period of transition from a system based on controlling the market to one of market freedom based on prudential regulations and solvency monitoring. The authorities have adopted several complementary measures but still need to go further to provide an adequate regulatory framework. This study of Guatemala's financial sector identifies priority areas where measures are needed to ensure the success of the recently adopted policy of financial liberalization thus contributing to enhanced saving and resource mobilization and allocation, and to an efficient financial sector.

Economic Background

3. Guatemala's recent economic performance can be divided into three periods. During the first period, which ended in 1978, the fiscal deficit was small, the exchange rate was stable and monetary policy was prudent. While the economy grew on average by more than 5% p.a., inflation remained low (except for the years of the first oil shock and the coffee boom in the 1970s) and the financial sector expanded significantly, as the ratio of M2 to GDP increased from an average of about 17% in the 1960s to more than 24% in 1976-1978. During the second period, from 1979 to 1985, the fiscal deficit increased substantially, monetary expansion accelerated and became unpredictable, and the external debt more than tripled, all of which contributed to reduced investment and lower per capita income. In the early 1980s, higher inflation combined with interest rate ceilings produced negative real interest rates, lower holdings of domestic financial assets,

capital flight, and a decline in foreign exchange reserves, while foreign banks curtailed commercial credit. An economic program to restore fiscal equilibrium was put in place in March 1982, but these stabilization efforts were dissipated after August 1983. Nevertheless, between 1982 and 1984 annual rates of inflation were the lowest and positive interest rates the highest in the 1980s and financial deepening increased to 28% by 1984.

4. In late 1984, the fixed parity of the Quetzal with the dollar was abandoned, and a multiple exchange rate regime was adopted that caused significant losses for the Banco de Guatemala (BG, the Central Bank) and further expansion of the consolidated fiscal deficit and the money supply. In 1985, inflation accelerated and real interest rates became substantially negative again. Nonetheless, the ratio of M2 to GDP peaked at an all time high of 30%. Clearly there was an element of surprise for asset holders in the abrupt end to the fixed exchange rate system after a period of relatively low inflation.

5. The third period began in 1986 with the program of the current government aiming at reducing inflation and re-establishing fiscal and external balances. The initial reforms induced a simplification and unification of the foreign exchange regime to reduce BG losses, measures to reduce the fiscal deficit, a reduction in monetary and credit expansion, and a modest increase in interest rate ceilings along with some liberalization of other prices. While the reform program led to immediate and sustained improvement on several fronts with improvements in the fiscal deficit and the balance of payments, sharply lower inflation and some renewal of economic growth, additional measures have become necessary.

6. In 1989, the combined public sector deficit increased, placing additional pressures on the financial sector for the following reasons. First, the market discounted the difficulties on the fiscal and monetary fronts through increased expectations of devaluation of the Quetzal, thereby reducing the competitiveness of domestic financial assets and hence financial deepening. Second, increased public sector borrowing requirements crowded out private sector access to the credit market and imposed additional distortions through increased arrears to domestic suppliers. The current account of the balance of payments continued to show a significant deficit and the BG continued to lose international reserves. The authorities took action to improve the balance of payments by liberalizing first interest rates and later the exchange rates. However, until February 1990, interest rates had not changed due largely to bankers' agreements to maintain the interest rate structure as previously fixed by the authorities. On the other hand, the Quetzal depreciated by 59% from early November 1989 to end May 1990. Average annual inflation accelerated from about 12% in 1988 to 20% p.a. when comparing the year end CPI. Inflation has continued to accelerate during 1990, reaching 35% in May relative to May 1989. At the same time, the economy continued to grow by about 3.8% p.a. and financial deepening declined to about 26% of GDP.

7. On February 20, 1990, the Junta Monetaria (Monetary Board, JM) increased in a significant amount both interest rates on open market operations (OMOs) and the discount rate. Partly as a response to these policies and partly due to the expiration of the banks agreement, banks interest rates began to increase. However, the monetary policy has continued to be passive, with the consequence that interest rates have increasingly become negative in real terms which have encouraged capital flight and put continued pressure on the exchange rate.

8. Exchange rate policy has almost consistently been undermined since the free float was introduced in November 1989. First, the BG failed to introduce an active monetary policy. Second, in order to substitute for monetary policy the BG thought that it could stabilize the exchange rate by introducing a band in February. After this experience failed after six weeks and left the BG almost without any foreign exchange but with increasing arrears, the country returned to a free float in the beginning of April 1990. Since devaluation pressures were not reduced, the BG introduced an auction market for foreign exchange at the end of May 1990. According to the monetary authorities, this auction system should stabilize the exchange rate. However, this auction market will not ease the pressure on the exchange rate as long as monetary policy continues to be loose, and the unresolved budgetary problems persist. This experience stresses the need for the consistency of the exchange rate policy vis-a-vis the fiscal and monetary policies. The recent events underscore the need for a prompt financial sector adjustment, including a review of and adjustment in monetary policy, the system of incentives, regulations and supervision.

#### Monetary Policy and Adjustment

9. Domestic Credit, Inflation, Devaluation and the Balance of Payments. Monetary imbalances in Guatemala, under inflexible exchange and interest rates, were corrected mainly by changes in foreign reserves and prices. Credit expansion was offset in earlier years by the loss of international reserves, but later adjustments were mainly in prices, first through prices of non-tradeable goods (i.e., appreciation of the Quetzal in real terms) and later through major devaluations in 1984 and 1986. As a result, fluctuations in the real exchange rate (the relative price of tradeable to non-tradeable goods) were exacerbated, with periods of real appreciation followed by large devaluations. This has induced expectations of changes in the exchange rate and in inflation and has introduced uncertainties in financial markets.

10. This sequence of adjustment is likely to change under the system of flexible exchange and interest rates. An excess supply of money will immediately be reflected in exchange rate depreciation and falling interest rates rather than in reserve losses. Domestic prices will also be rapidly affected by increases in the money supply, reducing the sharp fluctuations in the real exchange rate that existed under the previous regime. This, however, does not mean that exchange and interest rate flexibility will substitute for fiscal and monetary discipline. On the contrary, the functioning of the system will require sustainable fiscal and monetary policies since it will become more difficult for the government to repress domestic inflation now that it has given up control of the exchange rate. In other words, the link between money and prices (or monetary growth and inflation) will be tighter in the short run than under the previous regime.

11. As in other countries, the experience of Guatemala confirms that, macroeconomic instability is not conducive to the development of efficient financial markets. The recent liberalization of foreign exchange and financial markets is an important step in improving market structures, but they by themselves are not enough. They will create the desired momentum for the development of financial markets when complemented by improvements in fiscal and monetary management. These are important policy changes needed to improve confidence and expectations concerning inflation and exchange rates that will increase the competitiveness of domestic financial assets and promote financial deepening and capital inflows.

## Saving and Financial Deepening

12. Saving. Compared to other Latin American countries, the rate of saving (about 8% of GNP during the 1980s) has traditionally been low in Guatemala. Private sector saving in Guatemala is affected by disposable income, wealth, real interest rates, and other economic and financial variables, some of which are partially under the control of government policymakers. Higher domestic real interest rates have a small positive effect on saving, while increases in public sector saving cause a small reduction in private sector saving but nonetheless increase overall saving. Therefore, the recent policy of interest rates liberalization, because of the important correction expected in real interest rates if complemented by policies ensuring competitive financial markets, should raise national saving relative to GNP by more than 10%. In addition, national saving will also increase if the Government adopts a fiscal policy that increases public sector saving.

13. The terms of trade and foreign interest rates affect private saving, mainly by changing disposable income. In the case of Guatemala, terms of trade fluctuations have been wide but transitory, with powerful direct effects on private saving. The net debtor position of Guatemala and the high share of its foreign debt at variable interest rates imply that its disposable income falls following an increase in world interest rates. Guatemalans perceived foreign interest rate shocks as lasting or permanent, but consumption was slow to adjust in the short run and saving fell temporarily. In the long run, however, an increase in foreign real interest rates causes a permanent decline in Guatemalan consumption with no effect on the saving rate. A final result is that import tariff reductions and real depreciations of the Quetzal both increase saving. One possible explanation is that the propensity to save in the export sector is higher than in other sector of the economy. Thus, a trade liberalization policy, besides improving resource allocation, increases the average saving rate by redistributing income from non-exporters to exporters.

14. Financial Deepening. More important than the effect on aggregate saving is the effect on savings composition, and the efficiency of financial intermediation for financial liberalization to be successful. Financial deepening increases because people reshuffle their portfolios away from foreign assets and domestic real assets and in favor of domestic financial assets. This allows more investment opportunities by lifting lending constraints. An increase in financial intermediation in the formal system is usually associated with lower intermediation costs since there are economies of scale in pooling risks and lending maturities between savers and investors. In addition, rent-seeking, subsidies and BG losses will also be eliminated as financial markets adjust to the recently undertaken liberalization in Guatemala. These changes will improve welfare. In Guatemala there is a close association between real interest rates and financial deepening. When real interest rates are negative, the demand for M2 is low relative to GDP. The average M2/GDP ratio for 1979-1984 was 23%, well below that of Korea (35%), Malaysia (54%), Mexico (30%), Colombia (31%) and Thailand (44%).

15. The demand for M2 in Guatemala has been very responsive to changes in foreign interest rates and inflationary expectations, indicating high substitution between holdings of monetary assets vis-a-vis foreign financial assets (prompting capital flows) and domestic real assets, respectively. Similarly, real exchange rate appreciation has a negative



effect on the demand for real balances by raising expectations of devaluations. This effect should be minimized under the policy of flexible foreign exchange rates if the government does not interfere with the adjustment of the real exchange rate due to changes in the underlying economic determinants. In addition, interest rate liberalization, together with sustainable fiscal and monetary policies should contribute to stabilizing aggregate expenditures and the real exchange rate, thereby encouraging financial deepening.

#### Monetary Policy and Deficit Finance

16. During the 1980s, fiscal deficits have been the main determinant of monetary expansion, and declining international reserves, the main cause of monetary contraction. Moreover, the Government has had to use a variety of mechanisms to cover its deficit including the issuance of stabilization bonds (BESTs), delayed payments to supplier and various compulsory financing schemes. In addition to direct credit from the BG to the Government, non-remunerated reserve requirements and compulsory portfolio allocations were implemented to finance the Government deficit. Exchange rate and discount policies have forced the BG to incur substantial losses, and together with the tax treatment of financial instruments introduced important distortions into financial markets.

17. Instruments of Monetary Policy and Deficit Finance. By adopting a floating exchange rate regime, the Guatemalan authorities will be able to pursue an active monetary policy (an instrument of macroeconomic management), once they have been equipped with sufficient power and instruments to manage monetary aggregates efficiently. Currently, there are three types of limitations on the ability of the BG to carry on an active monetary policy: (i) inadequacy of available instruments; (ii) subordination of the BG to the JM; and (iii) inadequate information systems and monitoring of monetary policy.

18. According to the Organic Law of the BG (OLBG), the BG is the executive branch of the JM. The JM is the maximum monetary authority, responsible for determining monetary, exchange and credit policies. The JM establishes in the Monetary Program the limits within which the BG and the Government can operate, as well as the allocation of credit and the selection of monetary instruments. These instruments include reserve requirements, OMOs, rediscount facilities, public sector fund allocations, and, until recently, limits on credit expansion to the private sector and interest rate ceilings.

19. Reserve Requirements. Since 1986, non-remunerated bank reserve requirements have been 41% on demand deposits and 13% on savings and time deposits, as against 35% on liabilities with less than 30-day maturities, and 10% on liabilities with one year maturities for regulated finance companies. Finance companies also have remunerated reserves on liabilities over one year although they are redeemable on demand like bank savings deposits. This presents banks with unfair competition. However, during 1990 the JM has been authorizing banks to issue bonds which are exempt from reserve requirements, despite the fact that they are close substitutes for deposits. Differential reserve requirements reduce the control of the JM over monetary aggregates since shifts in the composition of deposits can cause significant changes in the money multiplier. Moreover, actual compliance with reserve requirements reveals serious problems for two reasons. First, compliance only requires balancing daily liquidity

shortages with daily excess liquidity over one month period. That is, a bank could be short of liquidity every day of a month but one, and the accumulated liquidity shortage could be balanced by the liquidity surplus of only one day. Second, banks are allowed to count as reserves cashier checks issued by other banks, which in turn are exempt from reserve requirements. That is, banks can issue base money. To tighten the control on the money supply, the JM will have to: (i) severely restrict the daily balancing scheme for compliance with reserve requirements, or better, to request daily compliance with it; (ii) require a uniform reserve requirement for all liabilities (including cashier checks) issued by banks and financial companies; and (iii) restrict the concept of reserves to include vault cash and deposits in the BG only.

20. In addition, as compared to a system (such as exists in Mexico) where banks receive remuneration at market rates on their reserve requirements, Guatemala's non-remunerated reserve requirements which act as a tax on a portion of the financial system, are an impediment to efficient financial intermediation. The revenue lost to banks from these requirements represented at most about 2 percentage points of the lending rate up until February 1990 and it increased to about 3 percentage points since then. Moreover, it accounts at most for about 30% of the banks' spread.

21. To increase efficiency in the Guatemalan financial sector, the BG needs to either reduce or remunerate reserve requirements. However, paying interest on reserves would tend to reduce spreads at the cost of increasing the consolidated public sector deficit. With bank reserves representing 4.2% of GDP in 1988, if the BG were to pay, for example, 13% p.a. on reserves, this would mean a fiscal cost of at least 0.55% of GDP. If the authorities decide instead to reduce reserve requirements, the impact on the fiscal accounts would be similar since the Government would have to issue bonds to sterilize the ensuing monetary expansion. Accordingly, fiscal adjustment and more transparent alternative mechanisms for deficit financing will be required before any sustainable reduction or remuneration of reserve requirements is possible.

22. Government Bonds and Open Market Operations. Interest rates on Government bonds placed with the BG were raised from 1.5% p.a. in 1985 to 9% p.a. in 1986 and later lowered to 7% p.a. by Congress. The BG issues certificates backed by this public debt portfolio. These certificates were redeemable on demand which disqualified them from use in OMOs. Moreover, the JM establishes ceilings on bond sales to the banking system and the non-financial private sector. Unlike OMOs in other countries where interest rates are determined at auction, the JM fixes the rates, aligning them with interest rates on bank deposits. In August 1989, the JM authorized the BG to engage in OMOs subject to ceilings on the volume of transactions. The JM also authorized the issue of certificates with deferred repurchase guarantees and established interest rates on these certificates. In February 1990, departing from previous policy, the JM initially raised the interest rates above banks deposit rates to 24% p.a. on the 30-day certificates, up from 13% p.a. set previously; but yielding to banks pressures the rate was subsequently established at 18% p.a. There is an increasing financial cost to the BG stemming from OMOs, since the gap between interest received and interest cost is growing rapidly, thus contributing to enlarge BG's losses. To improve public sector efficiency, the Treasury should paid market interest rates on its bond issues and the

BG should paid market rates on the deposits of the Treasury held at the BG, while the government budget should include the transfers from the BG.

23. The authorities' recognition of the need to implement effective OMOs as an important instrument of monetary control and the introduction of bonds not redeemable on demand that have well defined maturity dates, are important steps in the right direction. However, there are still some important shortcomings limiting the effectiveness of OMOs in Guatemala, most importantly are: the need for the BG to obtain JM authorization in terms of the amounts and conditions of the bonds to be issued and traded; and the fact that the BG continues to avoid auctioning which should be introduced immediately. In general, the JM does not take decisions concerning OMOs without the consent of the two commercial bank representatives on the JM. This practice undermines the effectiveness of OMOs since the BG in effect cannot compete for funds with the banks. Moreover, the recent JM authorization to issue redeemable certificates to be sold exclusively to banks implies readily available remunerated liquidity having little permanent monetary effect. The present practice is not conducive to pursuing an active monetary policy as required by the new policies of market determined foreign exchange and interest rates.

24. The existing regulatory framework, would permit some short run solutions which should be undertaken immediately. First, the representatives of the private banks could be requested to abstain from participating in JM meetings centered on decisions concerning monetary and foreign exchange rate policies. To implement this recommendation, the authorities simply need to enforce Article 29 of the OLBG, which prevents JM members having personal interests in topics on the agenda from participating in JM meetings. Second, the JM could authorize the BG to intervene in the money market without any restrictions other than maximum limits on total monetary expansion and inform the JM afterwards of its activities. These recommendations would greatly enhance the BG's ability to conduct OMOs. In the long run, however, the OLBG should be changed to remove the banks representatives from the JM.

25. To finance its needs the Government has also used market debt instruments, i.e., the medium term BESTs denominated in US dollars and in Quetzales and the Quetzal medium term Treasury bonds, BIVAs. In 1988, the JM authorized the use of BESTs for payments of taxes, for imports through foreign lines of credit, and for debt/equity swaps. However, in late 1989, the JM suspended the possibility of early amortization of BESTs through this scheme which was inflationary and provided significant subsidies, since BESTs were accepted at their face value instead of their lower market values. JM should continue to suspend this scheme unless the monetary program compensates for its effects, subsidies are eliminated and the Government is willing to bear the higher costs this would entail. The Government has recently been authorized by Congress to issue bonds for placement in the market.

26. Not all government debt is in the form of transparent debt instruments as the Government has been delaying increasingly payments to private suppliers. However, this debt is offset in part by the large private sector debt to the Instituto General de Seguridad Social (IGSS) due to weak collection procedures. Furthermore, the Central Government has been settling its employer contributions to the IGSS since 1987 with non-negotiable bonds bearing a preferential (low) rate of interest. Other financing schemes include compulsory investments by insurance companies, as

the Treasury issues bonds with lower yields than the rates paid by banks and these are placed with insurance companies as a compulsory proportion of their reserves. Since compulsory financing mechanisms undermine confidence and inhibit the development of genuine financial markets, they should be phased out.

27. Another issue is the existing stock of low interest government bonds held by the private sector. Unless the Government slows down inflation, it will impose a wealth loss on private sector bond holders (on those bonds that are not redeemable on demand), once the market adjusts to the recent liberalization of interest rates. This could scare away bondholders at the time when the Government wants to develop the bond market. Also, the Government needs to roll over its debt in the form of bonds that are redeemable on demand. Thus the Government should give high priority to replacing the existing stock of bonds with new ones having defined maturities and competitive interest rates. At an assumed interest rate of 13% p.a., the Central Government's interest cost on the outstanding domestic public debt would increase by 0.56% of GDP. However, since the majority of bond-holders are public sector institutions, the consolidated public sector deficit would only increase by 0.11% of GDP.

28. Discount Policy. The BG rediscounts commercial bank loans to specific priority sectors using its own funds or funds from external sources. For domestic resources, the JM established in August 1989 a discount rate 3 percentage points below the bank lending rate, except for low income housing where the discount rate is fixed at 9% p.a. In February 1990, the JM changed this discount policy for the better, by establishing a general discount rate structure equal to the interest rate structure on OMOs. On external credit lines, the discount rate is to be adjusted every quarter by the BG based on the cost of funds, and banks are to charge a maximum spread of 4 percentage points to their borrowers, except when existing or future loan agreements with international institutions establish specific rules. External discounted funds are denominated in Quetzales, and the BG assumes the exchange rate risk. However, to the extent that discount rates are not competitive, the BG will not be adequately covering itself against this risk. The present discount policy results in a wide dispersion of interest rates to final borrowers and in different spreads to banks and potential losses to the BG and therefore is not conducive to efficient resource mobilization and allocation.

29. During 1987, loans under credit lines financed with domestic resources were heavily concentrated: about 45% of agricultural loans accounted for 90% of agricultural credit; 33% of industrial loans accounted for 90% of industrial credit; and 2% of construction loans accounted for 53% of construction credit. Therefore, the Guatemalan authorities have not succeeded in their objective of improving income distribution through directed credit. Moreover, cheap loans tend to increase borrower debt at the expense of equity. Cheap funds have to be rationed and, depending on the rationing mechanism, the marginal cost of credit and, therefore, investment may be unaffected. Even if investment in the enterprise or favored segment of the economy were increased, it would be at the expense of other sectors as aggregate investment would be unchanged. The rent seeking that invariably accompanies such subsidies reduces welfare and tends to corrupt the system, while causing losses for the BG.

30. To be effective, all subsidies should be transparent and carefully targeted and monitored; but this is particularly difficult through credit. Targeting credit subsidies is difficult because credit is fungible, and,

because of rent seeking, the benefits often accrue to the unintended. Moreover, controlling interest subsidies is difficult because the subsidies embedded in fixed low nominal interest rates vary with market rates, and any adjustment mechanism tends to be complex and operate with lags. Finally, subsidies should be allocated through the government budget.

31. Although the Guatemalan authorities have not traditionally used discounts as an instrument of monetary policy, financial liberalization and the resulting need for active monetary policy justify using discounts as an instrument to control monetary aggregates. Controlling the discount rate has proven to be an effective instrument of monetary control and a useful market signal in most developed economies. Discounts which induce segmentation of financial markets, contradicting the new policy of financial liberalization, should therefore be phased out immediately as an instrument to channel subsidies and direct credit to specific sectors. Irrespective of the source or use of funds, the discount rate should reflect banks' marginal cost of mobilizing funds and the degree of tightness that the monetary authorities wish to impose on the economy. In addition, bank spreads should be free to be determined by market competition.

32. Allocation of Public Sector Deposits. Public sector deposits have not only been used as an instrument of monetary control, when transferred between banks and the BG, but also to support public banks. The accepted policy is that funds of official agencies and public institutions are to be deposited at the BG or held in the form of government bonds. As these yields are lower than those in alternative investments, income is transferred from agencies with excess funds to the BG or the Treasury. In addition, proper management of cash balances by public sector institutions is impaired, and the development of an investment department in, for example, the IGSS, is inhibited. Moreover, this is not a transparent instrument for monetary control, especially since it hides the transfer of income from the institutions with excess funds to the Central Government. Finally, competition and efficiency are impaired by providing public banks with captive deposits. This policy is not consistent with the new approach to financial markets in Guatemala, and should also be phased out as soon as possible. OMOs would generate the same consolidated public sector deficit, but both Central Government interest expenses and public entity interest income would increase. In addition, OMOs imply voluntary participation in the market, while deposit allocation is a compulsory device.

33. Interest Rates. The JM liberalized the interest rates of the banking system in August 1989. However, as mentioned above, until February 1990, interest rates remained unchanged due to the commercial banks' agreement and the absence of effective OMOs and discount policies. However, since the end of February 1990, the authorities are reforming their OMOs and discount policies towards having a more active role. In Guatemala, as in many other countries, there are legal constraints to interest rate liberalization. The Civil Code (Articles 1272 and 1273) gives borrowers the right to take creditors to Court and request annulment of any lending clause that allows variability of interest rates. Thus a

loan can have a freely agreed interest rate, but fixed throughout its maturity. This eliminates an important mechanism to cope with market uncertainty for developing a medium and long term bond market in an inflationary environment. This fixed interest rate constraint is particularly important in Guatemala since to reduce the incidence of the stamp tax, bank loan contracts are long term with short term renewals. Adopting the recommendations on tax policy discussed below would greatly relax this constraint in the short run; however, in the long run, the legal restriction on the variability of interest rates in loan contracts should also be phased out.

34. Information System and Monitoring Monetary Policy. Although there is a large data base at the BG, it is not well organized to provide a basis for an active monetary policy and monetary data are available only with a lag of one week. To improve the information system, the BG should: (i) require banks to provide both weekly and daily information on their positions in Quetzales, foreign exchange, public sector bonds, deposits, portfolio renewals, and excess liquidity, as well as the term to maturity of assets and liabilities in foreign exchange; (ii) install the capacity to process this information on a daily and weekly basis; (iii) establish a permanent commission reporting directly to the President of the BG to analyze and evaluate this information; and (iv) assess these daily and weekly reports covering the prospects for monetary policy, the financial conditions of banks, and recommendations that take into account the monetary program and the foreign exchange requirements of the BG and the overall public sector.

35. Losses of the BG. Much of the increase in the monetary base since 1985 has been due to the BG's operating and foreign exchange losses, most of which as a result of exchange rate guarantees on debt services. As mentioned above, losses were also incurred as a result of the imbalance between revenue from discount credits and the servicing of foreign credit lines and implementing the above recommended discount policy would eliminate BG's losses from foreign credit line operations. The BG's losses peaked at 4.5% of GDP in 1985 and have gradually declined to 1.3% in 1989. These losses were financed mainly by monetization and the inflation tax, and the induced losses in international reserves. With the recent liberalization of the foreign exchange market, the BG has again accepted the exchange rate costs of the banks' outstanding negative net foreign position, which would represent a loss of about 0.8% of GDP on a 33% devaluation of the Quetzal. This subsidy has an implication beyond its effect on the money supply in that it raises expectations that devaluation losses might again be covered in the future. If private debtors are not forced to carry the foreign exchange rate risk, foreign debt is likely to increase beyond a social optimum (also, encouraging back-to-back use of offshore funds). The BG introduced a fixed reference exchange rate for oil imports which involved granting subsidies, recently the reference exchange rate became a variable, determined by the average of the previous month's market rates. Under the new policy of a free foreign exchange rate and liberalized financial markets, there is no justification for the BG to continue to assume losses due to third parties' foreign exchange transactions. A policy statement in that respect should be issued immediately.

### Tax Treatment to Financial Assets

36. Guatemala has numerous tax provisions that impede the efficient development of its financial system by biasing the system in favor of certain types of financial instruments and intermediaries. This is particularly pronounced in the differential tax treatment of dividends and interests and in the stamp tax on financial instruments.

37. Dividends to Guatemalans are exempt from income tax, but dividends to foreigners are subject to a withholding tax. The treatment of interest for income tax purposes is distortive since interest on bank loans and private bonds traded on the Bolsa Nacional de Valores (BNV) are fully deductible, but non-bank interest is deductible only up to the level of bank interest. Interest on bank deposits, private bonds traded in the BNV, warrant bonds (bonos de prenda), insured mortgage certificates, and government and municipal bonds are tax exempt, but interest from non-regulated sources is liable for income tax and a 4% withholding tax. Banks have a different income tax schedule. Finally, interest payments to foreign-domiciled lenders' are subject to a withholding tax, but with total exemption for loans from financial institutions when the foreign currency proceeds were sold to a Guatemalan bank.

38. The income tax system discriminates against equity financing. In 1989, the cost of equity to enterprises in real terms was at least 5.4% p.a., compared to the cost of debt through bond issues of -2.2% p.a. The debt cost is much lower because interest is deductible on corporate income tax returns while dividends are not. The Guatemala income tax system thereby taxes income from equity but not income from debt. To ensure neutrality among various funding sources, income from all type of capital should be taxed equally. Moreover, the bias in favor of debt finance increases with inflation. In addition, the exemption of interest payments from taxation has important fiscal costs. The revenue foregone from the exemption of interest income was estimated at 0.60% of GDP in 1988 which is rather significant considering that the Central Government revenue was estimated at 9% of GDP and direct taxes alone at 2% of GDP in 1989. The foregone revenue could become an even more significant issue with the recent liberalization of interest rates, the acceleration of inflation and the expected positive effect on financial deepening.

39. The tax structure thus weakens the financial capacity of enterprises. It also reduces competition in the credit market because it favors resources intermediated by foreign financial institutions, private entity bonds and the banking sector. It also encourages the formation of economic groups and the concentration of bank portfolios in loans to associated customers. Finally, it discourages foreign direct investment since the overall result is a higher total tax on investing in Guatemala than for example in the U.S., Guatemala's main provider of equity finance. All these factors contribute to making macroeconomic adjustment more costly and difficult to achieve.

40. In Guatemala, there is also a 3% stamp tax on all transactions exempted from the value added tax. This tax levied on most financial contracts (the issue of private bonds through the BNV has recently been exempted) introduces another series of distortions. It discourages intermediation through the banking sector and encourages financing through bond issues and the non-regulated market. It induces long term loan

contracts through the practice of periodic renewals for tax avoidance (the tax is paid on the initial contract but not on the renewals), thereby creating a barrier to competition among intermediaries since shifting to a new source of finance bears the burden of the tax. This barrier is particularly important for new banks since they have a disadvantage in attracting creditworthy customers from established banks. The stamp tax also inhibits prompt increases in equity capital, as the tax must be paid on authorized but unissued capital, with the result that few companies have such capital available for issues when needed. Finally, it introduces an additional distortion by charging differential rates among sectors.

41. A more neutral tax treatment of financial instruments can be achieved through the elimination of: the stamp tax on regulated financial instruments, in tandem with expanding coverage of the value added tax to include financial intermediaries, as well as the differential income tax treatment among instruments, in particular, between income from debt and equity. The latter will be achieved through: (i) gradually eliminating deduction of interest payments by borrowers until they are only allowed to deduct the financial intermediaries spread component of interest payments; (ii) eliminating the special tax treatment of banks; (iii) making all interest income tax exempt and eliminating the withholding tax on interest income from non-regulated intermediaries; (iv) neither allowing deductibility of interest payments to foreign-domiciled lenders nor of capital losses on the amortization of principal due to the devaluation of the Quetzal; and (v) harmonizing corporate income tax rates with the U.S. Addressing the tax issues should be a priority item in the policy agenda.

#### Overall Impact of the Proposed Macrofinancial Reforms

42. The proposed macrofinancial reforms should promote greater fiscal transparency while stimulating the development of efficient financial markets. The Government has captured resources through forced mechanisms, and this has acted as an implicit tax (representing about 0.7% of GDP) on domestic financial assets. Furthermore, the Government currently is causing several distortions in the market through credit subsidies, the foreign exchange losses covered by the BG (together averaging about 1.5% of GDP during 1988-1989), and the non-neutrality of the tax treatment to financial assets. The proposed macrofinancial program offers the possibility of greater fiscal and financial transparency through the collection of income taxes on interest (representing about 0.7% of GDP) and the elimination of financial subsidies (saving the BG losses), while also removing the distortions that are hampering the development of the financial sector and resource mobilization in general. Considering all these effects, the net fiscal result of implementing these reforms would be positive by 1.4% of GDP. The program would also enhance BG's power to implement monetary policy, while giving the JM more independence from intermediaries influence.

#### The Financial Sector and Performance of the Banking System

43. The Financial Sector. There are seventeen private commercial banks and four private finance companies operating in Guatemala. The Government owns three banks: Banco Nacional de Desarrollo Agricola (BANDESA, the agriculture bank), Banco Nacional de la Vivienda (BANVI, the housing bank), and Credito Hipotecario Nacional (CHN, the mortgage bank) and a finance company, the Corporacion Financiera Nacional (CORFINA). Thirteen insurance companies and a few pension funds make up the



institutional investors, and a stock exchange has recently begun operations. There are also eleven warehouses that issue warrant bonds and non-regulated financial intermediaries.

44. The Banking System. The banking system, which includes commercial and Government banks as well as finance companies, accounts for about 95% of the liabilities and nearly 75% of the credit to the private sector. Commercial banks account for about 85% of liabilities and assets, while finance companies account for about 15%. Finance companies are less regulated than commercial banks with respect to reserve ratios and collateral requirements for different types of loans. Financial institutions are often linked together into groups through common ownership, thereby taking advantage of differences in tax treatment, regulatory constraints and supervision. Competition has increased significantly in the 1980s, especially due to the emergence of nonregulated intermediaries, but until recently, competition among banks themselves was limited by the slowness to grant new bank charters. In the past few months, however, six applications for new bank charters have been approved and eight others are awaiting authorization as part of the movement toward financial liberalization. Concentration appears to be fairly low, if group linkages are not considered.

45. Banking System Performance. Assessment of the performance of the banking system is difficult given inadequacies in accounting information (e.g., no professional organization to set standards, inadequate guidelines from the Superintendency of Banks (SB), and no private institutions that insist on high quality information). Bank operating and financial costs appear to have risen during the 1980s, especially for problem banks. Revenues from fees, especially related to foreign exchange transactions, and from interest on securities have become quite important for some banks. Debt/equity ratios vary widely among banks and have tended to increase during the 1980s -- due not only to low profitability and cumbersome procedures to inject new capital but also to the exception of certain assets from capital requirements. In addition, some banks may have understated their debt/equity ratio by accumulating operating losses in special reserve accounts rather than reducing their capital base.

46. Debt/equity ratios may also be significantly understated for some banks because of inadequate provisions for loans in arrears, and arrears may be understated because of rollovers and the failure of some banks to include as in arrears the total amounts of those loans with overdue payments. While overall arrears have tended to improve during the 1980s, the share of arrears over one year has increased. At least six banks have serious arrearage problems and possible negative net worth. One of them was intervened by the SB, and two others have some government participation. While all the public banks tend to be significantly less efficient than the private banks, the financial performance of public banks is not uniform. CHN continues to show profits, while BANVI, BANDESA and CORFINA have been experiencing significant losses. The financial conditions of CHN and BANVI will worsen as a direct consequence of the interest rate liberalization because substantial parts of their portfolios are under long-term fixed interest rate contracts.

47. There are only five private banks and one official bank that have ratios of non-performing assets to net worth lower than one. However, since non-performing assets include all loans and interest past due regardless of duration, these numbers overstate the financial difficulties

of the Guatemalan banking system. The problem banks may in the future face greater difficulties from interest rate liberalization and the issuance of new bank charters due to increased competition and increases in non-performing assets. There are also indications of excessive exposure to particular sectors and economic groups, and deficient lending policies (e.g., no controls on lending to shareholders or employees, and no systematic portfolio review).

48. The absorption of failing banks by new or existing banks will almost certainly require partial coverage of losses by the Government. The assets of the six possibly insolvent private banks and their estimated losses represents about 28% and 10%, respectively, of the total assets of the banking system. These losses are in addition to those that the BG will experience by assuming the foreign exchange risks on the foreign exchange exposure of the banking system. The total losses from foreign exchange and portfolio problems amount to about 1% of GDP. In addition, the losses of public banks are almost certainly even higher. CORFINA is technically insolvent and under intervention; also it received loans from the BG which are overdue since September 1989. BANVI and BANDESA are also technically insolvent, despite substantial transfers from the Government. These intermediaries do not only have high loan arrearages and high operating costs but also suffer a lack of clearly defined objectives (and related incentives and performance criteria), which makes them particularly vulnerable to political influence.

49. The Government needs to review its strategy concerning the public sector banks. These banks were created mainly to serve particular target groups of beneficiaries, but the performance of the public banks suggests that it would be better to deliver subsidies (to the extent they may be justified) to these groups directly through other means that would appear in the government budget and not through subsidized credit provided by public sector banks. Such a change in policy would change the basic purpose of the public sector banks and present the Guatemalan Government with three basic alternatives: (i) liquidate those that are basically insolvent and are likely to yield continuing losses; (ii) privatize them; and (iii) restructure and rehabilitate some of them. Different options could be followed for different public sector bank (e.g., liquidate CORFINA, privatize CHN, and continue BANVI and BANDESA as viable public sector institutions).

50. The liberalization of interest rates underscores the need for a prompt solution to the non-performing portfolio problem to ensure efficiency and stability of the system. Under a system of market determined interest rates, problem banks could engage in undesirable business practices such as: (i) increasing the spread on the performing part of the portfolio to try to offset the lost revenues on the non-performing part, thereby taxing the efficient sectors of the economy; (ii) engaging in riskier lending at higher interest rates to attempt to improve their weakened financial positions, thereby increasing potential future losses further; (iii) increasing deposit mobilization efforts by offering higher interest rates on deposits, thereby diverting funds from sound institutions; (iv) attempting to draw more funds from the BG, thereby putting additional pressure on monetary policy. The Banco Inmobiliario has been receiving liquidity assistance from the BG since December 29, 1988. All these actions would tend to misallocate resources and to increase the potential loss exposure of the BG, while bank owners would have little to lose through such risky behavior if these banks are in fact on the verge of

insolvency. Thus, the decontrol of interest rates (and the possible introduction of deposit insurance) requires actions on bank recapitalization and the strengthening of bank regulation and supervision to guard against possible bank insolvency and the related problems of excessive risk taking and misallocation of resources. These measures should be given especially serious consideration because implied deposit insurance may already exist, thus posing further potential pressures on the fiscal conditions.

### Regulatory Framework and Supervision

51. Regulation and supervision are heavily focused on economic regulations and tend to neglect important aspects of prudential regulation. Economic regulations reflecting largely from past efforts to enforce interest rate ceilings, prohibit banks from offering certain services (e.g., NOW accounts, bankers' acceptance, money market accounts, negotiable CDs), paying interest on demand deposits and charging fees for other services (e.g., checkbooks, returned checks, loan commitments). Such prohibitions hinder banks' ability to mobilize resources and allocate credit and also encourage inefficient nonprice competition and should be phased out. Moreover, with the abandonment of the interest rate controls, they no longer serve their original purpose. Also the suggestion made above to remunerate reserve requirements would require that banks be allowed to pay interest on demand deposits to promote competition and deposit mobilization. Banks are the only intermediaries permitted to operate in foreign exchange markets and competition should be encouraged by allowing entry by other financial intermediaries. In addition, there are extensive regulations over the guarantees that banks can accept for different types of loans which not only introduce significant distortions but also limit the development of crucial banking skills in loan evaluation and borrower selection. These too should be phased out and instead having the SB to focus on monitoring solvency and to analyze bank loan portfolios and credit policies in order to determine their adequacy. Banks are also required to maintain separate accounts for their commercial and mortgage departments, which may add to bank and supervisory costs, and should therefore be consolidated.

52. Prudential regulations need significant strengthening in several areas, especially after the liberalization of financial markets, to monitor bank solvency properly. The chartering of new banks is highly discretionary and still subject to significant delays. Capital requirements eroded by inflation for opening new banks, appear to be inadequate and they have lately been established on a non-transparent, case-by-case basis. There are also differential capital requirements for different assets. Because of the bias they entail (e.g., away from ownership of fixed assets and toward leasing), this system of minimum capital requirements for banks needs to be reassessed. Procedures for capital additions should be simplified, while initial capital requirements would be increased in real terms and procedures for granting bank charters would be made more transparent and less arbitrary. Minimum capital requirements for loans and investments in securities should be reduced, but all lending, guarantee and investment operations, even in government bonds, should be covered in the calculation.

53. Asset valuation, especially of loan portfolios, is inadequate. There is no loan classification system in place that could allow a realistic assessment of the value of bank portfolios, and provisions for

non-performing loans are established only on the basis of tax treatment. In addition, banks are allowed to roll over loans, including the capitalization of interest, without concern for past or prospective repayment. Also no adequate credit information system exists, mainly because banks are prohibited from supplying information on their customers' credit standing. It is argued that these inadequacies are no cause for concern because banks are required to operate on a cash basis. However, because the rest of the economy operates on an accrual basis, this different treatment mainly creates opportunities for tax avoidance (and thereby provides a strong incentive for the formation of groups), while the seeming strictness of cash accounting can easily be manipulated by, for example, granting new loans to delinquent borrowers. Therefore, a system for the evaluation and classification of loan portfolios should be established by the SB based on loan repayment status, borrower repayment capacity and cash value of collateral. Banks should be allowed to deduct provisions for income tax purposes when the SB request a bank to provision its loan portfolio. Accrual accounting should be adopted together with a more stringent regulatory framework.

54. Lack of adequate regulation to control loan concentration and loans to related parties is likely to prove the most serious deficiency in prudential regulation. Although banks are not permitted to lend more than 20% of their equity to any single borrower, the definition of relationships is lax, as all direct and indirect obligations of borrowers, partnerships and corporations are not included. A bank can also lend to the same borrowers through other financial institutions linked to the bank. In addition, banks are not prohibited from lending to their employees, shareholders or their relatives. Therefore, regulations on lending limits to each borrower should be reviewed to include all direct and indirect obligation of the borrower, to clarify the definitions of financial conglomerates and related parties (including partnership interests), and to limit lending to a bank's own shareholders and employees.

55. Inadequate prudential regulation is, moreover, combined with inadequate supervision. Current legislation does not require banks to hire qualified external auditors on a regular basis and there are no precise accounting guidelines or even an examination manual (although the SB is currently working on one). Bank examinations by the SB consist primarily of an examiner stationed permanently at each bank. This not only eliminates the critical element of surprise but also encourages an excessively close relationship between the examiner and the bank -- and banks are generally forewarned of external examinations. In addition, loan portfolios are only examined every two years on average, as examinations focus on compliance with economic regulations and accounting procedures rather than on loan portfolio quality and overall solvency. Finally, the SB has little power or autonomy, as the value of fines has been seriously eroded by inflation and banks have recourse to the JM to contest penalties and they can delay corrective actions. Adequate supervision would require addressing these issues as follows. Comprehensive yearly audits of all banks by qualified external auditors should be made a requirement and an effective system of fines and sanctions be implemented that the SB could apply for failure to comply with regulations and the SB's autonomy be enlarged. Bank income statements should be published and the system of permanently stationed bank examiners be replaced with a more frequent and effective system of bank examinations. A center for the analysis of bank credit risks and a credit reporting agency should be created, and SB resolutions should be changed, including norms and rules for loan portfolio

classification, accrual of interest, provisioning, and loan concentration. The SB should be modernized through improved techniques and staff training. Finally, the organizational and regulatory framework should be reviewed to decide if a new Superintendency Law is required to allow the SB to perform an effective supervisory role.

56. While regulations appear adequate to deal with insolvent banks, clearer and more precise procedures need to be established to allow the Government to act quickly and firmly -- especially considering that Guatemala has a number of problem banks and the evidence from other countries indicates how rapidly losses can escalate if insolvent banks continue to operate. While existing regulations authorize BG's intervention of insolvent banks, in practice it has been politically easier to attempt to cure insolvency by making infusions of funds rather than changing management. Furthermore, the procedure for intervening in a bank is too lengthy as bankers have several opportunities to contest an intervention by the SB. For each problem bank a choice must be made between liquidation and rehabilitation based on the cost of each course of action. Ownership and management will often need to be changed to bring about the required changes and to insure that current owners and managers responsible for bank problems do not benefit from any external assistance that might be given (which would not only be inequitable but would also create perverse incentives). Problem banks may be best acquired by strong banks (if this does not promote excessive concentration), by applicants for bank charters (if they have adequate capital and managerial skills), or possibly through the capitalization of deposits.

57. To pursue the most cost-effective solutions to solvency problems affecting the banking system, the Government needs to have a flexible and effective mechanism to handle ailing banks. This involves appropriate intervention procedures and mechanisms to rehabilitate or liquidate ailing banks. The Government should study alternative administrative mechanisms to rehabilitate and restructure financial institutions and to finance the costs of such operations, possibly by setting up a deposit insurance scheme. However, deposit insurance should not be instituted at a time when it is likely to imply increased costs to the Government of dealing with problem banks. In the Guatemalan situation, this suggests that prudential regulation and supervision first need to be strengthened and that insolvent banks should be recapitalized or liquidated before any system of deposit insurance is instituted. One advantage of a deposit insurance scheme is that it can share with banks through insurance premia the costs of dealing with problem banks. Certain basic principles are required to enhance public confidence in the mechanism's ability to deal with bank failures and to maintain the integrity of the banking system: (i) legal and financial autonomy; (ii) ability to function in a automatic, quick and efficient manner; (iii) freedom from political interference; and (iv) no subsidies for bank shareholders and borrowers.

58. Implementation of the above measures should increase the competitiveness of the regulated financial sector, thereby promoting efficiency and greater dynamism in the adoption of new technologies, especially through the enhanced possibilities for entry or exit. The recent liberalization of financial markets has increased awareness of the need for adequate prudential regulation and the focus of supervision on monitoring solvency.

### Informal Finance

59. Informal finance has become an important component of Guatemala's financial system primarily to avoid supervision and regulations that are applied to regulated intermediaries. However, there has been little analysis of informal finance that would allow an understanding of existing techniques, including those that successfully reach small-scale borrowers. Most of the studies that touch upon informal finance are mainly concerned with the creation of programs to promote microenterprises through the provision of subsidized credit by formal organizations -- even though microenterprises borrow almost exclusively from informal sources and at rates of interest lower than generally supposed. Moreover, because of their subsidies for borrowers and their insufficient spreads to cover the costs of lending, these programs are not viable in the long run but they encourage rent seeking and opportunistic behavior.

60. Informal finance consists of: (i) efficient and often innovative nonregulated intermediaries providing services that cannot be provided by regulated institutions; (ii) traditional moneylenders; (iii) off-shore banking activities that finance much of Guatemala's foreign trade and are largely carried out by branches of foreign institutions; and (iv) credit unions and other types of cooperatives that provide most of the financial services in rural areas, along with traditional moneylenders and other informal financial arrangements.

61. Because of the importance and apparent efficiency of informal financial markets in Guatemala, the objective should be not so much to regulate them, but rather to seek realistic ways to enhance the quality and quantity of their services. This analysis would provide important lessons for formal financial institutions about more efficient and innovative techniques of borrower selection and loan recovery and for policymakers about the negative effects of many current regulations.

### The Securities Market

62. The Bolsa Nacional de Valores S.A. (BNV) has been operating since late 1986 and has achieved a reasonable level of business in two types of government bonds. Other instruments are listed but have not been actively traded. The BNV has been operating despite the lack of a satisfactory regulatory framework. The existing arrangement is based on the Executive Branch Law which states that the Minister of the Economy has jurisdiction over stock exchanges. Internal regulations have been promulgated by the BNV, and these, together with guidelines issued from time to time by BNV management, provide the framework for the activities of the BNV. Although adequate to enable the BNV to commence business, this arrangement would not seem appropriate for the longer term, especially because it sets no standards for issuing securities. The BNV permits free listing of Government obligations and exempts regulated financial institutions from requirements to file prospectus. In fact, there has never been a prospectus offering through the BNV, and almost all the instruments currently listed were widely held before the BNV commenced operation, so the new market essentially is secondary.

63. Two versions of a proposed Securities Market Law (SML) have been discussed, negotiated, and partly agreed upon by the authors, the BG and BNV management. However, substantial areas of disagreement remain, mainly

with respect to the degree of authority of the Comision Nacional de Valores (CNV) and the degree of control to be retained by the BG and the JM.

64. One way to move speedily to a more stable structure for the BNV would be to introduce a self-regulatory system, using initially as basis the sound, if incomplete, set of internal regulations under which the BNV is currently operating. A self-regulatory framework would be practical interim solution but it would be important to ensure that these rules can be enforced. Authorities could establish a body to oversee the BNV's self-regulation and encourage the BNV to elaborate its existing set of internal regulations for securities trading.

65. The same solution is not available to govern the issuance of securities. The authorities will have to create a Securities Issuance Law (SIL) to provide legal means to insist on full and honest disclosure in prospectuses. The main purpose is to define the scope and depth of disclosure to be contained in a prospectus and to set standards of behavior for officers and directors of public companies. The current rules of the BNV do not provide an adequately detailed description of the information that the BNV would require on securities for listing. To protect outside shareholders' rights and to provide a sound basis for investment decisions, the financial data presented in prospectuses and periodic statements should be fully reliable. The authorities should thus consider whether existing accounting standards should be improved. The form and content of audit reports presented in prospectuses could be given in the SIL, but a more general solution would be for the accounting profession itself to implement a review of standards. Even if takeover bids may seem unlikely at present, the SIL should also cover mergers and acquisitions.

66. The Commercial Code describes the duties of company directors in some detail and provides for stockholder civil actions against derelict directors and for criminal sanctions in flagrant cases. However, in both its range and practical effects, this law is weak. Furthermore, behavioral and fiduciary standards for directors of publicly held companies should be higher than those applicable to closely-held entities. The proposed SIL should thus lay down the duties of public company directors in a more stringent way. The present law also does not acknowledge the rights of minority shareholders to seek protection against unfair acts by the majority, except that a minority shareholder can apply to the court to have his shares bought at asset value if deprived of reasonable dividends. The authorities may consider introducing necessary regulatory changes to increase protection of minority shareholders.

#### Suggested Sequence of Policy Reforms

67. The inadequacy of the overall conditions under which the financial liberalization measures were undertaken in Guatemala raises concern on the sustainability of the reforms. Financial liberalization was pursued in the context of a deteriorating macroeconomic environment, thereby posing additional pressures on the adjustment of the financial sector to the new policies, stemming from the unpredictability on the behavior of relative prices, foreign exchange and interest rates and the crowding out of the private sector. In addition, the financial liberalization, as being conducted, is contributing to worsen the already weak fiscal account prospects (including the grow in BG's losses and in the cost of servicing the public sector debt). Moreover, lack of competition and the inadequacy of prudential regulations and supervision, and existing intermediaries

solvency problems may induce widespread mismanagement, rents and resource misallocations. This situation may prove disruptive, and by creating still greater problems into the future, bound to failure. The negative experience with this strategy in the Southern Cone in the earlier 1980s speaks for itself. If Guatemala wishes to reap the benefits of the financial liberalization and avoid the costs inherent from a deorganized financial sector liberalization process, the authorities will have to come up very soon with a sustainable economic stabilization program that includes financial sector reforms.

68. To ensure the success and long-run viability of the proposed program of financial sector reform, due consideration has to be given to the following four aspects: (i) effects of the reforms on consolidated Government finance; (ii) market structure and financial conditions of intermediaries; (iii) adequacy of prudential regulation; and (iv) effectiveness of supervision. Accordingly, the reforms should seek to improve immediately the Government's financial condition, resolve solvency problems of financial intermediaries and issues of prudential regulation and supervision, and ensure a competitive market structure by removing barriers to entry and restrictive economic regulations, developing an active monetary policy, and issuing regulations and supervision of the securities market.

69. The strategy should be to implement first the suggested policy changes that would improve public sector saving, that is, implement the suggested changes in the tax system, the scheme for collection of private sector debts and the BG discount and foreign exchange policies, which should improve the Government's revenues, and the suggestions on public banks, which should reduce Government's expenses. These will enable the Government to: withstand the losses from resolving the system's solvency and restructuring problems, replace the existing stock of public sector debt paying below market interest rates and all existing compulsory public sector debt (e.g., arrears to suppliers) through competitive bonds, eliminate forced investment of insurance companies and deposit allocation of public sector institutions, and to finance all present and future domestic borrowing requirements through the issuance of bonds with clearly defined maturities and coupons which could be used by the BG for OMOs. Once the fiscal accounts are under control, consider either to pay interest on reserve requirements or reduce their ratios. The issues concerning the transparency of transfers within the public sector (including the BG) are not so pressing.



## CHAPTER I

### INTRODUCTION

#### The Scope of the Report

1.01 This study is the Bank's first in-depth analysis of private sector resource mobilization issues in Guatemala. It is meant to present senior policy makers in Guatemala with a set of recommendations to improve resource mobilization and allocation through measures that are directed at increasing efficiency in financial intermediation and in the competitiveness of domestic financial assets. They are thereby supportive of achieving a higher level of sustainable growth. The report consists of two parts. Part A focuses on an analysis of the macroeconomic issues constraining resource mobilization and allocation, as discussed in Chapters II and III. Part B focuses on an analysis of financial sector issues hampering the sector's ability to mobilize and allocate resources efficiently and consists of the four remaining chapters (Chapters IV through VII).

1.02 Chapter II evaluates Guatemala's monetary policy and the impact on financial markets of the Government's borrowing requirements and financing schemes. Chapter III studies the behavior of saving and the demand for money, which are key to understanding Guatemala's resource mobilization. This chapter also provides an analysis of financial market distortions stemming from differential taxation of different financial instruments. Chapter IV covers the composition and market structure of the financial sector in Guatemala and assesses the performance and financial condition of intermediaries. Chapter V offers an evaluation of the regulatory framework and supervision of Guatemala's banking system. Chapter VI is an overview of informal finance in Guatemala. Finally, Chapter VII studies the newly created securities market and institutional investors.

#### Overview

1.03 The financial sector in Guatemala, as in other countries, has been sensitive to macroeconomic disturbances arising from fiscal imbalances, exchange rate and monetary policies, and external shocks. The structure and performance of the financial sector has also been affected by government borrowing mechanisms, the tax treatment of financial instruments, sector-specific regulatory and supervisory constraints and, until recently, interest rate ceilings. In addition, government policies have compounded the problems of public sector development banks.

1.04 Financial intermediation in Guatemala is dominated by the banking system, in part as a reflection of the incentive system favoring bank debt instruments over equity finance and, until recently, third party debts. However, excessive regulation and inadequate supervision of intermediaries in Guatemala, have fostered a non-competitive regulated market and a competitive informal financial system. During 1989, a widening fiscal deficit and a deterioration in the terms of trade induced a balance of payments crisis. The authorities responded by liberalizing interest rates and the exchange rates, leaving both to be determined by market forces. These are very important policy changes that require appropriate changes in the focus of regulation and supervision of financial intermediaries to ensure the solvency of financial intermediaries and a competitive market structure.

## Economic Background

1.05 As a small and open economy, dependent on primary exports, Guatemala is highly exposed to external shocks. Nevertheless, the country was able to maintain stability and growth for many decades. Three distinct periods of monetary and fiscal policies can be distinguished during the past decades.

1.06 The first period which ended in 1978 was remarkably stable. Between 1964 and 1978, GDP grew on average at 5.7% p.a. Although inflation accelerated from an average of 1.5% p.a. in 1964-1973 to 12.4% p.a. on average in 1974-1978, this was mainly the effect of the first oil shock and the increase in expenditures spurred by the coffee boom. During this period, monetary policy was prudent, and the fiscal deficit was kept under control -- 1.2% of GDP on average between 1964 and 1978 -- and was primarily financed with public debt. The external balance allowed for stability in the exchange rate which had been fixed at a par with the U.S. dollar for almost 60 years. This stable environment encouraged both domestic and the external savings and investment in fixed assets. The demand for financial assets grew steadily, as the ratio of M2 to GDP increased from an average of about 17% in the 1960s to more than 24% in 1976-1978 (Appendix, Table I.1).

1.07 During the second period, from 1979 to 1985, the Guatemalan economy experienced serious economic and financial difficulties due primarily to fiscal imbalances and external shocks. As a result, in 1985 per capita income was 18% below its 1980 level, investment had decreased sharply, and the external debt had more than tripled from US\$0.8 billion in 1980 to US\$2.5 billion in 1985. Insufficient fiscal revenues, averaging less than 9% of GDP in the early 1980s, caused a sharp increase in the public deficit to 7.4% of GDP in 1981. Relaxation of monetary restraint, higher inflation and negative domestic real interest rates prompted a loss of confidence and encouraged capital flight and a small decline in the demand for financial assets to 23% of GDP. Also, foreign exchange reserves fell, foreign banks curtailed commercial credit, and private investment contracted.

1.08 An economic program to restore fiscal equilibrium -- including the introduction of a value added tax and other fiscal reforms -- was put into place between March 1982 and July 1983 with the political support of the private sector. However, stabilization efforts were dissipated after August 1983, and the International Monetary Fund (IMF) and the World Bank suspended disbursements. Nevertheless, the period between 1982 and 1984 witnessed the lowest annual rates of inflation of the 1980s, the highest positive real interest rates, and an increase in financial deepening at the rate of one percentage point of GDP each year to 28% in 1984. In late 1984, the authorities abandoned the fixed parity of the Quetzal with the dollar (Q 1 per US\$) and adopted a three-tiered exchange rate system. The operation of this foreign exchange system involved large subsidies and substantial losses by the Banco de Guatemala (BG, the Central Bank).<sup>1</sup> The combined public sector deficit, including the BG's losses, rose from about 4% of GDP in 1984 to nearly 6% of GDP in 1985, leading to a sharp expansion in monetary aggregates, so that inflation rose from 5% p.a. in December

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<sup>1/</sup> During 1985 the Quetzal depreciated in real terms by 34%, more than offsetting the cumulative appreciation during the period 1981-84.

1984 to 31% p.a. in December 1985. In 1985 real GDP declined by about 1%, the balance of payments registered a deficit of US\$108 million (financed largely by an accumulation of external debt arrears) and real interest rates became substantially negative. However, the ratio of M2 to GDP stood at an all time high of 30%. Clearly there was an element of surprise; an abrupt end to the fixed exchange rate system after a period of relatively low inflation.

1.09 The external imbalances reflect, to a great extent, the effect of higher public sector deficits (Appendix, Table I.1). The failure to carry out a sustained adjustment effort placed strong pressure on monetary policy which consequently became increasingly unstable and unpredictable. The monetary base and M1 fluctuated widely, reaching unprecedented rates of expansion of 63% and 56%, respectively, in 1985. Monetary expansion and devaluation caused inflation to accelerate to over 35% p.a. in the first half of 1986.

1.10 The third period began in 1986 when the current democratically elected Government took office and implemented a short-term economic program aimed at reducing inflationary pressures and strengthening the fiscal and external balances. Its Social and Economic Restructuring Program involved: (i) simplification and gradual unification of the foreign exchange rate system; (ii) reduction in the fiscal deficit including the BG's losses; (iii) a slowdown in credit expansion; and (iv) liberalization of price controls. In June 1986, the existing three-tiered exchange rate system was reorganized into: an official market in which the exchange rate continued to be fixed at Q 1 per US\$ limited to the service of external debt registered with the BG prior to June 1986; a new regulated market in which the exchange rate was initially set at Q 2.50 per US\$ for most trade transactions and service of "new" external debt; and a banking market in which the exchange rate was to fluctuate up to a ceiling of Q 3 per US\$ mainly for private individuals and covering some trade transactions and capital flows. The weighted average value of the Quetzal fell from around Q 1.90 per US\$ to Q 2.27 per US\$. At the same time, credit expansion was restricted by raising reserve requirements and by imposing limits on credit to the private sector.

1.11 The Government's 1986 economic program was successful, especially in reducing inflation and improving the balance of payments. Seasonally adjusted, the rate of inflation decelerated from 42% p.a. during the first half of 1986 to 12% p.a. in the second half. The external current account deficit (excluding official transfers) narrowed from US\$248 million (2 1/2% of GDP) in 1985 to US\$100 million (1% of GDP) in 1986, as imports declined sharply. However, despite a substantial increase in coffee prices, export receipts declined (by 5%) reflecting a continued drop in exports to Central American Common Market (CACM) countries and a sharp fall in cotton shipments. Nevertheless, the balance of payments deficit dropped to US\$68 million in 1986, compared to deficits of US\$108 million in 1985 and US\$187 million in 1984. Guatemala's external deficit for 1986 was more than covered by an increase in payments arrears, mainly related to commercial debt obligations. However, highly negative real interest rates in 1986 induced a steep decline in the M2 to GDP ratio by four percentage points to 26%.

1.12 The favorable balance of payments situation for 1986 reflected, to a large extent, more restrained fiscal and monetary policies. The consolidated public sector deficit was reduced from nearly 6% of GDP in

1985 to about 3% of GDP in 1986. Most of this improvement was due to a reduction in the BG's losses with the rationalization of the foreign exchange system. Notwithstanding a sharp increase in public expenditures, the deficit of the nonfinancial public sector (excluding U.S. budget support grants) was virtually unchanged at about 1.1% of GDP. A substantial share of this deficit was covered by an increase in government arrears, mainly to domestic suppliers. Government revenues (excluding grants) increased from 7.6% of GDP in 1985 to 9% of GDP in 1986, largely reflecting the favorable fiscal impact of higher coffee prices and the introduction of temporary export taxes.

1.13 The Government's 1986 stabilization efforts helped to lay the basis for economic recovery in 1987 as GDP grew by 3.1%. At the same time, inflation remained relatively low, averaging about 12% p.a., but the balance of payments situation worsened. A deterioration in the terms of trade, coupled with an unprecedented increase in imports (47% in real terms) partly to rebuild inventories, led to an increase in the current account deficit to 7.9% of GDP and a sharp decline in foreign reserves to less than one month of imports. In addition, the overall public sector deficit (including exchange losses) increased to about 3.3% of GDP, due partly to higher consumption expenditures and interest payments which more than absorbed an increase in tax revenues from 7% of GDP in 1986 to 8.2% of GDP in 1987.

1.14 Beginning in September 1987, the Government introduced a number of measures to reduce the fiscal and external imbalances, including tax reform and tighter credit policies. The tax reform consisted of: (i) lower marginal income tax rates and fewer tax brackets; (ii) closing of some tax loopholes and more limited exemptions; (iii) advance tax payments for corporations; and (iv) introduction of an import tariff surcharge of 4%. As a result of the reform, tax revenues increased from 7.9% of GDP in 1987 to 8.6% in 1988. In early 1988, the Government also increased electricity rates by an average of 25%. Both private entrepreneurs and labor unions strongly opposed these measures. Beginning in late 1987, there were indications that capital flight had resumed, thus increasing pressure on an already weak reserve position, while labor renewed its call for higher wages and additional price controls.

1.15 To check the deterioration in the balance of payments, the Government introduced a new set of economic measures in June 1988. These included: (i) unification of the foreign exchange regime at Q 2.70 per US\$ (implying a depreciation of the Quetzal of 8% in relation to the previous regulated rate of Q 2.5 per US\$ and of 170% with respect to the official rate); (ii) increases in interest rate ceilings on deposits and loans by two percentage points to 13 and 16% p.a., respectively; (iii) increases in the price of fuels; and (iv) stricter control over public sector purchases of goods and services. In addition, the Government began negotiations to refinance about US\$260 million in public sector payments arrears with foreign commercial banks and bilateral lenders.

1.16 On the basis of these measures, the Government reached agreement with the IMF in October 1988 for a 16-month Stand-by-Agreement. The principal objective of this program was to further strengthen the country's balance of payments and reserve position. Specifically, the program called for: (i) a reduction in the overall fiscal deficit from 3.6% of GDP in 1988 to 2.6% of GDP in 1989; (ii) a US\$60 million increase in the net foreign reserve position during 1989; and (iii) maintenance of flexible foreign

exchange rate and interest rate policies. However, this program never became effective, and because of significant departures from initial objectives, a new agreement would need to be negotiated.

1.17 During 1989, mainly because of a decline in government revenues, the combined public sector deficit increased to an estimated 3.9% of GDP (2.6% for the non-financial public sector, 1.3% due to BG losses). The increased fiscal imbalance was financed by an increase in arrears to domestic suppliers of about 0.9% of GDP and an increase in domestic financing of 0.7% of GDP. The current account of the balance of payments continued to show a significant deficit (estimated at 6.4% of GDP) and the BG continued to lose international reserves which reached a critically low level. To address this problem the authorities took action to improve the balance of payments by liberalizing interest rates, first for finance companies in April, and later in August for the whole banking system. However, until February 1990, interest rates have not changed due largely to bankers' agreements to maintain the interest rate structure as previously fixed by the authorities. In November 1989, the authorities decided to float the exchange rate. The official exchange rate of 1 Q per dollar was maintained due to legal constraints, but only for servicing the BG's foreign debt, while all other transactions are in the floating banks' foreign exchange market. The Quetzal had depreciated by about 25% by the end of 1989, after initially overshooting with a 41% devaluation, by the end of January 1990, the rate of devaluation increased to 33%, and by the end of May 1990 it reached 59%. Although average annual inflation increased from 10.3% in 1988 to 13% in 1989, the acceleration of inflation is more significant when the end-of-year CPI is used for comparison, from 12.3% in 1988 to 20.2% p.a. in 1989. Inflation has continued to accelerate during 1990, reaching 35% in May relative to May 1989. At the same time, the economy has continued to grow in real terms at about 3.8% p.a., while financial deepening has remained about the same.

1.18 On February 20, 1990, the Junta Monetaria (Monetary Board, JM) increased in a significant amount both interest rates on open market operations (OMOs) and the discount rate. Partly as a response to these policies and partly due to the expiration on the banks agreement, banks interest rates began to increase: as of May, the lending rates to 21%-28% p.a. from a ceiling of 16% p.a. set previously, and the deposit rates according to maturity (to 15%-16% p.a. for less than 30 days from a ceiling of 13% p.a. set previously, and up to 18.9% p.a. for longer terms). The monetary policy has continued to be passive, with the consequence that interest rates have increasingly become negative in real terms. Since the end of 1989, real interest rates on liabilities have fallen from a negative 4 to 7% p.a. to negative rates between 5 and 11% at the end of May 1990. On the asset side, real interest rates have dropped from a negative 2% p.a. to a negative 13% during the same period. These negative rates have encouraged capital flight and put continued pressure on the exchange rate.

1.19. Exchange rate policy has almost consistency been undermined since the free float was introduced in November 1989. First, the BG failed to introduce an active monetary policy. Second, in order to substitute for monetary policy the BG thought that it could stabilize the exchange rate by introducing a band in February 1990. After this experience failed after six weeks and left the BG almost without any foreign exchange (net reserve fell by \$55 million between end 1989 and end May 1990) but with increasing

arrears (an increase of about \$35 million during the first five months of 1990), the country returned to a free float in the beginning of April 1990. Since devaluation pressures were not reduced, the BG introduced an auction market for foreign exchange at the end of May 1990. According to the monetary authorities, this auction system should stabilize the exchange rate. However, this auction market is unlikely to ease the pressure on the exchange rate as long as monetary policy continues to be loose, and the unresolved budgetary problem persists. This experience stresses the need for the consistency of the exchange rate policy vis-a-vis the fiscal and monetary policies.

1.20 The adoption of market determined interest rates and foreign exchange rates were policy decisions taken under pressure induced by the macroeconomic imbalances -- without appropriate institutional support to ensure competitive markets and the solvency of the financial system. The following chapters review market distortions and regulatory constraints inhibiting the development of a sound and competitive financial sector that is necessary to improve resource mobilization and allocation in support of growth and improved welfare. Recent events underscore the need for prompt financial sector adjustment, including a review of monetary policy, the system of incentives, regulations and supervision.

**PART A. THE MACROECONOMICS OF RESOURCE MOBILIZATION**

**CHAPTER II**

**MONETARY POLICY AND DEFICIT FINANCE**

**Overview**

2.01 Monetary policy has been greatly influenced by the financial needs of the Central Government, the exchange rate regime, BG discount policies and changes in the international price of coffee. In addition to direct credit from the BG to the Government, non-remunerated reserve requirements and compulsory portfolio allocations are also mechanisms designed primarily to secure subsidized financing for the Government. Multiple exchange rates have forced the BG to incur substantial losses, thereby expanding the money supply significantly. Non-competitive interest rates impair the BG's ability to collect a competitive, market-determined exchange rate premium to cover the exchange rate risk on external sources of finance intermediated to the domestic market, and the resulting losses have contributed to monetary expansion. Other compulsory financing schemes such as accumulated arrears of the Government to domestic suppliers, together with Government and private sector arrears to the Social Security System and the tax treatment of financial instruments, also introduce important distortions into financial markets. In addition, monetary expansion has had important negative effects on the balance of payments and on expectations of devaluation and inflation which reduce the competitiveness of domestic financial assets. Accordingly, improvement in fiscal and monetary management is a prerequisite for macroeconomic stability and the development of financial markets.

**Instruments of Monetary Policy and Deficit Finance**

2.02 In a fixed exchange rate system as in Guatemala until October 1989, the money supply is an endogenous variable. And, as long as the BG had enough reserves, any disequilibrium in the money market was resolved by changes in foreign reserves held by the BG (passive monetary policy). Under those conditions, monetary policy could have only temporary effects on domestic markets. However, with the adoption of a floating exchange rate regime, monetary policy became an instrument of macroeconomic management (active monetary policy). Therefore, the authorities need to be equipped, as soon as possible, with sufficient power and instruments to manage monetary aggregates efficiently. Currently, there are three types of limitations on the ability of the BG to carry on an active monetary policy in Guatemala: (i) inadequacy of available instruments; (ii) subordination of the BG to the JM; and (iii) inadequate information systems and monitoring of monetary policy.

2.03 According to the Organic Law of the BG (OLBG), the BG is the executive branch of the JM. The JM is the maximum monetary authority, responsible for determining monetary, exchange and credit policies. Article 30 of the OLBG defines the JM's role; it: (i) appoints and dismisses all holders of managerial positions at the BG except the President and Vice President; (ii) determines bank reserve requirements; (iii) regulates the credit of the banking system; (iv) establishes policy

for public and semi-public banks; (v) regulates the rediscount policy and credit of the BG, and limits the different operations of the BG; and (vi) determines interest rates (Article 30). Article 98 of the OLBG also authorizes the BG to intervene in securities market, but it is the JM that fixes the limits and conditions of such operations (Article 30), and the BG is subordinated to the resolutions of the JM (Articles 104, 107, and 108). The Monetary Program of the JM establishes the limits within which the BG and the Government can operate, as well as the allocation of credit and the selection of monetary instruments. These instruments include reserve requirements, government bond operations which were recently transformed into OMOs, rediscount facilities, public sector fund allocations, and, until recently, limits on credit expansion to the private sector and interest rate ceilings.

2.04 Reserve Requirements. Commercial banks, along with public banks and finance companies, are required to maintain reserves at the BG proportional to their deposit liabilities. During 1975-1986, reserve requirements on demand deposits fluctuated between 35% and 41%, while those on savings and time deposits fluctuated between 10% and 16% (Appendix, Tables II.1 and II.2). Since 1986, bank reserve ratios have been 41% on demand deposits and 13% on savings and time deposits. Regulated finance companies have different requirements: 35% for liabilities with less than 30-day maturities, and 10% for liabilities with one-year maturities. Finance companies have remunerated reserves on liabilities of over one year maturity despite the fact that such liabilities are in fact redeemable on demand like bank savings deposits. This presents banks with unfair competition. However, during 1990 the JM has been authorizing banks to issue bonds which are exempt from reserve requirements, despite the fact that they are close substitutes for deposits. Differential reserve requirements reduce the control of the JM over monetary aggregates since a change in the composition of deposits can cause a significant change in the money multiplier. Moreover, actual compliance with reserve requirements reveals serious problems for two reasons. First, compliance only requires balancing daily liquidity shortages with daily excess liquidity every day of a month but one, and the accumulated liquidity shortage could be balanced by the liquidity surplus of only one day. Second, banks are allowed to count as reserves cashier checks issued by other banks, which in turn are exempt from reserve requirements. That is, banks can issue base money. As of end of April 1990, cashier checks represented about 2.2% of M2 and were responsible for about 6.6% of the supply of this monetary aggregate (2.2 times the M2 money multiplier of about 3). To tighten the control on the money supply, the JM will have to: (i) severely restrict the daily balancing scheme for compliance with reserve requirements, or better, to request daily compliance with it; (ii) require a uniform reserve requirement for all liabilities (including cashier checks) issued by banks and financial companies; and (iii) restrict the concept of reserves to include vault cash and deposits in the BG only.

2.05 In addition, as compared to a system (as exists in Mexico) where banks receive remuneration at market rates on their reserve requirements, Guatemala's non-remunerated reserves are an impediment to efficient financial intermediation. Since the BG does not pay interest on reserves, reserve requirements act as a tax on a portion of the financial system. These requirements result in a larger spread between loan and deposit rates, as banks transfer the burden of this tax to depositors and



borrowers. Tax avoidance has induced an expansion of intermediation through regulated finance companies and the informal financial sector at the expense of banks. Assuming that banks equalize their marginal cost of funds across sources and different types of deposits are close substitutes, then the maximum deposit rate divided by the proportion of freely disposable funds from these deposits reflects the marginal cost of mobilizing bank funds. The lending rate necessary to cover the cost of keeping idle reserves should have been 14.94% p.a. (13%/.87) since 1988 up until February 1990, and since then should oscillate between 18.4% p.a. (16%/.87) for deposits with less than 30 days maturity and 21.3% p.a. (18.5%/.87) for 180 days; that is, a spread of almost 2 percentage points should have been attributable to non-remunerated required reserves until February 1990 and between 2.5 and 3 percentage points since then. In 1988, the average bank spread calculated as the difference between the system's financial income and expenditures was 6.9 percentage points, so that almost 30% of it could be explained by the revenues lost from non-remunerated reserve requirements (Appendix, Table II.10). From 1983 to 1988, there was an increasing trend in bank spreads due to the increase in the deposit rate and the required reserve ratio, while the portion of the spread explained by other factors (the "normal" spread) has shown only a slight positive trend.

2.06 To increase efficiency in the Guatemalan financial sector, among other things, the BG will have to either reduce or remunerate reserve requirements. However, paying interest on reserves would tend to reduce spreads at the cost of increasing the consolidated public sector deficit. If the BG were to pay a market determined interest rate on reserves, this would imply paying the deposit rate. With bank reserves representing 4.2% of GDP in 1988 and assuming an interest rate of 13% p.a., would mean a fiscal cost of at least 0.55% of GDP. If the authorities instead decide to reduce reserve requirements, this still would have a similar impact on the fiscal accounts since the Government would have to issue bonds to sterilize the ensuing monetary expansion. Accordingly, fiscal adjustment and more transparent alternative mechanisms of deficit financing will be required before any sustainable reduction or remuneration of reserve requirements is possible.

2.07 Government Bonds and Open Market Operations. Interest rates on Government placed bonds with the BG have been raised from 1.5% p.a. in 1985 to 9% p.a. in 1986 (later lowered to 7% p.a. by Congress). The BG issues certificates which are backed by this portfolio of public debt. The interest and terms of these certificates vary among issues. However, they are redeemable on demand which disqualifies them from use in OMOs or from determining an interest rate term structure. The JM establishes ceilings on bond sales to the banking system and the non-financial private sector. Unlike OMOs in other countries where the interest rate is determined at auction, the JM generally fixes the rates, aligning them with the interest rate on bank deposits. In August 1989, the JM authorized the BG to engage in OMOs up to the limit of Q 100 million in certificates redeemable on demand and Q 200 million in certificates with deferred repurchase guarantees. The JM also established the interest rates on these certificates: 13% p.a. on bonds with a 30 day repurchase guarantee; 13.5% p.a. for a 60 day maturity; and 14% p.a. for a 90 day maturity. In February 1990, these rates were increased to 24%, 24.25% and 24.5%, respectively, but yielding to banks pressures the rate was subsequently

established at 18% p.a. However, the BG continue to avoid auctioning which should be introduced immediately. There is an increasing financial cost to the BG stemming from OMOs, since the gap between interest received and interest cost is growing rapidly, thus contributing to enlarge BG's losses. To improve public sector efficiency, the Treasury should paid market rates on its bond issues and the BG should paid market rates on the deposits of the Treasury held in the BG, while the government budget should include the transfers from the BG. In 1987, the largest demander of bonds was the banking system, while in 1988 it was the non-financial private sector (Appendix, Table II.3).

2.08 The authorities' recognition of the need to implement effective OMOs as an important instrument of monetary control and the introduction of non-redeemable on demand bonds with well defined maturity dates are important steps in the right direction. However, there are still some important shortcomings limiting the effectiveness of OMOs in Guatemala. The most important one is the subordination of the BG to the authorization of the JM in terms of the limits placed on the amounts and conditions of the bonds to be issued and negotiated. This is a serious problem due to the practice of the JM not to take decisions concerning OMOs without the consent of the two commercial bank representatives on the JM, even though they have only two votes out of eight, with six votes required for decisions on OMOs. This practice significantly undermines the effectiveness of OMOs since the BG in effect cannot compete for funds with the banks, limiting itself to withdrawing the excess liquidity that the banks want to release. Moreover, the recent JM authorization to issue Q 100 million in redeemable bonds to be sold to the banks, implies readily available remunerated liquidity having very little permanent monetary effect (for OMOs to be effective, negotiated bonds should be as distant from money as possible). This situation is certainly not conducive to pursuing an active monetary policy as required by the new policies of market determined exchange and interest rates.

2.09 The existing regulatory framework, however, offers some possible short run solutions to this problem. First, the representatives of the private banks could be requested to abstain from participating in JM meetings centering on decisions concerning monetary and exchange rate policies. Article 29 of the OLBG establishes that, in cases where members of the JM have a personal interest (or their partners or family members have interests) in topics on the agenda, they should be requested to abstain from participating in that JM meeting. In the operations under discussion, the bank representatives clearly have the type of interest described in the law, so that the law simply needs to be enforced. Second, the JM could authorize the BG to intervene in the money market through either OMOs or operations in the interbank market without any restrictions other than maximum limits on total monetary expansion -- and afterwards informing the JM of its activities. These recommendations would greatly enhance the BG's ability to conduct OMOs. In addition, the BG should be able to issue bonds not redeemable on demand and having well defined terms to maturity to conduct OMOs efficiently. In the long run, however, the law will have to be changed to remove the banks representatives from the JM. The government has to play the role of an arbiter in balancing intersectoral interests. The authorities could consult different sectors and seek consensus, but the decisions have to be their own.

2.10 The Government has also used market driven debt instruments to finance its needs. In 1983 and 1984, the Government issued US\$515 million in Stabilization Bonds (BESTs) to postpone payments to foreign creditors and suppliers. BESTs were denominated in US dollars, with clearly defined coupons and maturities (five years) and have been quoted on the Bolsa Nacional de Valores S.A. (Guatemalan Stock Exchange, BNV) at the same prices as those in the international secondary market. In September 1988, the Government made a public offer to exchange US\$400 million of BESTs for new bonds denominated either in Quetzales (7 year maturity, 5 years grace, 16% p.a. interest) or in US dollars (10 year maturity, 5 years grace, 10% p.a. interest). In addition, the JM authorized the use of BESTs for payment of taxes, imports through foreign lines of credit, and debt/equity swaps. As of January 1990, 92% of outstanding BESTs had been refinanced through these mechanisms (Appendix, Table II.8). As of May 1989, the internal rate of return (IRR) on BESTs was 16.4% p.a. for those denominated in US dollars, and 24.1% p.a. for those denominated in Quetzales. As of January 7, 1990, the rates had increased to 18.9% p.a. and 27.8% p.a., respectively. The change in yields can be attributed mainly to the fact that the yields on these bonds were initially reduced by the possibility of early amortization through the above mentioned scheme authorized by the JM which was suspended in the later part of 1989. The scheme for early amortization was inflationary, therefore, it should continue to be suspended unless the monetary program compensates for its effect and the Government has the resources to bear the higher costs it would entail. In addition, the implicit expected rate of devaluation of the Quetzal increased from about 6.6% p.a. in May 1989 to about 7.5% p.a. in January 1990, after changes in exchange rate policy and a major adjustment in the exchange rate took place.<sup>1</sup> Moreover, as of the second week of January 1990, the implicit country risk premium on government bonds was about 10% p.a.<sup>2</sup> However, the private sector claims that the implicit country risk premium on their own foreign borrowing is much less -- which suggests market signals of unfavorable expectations about the fiscal situation.

2.11 Another financial instrument quoted on the BNV is the BIVA, which is a Treasury bond denominated in Quetzales issued in 1987 to exporters claiming reimbursement of the value added tax (IVA). These too have clearly defined coupons and maturities (five years with annual amortization of 20% of the amount issued). The IRR on BIVAs was 23.5% p.a. in January 1990. The Government has recently been authorized by Congress to issue bonds and place them in the market to finance the deficit. These bonds are yielding 35.5% p.a. as of May 1990. Until now, these IRRs are the only transparent indicators of after-tax market-determined medium-term interest rates in Guatemala.

2.12 Not all debt has been converted into transparent debt instruments like BESTs or BIVAs. An increasing floating debt with the private sector has also emerged as a result of delaying Government payments to suppliers

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1/ Estimated as the ratio of the IRR on Quetzal denominated bonds to the IRR on dollar denominated bonds; e.g.,  $[(1.2407/1.1642)-1] \times 100$ .

2/ Estimated as the ratio of the IRR on dollar denominated BESTs to the interest rate on long-term US Treasury bond; e.g.,  $[(1.1889/1.086)-1] \times 100$ .

and contractors (Paragraph 1.17 and Appendix, Table II.7). However, this is offset in part by the large private sector debt to the Instituto General de Seguridad Social (General Social Security Institute, IGSS).<sup>3</sup> Furthermore, the Central Government settled its debt to the IGSS for its employer contributions since 1987 by means of non-negotiable bonds bearing a preferential (low) rate of interest. Other financing schemes include compulsory investments by insurance companies: the Treasury issues bonds with lower yields than the rates paid by regulated financial institutions and these are placed with insurance companies as a compulsory proportion of their reserves. Compulsory financing mechanisms undermine confidence and inhibit the development of genuine credit and capital markets.

2.13 Another issue is the existing stock of government bonds held by the private sector and bearing relatively low interest rates. Up to now there has been little or no effect on financial markets from the liberalization of interest rates, in large part due to the agreement reached by banks to maintain the interest rate structure prevailing before the new policy was adopted. Unless the Government decides to impose a wealth loss on private sector bond-holders of non-redeemable on demand bonds, which would occur when the market adjusts to the new rules, the Government would have to replace the existing stock of bonds with new ones having defined maturities and competitive interest rates. A similar substitution should also occur with bonds that are redeemable on demand to enable the Government to rollover this form of debt as well. Assuming that the average term-to-maturity interest rate would be 13% p.a., the Central Government's interest cost on the outstanding domestic public debt would have increased by Q 128.5 million (0.56% of GDP) in 1989. However, since the majority of bond-holders are public sector institutions, the consolidated public sector deficit would have increased by only Q 25.2 million (0.11% of GDP) (Appendix, Table II.11).

2.14 Limits on Credit Expansion. Another instrument of monetary control used until recently was the limits established on the expansion of bank credit to the private sector. These limits were set either by a resolution of the JM or through agreements between the JM and the banks. The excess over the limit had to be invested in government bonds purchased from the BG but, as mentioned above, only up to the limit on the sale of government bonds imposed by the monetary program. This combination of limits implied the possibility of 100% marginal reserve requirements. Consistent with the policy of financial liberalization, the authorities eliminated limits on credit to the private sector in August 1989.

2.15 Discount Policy. The BG rediscounts commercial bank loans to specific priority sectors selected by the Government on the basis of income distribution and resource allocation objectives (e.g., farmers, small and medium firms, exporters, construction activities). In this process, the BG uses its own funds or external sources, generally from international agencies. In the case of domestic resources, a resolution of the JM issued in August 1989 established a discount rate of 3 percentage points below the bank lending rate, except for low income housing (USAID funds) where the

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3/ Because there is no penalty for late payments of social security contributions, the private sector has accumulated an important debt with the IGSS.

discount rate is fixed at 9% p.a. In February 1990, the JM harmonized the discount policy funded with local resources with its OMOs policy by establishing a general discount rate structure equal to the one on OMOs. In the case of external credit lines, the discount rate is to be adjusted every quarter by the BG based on the cost of these funds, and the banks are to charge a maximum spread of 4 percentage points to their borrowers. However, there are exceptions to these rules when existing or future loan agreement with international institutions establish specific rules. Discounts with foreign funds have decreased in importance over the last few years due, in part, to the lengthy bureaucratic process involved. External discounted funds are denominated in Quetzales and the BG assumes the exchange rate risk; however, to the extent that the discount rates are not competitive, the BG will not be properly covering itself against this risk. Accordingly, the discount policy generates a wide dispersion of interest rates to final borrowers and results in different spreads to the banks and potential losses to the BG. This is not a policy conducive to efficient resource mobilization and allocation.

2.16 In 1987, the discount rate charged to banks for domestic sources of funds was 9% p.a., but the interest rate to final borrower on discounted loans could be no higher than 12% p.a., in contrast to the 14% p.a. ceiling on other loans. During the first quarter of 1987, the distribution of these credit lines was heavily concentrated: the 90 largest agricultural loans (out of approximately 200) accounted for 90% of agricultural credit; 33% of industrial loans accounted for 90% of industrial credit; and 2% of construction loans accounted for 53% of construction credit. Therefore, it does not appear that the Guatemalan authorities succeeded in their objective of improving income distribution through subsidized credit.

2.17 To the extent that the costs for the intermediary and/or the borrower are lower than the opportunity cost of funds, subsidy is provided. The opportunity cost of these funds is the uncontrolled savings deposit rate corrected for the non-remunerated reserve requirements on these deposits, presently over 18.3% p.a. (see Paragraph 2.05). Cheap loans tend to increase the borrower's debt at the expense of equity but may not increase investment in either the enterprise or the economy. Cheap funds have to be rationed and, depending on the rationing mechanism, the marginal cost of credit and, therefore, investment may be unaffected. Even if investment in the enterprise or in the favored segment of the economy were increased, it would be at the expense of other sectors, because aggregate investment would be unchanged. The rent seeking that invariably accompanies such subsidies reduces welfare and tends to corrupt the system, while causing losses for the BG.

2.18 To be effective, subsidies should always be carefully targeted, controlled and transparent, but this is especially difficult to ensure with credit, making it an inappropriate vehicle for subsidies. Targeting credit subsidies is difficult because credit is fungible, and, because of rent seeking, and the benefits often accrue to the unintended. Moreover, controlling interest subsidies is difficult because the subsidies embedded in fixed low nominal interest rates vary with market rates, and any adjustment mechanism tends to be complex and operates with lags. In addition to being transparent, subsidies should be allocated through the government budget.

2.19 Although the Guatemalan authorities have not traditionally used discounts as an instrument of monetary control, financial liberalization and the resulting need for active monetary policy would justify using discounts as an instrument to control monetary aggregates. Controlling the discount rate has proven to be an effective instrument of monetary control and a useful market signal in most developed economies. Discounts which induce segmentation of financial markets, contradicting the new policy of financial liberalization, should therefore be phased out as an instrument to channel subsidies and direct credit to specific sectors. Irrespective of the source or use of funds, the discount rate should reflect banks' marginal cost of mobilizing funds and the degree of tightness that the monetary authorities wish to impose on the economy. In addition, bank spreads should be free to be determined by market competition.

2.20 Allocation of Public Sector Deposits. Public sector deposits have not only been used as an instrument of monetary control, when transferred between banks and the BG, but also to support public banks by reallocating these funds from private banks. The accepted policy is that funds of official agencies and public institutions are required to be deposited at the BG or held in the form of government bonds. As these yields are lower than those on alternative investments, income is transferred from agencies with excess funds to the BG or the Treasury. In addition, proper management of cash balances by public sector institutions is impaired, and the development of an investment department in, for example, the IGSS, is inhibited. Moreover, this is not a transparent instrument for monetary control, especially since it hides the transfer of income from the institutions with excess funds to the Central Government through the BG (i.e., the foregone interest on deposits at commercial banks and Central Government saving in interest payments). OMOs would generate the same consolidated public sector deficit, but Central Government interest expenses and public entity interest income would increase. In addition, OMOs imply voluntary participation in the market, while deposit allocation is a compulsory device. Moreover, competition and efficiency are impaired by providing public banks with captive deposits. Since this policy is not consistent with the new approach to financial markets in Guatemala, it should also be phased out.

2.21 Interest Rates. As discussed above, the JM has the authority to regulate interest rates, and using this power, the JM liberalized the interest rates of the banking system in August 1989. However, as mentioned in Chapter I (Paragraph 1.17), interest rates remain the same due to the commercial banks' agreement and the inability of the Government to activate an effective OMOs and discount policies. By the end of February 1990, the authorities are reforming their OMOs and discount policies toward having a more active role. Direct controls over nominal interest rates had resulted in negative real interest rates for several years. While real interest rates had improved in the early 1980s, they deteriorated again in 1985-1986 as a result of the acceleration in inflation. The real interest rate on savings deposits became positive after the stabilization plan, increasing from -22.3% p.a. in 1986 to 2.8% p.a. in 1987, but declined again thereafter (Appendix, Table I.1). Banks lending and deposit ex-post real rates became negative since November 1989.

2.22 The experience of Guatemala with interest rate ceilings indicates their disruptive effects on an economy. As suggested by the econometric

results discussed later in this Chapter and Chapter III, they have discouraged financial intermediation through the regulated market, have reduced saving incentives and have fostered capital flight. In addition, they have discriminated against financing of riskier investment opportunities (e.g., small enterprises), have promoted the formation of economic groups, and have led to the concentration of bank loan portfolios in a few firms and with individuals associated with these groups. They have also promoted rent-seeking entrepreneurship. Furthermore, such ceilings have inhibited competition through the price system and have induced the adoption of less transparent rationing mechanisms. As noted earlier, they have also impaired the BG's ability to collect a market determined exchange rate premium to cover the risk associated with foreign sources of credit. Finally, interest rate ceilings have discouraged the development of a long-term financial market in support of investment finance.

2.23 Control of interest rates also has fiscal implications. The issuance of Treasury bonds redeemable on demand with yields similar to the regulated interest rate on bank savings deposits places the Government in a favorable position to capture a significant part of the transfer of income from depositors to users of credit. The Government would have to find alternative revenues to compensate for higher interest payments on Treasury bonds (see Paragraphs 2.06 and 2.13).

2.24 In Guatemala, as in many other countries, there is legal constraint to interest rate liberalization. The Civil Code (Articles 1272-1273) gives borrowers the right to take creditors to Court and request annulment of any clause in the loan documents that allows variability of interest rates. Thus a loan can have a freely agreed interest rate, but fixed throughout its maturity. This eliminates an important mechanism to cope with uncertainty in medium and long term financial transactions and impairs the development of long term debt instruments and, therefore, it should be phased out. This constraint is particularly important in Guatemala due to the peculiar forms of loan contracts practiced by banks to reduce the incidence of the stamp tax (see Paragraph 3.21).

2.25 Information Systems and Monitoring Monetary Policy. Although there is a voluminous data base at the BG, it is not organized in a way to serve as an information system to guide decisions for an active monetary policy. In addition, monetary data are available only with a lag of one week. To improve the information system, the BG will have to: (i) require the banks to provide weekly and daily information on their positions in Quetzales, foreign exchange, public sector bonds, deposits, portfolio renewals, excess liquidity, and the term to maturity of assets and liabilities in foreign exchange; (ii) implement an information system capable of processing this information on a daily and weekly basis; (iii) establish a permanent commission (composed of members from at least the Departments of Economic Studies and Foreign Exchange of the BG and the Superintendency of Banks, SB) reporting directly to the President of the BG to analyze and evaluate this information; and (iv) assess the daily and weekly commission reports covering the prospects for monetary policy, the financial condition of the banks, and recommendations that take into account the monetary program and the foreign exchange requirements of the BG and the overall public sector.

## Sources of Monetary Expansion

2.26 Compared to other Latin American countries, monetary expansion in Guatemala has been relatively moderate. The average annual rate of expansion of M1 during the 1980s was about 7%, while that of M2 was about 11%. Changes in M1 and M2 have been dominated by changes in the monetary base, as variations in the money multiplier have only recently become significant. The sources of expansion in the monetary base are four: net foreign assets, net credit to the Government, the BG's losses, and net credit to the private sector.

2.27 Net Foreign Assets. Before 1979, the increase in net foreign reserves was the main source of expansion in the monetary base (Appendix, Table II.5). This was especially true between 1975 and 1979 when coffee prices soared and net foreign reserves increased 3.5 times. BG credit to the public sector was very much under control during those years. However, the situation changed in 1979, as fiscal deficits increased and reserve accumulation ceased. From 1979 to 1984, the fall in net foreign assets offset almost 56% of the increase in domestic credit to finance the fiscal deficit. When coffee prices recovered in 1986, there were substantial gains in reserves which were used in 1987 to sterilize the excess liquidity created by the BG's losses. Net foreign reserves have contributed to monetary contraction since 1987, declining continuously from about -.5% of GDP in 1987 to about -.8% in 1988 and projected to decline further to about -2.2% in 1989.

2.28 Fiscal Deficit Financing. Credit from the BG has been an important instrument in Guatemala to finance the fiscal deficit (Appendix, Table II.5). Other financing instruments include government bonds and, more informally, domestic arrears on public obligations (i.e., "floating debt"). Foreign borrowing has covered one-fourth to one-fifth of public sector financial needs (Appendix, Table II.6). In general, while international reserves were high, monetary expansion to finance the deficit was partially offset by a fall in reserves. As reserves were depleted, however, the Government was forced to devalue the Quetzal and to finance its payments to foreign creditors and suppliers (see Paragraph 2.10).

2.29 Losses of the BG. Much of the increase in the monetary base during 1985-88 was due to the BG's operating and exchange rate losses (Appendix, Table II.9). Most of these losses originated in foreign exchange transactions after the fixed exchange rate system was abandoned in 1984, as the BG continued to sell foreign exchange at Q 1.00 per US\$ in the official market while buying at Q 2.50 in the banking market. Operational losses were also incurred as a result of the imbalance between receipts on discount credits and the servicing of foreign credit lines -- due especially to the fact that the BG because of interest rate ceilings was unable to constitute an appropriate reserve to hedge against exchange rate risks.

2.30 To partially offset the monetary expansion created by its foreign exchange and operating losses, the BG sold government bonds and raised reserve requirements in September 1986. In addition, discount operations were significantly curtailed, except for those banks whose liquidity was affected by the shift in IGSS deposits to the BG (see Paragraph 2.20). Exchange rate losses were reduced after the implementation of a new



exchange rate system in June 1986, but the Government has continued to subsidize the servicing of external debt contracted by the private sector before that date. The subsidy has an implication beyond its effect on the money supply in that it raises expectations that devaluation losses might again be covered in the future. If private debtors do not properly internalize exchange rate risk, foreign debt is likely to increase beyond a social optimum.<sup>4</sup> Aware of this problem, the Government unified the exchange rate in mid-1988 and thereby eliminated the subsidy on servicing the old external debt.

2.31 With the recent liberalization of the foreign exchange market, the BG once again has accepted the exchange rate costs of the banks' outstanding negative net foreign exchange position of \$ 197 million (Appendix, Table II.12). A 25% devaluation of the Quetzal for example would imply a loss to the BG of about Q 133 millions (0.6% of GDP). Counting only the negative position of private banks (Q 109 millions), the losses of the BG corresponding to its contribution to the consolidated public sector deficit would be Q 74 millions (about 0.3% of GDP). Also the BG introduced a reference exchange rate of Q 3.22 per dollar for combustible imports. This implicit subsidy became increasingly expensive as the difference between the free market and the reference exchange rate widened. For example, the annualized subsidy on combustible imports in December of 1989 could amount to 0.3% of GDP. Recently, the BG abandoned the fixed reference exchange rate and replaced it by the average of market exchange rates of the previous month.

2.32 The BG's losses, due to the extension of the exchange rate guarantees on debt services and interest rate subsidies, were financed almost entirely through the collection of the seigniorage and the inflation tax during 1985-1986 and 1988-1989. However, during 1984 and 1987, the BG's losses were financed by the inflation tax and losses in international reserves (Appendix, Table II.13). Under the new policy of a free foreign exchange rate and liberalized financial markets, there should be no justification for the BG to continue to take losses due to third parties' foreign exchange transactions.

2.33 BG Credit to Financial Institutions. Before 1980, the banking system received about the same amount of credit from the BG as did the public sector (Appendix, Table II.5). After that year, the banking system's share declined as the public sector's financial needs became more significant. In fact, BG loans to commercial banks grew less than bank deposits at the BG. The balance, favorable to the BG, was used to buy international reserves and to finance the public sector deficit.

2.34 Money Multiplier. For M1, the money multiplier has been stable at around 1.0, while for M2 it has been increasing over the last 10 years from 2.4 to its current level of around 3.0 (Appendix, Table II.4). Two factors help to explain the behavior of the M2 money multiplier: decreases in the currency to deposit ratio, and decreases in the reserve coefficient (the latter due mainly to the increase in the share of quasi-money in total

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4/ Economic agents often obtain loans from abroad guaranteed by their own deposits in foreign banks instead of utilizing those funds directly as capital.

deposits since quasi-money has lower reserve requirements). While stable on average, the M1 multiplier has been sensitive to changes in reserve requirements on demand deposits.

### Inflation, Devaluation and the Balance of Payments

2.35 Empirical analysis (Annex A) indicates that monetary imbalances in Guatemala were mainly corrected through changes in prices and reserves. This is explained by the fact that interest rates and exchange rates have been fixed or controlled by the Government. Between 1961 and 1987, about 47% of the annual change in domestic credit was offset by losses in international reserves, reflecting the fact that Guatemala is a fairly open economy in both goods and capital markets. An excess supply of money increases domestic resident's demand for tradeable goods (importables and exportables) and foreign assets. If the exchange rate does not depreciate, both the trade and the capital account deteriorate and the country loses reserves. The remaining excess supply of money was corrected through adjustments in the prices of home goods; i.e., an appreciation of the Quetzal in real terms. In 1984 and 1986, steep devaluations were needed to cope with balance of payments crisis generated mainly by fiscal and monetary imbalances in combination with inflexible exchange and interest rates. As a result, fluctuations in the real exchange rate (the relative price between tradeables and nontradeables) were exacerbated, with periods of real appreciation followed by large devaluations.

2.36 The conditions described above are likely to change under the new system of flexible exchange rates and interest rates. An excess supply of money will immediately be reflected in nominal exchange rate depreciation and falling interest rates rather than in reserve losses. Also, exchange rates and domestic prices will be almost simultaneously affected by increases in the money supply, reducing the sharp fluctuations in the real exchange rate that existed under the previous regime at times of active domestic credit expansion. This, however, does not mean that exchange and interest rate flexibility will substitute for fiscal and monetary discipline. On the contrary, the functioning of the system will require sustainable fiscal and monetary policies since it will become more difficult for the government to repress domestic inflation now that it has given up control of the exchange rate. In other words, the link between money and prices (or monetary growth and inflation) will be tighter in the short run than in the previous regime.

2.37 Although interest rates have been fixed in the regulated market, flexible rates have prevailed in informal markets (see Chapter VI). Capital flight was significant in the 1979-1981 period but declined in the following years in spite of continuing macroeconomic instability. Part of the explanation for this resides in informal finance: financial opportunities increased domestically thereby attracting domestic savings and discouraging capital flight.

### Concluding Remarks

2.38 As in other countries, the experience in Guatemala confirms that, macroeconomic instability is not conducive to the development of efficient credit and capital markets. The recent liberalization of foreign exchange rates and financial markets is an important step in improving market

structures, but these changes by themselves are not enough. They will create the desired momentum for the development of financial markets only when complemented by improvements in fiscal and monetary management, including the adoption of more efficient mechanisms for OMOs, improved reserve requirement scheme and the use of more transparent and market driven instruments for the financing of the public sector. These are important policy changes needed to improve confidence and expectations concerning inflation and exchange rate changes that would increase the competitiveness of domestic financial assets and promote financial deepening. In addition, reductions in the preferential allocation of funds (with well targeted and budget financed subsidies to replace credit subsidies) and elimination of the BG's losses (including future possibilities for transfers of rents from the BG to the private sector) would greatly contribute to a consolidated financial market in Guatemala that is responsive to market discipline. Additional recommendations are presented at the end of Chapter III in the context of an overall program for macrofinancial reform.

## CHAPTER III

### SAVING, FINANCIAL INTERMEDIATION, TAXATION AND RECOMMENDATIONS

#### FOR MACROFINANCIAL REFORM

##### Overview

3.01 Adverse political conditions in Central America, external shocks and poor domestic policies accounted for the fall in investment from a peak of 22% of GDP in 1978 to a low of 16% in 1986 (Appendix, Table III.1). On the other hand, Guatemala's favorable terms of trade and prudent fiscal policies had helped to achieve higher rates of domestic saving before 1980. However, as the terms of trade worsened and fiscal deficits increased, domestic saving fell more than investment, thus increasing the need for foreign savings from 1.7% of GDP in the 1970s to 4.1% in the 1980s (Appendix, Chart III.1). Under the present conditions of restricted access to international financial markets, Guatemala will need to improve domestic resource mobilization in order to finance a higher rate of investment, and to allocate financial resources more efficiently. The purpose of this chapter is to identify macrofinancial policies for improving private sector saving performance and the competitiveness of domestic financial assets.

##### Private Saving

3.02 Compared to other Latin American countries, the rate of saving has traditionally been low in Guatemala (Appendix, Table III.2). The ratio of gross national saving to GNP was 11% -- the Region's lowest -- during 1965-1973. It improved to 14.3% during 1973-1980, benefiting from the favorable price of coffee, but fell back to 7.7% in 1980-1986 -- the Region's fourth lowest. While average private saving ratios may vary from country to country depending on such factors as population growth, productivity growth, existence of a pay-as-you-go social security system, retirement age, and development of financial institutions, saving behavior in Guatemala is also affected by changes in disposable income, wealth, real interest rates, and other economic and financial variables.

3.03 Financial reform has been advocated for countries suffering from financial repression as a means to promote a higher saving ratio. However, international evidence is not conclusive about the responsiveness of aggregate saving to the real interest rate. Econometric results in the case of Guatemala reveal that the effect on private sector saving of changes in domestic real interest rates has been positive, albeit small (Annex A). However, the recent liberalization of interest rates, if complemented by policies ensuring competitive financial markets, should have a positive effect on saving (about 1% of GNP representing an increase of over 10% in the saving ratio), because the expected real deposit rate would increase from nearly 0% to about 10% p.a. More important than the effect on aggregate saving is the effect on saving composition, and the efficiency of financial intermediation (see Paragraph 3.09).

3.04 The terms of trade and foreign interest rates affect private saving mainly by changing disposable income. In the case of Guatemala,

terms of trade fluctuations have been wide but transitory, thereby having powerful direct effects on private saving. In addition, both net foreign assets and public saving are directly related to the terms of trade. In the case of public saving, this is due to the effects on public revenues of the coffee tax, the increase in disposable income, and the increase in trade (Appendix, Chart III.2). An improvement in the terms of trade will also increase private saving indirectly through its effect on the stock of net foreign assets and the subsequent increase in disposable income stemming from foreign interest earnings. National saving will thus improve due to the improvement in both private and public saving.

3.05 The net debtor position of Guatemala and the high share of its debt at variable interest rates imply that its disposable income falls following an increase in world interest rates. Estimates for Guatemala show that saving responds negatively to prevailing foreign real interest rates but positively to lagged rates. Moreover, both coefficients are equal in absolute values, offsetting each other in the long run. These results suggest that Guatemalans perceived foreign interest rate shocks as lasting or permanent, but that consumption was slow to adjust in the short run so that saving fell temporarily. However, as consumption adjusted to lower income in the longer run, the effect tended to disappear. That is, an increase in foreign real interest rates causes a permanent decline in Guatemalans' consumption with no effect on their saving rate in the long run.

3.06 Other factors affecting private saving in Guatemala are public sector saving and the initial stocks of net foreign assets and real cash balances or credit availability. Public sector saving exerts some crowding out effect on private saving; that is, a one Quetzal increase in public saving induces a lower increase in national saving since private saving declines. This reflects the adverse effects of taxes on private disposable income. Changes in net foreign assets affect saving by increasing or decreasing national income, since the flow of interest earned by a country depends on both foreign interest rates and the net worth of the country vis-a-vis the rest of the world. Finally, greater availability of credit reduces saving by enhancing consumption, especially if liquidity constraints are present in the economy.

3.07 An interesting result is the effect of import tariffs and the real exchange rate on private saving.<sup>1</sup> Tariff reductions and real depreciations of the Quetzal both increase saving. One possible explanation is that the propensity to save in the export sector is higher than in other sectors of the economy. Thus, an increase in the relative price of exports through trade liberalization, by redistributing income from non-exporters to exporters, increases the average saving rate.

#### Financial Intermediation and Financial Deepening

3.08 A high interest elasticity for private saving is not the only condition for financial liberalization to be successful. In addition, as financial markets adjust to the recently undertaken liberalization in

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<sup>1/</sup> The real exchange rate is defined as the domestic currency price of foreign goods relative to home goods. A real depreciation of the Quetzal is represented by an increase in the real exchange rate.

Guatemala, rent-seeking, subsidies, corruption and BG losses will be eliminated (see Paragraph 2.17-2.18). Going from negative to positive real interest rates may have significant effects on (i) saving composition, and (ii) the efficiency of financial intermediation. Financial deepening increases, if anything, because people reshuffle their portfolios away from real domestic assets and foreign assets and in favor of domestic financial assets. This allows more investment opportunities at home by lifting lending constraints to the private and public sectors. Finally, an increase in financial intermediation in the formal system is usually associated with lower intermediation costs since there are economies of scale in pooling risks and lending maturities between savers and investors.

3.09 The empirical analysis shows that in Guatemala there is a close association between real interest rates and financial deepening. When real interest rates are negative, the demand for  $M_2$  is low relative to GDP. In Guatemala, the average  $M_2$ /GDP ratio for 1979-1984 was 0.23, well below that of Korea (0.35), Malaysia (0.54), Mexico (0.30), Colombia (0.31) and Thailand (0.44). When repression hits financial markets, less credit is intermediated by the domestic banking sector. As wealth owners seek alternative assets, the results are capital flight, increased demand for real assets and the channeling of savings through informal markets. These undesirable effects will be minimized when the adopted financial liberalization becomes fully effective within a competitive market structure.

3.10 The ratio of  $M_1$  to GDP has been fairly constant, while the ratio of  $M_2$  to GDP has fluctuated more in the short run, reflecting high substitutability among bank deposits, foreign currency, and inventories of goods (Appendix, Chart III.3). On the whole, the ratio of  $M_2$  to GDP has increased since the 1960s (Appendix, Table III.3). The demand for  $M_2$  in Guatemala has been very elastic to changes in foreign interest rates and inflationary expectations (Annex A). This explains the fall in the demand for monetary assets after both rates increased in the 1980s. Similarly, real exchange rate appreciation has a negative effect on the demand for real balances by raising expectations of devaluation. This effect would be minimized under the adopted policy of flexible foreign exchange rates, if the government facilitates the adjustments in the real exchange rate due to changes in its underlying economic determinants. In addition, interest rate liberalization, together with sustainable fiscal and monetary policies would contribute to stabilizing aggregate expenditures and the real exchange rate, thereby encouraging financial deepening.

3.11 Credit Allocation. The Banking Law (BL) grants the JM considerable autonomy in regulating the allocation of credit (Article 80). The JM is empowered to establish ceilings on portfolio growth in general and by type of credit, and this can even differ among banks. Such power introduces uncertainty which has an adverse effect on the system.

3.12 Most bank credit goes to the private sector. The stock of bank credit to the private sector increased from 13% of GDP in 1966-1977 to about 17% in 1978-1987. The allocation of bank credit has experienced important changes in its sectoral composition between 1980 and 1986. The share of credit to the tradeable sectors declined (agriculture from 19% to 14%, and industry from 32% to 29%), while that for commerce increased steadily from 18% to 30% (Appendix, Table III.4). These changes may have

been prompted by the turn in relative prices against the tradeable sectors during that period prompted by falling export prices for coffee and cotton. On the whole, credit allocation was distorted by interest rate controls and rationing schemes that inhibited transparency in credit markets.

### Tax Treatment of Financial Transactions

3.13 Both income taxes and stamp taxes lead to distortions that can have an adverse effect on competitiveness in the financial sector. On the other hand, exempting intermediaries from the value added tax provides an incentive to the sector.

3.14 Taxation of Dividends. Dividends paid to physical and juridical persons domiciled in Guatemala are exempt from income tax. Dividends to foreign shareholders are subject to a withholding tax of 12.5%.

3.15 Taxation of Interest. The treatment of interest for income tax purposes is distortive: (i) interest on banking system loans, and, since recently, on public placement of private bonds is fully deductible, but informal finance interest is deductible only up to the level of bank interest; (ii) interest on deposits in the banking system, private bonds transacted in the BNV (only recently), warrant bonds (bonos de prenda), insured mortgage certificates (FHA) up to a mortgage value of Q 100,000, and government and municipal bonds are tax exempt, but interest from non-regulated sources is liable for income tax and a 4% withholding tax; (iii) the tax obligation of banks is the greater of two alternative methods of calculation, one of which includes only taxable income and calculates the tax bill as for any other entity, while the other includes total income (both taxable and tax exempt) and applies a single rate of 18%; and (iv) foreign-domiciled lenders' interest is subject to a withholding tax of 25%, but with a total exemption for loans from financial institutions where the foreign currency proceeds were sold to a Guatemalan bank. This exemption enables Guatemalans to borrow abroad, perhaps involving the back-to-back use of offshore funds, on a more favorable tax basis than borrowing locally.

3.16 On balance, there is discrimination against equity financing under the current income tax system. The estimates of the cost of equity and debt through bond issues in 1989 are 5.4% and -2.2% p.a., respectively.<sup>2</sup> Therefore, the income tax treatment of interest generates a 7.6 percentage points bias favoring debt finance. The debt capital cost is lower (in fact negative!) because of the deduction of the interest rate in the corporate

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2/ The after tax debt cost  $[X_d(1-t)]$  is equal to the interest paid less interest tax deductions  $[i(1-t)]$  less the rate of depreciation of the principal, namely, the rate of inflation,  $p$ ; that is:  $X_d(1-t) = i(1-t) - p$ . The bank lending rate and the inflation rate in 1989 were 16% and 12% p.a., respectively, and the corporation income tax is 34%. Hence, the debt cost (before tax) is  $X_d = -2.2\%$  p.a. On the other hand, the after tax equity finance cost  $[X_e(1-t)]$  is equal to the real interest rate,  $r$ . An underestimate of it could be the ex-post real lending interest rate in 1989 of 3.6% p.a., so that the cost of equity capital (before tax) is  $X_e = 5.4\%$  p.a.

income tax return while dividends are not deducted.<sup>3</sup> The bias in favor of debt finance increases with inflation. For example, if the real interest rate remains the same, but the rate of inflation increases to 18% p.a., so that the corresponding lending rate rises to 22.3% p.a., the cost of debt finance falls to -5% p.a. That is, widening the edge favoring debt finance to 10.4 percentage points.

3.17 Estimates based on a small sample of firms show an average debt-equity ratio of about 1.67:1 for medium-and-large non-financial enterprises and of 1.33:1 for smaller ones (Appendix, Table III.5). Such leverage for Guatemalan enterprises may create some liquidity and financial viability problems during times of contraction in aggregate demand, thereby making macroeconomic adjustment more difficult and costly to achieve.

3.18 The exemption of interest payments from taxation has important fiscal costs. An estimate of the revenue foregone can be obtained from the interest payments of firms to the banking system which amounted to Q 377 million (1.85% of GDP) in 1988. However, if all interest expenses in the economy were considered, the total corporate tax base would probably have been reduced by more than 2% of GDP. With a corporate tax rate of 34%, the minimum foregone corporate tax revenue to the government was 0.63% of GDP. In addition, the foregone revenue from the exemption of interest could become a more significant issue with the recent liberalization of interest rates. These estimates would also be greater due to the expected positive effect on financial deepening in response to the financial liberalization. Accordingly, it is very plausible that revenue could increase by about 0.6% of GDP if interest payments were not to be tax exempt. This figure is rather significant considering that central government revenue was estimated at 9% of GDP and direct taxes alone at 2% of GDP in 1989.

3.19 In summary, the current tax treatment of interest and dividends introduces the following distortions: (i) it creates problems of equity and inadequate tax collections because regulated debt instruments do not pay income tax; (ii) it encourages financing through debt to the detriment of equity which weakens the financial position of enterprises; (iii) it reduces competition in the domestic credit market because it treats differently the intermediation by foreign financial institutions (by encouraging back-to-back use of offshore funds), private entity bonds, the regulated banking sector and informal financial markets; (iv) it encourages the formation of economic groups and the concentration of bank portfolios in loans to associated customers in order to benefit from the preferential tax treatment for debt finance; and (v) it discourages foreign direct investment by charging a withholding tax on remittances to foreign parent companies which results in a higher total tax for investing in Guatemala

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3/ The cost of debt when intermediated through banks is slightly greater because of the 18% tax on banks profits. To take account of its effect, the right hand side of the equation for debt finance is replaced by  $i[1-t+(s.18)]-p$ , where  $s$  is the banks' profit margin as a percentage of the lending rate, assumed to have been 3%. The cost of debt in this case was - 2.05% p.a. in 1989. On the other hand, the cost of debt through foreign borrowing is obtained when the right hand side of the equation for debt finance is replaced by  $i^*(1-t)-ex$ , where  $i^*$  is the quetzal equivalent of the foreign dollar lending rate and  $ex$  is the rate of devaluation of the quetzal relative to the dollar.



(42%) than in the U.S.A. (about 38% including the federal corporate income tax plus an estimate of average state income tax).

3.20 Stamp Tax. In Guatemala, there is a 3% stamp tax collected on all transactions exempted from the value added tax. The 3% stamp tax on financial contracts (the issue of private bonds through the BNV has recently been exempted) introduces another series of distortions. It discourages intermediation through the banking sector and encourages bond issues and the non-regulated market. It induces the formulation of loan contracts for long periods through the practice of periodic renewals for tax avoidance (the tax is paid on the initial contract but not on the renewals),<sup>4</sup> thus creating a barrier to competition among intermediaries since shifting to other sources of finance bears the burden of the tax. This barrier is particularly important for new banks, since they are placed at a disadvantage in attracting creditworthy customers from established banks. The stamp tax also inhibits prompt increases in equity capitalization, as the tax must be paid on authorized but unissued capital, with the result that few companies have such capital available for issue when needed, therefore providing a disincentive to raising equity capital. The stamp tax introduces an additional distortion by charging differential rates for different types of borrowers/transactions (e.g., the rate for warrant bonds is only 1%).

3.21 Taxation of Capital Gains. Capital gains are taxed as income at the taxpayer's marginal rate of income taxation and are payable over a three-year period. To the extent that taxable income could be transformed into capital gains, this extended period may create a loophole for avoiding income tax, especially if the financing provided for the tax payment during the extended period involves the granting of subsidies.

#### Proposals for Macrofinancial Reform

3.22 In order to improve transparency and efficiency in the mobilization and allocation of resources and to support the growth of financial markets in Guatemala, it is important to develop a policy strategy for the sector within the context of a global economic strategy that ensures macroeconomic stability. The findings indicate that a policy framework that facilitates adjustments in the real exchange rate to changes in its underlying determinants and that minimizes temporary real exchange rate fluctuations is the most efficient way to maintain the competitiveness of Guatemalan financial assets, thereby supporting the development of the financial sector. The recent liberalization of the foreign exchange market is an important step in the right direction. However, to minimize

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4/ Before 1984, an adjustment in the lending rate on an existing loan was considered equivalent to extending a new loan and was therefore subject to the 3% tax. With maximum lending rates of 16% p.a., a 3% tax represents a surcharge of more than 19% on the cost of a one-year loan, with an even higher incidence on a shorter maturity credit. Banks thus resorted to lending short term by using renewable documents with terms up to 5 years.

fluctuations in the real exchange rate, the government will need to: (i) abstain from intervening in the foreign exchange market to support unrealistic levels of the exchange rate; (ii) pursue a sustainable macroeconomic program to avoid stop and go macroeconomic policies; (iii) follow an anticyclical fiscal policy to smooth out the effects on economic activity of temporary changes in the terms of trade; and (iv) refrain from using trade policy and restrictions on capital mobility for balance of payments adjustment purposes. A detailed proposal for a macrofinancial policy reform program to correct the distortions analyzed in Part A is outlined below.

**3.23 Assessing Domestic Financing Needs of the Public Sector.**

Restricted access to international financial markets, particularly for the private sector, requires the public sector to assess its domestic financing needs taking into account potential crowding-out effects on the private sector. Moreover, to complement the recent measures of financial liberalization, the Government should meet its future financial needs through voluntary placements of public bonds with a range of maturities and without the possibility of redemption on demand. Accordingly, the Government should abandon meeting its financing needs through compulsory or non-transparent financing mechanisms such as non-remunerated reserve requirements, floating debt with the private sector, forced allocations of public sector deposits and forced placements of non-competitive or non-negotiable bonds with insurance companies or other institutions, either private or public.

**3.24 Transparency of the Stock of Net Domestic Public Debt.** In order to facilitate the transition to deregulated financial markets, the national budget should provide the resources necessary to ensure that voluntary placements of public debt, with a range of maturities and not redeemable on demand, can replace the stock of compulsory financing instruments noted above. The cost of this program to the public sector would be about 0.7% of GDP (see Paragraphs 2.06 and 2.13). The resources to finance this cost could come almost exclusively from the proposals for reforming the tax treatment for interest expenditures (see Paragraph 3.16). Furthermore, an effective mechanism based on market incentives should be introduced to promote servicing of private sector debt to the public sector that would improve public sector revenues. This would facilitate the implementation of policies that would result in: (i) uniform and competitively remunerated reserve requirements on all debt instruments that are redeemable on demand (e.g., bank deposits, finance company and private entity bonds);<sup>5</sup> (ii) elimination of the floating debt of the public sector to the private sector and vice versa; (iii) elimination of compulsory investments by insurance companies and pension funds in government bonds at preferential (low) interest rates; and (iv) elimination of forced allocations of public sector funds, and therefore also of the ensuing non-transparent and earmarked income transfers from autonomous public sector entities (including the BG,

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**5/ Finance companies and private entities should also be encouraged to promote medium- and long-term resource mobilization through non-redeemable bonds and negotiable CDs with variable or fixed interest rates and with or without indexed clauses.**

whose transfers should be explicit) to the Central Government. The benefits of these policies will be perceived through the following effects: (i) reductions in intermediation spreads for banks, insurance companies and pension funds while promoting competition among intermediaries and competitiveness of Guatemalan financial assets, hence increasing financial deepening, net capital inflows, saving and domestic investment; (ii) reduction in the risk of delayed payment when supplying goods and services to the Government, thereby promoting greater competition among public sector suppliers that could improve fiscal conditions; (iii) improvements in financial programming and in the mobilization and allocation of public sector resources; (iv) development of a medium- and long-term bond market through voluntary placements of negotiable government securities; and (v) contributing to establish a market interest rate structure to guide the mobilization and efficient allocation of resources -- and economic policy in general. (Liberalization of commercial bank interest rates is not enough, competition among intermediaries and market participants in general, including the Government, also needs to be encouraged.)

3.25 Improving Monetary Instruments. The objective is to have a market-determined interest rate structure through strengthening the recently adopted OMOs using auctions as the vehicle for bond placements. OMOs should be carried out on the basis of bids for bonds with varying maturities and not redeemable on demand, and OMOs could become the primary instrument for monetary control. However, for the BG to be able to execute efficiently the monetary policy objectives dictated by the JM, it will need to have the freedom to determine the amounts and conditions of bonds to be issued and negotiated, which are currently dictated by the JM. Moreover, in order to pursue independent monetary and foreign exchange policies in the short run, the authorities should enforce existing legislation prohibiting commercial bank representatives on the JM from participating in JM decisions concerning these policies; in the long run, the law needs to be changed to remove bank representatives from the JM altogether. The BG does not currently have the power to compete effectively with banks for funds, so that it cannot conduct an efficient monetary policy. In addition, the JM should authorize the BG to intervene in the market without any restrictions other than compliance with maximum limits on aggregate monetary expansion --and afterward the BG would inform the JM of its activities. Concerning credit expansion, the JM has correctly eliminated direct limits on credit expansion to the private sector. The JM should fix ceilings only on portfolio growth for the BG. In addition, the BG will need to review regulations to enforce reserve requirements (see Paragraph 2.04).

3.26 Rationalization of Bank of Guatemala Discount Rates and Foreign Exchange Losses. The discount rate, as well as OMOs, should be used as an instrument of monetary policy since controlling the discount rate is an effective instrument of monetary control and a useful market signal. Because of this -- and the fact that credit subsidies are invariably accompanied by rent seeking which corrupts the system and reduces welfare (while also causing losses for the BG) -- discounts as an instrument to channel subsidies and direct credit to specific sectors, thereby inducing segmentation of financial markets and contradicting financial liberalization, should be phased out. To be transparent, subsidies should be allocated through the government budget. BG discounts to intermediaries should be made at a single variable rate reflecting the marginal cost of

funds, irrespective of funding costs for each source, and the degree of desired tightness for monetary policy. Intermediaries should be able to transfer discounted funds to final users with spreads determined freely in the market. In addition, the processing of credits with external funding should be simplified to improve their competitiveness. Moreover, the BG should no longer bear the foreign exchange risk taken by the banks through their net foreign exchange positions or by any other party resulting from their foreign exchange transactions.

3.27 The adoption of these instruments of monetary policy would provide various benefits: (i) it would reduce rent seeking and corruption; (ii) it might promote better allocation of credit; (iii) it would make any subsidy well targeted and transparent in the budget; (iv) it would enhance the BG's power to control the monetary aggregates; and (v) it would allow the BG to collect the differential between the external cost of funds and intermediaries' marginal cost of funds in the domestic market. This differential includes expectations about exchange rate changes and country risk, thereby enabling the BG to accumulate reserves to cover itself over the long term against exchange rate risks and changes in foreign interest rates. The BG would also be capturing any subsidy from external financing sources. In order to increase protection against foreign exchange risk, the BG should also ensure that the currency composition of its reserve assets reflects the currency composition of its external liabilities.

3.28 Improving Information Systems and Monitoring Monetary Policy. To improve the capabilities of the monetary authorities to carry out an active monetary policy, the BG will have to require banks to provide financial information on a daily basis and then to process it immediately. A permanent commission reporting directly to the President of the BG should be established to analyze and evaluate this information and to provide daily and weekly reports covering the prospects for monetary policy, the financial condition of banks, and recommendations for monetary and financial sector policies.

3.29 Modification of the Tax Treatment of Financial Transactions. A more neutral tax treatment to financial instruments can be achieved through: (i) eliminating the stamp tax on regulated financial instrument transactions in tandem with expanding coverage of the value added tax to include financial intermediaries; and (ii) eliminating the differential tax treatment among instruments, in particular, between debt and equity finance.<sup>6</sup>

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6/ This proposal is usually misunderstood in Guatemala as having to do with taxing saving. However, it does not deal with the issue of a tax system based on taxing either income or consumption. Since the Guatemala tax system is based on taxing income, the proposal aims at equally taxing all sources of income from capital (equity and debt) and not only income from equity capital as the Guatemala tax system does. If Guatemala desires to avoid taxing saving, then it should move to a consumption based tax system.

The second objective will be achieved through: (i) gradually eliminating deduction of interest payments by borrowers (e.g., allowing deduction of 2/3 of interest payments in the first year of the program implementation, to further reduce deduction to 1/3 of interest payments in the second year, and finally accepting the deduction of the financial intermediary spread component of interest payments only when the lender is a regulated intermediary beginning in the third year);<sup>7</sup> (ii) eliminating the special income tax treatment for banks; (iii) making all interest income tax exempt and eliminating withholding tax on interest income from non-regulated intermediaries; (iv) adopting the same timing for the payment of the capital gains tax as for the income tax (or introducing a competitive financing scheme for the extended period granted to capital gains tax payments);<sup>8</sup> (v) neither allowing interest payments to foreign-domiciled lenders nor capital losses on the amortization of principal due to the devaluation of the Quetzal to be deductible;<sup>9</sup> and (vi) harmonizing corporate income tax rates with the U.S. by reducing the withholding tax on profit remittances to foreign parent companies.

#### Concluding Remarks

3.30 The proposed program of macrofinancial reform should promote greater fiscal transparency while stimulating the development of efficient credit and capital markets. The Government has captured resources through forced mechanisms, and this has acted as an implicit tax (representing about 0.7% of GDP) on domestic financial assets. Furthermore, the Government currently introduces several distortions in the market through credit subsidies, the foreign exchange losses covered by the BG (together averaging about 1.5% of GDP during 1988-1989), the non-neutrality of the tax treatment for financial assets, and the inadequacy of the regulatory framework and supervision of intermediaries (to be discussed in Chapters IV, V and VII). The proposed macrofinancial program offers the possibility of greater fiscal and financial transparency through collection of income taxes on interest income (representing about 0.6% of GDP) and the elimination of financial subsidies (saving the BG losses), while also removing the distortions from the system of incentives that are hampering the development of the financial sector and resource mobilization in general. Considering all these effects, the net fiscal result of implementing these reforms would be positive (2.1% of GDP on the positive side versus 0.7% on the negative side). The program would also enhance BG power in implementing monetary policy, while also giving the JM more independence from intermediaries influence.

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7/ Mexico and Colombia adopted a gradual elimination of deduction of interest payments.

8/ The Income Tax Law will have to allow for adjustments for inflation (e.g., asset valuation) to ensure neutrality in asset markets.

9/ This is to avoid deduction of any amount of the principal.

## PART B. THE FINANCIAL SECTOR

### CHAPTER IV

#### STRUCTURE OF THE FINANCIAL SECTOR AND PERFORMANCE

##### OF THE BANKING SYSTEM

###### Industry Analysis

4.01 Guatemala has a moderately dynamic financial sector with numerous regulated and non-regulated intermediaries (Appendix, Chart IV.1). There are three major groups of credit market intermediaries in Guatemala: commercial banks, finance companies, and non-regulated financial institutions. Regulated intermediaries are licensed by the JM and monitored by the SB. There are seventeen private commercial banks and four private finance companies. Two of the private banks are foreign owned, Lloyd's and Bank of America (which is closing down its operations in Guatemala). One bank, Banco Inmobiliario (BIm), was acquired by a foreign bank, and 25% of Banco Internacional is also foreign owned. Banco de los Trabajadores (BT) is a "mixed bank" controlled by Guatemalan workers with minimal state holding, and Banco del Ejército (BE) is owned by the Army. The Government owns three banks -- Banco Nacional de Desarrollo Agrícola (BANDESA, specialized in the agriculture sector), Banco Nacional de la Vivienda (BANVI, specialized in housing), and Crédito Hipotecario Nacional (CHN, the mortgage bank) -- and one finance company Corporación Financiera Nacional (CORFINA). There are also eleven warehouses that issue bonds warranted by merchandise (bonos de prenda). Insurance companies and pension funds make up the institutional investors, and a stock exchange has recently begun operations. In addition, there are non-regulated financial intermediaries.

4.02 The Banking System. The banking system, which includes commercial and Government banks as well as finance companies, accounts for around 95% of liabilities and nearly 75% of the credit of the formal financial system to the private sector. Commercial banks account for about 85% of liabilities and assets, while finance companies account for about 15% (Appendix, Table IV.1).

4.03 Several banks are in financial difficulty due to high levels of non-performing assets. There are only five private banks and one official bank that have a ratio of non-performing assets to net worth lower than one (Appendix Table IV.11). However, since non-performing assets include loans and interest one day past due, these numbers may overstate the financial difficulties of the Guatemalan banking system. Among private banks, BIm (once the second largest bank in Guatemala) is the only one officially acknowledged to be insolvent. It has the highest ratio of non-performing assets to capital in the system (3.3), and its losses are estimated at about US\$24 million. BIm is operating under supervision of the BG which has nominated an overseer to the Board of Directors. A decision should be made soon on what to do with this ailing bank, with alternatives such as merger or liquidation being analyzed. In addition, the BT and BE are experiencing difficulties. All the problem banks may face greater difficulties from interest rate liberalization and the issuance of new bank charters due to increased competition and increases in non-performing

assets. Also, there are indications of excessive exposure to particular sectors, economic groups or individuals, and deficient lending policies (e.g., no controls on lending to shareholders or employees, no systematic portfolio review).

4.04 Any restructuring plan or arrangement for the absorption of failing banks by new or existing banks will almost certainly require partial coverage of losses by the Government. Existing information indicates that such losses could be on the order of Q 114.1 million (US\$45 million equivalent as of mid 1988), as compared with total assets for the six possibly insolvent private banks of approximately US\$490 million equivalent (28% of total assets of the banking system). In addition, by assuming the foreign exchange risks on the foreign exchange exposure of the banking system, the BG will experience losses of about Q 197 million (about Q 88 million due to public bank exposure) for each Quetzal the foreign exchange rate increases (see Paragraph 2.30). The cumulative losses stemming from the foreign exchange risk and the portfolio problem amount to about 1% of GDP.

4.05 Two of the three public banks, BANDESA and BANVI, are also experiencing problems. The financial conditions of CHN and BANVI will worsen as a direct consequence of the interest rate liberalization and of the fact that a substantial part of their portfolio is under long-term fixed interest rate contracts. All the public banks tend to be significantly less efficient than private banks, but their financial performance is not uniform.

4.06 The liberalization of interest rates underscores the need for a prompt solution to the non-performing portfolio problem to ensure stability of the system and efficient allocation of resources. Under a system of market determined interest rates, problem banks could engage in undesirable business practices such as: (i) increasing the spread on the performing part of the portfolio to try to offset the foregone revenues on the non-performing part, thus taxing the efficient sectors of the economy; (ii) engaging in riskier lending at higher interest rates in attempting to improve their weakened financial positions thereby leading to higher risk loan portfolios; (iii) increasing deposit mobilization efforts by offering higher interest rates on deposits, thereby diverting funds from sound institutions and tending to contaminate the whole system; and (iv) attempting to draw more funds from the BG, thus putting additional pressure on monetary policy. The BIm has been receiving liquidity assistance from the BG since December 29, 1988. The outstanding balance is Q31.2 million (0.5% of M2). All such actions would tend to increase the potential loss exposure of the BG and the Guatemalan Government, while the banks' owners would have little to lose through such risky behavior if these banks are in fact on the verge of insolvency. Thus, the decontrol of interest rates (and any possible institution of deposit insurance) requires actions concerning bank recapitalization and the strengthening of bank regulation and supervision to guard adequately against possible bank insolvency and the related problems of excessive risk taking. These measures should also be given serious consideration because implied deposit insurance may already exist, thus posing potential additional pressures on the already difficult fiscal conditions.

4.07 Finance companies are supposed to promote industrial, mining and tourism development in the country. Banks are subject to non-remunerated

reserve requirements on deposits, while finance company liabilities of over one year maturity are not (see Chapter II). Finance company needs for liquidity are met by holding 30% of their assets as bank deposits. Finance companies are free to include additional service charges and are less restricted than banks in the types of guarantees that can be used. Accordingly, finance companies tend to be more profitable than banks. For both banks and finance companies there were only a few short-term liquid instruments: low-yielding Government bonds and long-term finance companies bonds which have repurchase agreements. Recently, on November 16, 1989, the JM approved 30 day interbank deposits, which were previously prohibited, facilitating bank liquidity management.

4.08 The Government's finance company, CORFINA, is technically insolvent and currently under intervention. CORFINA continues to administer its remaining portfolio, including some 32 trust funds, and is also involved in protracted litigation with Celulosas de Guatemala S. A. (CELGUSA), its major debtor. CELGUSA, a paper and pulp manufacturing company, accounts for about 80% of CORFINA's industrial portfolio and defaulted before ever starting operations. CORFINA benefited from loans from the BG which have been overdue since September 1989. The outstanding balance is Q39.3 millions (0.65% of M2).

4.09 Non-bank Financial Institutions. These institutions consist of general deposit warehouses, insurance companies, pension funds and the Institute for the Promotion of Insured Mortgages (IPSH). General deposit warehouses provide for the deposit, management and safekeeping of goods (including in-bond deposits). They also issue certificates of deposit and negotiable pledges (warrants) that constitute a guarantee which the depositors of goods can use to secure financing. There are ten private general deposit warehouses and one state-owned general deposit warehouse.

4.10 There are thirteen insurance companies in Guatemala, of which twelve are domestic and one is foreign. The private insurance companies are limited liability companies, and the state-owned insurance companies are governed by their charters. Current law prohibits foreign insurance companies from operating in Guatemala, and the one remaining foreign insurance company only transacts business related to its pre-existing portfolio. The IPSH is a decentralized state-owned entity that provides mortgage insurance for loans granted by financial entities affiliated with that system.

#### Market Segmentation and Specialization

4.11 Banks frequently offer financing packages jointly with other intermediaries by referring clients to finance, insurance, warehousing and consumer finance companies. Banks are important providers of funds for these institutions through the purchase of long-term debt instruments or, less frequently, through equity ownership. In most instances both the bank and the other intermediaries belong to the same group of owners.<sup>1</sup>

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<sup>1/</sup> As a rule, banks are sensitive about their image and avoid being associated openly with non-regulated intermediaries that charge significantly higher lending rates.



4.12 The establishment of separate legal entities was a response to differences in tax treatment, regulatory constraints including reserve requirements, interest rate ceilings and capitalization requirements, and banking supervision. Differential capital requirements depending on the proportion of fixed assets and loans have created incentives for the establishment of leasing and warehousing companies. For example, leasing of fixed assets allows banks to maintain a reduced asset base and avoid capital requirements, and loans guaranteed by deposit warrants issued by warehouses do not count in calculating capital requirements.

4.13 Competition. Prior to the 1980s, the fairly stable economic environment was supportive of banking activities, but in the early 1980s high inflation and overvaluation of the currency put upward pressure on interest rates. However, interest rate ceilings were not adjusted sufficiently by the JM, thereby reducing banks' competitiveness in raising funds. Competition increased due to the entry of non-regulated intermediaries that could offer more attractive returns to investors. The banks' share in fund raising dropped, and with no reduction in administrative costs, unit operating costs for banks increased.

4.14 Accordingly, professional non-regulated intermediaries have mushroomed and customers have become more sophisticated. Barriers to entry in lending have been eroded by the introduction of electronic information processing. Credit can be obtained from a wide range of institutions, each specializing in a market segment with demarcations drawn by the regulatory constraints and the differential tax treatment for banks and interest studied in Chapter III. Commercial banks and regulated finance companies cater to larger corporate concerns, while nonregulated intermediaries are important lenders to higher risk medium size businesses and consumers.

4.15 In contrast, barriers to new competition are significant for deposit taking and for foreign exchange transactions. Pricing of time deposits has shown some sluggishness, as banks are constantly watching movements in the rates offered by competitors, and sudden changes are carefully avoided. Despite the new policy of liberalizing interest rates, banks so far have agreed to maintain the previously regulated levels. In addition, existing deposit taking institutions have sought to protect themselves behind regulatory barriers, and, until recently, have blocked the entry of new participants through lobbying at the JM. In the past few months, however, six applications for new bank charters have been approved and eight others are awaiting authorization as part of the movement toward financial liberalization. However, none of the authorized banks have started operations so far.

4.16 Intensified competition has set a high premium on the ability to launch and market new deposit instruments. For banks with large amounts of sight and term deposits, attracting additional funds through higher rates on new deposits has a high marginal cost since rates would have to be increased across the board. It is preferable to offer instruments with new features that do not cause much diversion from established deposits. The market has seen a growing variety of deposit instruments, although for the most part they are savings passbooks -- in some cases with minor benefits from the drive for product differentiation, but in others offering in

effect a NOW account serving a select group of clients. Non-regulated intermediaries seem to have been more creative in designing new instruments for both lending and deposit taking. For example, a checking account service linked to a time deposit with a repurchase agreement was launched in the second half of 1988.

4.17 Other financial services have also emerged. Ceilings on lending rates and capitalization requirements have stimulated the search for fee based revenues such as wire transfers, cash management, and fax letters of credit. Some of these products are offered directly by banks, while others are marketed by associated finance companies.

4.18 Market Concentration. The largest three banks account for about 29% of total banking system assets. The largest bank has about 11%, and the other two large banks have about 9% each. The fourth largest institution used to be CORFINA. A second group of six medium-sized banks have market shares ranging from 4% to 6%. The largest nine institutions (leaving aside CORFINA's 8.6%) thus account for 58% of the market, a level which appears reasonable (Appendix, Table IV.2). Nonetheless, market share data fail to convey accurately the degree of market power since banks operate as part of larger financial groups.

4.19 The role of public banks and foreign banks in Guatemala is small relative to many other Latin American countries. The three public banks account for 11% of total assets, while foreign banks account for only 5% of the market. Considering only banks and excluding finance companies, there has been an increase in concentration in the largest three banks between 1983 and 1987. In 1987, the three largest banks accounted for 39% of total business, compared to only 29% in 1983 (Appendix, Table IV.3).

4.20 Larger banks have adopted a strategy of growing into related areas of business and have established independent finance companies instead of expanding their own asset base. Such a strategy not only responds to limitations imposed by regulations but is also a reaction to fears of nationalization as happened in neighboring El Salvador and Mexico. Political stability in the region is a major concern. Larger banks are also more specialized than smaller and newer banks. The largest bank, Banco Industrial, has most of its loan portfolio in manufacturing and agro-industrial firms. Another large and well established bank, Granai Towson, has developed a retail network along with its lending to large companies. Mid-sized and small banks have less scope for selecting their clientele and are less specialized, with the notable exception of Banco Exportador. Few banks engage in personal lending except as part of a commercial relationship.

#### Growth of Regulated Intermediaries

4.21 The growth of assets of private banks averaged 4.7% p.a. in real terms for the period 1983-1987. Finance company assets, excluding CORFINA, grew at a real rate of 10% p.a. over the same period. However, lending by all institutions decreased in real terms in 1983-1987. This could be explained by disintermediation resulting from a higher average rate of inflation of 14.75% p.a. relative to an average weighted lending rate below 14% p.a., and by the modest expansion in banking stemming from the increase in branches and new banks stimulated by the prospects for greater collection of the inflation tax.

4.22 During the period 1983-1987, liquid assets grew at 10.5% p.a. in real terms, whereas other assets, mainly interest receivables, have grown at 28% p.a. in real terms, which may be a reflection of a deterioration in loan portfolio quality. Older and larger banks have managed to maintain their market share by investing in securities and other assets. The asset category of net loans shows a below average increase of 2.8% p.a. in real terms. Public banks have diminished in importance with their assets declining by 3.4% p.a. in real terms over the same period, while their net loans contracted by 7.6% p.a. and their other assets by 1.4% p.a. both in real terms. Foreign bank's total assets also declined by an average rate of 4.3% p.a. in real terms.<sup>2</sup>

#### Performance of the Private Banking System

4.23 Introduction. Available intermediaries' financial information is unreliable because the quality of accounting information in the country in general is low and consistency of financial statements of different businesses even within the same industry is lacking. There is no professional organization responsible for developing and setting reporting standards or related definitions, concepts and basic accounting principles. Organizations that would normally require high quality financial data (securities exchanges, debt rating agencies, etc.) are either non-existent or just beginning to operate. Information is organized according to the SB's guidelines for its statistical publications rather than oriented to provide a basis for the analysis of bank financial performance.

4.24 The following analysis compares the financial statements of banks for 1983 and 1987 in order to assess their earnings performance, capital adequacy, solvency and asset quality, as well as some specific aspects of risk management. Management and organization are dealt with briefly in the context of internal controls and credit evaluation and administration.

4.25 Earnings Performance. Significant differences exist among banks in financial performance, and these disparities have been increasing over the past 4 years. Financial and operating costs have gone up for all banks, but they have increased relatively more for banks in difficulty. Return on equity (ROE) has increased for all banks, due mainly to increased debt levels, while return on assets (ROA) has varied among banks (Appendix, Table IV.7). There are no figures for loan losses, but there is a significant correlation between ROA and arrears -- indicating that disparities would be even greater if proper provisions were made for non-performing assets.

4.26 Net interest margins<sup>3</sup> have tended to narrow due to greater proportions of fee-based revenues, even though margins on loans have increased. For most banks and finance companies, interest revenues are still the major source of income, although the figures are difficult to interpret. For 1987 the ratio of effective revenues to net loans varies

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2/ The two foreign banks have evolved in opposite directions. Bank of America has cut back on its lending operations, while Lloyd's has been more aggressive.

3/ Net interest income divided by total financial income.

among banks between 10% and 17%, and similar variability is present in other years. Interest revenues were higher in 1987 than in 1983 because interest rate ceilings were raised from 12% to 14% p.a. in 1984, but effective lending rates have actually been closer to 17-18% p.a. as a result of the practice of requiring compensatory balances of about 20%. Interest expenditures have also risen from 1983 levels and vary considerably among banks, reflecting different funding strategies. An important component of financial income in recent years has been income from foreign exchange transactions -- as much as 25% of total earnings in some cases. Another important source of revenues is income from long-term securities of finance companies. Some problem banks have offset declines in income from loans with income from securities.

4.27 Capital Adequacy and Solvency. With few exceptions, there is a need to increase the capitalization of the banking system. Levels of indebtedness of private banks, as measured by debt to equity ratios (D/E), vary significantly, ranging between 9 and 22 for domestic private banks. Some banks claim that D/E ratios are high because of complicated procedures for capital increases (see Chapter V) so that most additions to capital are through retained earnings. There are, however, other reasons for avoiding capitalization (see comments on the stamp tax in Chapter III and Paragraph 4.19). Changes in the capital base also reflect changes in asset composition, as increased leverage is related to increased holdings of assets with low capital requirements (see Chapter V).

4.28 Actual D/E ratios may be even higher given the widely known practice of banks of not making adequate provisions against loan losses, so that loan portfolios, and hence equity, are overvalued in financial statements. An estimate of likely losses can be obtained from data on loans in arrears for more than one year (Appendix Table IV.4). The ratio of such arrears to the capital base (the coverage ratio) gives some information on the adequacy of the latter as a buffer for potential losses. However, reported arrears probably underestimate the actual figures because of the practice of some banks to show as being in arrears only that portion of the loan due for payment and not the totality of the loan. Figures also exclude reschedulings and rollovers. On the other hand, these data could overstate losses by the amount of good collaterals which these loans might have. In addition, some banks have overstated their capital by accumulating operating losses in special reserve accounts rather than reducing their capital base.

4.29 For several banks, substandard assets as of September 1989 were more than twice capital and reserves (Appendix, Table IV.11). The combination of high D/E ratios with high non-performing assets/E ratios and inadequate coverage ratios indicates the inability of banks to weather adverse conditions. Moreover, leasing of fixed assets is an expedient mechanism to avoid capitalization. Calculations of D/E ratios should incorporate leases.<sup>4</sup> These findings suggest the need to request a higher capital base for the banking industry. The urgency of this is compounded by the liberalization of interest rates, the granting of new bank charters, and the floating of the exchange rate under the expectation that in the future banks will bear greater risks, including the foreign exchange risk on their net foreign exchange positions.

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4/ It was not possible to obtain separate information that would permit a recalculation of D/E ratios.

4.30 Loan Portfolio Quality. The quality of the loan portfolios of some private commercial banks is poor, and arrears are high. In 1983, banking system total arrears on principal were about 20% according to reported numbers, but close to 30% according to non-official sources. Reported figures for 1987 show total arrears at 10%, an apparent improvement. However, arrears over 12 months are a larger share of total arrears, indicating a deterioration in portfolio quality. Moreover, these figures understate the total volume of loans in arrears (Paragraph 4.28). Finance companies have lower arrears, just 2 to 3% of outstanding loans, except for CORFINA which had 76% of its portfolio in arrears in 1987.

4.31 Certain individual banks have high arrears. In 1987, three banks reported arrears of over 20% of their total portfolios, and as mentioned in Paragraph 4.28 the situation may be even worse. In most cases, banks with solvency problems also show poor loan portfolio quality. Interest arrears are also high in some cases (Appendix, Tables IV.5 and IV.11). For example, one bank had interest arrears amounting to 19 months of interest revenues. Although there appears to be some improvement in overdues, more information on the evolution of the quality of the loan portfolio would be needed to understand the causes for these reductions, which might be largely reschedulings or write offs. Notwithstanding these limitations, the data give some indication of orders of magnitude and numbers of banks with high arrears.

4.32 Operating Efficiency. Bank operating efficiency has deteriorated over the period 1983-1987. The drive to seek low cost sight and savings deposits has increased personnel and administrative expenses associated with branching and with marketing of differentiated savings instruments. For the three largest banks, average personnel expenses as a percentage of normal risk assets have gone from 1.45% to 1.53% in 1983-1987 (Appendix, Table IV.6).

4.33 For public banks, personnel expenses are twice as high, possibly due in part to different types of business (e.g., small agriculture, housing). Administrative overheads tend to be higher for problem banks (Appendix, Table IV.7). This could be a reflection of deficient control systems and, in particular, the high correlation between arrears and administrative expenses suggests that excessive time and resources may be spent attempting to recover loans with little prospects for repayment or in the administration of assets obtained through liquidation.

4.34 Problem Banks. There are at least six banks that can be characterized as problem banks. Two of them, BT and BE, are managed with policies and organizations that resemble those of public banks. Although ET and BE take deposits from the public, they have captive funding sources from official deposits. Their lending procedures are weak, and available information suggests that their arrears are high. Both banks are inefficient as evidenced by inordinately high overhead and personnel costs.

4.35 In addition to BIM, at least three other private banks are close to insolvency. There are no precise figures of the losses of these institutions, but they should be quantified since they will likely require decisions either to recapitalize or reduce the scope of their operations.

4.36 Term Mismatching. The differential in reserve requirements between demand deposits (41%) and savings deposits (13%) has induced banks to promote savings accounts through higher interest payments and better service. During 1980-1986, savings deposits represented the largest source of bank deposits, 67.3% on average, while demand deposits represented 22.7% for a total of 90% for sight deposits, leaving only 10% of deposits with terms over 30 days. At the same time, estimates from the SB indicate that about 90% of bank loans are registered as short-term credits, often in the form of revolving loans. However, a significant proportion of these credits are effectively medium-term loans but are structured as renewable contracts to avoid the 3% stamp tax. Moreover, long-term mortgages represent 28% of bank loan portfolios, so that term mismatching between assets and liabilities poses a potential liquidity problem.

4.37 Finance companies are mandated to lend for terms more than one year, and their portfolios mostly have 3 to 5 year terms. They are only allowed to lend for short-term working capital in support of long-term loans. Since there are no established maximum percentages for working capital finance, it appears that a substantial portion of lending is short or medium term, from 1 to 3 years.

#### Performance of Public Banks

4.38 Public banks in Guatemala have experienced a slight decline in their share of banking system assets from 12.3% in 1983 to 11.5% in 1986. This decline appears to be continuing, primarily as a result of the non-competitiveness of their deposit and lending rates compared to private banks.<sup>5</sup> Earning assets of public banks have leveled off, with a dramatic decrease in growth rates from 41% in 1985 to 10% in 1987. Deposits in public banks have also declined. Public banks are not market oriented and, as such, have virtually no ability to mobilize and allocate funds efficiently. Their poor performance is also reflected in loan portfolio problems, operating losses, cumbersome application procedures and lack of marketing skills.

4.39 Operational Performance. Public banks operate through centralized management structures that have tended to restrict the delegation of authority and hamper communication and information dissemination. Public banks are overstaffed; the ratios of product per staff are low. For instance, the ratios of mortgages per employee are 9:1 for CHN and 3:1 for BANVI. High administrative and overhead expenses, coupled with other inefficiencies, are behind their high operating costs and poor profitability. Critical functions such as corporate and strategic planning, asset-liability management, budget management, management tools for basic portfolio analysis, information systems for decision-making, and financial analysis are either non-existent or very limited.

4.40 Operations are not sufficiently staffed with qualified personnel to analyze credit and interest risks on the types of loans being made by public banks (e.g., agriculture, mining, construction, mortgage, consumer, small industry, retail operations, etc.). In addition, written standards and procedures are non-existent or outdated, while credit administration and portfolio management are weak. High arrears have resulted in part from poor credit risk analysis and collateral appraisals.

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5/ For more details on public banks, refer to Annex E.

4.41 Financial Performance. The financial performance of public banks is not uniform. CHN continues to show profits, while BANVI, BANDESA and CORFINA have had significant losses in recent years. BANDESA and CORFINA are technically insolvent since their net worth (even after Government transfers) is negative. Mounting losses have reduced the capital base of BANVI by one-third in the last five years. CHN has reported profits throughout the period and has not required any Government assistance since 1983. The reduction in the capital bases of the unprofitable banks has been tempered by Government transfers in the form of equity contributions. As of end 1987, advances from the Government to public banks stood at Q 29.1 million (US\$11.6 million).

4.42 Except for CHN, public banks have generated negative operating margins since 1984. Financial spreads (i.e., average yields on earning assets minus costs of debt) have not been large enough to cover high administrative and overhead expenses and loan losses. As a result, public banks have been losing money, causing a major deterioration in their capital base. The lack of: sound policies, financial management and planning, and the absence of good lending practices, poor collection and high default rates have also contributed to their current financial problems.

#### Recommendations for Public Banks

4.43 The Government urgently needs to review its strategy concerning the public banks. These banks were created mainly to serve particular target groups of beneficiaries, but the performance of the public banks suggests that Guatemala might be better suited for delivering subsidies (to the extent they may be justified) to these groups directly through other means that would appear in the public sector budget (to explicitly reveal the contribution to the fiscal deficit) and not through subsidized credit provided by public sector banks (also see Paragraphs 2.17-2.19 and 3.27). Such a change in policy would change the basic purpose of the public sector banks and would present the Guatemalan Government with three basic alternatives: (i) liquidate the public sector banks that are basically insolvent and that yield continuing losses in order to avoid these losses; (ii) privatize the public sector banks after giving them a treatment similar to that recommended in Chapter V for the insolvent private-sector banks; and (iii) restructure and rehabilitate the public sector banks and continue them as viable public sector institutions. In case the third option is chosen, Annex E provides the basic elements of a restructuring and rehabilitation program for public sector banks. In addition, it should be noted that different options could be followed for different public sector banks (e.g., liquidate CORFINA, privatize CHN, and continue BANVI and BANDESA as viable public sector institutions). The cost of each option will depend on whether the Government can avoid further assistance to privatized public banks and whether the continuing public banks can be operated as sound financial intermediaries.

## CHAPTER V

### BANKING REGULATION AND INSTITUTIONAL REGULATORY ARRANGEMENTS

#### Main Issues

5.01 The regulatory framework in Guatemala is focused almost exclusively on economic (e.g. compliance with capital and reserve requirements) rather than on prudential regulation (e.g., monitoring the solvency and liquidity of banks). The SB's supervision of regulated intermediaries is likewise focused on enforcing specific monetary, fiscal and accounting regulations, rather than on the analysis of credit risk or the assessment of the solvency of intermediaries.

5.02 There are two extreme approaches to addressing solvency issues in the banking business. The more pervasive involves extensive government intervention in the banking business to prevent insolvencies by preventing banks from running losses, on the principle that if one does not suffer losses, one will never go bankrupt. Thus, solvency monitoring may not be needed. This requires: (i) controlling interest rates and products (instruments both to mobilize funds and to allocate them) to ensure that the least efficient bank in operation at least breaks even; (ii) preventing entry of new banks whenever this creates competition threatening the profitability of existing banks; and (iii) setting very strict rules for lending (e.g., collateral requirements) to minimize risks.

5.03 A different approach is not to attempt to control the market but rather to require banks to engage actively in competition while preventing bankruptcy. In this case, however, clear rules on solvency must be set and actively enforced, and banks that do not meet these rules must be stopped from doing business before they become insolvent and their continuing operations disrupt the efficient functioning of financial markets (see Paragraph 4.06).

5.04 Both approaches can be effective in terms of preventing insolvencies as long as the regulatory authority is effective. However, both theory and empirical evidence indicate that the regulatory scheme based on monitoring solvency is more efficient in terms of overall costs to the society as it provides incentives for efficiency and innovation. Guatemala has been a standard case of regulation based on attempting to control all the relevant variables of the market -- relatively successful in terms of preventing insolvencies, but costly in terms of efficiency losses. There have been a few insolvencies and apparently no depositors suffering actual losses.

5.05 Since Guatemala has recently adopted a policy of liberalizing financial markets, it will also need to review prudential regulations and supervision to monitor bank solvency properly. Following this approach, the major problems in banking regulations and supervision in Guatemala become: (i) inadequate capital requirements; (ii) an inadequate loan portfolio classification system; (iii) insufficient provisioning for bad debts; (iv) excessive exposure to related parties; (v) inadequate disclosure of information; and (vi) inappropriate inspections. In addition, the Government should improve its mechanisms to deal with ailing banks, including the possible implementation of a partial deposit guarantee



system in order to share with banks the costs of resolving financial crises. While the Bank Rehabilitation Law (BRL) (Decree 7-72) provides some flexibility to implement a wide range of alternative mechanisms to rehabilitate or liquidate insolvent banks, these options need to be studied and spelled out. This decree authorizes BG intervention of insolvent banks, but in practice it has been politically easier to attempt to cure insolvency by making infusions of funds rather than changing management. Furthermore, the procedure for intervening in a bank is too lengthy as bankers have several opportunities to contest an intervention by the SB.

### Regulatory Framework

5.06 The main legislation affecting the banking sector in Guatemala consists of: (a) The 1946 BL (Decree 315 and subsequent reforms); (b) the OLBG (Decree 215 and subsequent reforms); (c) the Monetary Law (ML) (Decree 203 and subsequent reforms), and the BRL. Other important regulations consist of resolutions issued by the JM, the BG and the SB. The analysis here highlights the main aspects of this body of laws and regulations, emphasizing those that should either be modified or studied further because they introduce two types of distortions into the financial system--those discouraging its healthy growth and those increasing the costs of financial intermediation.

### Economic Regulations over Banking Activities

5.07 The banking system in Guatemala has been subject to the following major economic regulations: directed credit allocation, differential collateral requirements, reserve requirements, and, until recently, interest rate ceilings. The last two regulations were analyzed in Chapter II, and the others will be dealt with here. Moreover, banks are prohibited from engaging in certain activities, or have limited powers, while for certain other businesses they have been given quasi-monopolistic licences.

5.08 Prohibited Operations. In an attempt to prevent banks from circumventing previous interest rate controls, banks have been prohibited from charging for many services such as fees for checkbooks. In addition, they are not allowed to pay interest on demand deposits, to issue bankers' acceptances, or to offer NOW accounts, money market accounts or negotiable certificates of deposit (CDs). Some of these regulations are contained in the BL, while others are resolutions of the JM. These regulations hinder the system's ability to mobilize resources and to allocate credit efficiently because they reduce income from services, increase unit operating costs, increase spreads and restrict the range of products offered. They also lead to inefficient resource allocation through non-price competition and through the provision of free services. Moreover, with the abandonment of interest rate controls, they no longer serve their original purpose. Also the suggestion to remunerate reserve requirements would require that banks be allowed to pay interest on demand deposits to effectively promote competition and avoid transferring rents to the banking system.

5.09 The BL also prohibits banks from charging commitment fees or imposing penalties for returned checks. These restrictions inhibited the responsible issuance of checks and punctual use of credit facilities. and thereby harmed bank operations.

5.10 Collateral Requirements. The BL also establishes minimum guarantees from borrowers (Article 89). For instance, credits with maturities over one year must be secured by assets or mortgages. Banks can lend up to 80% of the value of the guarantee provided by government paper or similar instruments, up to 70% with other securities or merchandise and up to 50% with mortgage collateral. The maximum term is five years for the first two types of guarantees and twenty-three years for mortgage guarantees. Short-term credits require only fiduciary guarantees. This introduces a distortion in favor of short-term lending to bypass the requirement of mortgages and other asset guarantees (garantias prendarias). In any case, collateral requirements should not be arbitrarily imposed. Instead, banks should be free to require whatever collateral seems appropriate based on an assessment of the capacity of the borrower and the associated risk/return profile. Guarantee requirements hinder the development of banking skills, particularly the evaluation of the financial capacity of borrowers and the feasibility of investment projects, thus seriously hampering access to credit, efficient resource allocation and growth potential.

5.11 Authorization to Make Foreign Exchange Transactions. Banks are the only financial intermediaries allowed to operate in the foreign exchange market. As a result, this market has little competition, and banks have been able to reap large profits. Consequently, there is scope for more competition to improve efficiency and reduce costs and fees. This has become particularly important with the recent move to a floating exchange rate regime. In early November, 1989, when the floating system was adopted, the weighted average spread between the purchase and sale rates was 3% and gradually declined to about 1% in early December. However, the dispersion in spreads among banks continues to be significant, suggesting the existence of some barriers to arbitrage (the maximum spread fell from 15% to 4% during the period).

#### Prudential Banking Regulations

5.12 Strengthening banking regulations is extremely important to improve the functioning of the Guatemalan banking system. Some bank regulations need to be tightened, particularly with regard to chartering, capital requirements, loan provisions, loan concentration, information disclosure, and accounting methodology.

5.13 Chartering Regulations. The JM has the power to charter banks and does so without disclosing its chartering requirements. As a result, the system is highly discretionary, and entry by new banks has been very difficult. Only recently, compatible with the move towards financial liberalization, barriers to entry have been relaxed; although chartering of new banks continues to be discretionary. The result has been protection for inefficient banks and a stifling of innovation through lack of competition. The major change in policy toward much freer entry for new banks underscores the need for a reconsideration of the basis for such policies. The basic elements for improved bank chartering are: adequacy of bank capital; operating plans and earnings prospects for the new bank; and the character, experience and administrative capability of the bank's organizers, directors and officers.

5.14 Inadequate Capital Standards. There are two important aspects of capital adequacy. The first is the minimum capital required for a bank to start operations. The JM has defined the minimum capital required to obtain a bank charter as Q 5 million (about US\$1.5 million as of December 1989). Considering the solvency problems of several banks (see Chapter IV), this level may not be sufficient to provide a minimum critical mass for a bank to start operations. Moreover, this requirement was established in nominal terms, so that inflation has eroded much of its real value. For the recently chartered banks, the minimum capital required was decided on a non-transparent, case-by-case basis.

5.15 The second is the minimum level of capital required to support a given level of operations, usually measured relative to assets or liabilities, so that the capital of a bank is expected to grow in parallel with the expansion of its operations. The BL defines the following minimum capital requirements: (i) 5% of investments in Government or Government approved securities; (ii) 10% of investments in loans and other securities (excluding shares of finance companies that require 50%); and (iii) 50% of investment in fixed assets. Because of the biases built by these different ratios (e.g., away from ownership of fixed assets and toward leasing), there is a need to reassess this system of minimum capital requirements for banks to undertake different operations. Moreover, between 1960 and 1986, the system's ratio of capital and reserves to total assets has declined persistently from 17.6% to 6.1% -- and more dramatically with respect to total deposits, from 56.7% to 6.9%. These average solvency coefficients--still appropriate by international standards--are higher for public banks (11% and 22%, respectively, in 1986) than for private banks, both domestic (6% and 7.5%) and foreign (5% and 6%). The authorities have also been diluting the capital constraints by granting exemptions for a growing number of collateralized operations. For instance, bank guarantees and lending supported by warrants (bonos de prenda) and mortgage bonds (cédulas hipotecarias) are not subject to capital requirements. These two represented an average of 29.7% and 15.1%, respectively, of loan portfolios during 1980-86, suggesting an inordinate growth of off-balance sheet operations and the financing of warehousing operations. If the issues of bank solvency discussed in Chapter IV are taken into account, the current system of capital regulations may be quite risky.

5.16 Capital increases may also have been slowed by the fact that procedures for increasing authorized capital are lengthy and complicated, requiring approval by the SB, the JM and the Ministry of Finance, and usually taking more than one year. An indication of these effects is the fact that, during the 1980s, capital increases (6% p.a.) have lagged substantially behind the growth in reserves (14% p.a.).

5.17 Inadequate Loan Portfolio Classification System. A loan portfolio classification system does not exist that would allow for an assessment of the quality of bank portfolios -- a precondition for sufficient provisions to cover the risks of possible losses.

5.18 Insufficient Provisioning. The SB is more concerned about the possibility of excessive provisioning to avoid taxes than about adequate provisioning to reflect the riskiness of bank loan portfolios. Banks can

only deduct for income tax purposes provisions of up to 2% of total loans, discouraging banks from provisioning more -- in fact all banks provision exactly 2% of their loan portfolios. For most banks, this level of provisioning may be too low, not fully reflecting the riskiness of loan portfolios artificially inflating profits and the book value of equity.

**5.19 Rollover Practices.** Banks are allowed to rollover loans, including even the capitalization of interest, without concern for the repayment capacity of borrowers. More stringent rules regarding rollovers should be issued. The BL (Articles 106 and 108) allows rollovers, but the JM has not issued rules defining appropriate circumstances for rollovers (Articles 88).

**5.20 Credit Information.** There is no adequate credit information system. The Association of Banks provides only incomplete information to other banks, while the banks themselves are prohibited from supplying information on their customers' credit standing.

**5.21 Delays in Foreclosing Collaterals.** Bank foreclosures in the case of mortgages do not pose any significant problem. However, foreclosures of borrowers' assets on fiduciary operations takes several years to settle due to a cumbersome and slow judicial process. This creates uncertainties and restricts access to credit.

**5.22 Accounting Methodology.** The regulatory framework requires that banks maintain their accounts on a cash basis, while the rest of the economy operates on an accrual basis. Such asymmetric treatment supports tax avoidance transactions. Banks can ask their borrowers to postpone or anticipate interest payments, thereby enabling the banks to smooth their profits to minimize tax liabilities. For example, if interest payments are delayed, banks receive no taxable income, while borrowers can deduct accrued interest. Such arrangements may provide another incentive for the formation of groups and the concentration of credit.

**5.23** The requirement of cash accounting for banks seems to suggest that the frequent problem of profit overestimation from the computation of accrued but uncollected interest would not be present for the Guatemalan financial sector, and cash-basis accounting is emphatically defended in Guatemala on precisely these grounds. However, despite the apparent soundness of the system, it can easily be manipulated, for example, by granting new loans to delinquent borrowers.

**5.24 Loan Concentration.** Current regulations on lending to related parties are inadequate. Although banks are not allowed to lend more than 20% of their equity to any single borrower, the definition of relationships with a single borrower is lax. Since all direct or indirect obligations of borrower or partnership interests are not included, banks can in fact lend several times their capital to a single borrower (or a group of closely related borrowers), while a single borrower can use a variety of related interests and corporate ruses to obtain excessive credit. Such relationships do not provide adequate diversification and can leave a bank heavily dependent on a few borrowers. An indication of the extent of credit concentration is that, in a study conducted in the fourth quarter of 1983, about 9% of the number of loans from the private banking system were for Q 100,000 (US\$100,000), or more, and represented 75% of bank loan portfolios.

5.25 In addition, credit risk is increased through the fact that a bank can split a loan package with a finance company in which it has an interest, it can lend against warrants of its own warehouse, or it can lend to several companies representing the same business unit. Another source of credit risk is the absence of prohibitions on lending to bank employees, shareholders or their relatives. This practice has worsened loan quality at several banks.

5.26 External Audits. Current legislation does not require banks to hire qualified external auditors on a regular basis to assess the quality of their financial statements. However, most supervised institutions do contract such external audits and send copies of the audit reports to the SB on a voluntary basis.

5.27 Fines and Sanctions. The levels of fines and sanctions that the SB can apply are largely prescribed by the BL. The real value of fines has been eroded by inflation, so that it is often more profitable for a financial institution to continue operating in an illegal manner and pay the fine rather than take corrective action. Furthermore, regardless of the level of fines or sanctions, banks can contest them with the JM. This process can take several months, and corrective actions are not required in the interim. This situation deserves immediate attention since it undermines the authority of the SB and its ability to guarantee the soundness of the financial system.

5.28 Information Disclosure. The quarterly bulletins of the SB only present balance sheet information for banks and finance companies, but it would also be useful to present and analyze income statement figures in a comparable fashion. Since banks are obliged to publish their year-end balance sheets and income statements in newspapers, this recommendation could be implemented without major opposition and additional work.

5.29 Bank Examinations. The SB's system for examination of financial institutions includes having an examiner stationed permanently at the supervised institution. This system has major drawbacks: (i) too close a relationship may develop between the supervisor and the supervised, thereby undermining the quality of supervision; and (ii) the element of surprise critical for examining the manner in which operations are normally carried out is eliminated. With the exception of auditing of cash and marketable securities in bank vaults, all other audits by the SB are done after first informing the financial institution that the examination will take place, thereby further undermining the quality of the audit. In addition, loan portfolios are only examined every two years on average.

5.30 Segmentation between Commercial and Mortgage Departments of Banks. The BL distinguishes among three types of banks: commercial banks, mortgage banks and capitalization banks. Commercial banks fund themselves with short-term deposits (up to 1 month), and mortgage banks operate with deposits over one month, while capitalization banks could issue capitalization bonds. (No capitalization banks or capitalization departments have been formed). In practice, all banks in Guatemala are licensed to undertake both commercial and mortgage operations, but as separate departments requiring separate accounting. This separation is time consuming for banks that have to separately prepare the required

information and for the SB which has to supervise these activities separately. Moreover, each department has to separately comply with banking regulations such as minimum capital requirements.

5.31 Regulations on Warehouse Warrants. A common form of asset-based lending uses negotiable time drafts backed by warehouse warrants (bonos de prenda). In practice, negotiability is limited to the bank that owns the issuing warehouse because there is no confidence in the creditworthiness of the same operation at another bank. Also, banks tend to operate largely with companies owned by the group of bank shareholders. Lending by means of such bonds is attractive to banks because borrowers are subject to only a 1.5% stamp tax instead of the normal 3% tax and banks are not subject to capital requirements as this is considered fully secured lending. The size of the loan market based on such guarantees is significant. In 1987 it was estimated at Q 450 to Q 600 million, 10% of the assets or 15% of loans of the banking system.

5.32 With an appropriate inspection system for warehouses, loans backed by warrants could be among the highest quality bank assets. The risks inherent in such loans are basically the creditworthiness of the banks that own the warehouses. In order to establish appropriate safeguards it is important to improve the inspection of warehouses, particularly those that are leased from independent operators and not directly controlled by banks. In addition, credit rating criteria for negotiable paper backed by warrants could be established to improve their marketability. Warehouse warrants could be classified into categories reflecting the amount of risk, the maturity, and the liquidity of the underlying commodity.

### Banking Supervision

5.33 Insufficient Banking Supervision. The major problem currently facing banking supervision is that the BL focuses excessively on formal controls to the detriment of assessing the overall solvency of financial institutions. The SB concentrates on compliance with regulations and ensuring that bank accounting follows predetermined guidelines, while the analysis of loan portfolio quality and operating efficiency is largely overlooked. Moreover, the Dirección General de Rentas Internas (General Internal Tax Bureau) has sub-contracted the assessment and collection of taxes from banks and regulated finance companies to the SB. In addition, the SB is not adequately staffed, having a large number of accountants but an insufficient number of economists and financial analysts. The Technical Department receives all required information from financial institutions, while the Banking Department is in charge of in-situ bank examinations. (Financial intermediaries must file about 80 different forms with the SB, and simply checking these forms would seem to occupy most of the time of the SB's nearly 300 employees.) The function of the Technical Department seems to be limited to processing the information received from financial intermediaries, producing various statistics, and to preparing a report on the overall financial system. Reports on the conditions of individual institutions are produced by the Banking Department on a quarterly basis.

5.34 The analysis done of the available information does not permit an accurate appraisal of the evolution of the financial condition of each bank. As a result, supervisors are limited in their ability to take timely actions. In addition, the SB functions as an appendage of the JM, which

also oversees the operations of the BG, so that the SB lacks autonomy, and banks even have recourse to the JM to contest any resolutions of the SB. This may result in conflicts of interest since two members of the JM are private bankers.

5.35 While the SB gathers a large amount of information, the quality of this information is low, and even inconsistent, because no precise accounting guidelines are provided by the SB. In addition, the SB has particular difficulty collecting information from the BT and BE. The Banking Department is currently working to develop an examination manual. Although this manual seems likely to reflect a legalistic/accounting approach to bank regulations and supervision, this could nonetheless be an opportunity to introduce the desired changes.

#### Handling of Ailing Financial Institutions

5.36 Current Procedures to Handle Problem Banks. The BL authorizes the Superintendent to intervene in banks (Articles 101 and 102), but it is not clear how quickly interventors can be assigned and what appeal mechanisms are available to bank shareholders and managers to delay or stop bank interventions. Considering the limited autonomy of the SB vis-a-vis the JM, it seems unlikely that a bank intervention could be undertaken quickly.

5.37 Existing procedures defined by Decree Law 7-72 permit the JM to carry out a series of corrective actions when faced with a bank that is not complying with the solvency and operating criteria defined in the Law. The following actions are authorized: (i) suspend or remove, partially or totally, the Board of Directors and the management of the affected bank; (ii) nominate an additional Director to the Board having veto powers, as well as the same attributions as the other Directors; (iii) limit or prohibit the distribution of dividends; (iv) limit, regulate or prohibit certain types of operations and investments; and (v) authorize the BG to provide funds to financial institutions for their recapitalization.

5.38 The BRL also empowers the SB to evaluate the net worth of a bank, and if it is found to be negative, the stockholders can lose all their rights and be forced to relinquish ownership to the SB. The JM is further empowered to undertake the financial and administrative actions required for the prompt reorganization of a bank, but the participation of the BG as sole owner or as co-owner cannot exceed five years. Experiences with the application of this decree, however, seem to have led to bail outs rather than strictness.

5.39 Guidelines for the Rehabilitation or Liquidation of Banks. When faced with an insolvent bank there are three alternative courses of action: (i) force recapitalization by existing owners; (ii) rescue the bank (rehabilitation) with a change of ownership and management; or (iii) close down the bank (liquidation). The decision should be based on the minimum cost alternative. Closing down a problem bank implies costs from the liquidation process and coverage of insured deposits (if they were to exist). Rescuing a problem bank implies costs from the process of "cleaning-up" and recapitalizing the institution. In addition, both alternatives imply certain indirect costs related to potential domino effects, impacts on borrower behavior, effects on depositors, labor disruptions, interruptions of services and similar effects.

5.40 In deciding which treatment should be given to different problem banks in the Guatemalan system, three aspects should be considered jointly: (i) solvency; (ii) profitability; and (iii) externalities associated with each course of action.

- (i) Solvency. The emphasis should be on an accurate assessment of the bank's capital to give an initial indication of the volume of resources needed to revitalize the institution. Actual capital should be estimated by adjusting the book value of capital to take into account the overvaluation of the loan portfolio due to bad loans and uncollectable accrued interest, with further adjustments to take into account the possible overvaluation of other assets. Possible contingent liabilities and unbalanced positions in foreign exchange should also be taken into account.
- (ii) Profitability. The emphasis should be on determining the bank's ability to generate profits to rebuild its eroded capital position and to avoid further erosion. Profitability should be analyzed through the ROE ratio (where net returns have been adjusted to exclude inappropriate accrued interest) and through the ratio of fixed costs (labor and administrative costs) to net financial income (interest and fee income minus dividends, interest and fee expenditures).
- (iii) Associated Externalities. The "indirect" costs associated with actions for dealing with problem banks should take into account the size of the institution and its relative importance in the total banking system and in the regions where it operates.

5.41 Renewal of operations and rehabilitation of a bank after liquidation procedures have begun is difficult, especially when confidence in the banking system is weak and because more problems and hence more costs will be discovered in the rehabilitation process. The decision of whether to liquidate or rehabilitate an insolvent bank should therefore be made prior to formal intervention and be based on a comparison of financial costs and externalities associated with each alternative.

5.42 Alternative Rehabilitation Procedures. A number of Guatemalan banks have serious solvency problems (see Chapter IV). Their profitability may also be a serious problem because of high proportions of non-performing assets and often high overhead due to over branching and over staffing, so that a simple injection of capital will not suffice to restore profitability. Strong management will also be required to sell off real estate, reduce overhead, and establish new lending policies to reduce loan concentration and implement effective loan recovery, among other restructuring measures.

5.43 In some banks, such measures are unlikely to be taken by current managers and owners, so that new ownership and management may sometime be a prerequisite for rehabilitation. These changes are necessary for equity and for effective rehabilitation to prevent the repetition of previous problems, whereas bailing-out current shareholders would not lead to the desired rehabilitation and might increase future problems. Change of ownership usually means the merger or sale of the bank, after appropriate



clean up, to an institution that is solvent and well managed. However, the small size of the Guatemalan system limits the number of potential acquirers. Alternative possibilities to be explored include sales to foreign banks, equity from small stockholders (including the possible capitalization of existing deposits), and sales to groups requesting charters for new banks.

5.44 In order to facilitate mergers and acquisitions of insolvent banks, the JM could authorize the acquisition of shares of one bank by another in accordance with the BL (Article 91, Section d). Also, Article 10 indicates that mergers could be authorized if approved by the JM. However, these procedures are treated as chartering new banks, and as seen before, they are time consuming and non-transparent. The issuing of transparent rules and the speeding up and simplification of procedures would greatly contribute to the resolution of solvency problems with a minimum contribution from the budget.

5.45 When an expeditious change of ownership through market procedures is not possible, the BG should make use of powers in the BRL to require at least the majority of shareholders to endorse their shares to the BG in order to facilitate the BG's task of looking for new shareholders to find a permanent solution quickly. This procedure will avoid maintaining the present shareholders and management in power to impede the solution or receive the benefits from a successful clean-up operation. While the BG is searching for satisfactory new shareholders, it might contract out the management of the bank to a third party. In case it cannot find a buyer for an insolvent bank, the Government would have to liquidate it.

5.46 Liquidation Procedures. If liquidation is chosen, all efforts from the outset should be directed at minimizing the costs involved. This may be done by selling off good loans to other banks and simultaneously transferring compensating liabilities to reduce the possible erosion of the deposit base of the banking system. The bank's liabilities to the BG and external creditors could be handled under procedures established by banking legislation. Small depositors, up to a limit to be determined if deposit insurance were instituted, could be paid by the BG. Any unpaid balance to depositors could be dealt with in accordance with the liquidation procedures established by law.

5.47 Suggestions Regarding the Handling of Ailing Intermediaries. While the BRL provides an ample legal framework for the JM and the BG to have adequate alternatives to rehabilitate banks and other financial institutions, administrative procedures need to be spelled out and to be more transparent.

5.48 In order to expedite the most cost-effective solutions to solvency problems affecting the banking system, it is important for the Government to have a flexible and effective mechanism to handle ailing banks. This involves appropriate intervention procedures and mechanisms to rehabilitate or liquidate ailing banks. The Government should study alternative administrative mechanisms to rehabilitate and restructure financial institutions and to finance the costs of such operations. The options range from setting up a Deposit Insurance/Financial Rehabilitation Fund, such as the one established in Spain, to setting up an administrative unit in the Central Bank, as was done in Bolivia, to trying to anticipate

banking crises and providing financial assistance to problem banks, particularly when liquidation is not desirable. (Annex C contains a model for the legal and operational framework for a Deposit Insurance/Financial Rehabilitation Fund, and Annex D indicates the principles and objectives which are required to establish a successful Deposit Insurance Fund.)

5.49 Regardless of which mechanism is selected, certain basic principles are required to enhance public confidence in the mechanism's ability to deal with bank failures and to maintain the integrity of the banking system: (i) legal and financial autonomy; (ii) ability to function in a automatic, quick and efficient manner; (iii) freedom from political interference; and (iv) no subsidies for bank shareholders and borrowers. However, deposit insurance should not be instituted at a time when it is likely to imply increased costs to the Government of dealing with problems banks. In the Guatemalan situation, this suggests that prudential regulation and supervision first need to be strengthened and that insolvent banks should be recapitalized or liquidated before any system of deposit insurance is instituted. The advantage of a deposit insurance/financial rehabilitation fund is that it shares with banks the costs of dealing with problem banks.

#### Proposals for a Program of Reform for Bank Regulation and Supervision

5.50 A program of reform for bank regulation and supervision that takes into account the previous analysis will enable intermediaries to improve their efficiency and capacity to mobilize and allocate resources. It will also focus on more appropriate standards for prudential regulation and supervision, thereby improving the competitiveness of domestic financial assets while reducing potential Government budgetary contributions. Such results can be attained through the reduction of portfolio risk and the internalization of the remaining risk premium within the financial sector.

5.51 Suggestions Regarding Economic Regulations. The following strategy is proposed for economic regulations of banks: (i) allow financial institutions to compete freely through the price mechanism (e.g., by eliminating existing regulations that restrict charges for checkbooks and other services); (ii) allow banks to pay interest on demand deposits and to offer new instruments to mobilize resources (e.g., bankers acceptances, NOW accounts, money market accounts, and CDs not redeemable on demand with the option of fixed or variable interest rates); (iii) promote greater freedom of action by financial intermediaries in managing of loan guarantees by eliminating current statutory requirements and instead having the SB analyze bank loan portfolios and credit policies in order to determine whether these are adequate; (iv) review legislation in order to remove restrictions from banks from charging penalty interest on overdue loans, fines for returned checks and credit commitment fees; and (v) promote competition in the provision of financial services in general, and in particular by allowing other financial institutions (e.g., exchange houses, exchange brokers) to participate in foreign exchange activities.

5.52 Suggestions Regarding Prudential Regulation and Supervision. The following strategy is proposed: (i) simplify procedures for capital increases; (ii) increase the initial minimum capital requirement, establish it at constant prices, and make the procedures for granting bank charters more transparent and less arbitrary; (iii) promote competition in the

banking sector, especially by enabling institutions to enter and exit the sector in an orderly fashion; (iv) reduce the minimum capital requirement for loans and investments in securities from 10% to 8%, but including all lending, guaranteeing and investing operations, even in government bonds; (v) establish a uniform system for the evaluation and classification of loan portfolios by the SB based on loan repayment status, borrower's repayment capacity, and cash value of collateral (a proposed system is presented in Annex B); (vi) require banks to make provisions for overdue loans according to borrower's repayment capacity and, to the extent possible, also for risky or doubtful loans that are still current; (vii) allow banks to deduct provisions for income tax purposes when the SB requests a bank to provision more than 2% of the value of its loan portfolio (but count as income the reversal of provisions); (viii) for reprogramming, rescheduling or refinancing loans, take into account borrower's repayment capacity and require at least partial payment of interest; (ix) consider adopting accrual based accounting within a more stringent regulatory framework; (x) review regulations on lending limits to each borrower to include all direct and indirect obligations of the borrower and clarify the definitions of financial conglomerates and related parties (including partnership interests); (xi) limit lending to a bank's own shareholders and employees; (xii) ensure that the SB receive as accurate financial information as possible by requiring comprehensive yearly audits of all banks by qualified external auditors; (xiii) implement an effective system of fines and sanctions in real terms that the SB will be able and willing to apply; (xiv) immediately enforce fines and sanctions of the SB but permit subsequent appeal to the JM; (xv) publish bank income statements and balance sheets and comparative analysis on a quarterly basis in the SB's quarterly bulletin with a maximum lag of one quarter; (xvi) replace the system of permanently-stationed bank examiners with a more frequent and effective system of bank examinations; (xvii) consolidate the accounting for the commercial and mortgage departments of banks; (xviii) classify warehouse warrants according to risk, maturity, and liquidity; (xix) institute adequate warehouse inspections, particularly for those leased from independent operators; (xx) improve the credit information system by creating a center for analysis of bank credit risks and a credit reporting agency; (xxi) modify the BL to increase the SB's autonomy; (xxii) change SB resolutions including norms and rules for loan portfolio classification, accrual of interest, provisioning, and loan concentration; (xxiii) modernize the SB through improved techniques and staff training; (xxiv) review the organizational and regulatory framework to decide if a new Superintendency Law is required to allow the SB to perform an effective supervisory role; and (xxv) provide financial independence for the SB to guarantee autonomy in its decision making and to enable it to hire qualified personnel.

### Concluding Remarks

5.53 Implementation of these measures should increase the capacity of the regulated sector to expand its operations and to facilitate the entry of new participants and the exit of bankrupt intermediaries. Some of these new participants could acquire banks that are at present insolvent after prior restructuring by the BG. Competitiveness, efficiency and dynamism in the adoption of new technologies will be motivated by the changes proposed, especially through enhanced possibilities for entry or exit to the sector. The recently adopted policy of financial liberalization has increased awareness on the need for the adequacy of prudential regulations and the focus of supervision on solvency monitoring, therefore ensuring the success and sustainability of the reforms.

## CHAPTER VI

### INFORMAL FINANCE

#### Introduction

6.01 Informal finance is widely recognized as an important component of the Guatemalan financial system, not only because of the volume of operations carried out but also due to the wide variety of services provided to a broad range of different types of clients. Informal finance in Guatemala consists of a series of subsectors: (i) highly organized nonregulated financial institutions (NFIs); (ii) various types of individual moneylenders; (iii) credit unions and nonprofit organizations specialized in lending to microenterprises; and (iv) off-shore banking. Presently in Guatemala, there is a great deal of interest in the informal sector, especially in microenterprises, but not in informal finance. A better understanding of informal finance and of its actual and potential relationship to the financing of microenterprises is a crucial element of this chapter because of the immediate relevance to the programs and policies currently being developed for microenterprises.

#### Nonregulated Financial Institutions

6.02 NFIs exist primarily to avoid supervision and regulations (e.g., reserve and capital requirements and, previously, interest rate ceilings) that are applied to regulated intermediaries. Guatemala's NFIs mobilize and allocate funds in spite of the lack of newspaper advertisements. Instead, they employ "promoters" who are paid both salaries and commissions and who use personal contacts and reputation to bring in funds and borrowers.

6.03 The interest rates paid on these funds are market determined and vary according to the liquidity and guarantee provided by NFIs and according to the amount of funds involved. These rates are higher than bank deposit rates in part because they are not subject to non-remunerated reserves and capital requirements, in part because of perceived risks (e.g., the lack of lender of last resort for NFIs), and in part because interest income outside the banking system is taxed. Nonetheless, loan default and delinquency rates for NFIs are reported to be lower than the rates for banks. In fact, the only time NFIs experienced significant problems was when they relied heavily on foreign sources of funds and there was a major change in the foreign exchange regime. As a consequence, most NFIs are now said to rely almost exclusively on domestically mobilized funds, including equity. In addition, several NFIs are reported to be affiliated with banks through joint ownership and therefore can obtain a portion of their funds from bank affiliates.

6.04 The lending rates of NFIs fluctuated between 2% and 3% p.m. in mid 1988. The cost of these resources is greater than those of banks because of the higher cost of funds, higher operating costs and greater risks due to market segmentation as commercial banks often do not make adequate loan appraisals. Loan decisions by NFIs focus on analysis of borrower cash-flow positions and on co-signers rather than on real and personal property mortgages, thereby permitting greater access and more rapid service. The innovative techniques developed by NFIs have been successful in client selection and loan recovery. In addition, the speed and flexibility of

NFIs may have made borrowers eager to repay promptly to maintain a good credit record for future loans in spite of higher interest rates than those charged by the banking system.

6.05 NFIs originated in Guatemala to provide consumer finance, especially through credit cards and for the purchase of cars and other consumer durables. However, NFIs have since innovated and diversified into a wide range of financial activities such as leasing, factoring, money market funds and lending for general purposes. Although these activities are primarily carried out in Guatemala City, NFIs have also penetrated certain rural areas of Guatemala, perhaps more than the banking system.<sup>1</sup>

6.06 Off-shore banking is also important in Guatemala but is primarily carried out by representatives of foreign banks that maintain offices in Guatemala or make regular visits to the country. These representatives finance much of Guatemala's foreign trade and may also be involved in moving funds off-shore and in handling remittances from abroad. Some of these agents operate under licences granted in Panama. On the other hand, NFIs generally do not participate in off-shore banking.

6.07 NFIs provide a wide range of useful services and appear to do so efficiently and competitively. The high profits reported by many of these NFI may be a direct consequence of regulations together with the flexibility and continuing innovations of NFIs.

#### Traditional Urban Moneylenders

6.08 Moneylenders of the traditional type found throughout Latin America are also found in Guatemala. In contrast to NFIs, they place heavy emphasis on physical guarantees. Some moneylenders advertise in newspapers, while others do not. Interest rates on moneylender funds ranged from 2% to 5% p.m. in mid 1988 for those that advertise, and even higher for those that do not. Regulations against this type of behavior are as likely to be ineffective in Guatemala as anywhere else. On the other hand, implementation of the report's recommendations should increase access to the regulated segment of the market and thereby reduce the operations of moneylenders.

#### Studies of Microenterprise Finance

6.09 There recently has been a great deal of interest in Guatemala in promoting the development of microenterprises. And improved access to credit on favorable terms is typically seen as a crucial component of any effort to promote microenterprises. Nonetheless, the programs and

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<sup>1</sup>/ One NFI in particular reported that a significant percentage of its loan portfolio was outside of Guatemala City in loans to small and medium scale agricultural marketing agents. Moreover, the repayment experience with this component of its loan portfolio was said to be excellent.

proposals to improve lending to microenterprises rarely contain any analysis of current lending to microenterprises. Only two studies have been found describing actual lending to microenterprises (See Annex F).

6.10 A study carried out by the Fundación para el Análisis y el Desarrollo de Centroamérica (FADES) concludes that few microenterprises had obtained bank credit and that the guarantee most often required, a real property mortgage, can be considered quite strict. Thus, few microenterprises appeared to benefit from the low interest rates on bank loans or the fact that most of these loans were medium or long term. Concerning informal credit, the data show not only much wider access, but also that not all of these loans were very small or short term. For most of these loans, no estimate of the actual interest rate could be made because no rate was given, but only 20% reported an interest rate over 20% p.a. A substantial majority of informal loans require only a co-signer for the guarantee. Moreover, for informal loans a smaller percentage of borrowers reported that they had more difficulty repaying than in the case of bank credit.

6.11 The results of another survey, conducted by CAEM and AITEC,<sup>2</sup> are quite similar to the FADES study in showing that few microenterprises use credit and those that do rely mainly on moneylenders or friends and relatives rather than on public or private financial institutions or cooperatives. Specifically, only 10% of the 450 microenterprises surveyed currently have a loan, and only 15% could remember ever having had a loan (Appendix, Table VI.2). Of these loans, almost half were from friends and relatives, one-third were from moneylenders, and the remaining approximately 20% were spread among public and private institutions, cooperatives, and no reply (Appendix, Table VI.4). In addition, only 15% had either a savings or a checking account at a bank, and only 11% reported that they purchased goods or services on a delayed payment basis (Appendix, Table VI.2).

#### Credit Projects to Promote Microenterprise Development

6.12 Various credit projects have been proposed or are being developed in Guatemala to promote microenterprises. However, the most important of these projects fail to take into account the above-mentioned studies, nor do they have any sound basis to guide their strategies. Moreover, their number and magnitude could disrupt Guatemalan financial markets, and some of them could have a negative impact on the future financing of microenterprises if carried out as currently planned.

6.13 The initial focus within the Guatemalan Government for microenterprise lending appears to have been the Office of the Vice President. A trust fund was created in this office in late 1987 ("Fondo de Desarrollo de la Microempresa Urbana") which, by March 1988, had lent more than Q 1.5 million to almost 450 microenterprises. Loans are made by the BT at 14% interest p.a. (plus a fee of Q.20) with a maximum term of four years and a maximum amount of Q 6,000. Loan proposals are prepared and technical assistance is provided by private voluntary organizations (PVOs) that receive a fee of Q 30 for each loan proposal (and they also receive a

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2/ Estudio Exploratorio para el Desarrollo de un Programa de Apoyo a la Microempresa, prepared by the Cámara Empresarial de Guatemala (CAEM) and Acción Internacional (AITEC) in 1986-87.

subsidy from the Guatemalan Government during the initial stage of the project). In lending decisions, considerable attention is paid to guarantees, for which the borrower is required to pay the costs of evaluation and inscription, so that guarantees are likely to become the key device that rations this apparently cheap credit among microenterprises. It is difficult to see how the interest rates charged and the small additional fees can cover the costs incurred by the BT and the PVOs in lending to microenterprises. In addition, the responsibility for loan recovery is divided between the bank and the PVOs, and such a division has almost everywhere led to serious problems of loan delinquency and default.

6.14 In another project, USAID and CAEM have developed a loan guarantee fund to promote lending through the banking system to small and medium scale enterprises. However, since only 50% of the loan is guaranteed and there are stringent requirements with respect to loan recovery efforts, it is difficult to believe that the banking system will find this guarantee fund attractive, especially given the earlier negative experience with pay offs on loan guarantees. A number of other microenterprise lending projects are described in the CAEM-AITEC study, but none of these have been able to lend significant amounts because of lack of funds and inappropriate approaches to lending (e.g., interest rates of 14% p.a. or less which are far too low to cover costs and allow long-run viability).

6.15 Most microenterprise lending projects in Guatemala have been developed without the necessary prior study of informal financing requirements and arrangements actually being used by microenterprises. Perhaps the only exception is the program initiated by AITEC, based in large part on the CAEM-AITEC study, which attempts to create an approach that can be viable in the long run by focusing on loan recovery and interest rates adequate to cover project costs. Because of the lack of adequate prior study, other microenterprise lending projects are not only likely to turn out to be nonviable, but may also "train" a large number of microenterprises in rent seeking behavior and in nonrepayment of loans to the detriment of future projects that might otherwise be viable.

#### Informal Finance in Rural Areas

6.16 The existing analysis of informal finance in rural areas of Guatemala is even less adequate and tends to be related only to projects involving loans from BANDESA (mostly funded by international agencies) to various types of agricultural cooperatives for lending to farmers. Because of high operating costs and poor loan recovery, these projects have generally not been viable in the long run. The lack of adequate prior study of informal financial markets in rural areas has undoubtedly contributed to the lack of success in providing financial services on a continuing basis experienced by most of these projects. Until adequate studies are undertaken, the design of future policies and projects will likewise be hindered.

6.17 Two types of informal financial activities are particularly worthy of study not only because they have been found to be widespread in the rural areas of most developing countries but also because they can provide important lessons that can help to improve the functioning of formal financial institutions in rural areas. Rotating savings and credit

associations are potentially important because they involve two unusual aspects: (i) cooperation among a group of individuals; and (ii) savings mobilization from the members of the group. They are sometimes seen as precursors to the formation of credit unions and other forms of cooperatives in rural areas, as well as indicating possibilities for deposit mobilization by formal financial institutions.

6.18 As noted above, certain NFIs have experienced considerable success in lending to agricultural marketing agents operating in rural areas. Such marketing agents (sellers of inputs as well as purchasers of agricultural output) are likely to experience significant economies of scope in lending to low-income agricultural producers because of the information they obtain through their marketing transactions about cash flow patterns and reliability. Objections that marketing agents often exploit low-income agricultural producers through various monopolistic practices have frequently been used to attempt to limit the role of agricultural marketing agents in rural financial markets. However, increased lending to both actual and potential marketing agents is likely to enhance competition by removing a possible barrier to entry, as well as increasing the funds potentially available for lending to low-income agricultural producers.

#### Credit Unions and Other Rural Cooperatives

6.19 Credit unions are a particularly important part of the Guatemalan cooperative movement. As of March 1986, there were 189 credit unions in Guatemala with more than 125,000 members in total, as compared with 921 cooperatives of all types with approximately 210,000 members. While only 72 of these 189 credit unions are affiliated with FENACOAC, the federation of credit unions, these include almost all of the larger credit unions and account for almost 90,000 members. The loan portfolios of affiliated credit unions total almost Q 25 million, and these loans are mainly financed by member capital contributions (more than Q 15 million), deposits (more than Q 5 million), and loans from international agencies to FENACOAC for on-lending to affiliated credit unions (most of the rest).

6.20 Credit unions in Guatemala typically pay rates of interest on deposits that are competitive with banks. Stated interest rates on loans tend to vary more widely among credit unions but are generally slightly higher than stated interest rates on bank loans. Interest rates effectively charged tend to be considerably higher than stated rates because a member's borrowing is limited to some multiple of his capital contribution and because of the requirement to "capitalize" a portion of loans (e.g., to borrow 10% more than the amount to be received with the 10% added to the member's capital account). Because of the spreads implied by these interest rates and the low operating costs of most credit unions, they are viable if loan collection can be kept up. Unfortunately, many credit unions have not always been able to do this, especially those in areas severely affected by earthquakes and rural violence and consequent migration. The analysis of informal rural finance, together with programs based on market-oriented incentives, could help to promote the continuing viability of credit unions and thereby ensure a permanent improvement in rural financial services.



6.21 In addition to credit unions, there are a large number of agricultural cooperatives in rural areas. In fact, there are actually far more agricultural cooperatives than credit unions (446 as compared with 189) but with fewer members (less than 50,000 as compared with more than 125,000). Agricultural cooperatives have been heavily involved in lending to producers, often through programs involving BANDESA's Cooperative Credit Department. Specifically, BANDESA has lent significant amounts to agricultural cooperatives for on-lending to their members (and sometimes even to non-members), often with funds supplied by international agencies. After the earthquake of 1976, in particular, agricultural cooperatives were used to channel funds from international agencies to individuals who were members of cooperatives, as well as many who were not.

6.22 USAID has recently initiated a rural credit project using cooperatives to channel credit, but with increased emphasis on institutional viability and greater orientation toward market-based incentives, thereby hoping to avoid past problems. This raises the important issue of the extent to which agricultural cooperatives that are not basically financial institutions should be involved in channeling credit. This is analogous to the issue of whether credit unions should be involved in nonfinancial activities such as marketing or the delivery of technical assistance to producers.

#### Main Conclusions and Recommendations

6.23 There are three main conclusions with respect to informal financial markets in Guatemala. First, there are many efficient and innovative NFIs in Guatemala that are currently providing a wide range of important financial services that are not being provided by regulated intermediaries. Consequently, a primary objective should not be the regulation of NFIs but rather using the lessons that can be learned from their operations in moving toward the deregulation of regulated intermediaries. Second, the Guatemalan Government and various international agencies are embarking on credit programs and projects, in particular those to promote microenterprise development, that are not based on an adequate understanding of the working of informal finance in Guatemala. Consequently, these programs and projects are not likely to be viable and sustainable in the long run and may instead make it more difficult to create viable programs and projects in the future. Third, in spite of the importance of informal financial markets in Guatemala, there has been no adequate study of these markets in either urban or rural areas. Therefore, resources will need to be allocated to that end to guide the development of efficient financial markets and especially to improve access to financial services for small farmers, microenterprises and small savers.

## CHAPTER VII

### THE SECURITIES MARKET

#### Background

7.01 The Bolsa Nacional de Valores S.A. (BNV) has been open for business since late 1986. During this time, it has established a reasonable level of business, but only in two types of Government bonds. Other instruments, including shares in some private banks, are listed but have not been actively traded. The BNV has been operating despite the lack of a satisfactory regulatory framework. The existing institutional and operational arrangements are based on Section 14 of Article 16 of the Executive Branch Law which states that the Minister of the Economy has jurisdiction over stock exchanges. Internal regulations have been promulgated by the BNV, and these, together with guidelines issued from time to time by BNV management, provide the framework for the activities of the BNV. Although legally sound and adequate to enable the BNV to commence business, this unusual arrangement does not inspire confidence for the longer term, especially because it sets no standards for issuing securities. In addition, the October 1987 revisions to the Income Tax Law brought all securities exchanges, and the BNV in particular, under the control of the SB for income tax matters, paralleling the arrangements for banks and regulated financieras.

7.02 Authorized Members. Eleven BNV shareholders are authorized to trade on the floor of the BNV in the name of brokerage companies. Two of the brokerage companies are independent, while the other nine are affiliated with financial institutions, namely financieras (2), unofficial foreign exchange houses (4), a Guatemala bank, a foreign bank and a US stockbroker. Applications are pending from another financiera, a commercial group and a US bank, while applications are expected from two more Guatemalan banks and a financiera. Such membership should be more than adequate to support the activity of the BNV for some time into the future, and no more applications for membership will be actively sought by the BNV. Following allegations of irregularities in late 1987, the BNV's Council of Administration requested one stockbroker to relinquish his authorization to trade, although he remains a shareholder of the BNV. It is the BNV's intention to impose a minimum capital requirement on stockbrokers, probably Q 50,000 (US\$18,500 as of mid 1988), before admitting them as authorized members, but this requirement is not currently in place.

7.03 Listed Instruments. Under its self-imposed regulations, the BNV permits free listing of Government obligations and exempts financial institutions supervised by the SB from the requirement to file a prospectus. Since there are few legal limitations on the sale of stock and bonds by private companies in Guatemala, and no requirements even for public offerings, there has never been a prospectus offering through the BNV. In fact, almost all the instruments currently listed were widely held before the BNV commenced operation, so the new market can best be described as secondary in nature.

7.04 BESTs and BIVAs were issued between 1984 and 1987, before the BNV opened for business. These bonds were immediately eligible for trading on

the newly-opened exchange and have accounted for around 99% of BNV business. Two other types of Government bonds (CIVAPUs and Reconstruction Bonds) and a bond issued by the Government of El Salvador (DICAs) under the aegis of the CACM have been listed but are scarcely traded at all. Shares in three private banks and one regulated financiera have been listed, but these account for only a fraction of one percent of BNV turnover.

#### Regulation of the Stock Exchange

7.05 Two competing versions of a proposed Securities Market Law (SML) have been discussed, negotiated, and partly agreed to by the separate authors, the BG and BNV management. However, substantial areas of disagreement remain, mainly with respect to the degree of authority for the management of the Comisión Nacional de Valores (CNV) and the degree of overall control and influence to be retained by BG and JM. Neither of these proposals has serious flaws (Annex G). Nonetheless, it is suspected that there are irreconcilable differences between the BG's and the BNV's current positions, compounded by a lack of political will to reach a solution. If the concept of an omnibus securities law remains alive covering: the organization and regulation of securities exchanges, the registration of brokers, the issuance of securities, the creation of a securities commission and fiscal incentives, its progress may be interrupted more than once.

7.06 Need for Legal Regulation. In many countries the development of dispersed ownership of corporate stock and bonds, whether or not through the medium of a formal securities exchange, has given rise to protective legislation governing public issues of securities. Although such legislation can never guarantee the worth of any particular investment, and should not offer such protection, it can at least establish common standards of disclosure and thus a basis for comparative assessment. There seems to be a tendency (whenever a securities exchange is being promoted where the law providing a framework for the issuance of securities is also deficient) to try to deal with the structure and regulation of the exchange and the public issue of securities in the same law. This is not necessary, since the two matters, while related, are conceptually and operationally separate. A case can thus be made for proceeding on parallel but distinct paths and thereby achieving at least one objective more swiftly.

7.07 Guatemala finds itself in the circumstances described above and could benefit from the twin path approach, particularly since the confrontation between the authorities and the BNV on the appropriate shape of the law to regulate the BNV could be drawn out and leave the operations of the BNV in legal limbo. One way to sidestep the problem and move speedily to a stable structure for the BNV would be to introduce a self-regulatory system. As a foundation this could use the sound, although incomplete, set of internal regulations under which BNV is currently operating. While a self-regulatory framework would be practical, albeit an interim solution to the legal impasse, it would be important to ensure that these rules can be enforced. Authorities could be urged to establish a body to oversee the BNV's self-regulation and the BNV to elaborate the existing set of internal regulations for securities trading.

7.08 Regulating the Issuance of Securities. The same solution is not available to govern the issuance of securities, not least because the proprietors or shareholders of companies seeking to list securities do not constitute a small and visible club and are not specifically interested in the long-term health of the securities market. The traditional market rule of caveat emptor is of limited application here, as the goods on sale, tradable financial instruments, are not susceptible to independent valuation by a buyer without benefit of information. It is the disclosure of all relevant information that is the principal aim of issuance provisions.

7.09 Allowing for the fact that regulation of securities exchanges and public issuing need different approaches, the two draft Guatemalan securities laws (each designed by a party with no particular experience with public issuing) devote scant attention to prospectus and disclosure requirements, leaving the details to be established by the future CNV. This is fraught with danger, as any such commission is likely to see its duty as partially protective and may thus try to vet prospectuses in a qualitative sense, as if formal approval were being solicited. The main purpose of a public issue law is to define the scope and depth of disclosure to be contained in a prospectus and to set standards of behavior for officers and directors of public companies. Shortfalls can be the subject of civil lawsuits by aggrieved investors, thereby setting both market and legal standards for such documents. The current rules of the BNV do not provide an adequately detailed description of the information that the BNV should require for the listing of securities, although there is a comprehensive list of areas where any subsequent change must be announced.

7.10 Disclosure. The essence of disclosure requirements for corporate issuers is that they provide potential investors with all material information concerning the investment. The definition of material is all information that an average investor would want before making an investment decision, and, if in doubt, information should be disclosed. The BNV should develop a comprehensive list of headings to be included in initial public offering prospectuses in considerably more detail than presently contained in its regulations, but such a list should not discourage an issuer from including additional material if warranted by its own circumstances. In its routine oversight of the exchange, the BNV would also be expected to review the contents of prospectuses for completeness, but should not be expected to approve a prospectus or the underlying investment in any sense.

7.11 BNV regulations call for routine and extraordinary company announcements and reports to be submitted in a timely fashion. It is also necessary for the BNV to ensure that such material is disseminated as widely as possible, certainly to all brokers and to a BNV library. This library could develop a statistical section over time to provide a comprehensive source of information on a company's history, including initial and subsequent prospectuses, periodic reports and corporate announcements.

7.12 Accounting Standards. Although companies are obliged to provide other material, the essential information to enable rational investment decisions is financial. It is of greatest importance that financial data presented in prospectuses and periodic statements be fully reliable. The authorities promoting the development of the BNV should thus consider

carefully whether the existing accounting standards in Guatemala should be improved.

7.13 The accounting profession in Guatemala appears to have developed over time several differing ways of conducting audits. First, for financial institutions, the profession has been guided by the minimum requirements and standards applied by the SB and has not sought improvements in accounting techniques. Second, for private companies, there seems to have been some collusion between shareholders and their auditors to present as discreet and veiled an impression of the company's affairs as possible. Though understandable for fiscal and control purposes, this does not contribute to protecting outside shareholder rights, nor to providing a sound basis for investment decisions. Third, and by contrast, the standards applied by the auditing profession to audits of subsidiaries of foreign companies seem very high, perhaps prompted by stipulations of the parent company auditors.

7.14 The form and content of audit reports presented in prospectuses could be given in the law covering the issue of securities, but a more general solution would be for the accounting profession itself to implement a review of standards. The attraction for accountants that might be offered by those developing the securities exchange would be a significant increase in accounting work.

7.15 Merger and Acquisitions Activity. Takeover bids eventually become a common feature of any securities market, no matter how unlikely this may seem at the moment in Guatemala. Subject to appropriate safeguards, this is to be welcomed as it demonstrates that a market is seen to be a suitable vehicle for the transfer of controlling interests in listed companies, a logical extension of the transfer of small holdings. This topic could be handled by the securities issue law or by exchange regulatory arrangements, since elements of merger and acquisitions activity span both areas. On balance, it would seem better to allow the issuance law to govern, since self-regulation is generally accepted as inadequate to deal with more prejudicial takeover tactics. The takeover code should include such subjects as: which actions fall within its ambit, the methods to provide for equal treatment of all shareholders, the contents, timing and method of dissemination of offer documents, advertising and publicity limitations, acceptance procedures and competitive circumstance.

7.16 Obligations of Directors. The Guatemalan Commercial Code describes the duties of company directors in some detail and provides for stockholders civil actions against derelict directors and for criminal sanctions in flagrant cases. Both in its range and in its practical effects (e. . . , the paucity of awards by the courts), this element of the law is weak. Furthermore, it is widely accepted that behavioral and fiduciary standards for directors of publicly held companies should be higher than those applicable to closely-held entities. The proposed securities issuance law should thus lay down the duties of public company directors in a more stringent way.

#### Traded Instruments for an Expanded BNV

7.17 The existing market for Government bonds, as discussed in Chapter II, is largely confined to financial institutions that can effectively be

forced to accept them. The recommendation there was to establish a market mechanism to finance public sector borrowing requirements. This would use the facilities of the BNV to trade conventional Government debt (see also Chapter III).

7.18 Private entities do issue bonds to a limited extent in Guatemala. Although the issuance of bonds by financial institutions is implicitly under the control of the monetary authorities, in the case of financieras issues a specific certification from the Comision de Valores del BG (CV) (Securities Commission of BG) is required to enable investment by state-owned entities. Four of the five financieras have secured this certification, with their paper being labelled "first class." Under a 1980 resolution, such certification requires the provision of financial statements, indication of the intended use of funds, prospective means of repayment, and a draft prospectus describing the issue. The issuer must also undertake to provide monthly and annual financial information and notification of board or management changes. Issues can only be made with the expressed permission of the JM, and the CV reserves the right to examine the issuer's accounts.

7.19 There was an apparent similarity between this certification role of the CV, which is narrowly applicable to classifying bonds for a specific purpose, and a much wider certification role for the granting of fiscal incentives (which were offered in the October 1987 tax reform measures for private bonds that had been accorded first-class status by the CV). Since October 1989, non-financial bonds issuers, as discussed in Chapter III, are exempted from the income and stamp taxes, and this status is granted automatically and without CV intervention. The latter may have been justified since: (i) a non-financial issuer should not need to have its issues approved by the JM; (ii) the opportunity for the CV to examine accounts, even retroactively, may have been viewed as oppressive; and (iii) the criteria for certification seem to be mechanical rather than analytical. Moreover, it is doubtful if the CV has the requisite professional resources to have been able to carry out this certification function for non-financial issuers.

7.20 The BNV has been requested to list the bonds of some financieras that have been accorded first-class status and is confident that the necessary procedures will soon be accomplished. This should prove attractive to issuers as there will be no need to offer the repurchase guarantees customarily attached to unlisted paper. The CV has insisted that repurchase guarantees be backed by bank deposits against the outstanding bonds of 40% or 10%, depending on whether repurchase is immediate or after 30 days notice. Once these deposits are exhausted, a financiera has no further legal liability to repurchase, making the guarantee of liquidity worthless under extreme circumstances. The absence of any such guarantee on listed bonds would avoid this confusion, albeit at the higher interest rates applicable to term loans. Such premiums might be acceptable to financieras, given the more efficient use of the proceeds without the requirement to place funds in low-yielding bank savings accounts (see Chapters II and III).

7.21 Non-financial companies are not experienced in raising funds through bond issues. However, as a response to the new incentives, there are two bond issues under preparation soon to be placed using BNV facilities.

7.22 Share issues by private companies have been scarce in Guatemala. As discussed in Chapter III, the tax system discriminates against equity finance. In addition, the propensity for banks to prefer better credit risks, especially as long as interest rates on loans were controlled, has provided larger and more successful companies with easy access to bank credit and has correspondingly reduced the need to seek external equity and non-bank debt finance. In any case, there is a need to facilitate the process of augmenting capital through public issues. The 3% stamp tax levied on a company's authorized capital, combined with extremely costly and time-consuming procedures to secure official permission and arrange for increases in authorized capital, has meant that companies wanting capital increases would not be able to react in time. Paradoxically, the process for issuing already authorized but unissued capital is relatively quick and straightforward, but few companies are willing to take advantage of this (even though the legal minimum for issued capital is 25% of authorized) because of the 3% tax on authorized but unissued capital. However, the BNV should not neglect equity issues, even though debt issues can be more easily arranged, but should make an effort to cultivate potential issuers of and investors in equity. Preference shares, convertible debentures and partly-paid shares could provide acceptable hybrid investment instruments with appropriate safeguards that could help to accommodate the disparate needs of the parties.

7.23 Early in the development of a securities market, it seems premature to consider sophisticated matters such as underwriting, but underwriting is worth highlighting because it will require attention sooner or later if primary issues of Government and private paper prove popular and sustainable. Underwriting, although feasible by financial companies, may also imply the need for the creation of new institutions, or the modification of old ones, to provide risk capital together with advisory services for investment or merchant banking. It is too early to map such developments with precision, but any regulatory changes envisaged for securities markets should not preclude these other types of activities which will be of great catalytic importance.

#### Potential Investors in Instruments Traded on the BNV

7.24 The existing clientele of the BNV is rather eclectic, as trading is principally in BEST and BIVA bonds. The emergence of institutional investors<sup>1</sup> could be an important impetus for the growth of the BNV. Although regulatory constraints on financial institutions (see Chapters II and V) and their innate conservatism, may prevent the assumption of their full potential as investors. Insurance companies are restricted by law and custom from investing outside a narrow range of securities. In contrast with banks and financieras, however, insurance companies are at least willing to discuss making investments in traded bonds and equities, perhaps as a natural extension of their more distant time horizons. Pension funds might find it attractive to be able to widen the range of investment possibilities into which their portfolios can be diversified. However, as pension funds are little developed in Guatemala and there is a dearth of yardsticks against which investment performance can be measured, some time may elapse before the error of investing exclusively in low-yielding Government bonds becomes evident. The shortfalls in contributions to the

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<sup>1/</sup> For more details on institutional investors, see Annex H.

IGSS, and its dependence on Government bonds to fill its investment portfolio at relatively low interest rates (and with resale rights) limit its potential involvement in the securities market.

7.25 Private investors are likely to invest through the BNV, especially if stockbrokers facilitate this through the development of money market funds to compete with the unregulated financial intermediaries already offering this service in Guatemala. However, Guatemalan law does not acknowledge the right of minority shareholders to seek protection against unfair acts by the majority, except that a minority shareholder can apply to the court to have his shares bought at asset value if deprived of reasonable dividends. The authorities should consider introducing necessary regulatory changes to increase protection of minority shareholders as a way to stimulate the demand for shares in the future.

#### Recommendations

7.26 Based on the previous analysis, to support the development of the securities market in Guatemala, the authorities will have to: (i) explore self-regulation for the BNV as a way of avoiding an invidious choice between the BG and BNV proposals for the SML; (ii) consider the introduction of a non-statutory commission to advise the BG on breaches in self-regulation and to ensure that rules are being enforced; (iii) urge the BNV to elaborate its existing set of internal regulations regarding the trading of securities; (iv) devise a Securities Issuance Law to provide legal means to insist on full and honest disclosure in prospectuses; (v) encourage upgrading of accounting and auditing standards in Guatemala with special reference to accountant reports in prospectuses; (vi) review the desirability of utilizing the BNV as a conduit for issuing Government Bonds and, if the result is positive, set up a task force to consider underwriting; (vii) study the likely consequences of liberalizing the investment policies of insurance companies to enable a wider range of investments; (viii) once the regulatory framework is sufficiently developed, promote technical assistance in merchant banking to establish various financial instruments suited to the needs of Guatemalan investors/issuers; (ix) develop money market funds through brokers; and (x) increase minority shareholders protection against unfair acts by the majority.



GUATEMALA - FINANCIAL SECTOR REPORT

Econometric Estimates

Demand for Money

The demand for monetary assets can be represented by the following equation:

$$(1) \quad \ln m_t^d = a_0 + a_1 \ln y_t + a_2 p_t^e + a_3 rf_t$$

where  $m_t^d$  is demand for real M2 balances,  $y_t$  is real output,  $p_t^e$  is expected rate of inflation, and  $rf_t$  is expected rate of return on foreign assets.

Gross substitutability is assumed among money, goods, and foreign assets. The following signs are expected for the coefficients:  $a_1 > 0$ ,  $a_2 < 0$ ,  $a_3 < 0$ . Other interest rates, such as the domestic deposits rate, were controlled by the government and experienced little variation over time; they are not included in the money demand equation as lack of variation in the interest rate reduces statistical correlation between this variable and money demand. Moreover, when nominal interest rates are controlled, the effect of changes in the real return on money is more likely to be captured by changes in the expected rate of inflation.

If partial adjustment is assumed,

$$(2) \quad \ln m_t = b \ln m_t^d + (1-b) \ln m_{t-1}$$

where  $0 < b < 1$  is the proportion of excess demand for money that is cleared in the current period. In addition, we know that

$$(3) \quad \ln m_t = \ln M_t - \ln P_t$$

where  $M_t$  is the nominal M2 stock and  $P_t$  is the price level.

Expectations about inflation ( $p_t^e$ ) are generally formed on the basis of past rates of inflation and anticipations of future policies having an effect on current inflation. For simplicity, it is assumed here that only the past inflation rate determines expectations, i.e.,

$$(4) \quad p_t^e = D \log P_{t-1}$$

where  $D$  is a first-difference operator.

The return on foreign assets depends on expectations about depreciation of the local currency; these must be added to the world interest rate to obtain the yield in local currency. The relevant rate of exchange for foreign assets in Guatemala is the parallel or free banking rate. Assuming this rate is expected to depreciate in proportion to real exchange rate "disequilibrium" in the regulated market,

$$(5) \quad r f_t = r^*_t + c(\ln e - \ln e_{t-1})$$

where  $r^*_t$  is the interest rate on US bonds,  $\bar{e}$  is a reference year real exchange rate level, and  $e_{t-1}$  is the real exchange rate in period  $t-1$ .<sup>1</sup>

Combining (1), (2), (4), and (5), the following reduced-form equation results:

$$(6) \quad \ln m_t = k_0 + k_1 \ln y_t + k_2 \text{Dlog } P_{t-1} + k_3 r^*_t + k_4 \ln e_{t-1} \\ + k_5 \ln m_{t-1}$$

where  $k_0 = b(a_0 + a_3 c \ln \bar{e})$ ,  $k_1 = b a_1 > 0$ ,  $k_2 = b a_2 < 0$ ,  $k_3 = b a_3 < 0$ ,  $k_4 = -b a_3 c > 0$ ,

$$k_5 = (1-b) > 0.$$

This equation was estimated using annual data from 1961 to 1987. The results are shown in Table A.1, Regression [1]. The structural parameters of the model are obtained from the reduced-form coefficients. The long-run elasticity of money demand with respect to income ( $a_1$ ) equals 1.9 indicating that economic growth has been accompanied by an increase in the M2 over GDP ratio (financial deepening). Money demand is elastic with respect to the US interest rate ( $a_3 = -3.9$ ) reflecting high substitutability between domestic and foreign financial assets. In other words, a one-percentage point increase in the U.S. interest rate reduces real money demand in Guatemala by about 4%. Also, the long-run coefficient of lagged inflation is statistically significant and high ( $a_2 = -1.15$ ); this reinforces evidence of high substitutability among assets in the economy. The remaining structural parameters are  $b = 0.59$  and  $c = 0.07$ . Thus, the market clears about 60% of excess money supply in one year, and only 7% of the real exchange rate disequilibrium gap is passed on to the expected rate of depreciation.

### Balance of Payments

In a small open economy with a fixed exchange rate and controlled interest rates, monetary imbalances are likely to be adjusted through changes in international reserves and domestic prices. The extent to which changes in reserves respond to an initial disequilibrium in the money market depends on the degree of openness of the economy. An extreme case arises when all goods are tradable and capital mobility is perfect since, under these conditions, domestic inflation equals foreign inflation, and reserves are the only endogenous variable: an increase in money demand should lead to an increase in reserves, and an increase in domestic credit supply should be offset by an equal reduction in reserves.

The relationship among reserves, prices, and domestic credit can be derived with reference to the money demand equation presented above. Assuming full monetary adjustment ( $b=1$ ) and differentiating (1) and (3), the equilibrium condition becomes:

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<sup>1/</sup> For simplicity, real exchange rate disequilibrium is implicitly measured as deviations from a constant parity level.

$$(7) \quad \text{Dlog } M_t - \text{Dlog } P_t = a_1 \text{Dlog } y_t + a_2 \text{Dp}^e_t + a_3 \text{Drft}_t$$

Noting that changes in money supply must equal changes in domestic credit (C) plus changes in reserves (R),

$$(8) \quad \text{Dlog } M_t = (\text{DC}_t/M_{t-1}) + (\text{DR}_t/M_{t-1})$$

Following Khan (1980), it is assumed that the increments of asset returns that appear on the right-hand side of (7) can be added into a roughly constant term. From (7) and (8),

$$(9) \quad (\text{DR}_t/M_{t-1}) = r_0 - (\text{DC}_t/M_{t-1}) + \text{Dlog } P_t + a_1 \text{Dlog } y_t$$

The left-hand side of (9) represents the balance of payments as proportion of the beginning-of-period money supply. This is shown to depend on the rate of domestic credit expansion, the rate of inflation, and the rate of growth in GDP. The model admits three alternative specifications. (i) If all goods are tradable and the exchange rate is autonomously set by the government, domestic inflation equals foreign inflation plus devaluation ( $\text{Dlog } P_t = \text{Dlog } P^*_t + \text{Dlog } E_t$ ), and this variable must appear on the right-hand side of (9) as an exogenous determinant of changes in reserves. This specification corresponds to the monetary approach to the balance of payments (Frenkel and Johnson). (ii) If all goods are tradable but the exchange rate adjusts in response to balance of payments conditions, the relevant endogenous variable should be an overall indicator of exchange market pressure, namely, changes in reserves minus devaluation (Girton and Roper). (iii) If only some goods are tradable and the price of nontradables depends on monetary conditions, the endogenous variable should be defined as changes in reserves minus domestic inflation.

Regressions [2], [3], and [4] in Table A.1 report results based on these three specifications of the balance of payment. The best fit of the data corresponds to equation [4] where reserves and prices appear as endogenous. Notice that the coefficient of domestic credit expansion is very close to -1.0 in equation [4] as expected from the theory, indicating that excess supply of credit is fully eliminated by changes in reserves and domestic inflation.

One limitation of the previous model is that it does not show how domestic prices and reserves move to eliminate monetary disequilibria. This shortcoming can be remedied by explicitly postulating the process leading to market clearing. The next model assumes a two-step, nondynamic clearing process whereby domestic prices react sluggishly to ex-ante monetary disequilibrium while the remaining excess supply or demand for credit is absorbed by changes in reserves. In this way, the relative contribution of prices and reserves to the adjustment process can be determined from the data. Since it is assumed that money demand equals money supply at the end of the period,

$$(10) \quad \log M_t = \log P_t + \log m^d_t$$

The following identity applies to the price level:

$$(11) \quad \log P_t = \log P_{t-1} + \text{Dlog } P_t$$

Assuming that domestic inflation is determined by foreign inflation, the rate of devaluation, and the ex-ante excess supply of money (ESM), we can write

$$(12) \quad \text{Dlog } P_t = h_1(\text{Dlog } P^*_t + \text{Dlog } E_t) + h_2(\text{ESM})_t$$

where the  $h_1$  coefficient depends on goods tradability and import dependency, while  $0 < h_2 < 1$  represents the proportion of monetary disequilibrium that spills over the goods market during one year.

Excess money supply, in turn, can be specified as the sum of initial real balances plus the monetary shock in period  $t$  minus real money demand in period  $t$ . Assuming all changes in domestic credit are exogenous and there are no exogenous shocks to reserves,

$$(13) \quad \text{ESM} = \ln m_{t-1} + (\text{DC}_t / M_{t-1}) - \ln m^d_t$$

Using equations (10) to (13), we can write

$$(14) \quad \ln M_t = (1-h_2) \ln m^d_t + \ln P_{t-1} + h_1 (\text{Dln } P^*_t + \text{Dln } E_t) \\ + h_2 (\ln m_{t-1} + \text{Dln } C_t)$$

Subtracting  $\ln M_{t-1}$  from both sides of equation (14), using (8), and rearranging terms, the following equation results:

$$(15) \quad \text{DR}_t / M_{t-1} = -(1-h_2) [\ln m_{t-1} + (\text{DC}_t / M_{t-1})] + h_1 (\text{Dln } P^*_t + \text{Dln } E_t) \\ + (1-h_2) \ln m^d_t$$

To estimate (15), we must first substitute (1) for  $\ln m^d_t$ . The econometric results are shown in Table A.1, Regression [5]. The structural parameters of the model are the following:  $h_1=0.29$ ,  $h_2=0.57$ ,  $a_1=2.14$ ,  $a_2=-1.19$ ,  $a_3=-6.86$   $c=0.09$ . Thus, 29% of imported inflation and devaluation is reflected in higher consumer prices. Also notice that, except for  $a_3$ , the long-run coefficients of the money demand function are remarkably close to the ones obtained using the partial-adjustment model (Table A.1, Regression [1]). The same is true for the parameter  $c$  relating expected depreciation to real exchange rate overvaluation. The foreign interest rate elasticity, however, is higher than in the previous model. The additional information relates to the value of  $h_2$ . According to the results, 57% of excess money supply is cleared by prices and 43% by international reserves.

### Saving Equation

To analyze private saving determinants, the following regression was estimated by OLS using annual data from 1969 to 1987:

$$(16) \quad \ln SP_t = 7.84 + 0.007 r_{t-1} - 0.04 r_t^* + 0.04 r^*_{t-1} \\ (14.3) \quad (3.0) \quad (4.8) \quad (3.4) \\ + 0.08 \text{NFA}_{t-1} - 0.13 \ln SG_t + 0.77 \ln (\text{PX/PM})_t \\ (9.6) \quad (2.5) \quad (2.7)$$

$$- 18.10 T_t + 0.70 \ln e_{t-1} - 0.37 \ln m_{t-1}$$

(9.3)                      (5.4)                      (2.3)

$$\bar{R}^2 = 0.97$$
$$DW = 2.5$$

where  $SP_t$  = private saving relative to GDP  
 $r_t$  = domestic real interest rate (deposits)  
 $r^*_t$  = foreign interest rate (U.S.)  
 $NFA_t$  = net foreign assets  
 $SG_t$  = public saving relative to GDP  
 $PX/PM_t$  = terms of trade  
 $T_t$  = commercial tariff  
 $e_t$  = real exchange rate  
 $m_t$  = real money supply (M2/P)

The real interest rate on domestic assets affects private savings with a lag of one year. A one-percentage point increase in the real interest rate raises the saving ratio by 0.7% next year. Although the regression coefficient is positive and statistically different from zero, the magnitude of the coefficient is relatively unimportant since for an initial saving ratio of 10% of GDP, the increase would be only 7 hundredths of 1% of GDP. This result is consistent with international evidence in other developing countries (see Giovannini, 1985); empirical estimates of the response of aggregate saving to the real interest rate in developing countries do not provide any support to the hypothesis that aggregate saving responds positively to the real interest rate. The effect of a change in the foreign real interest rate operates mainly through changes in disposable income. Being a net debtor country, Guatemala is adversely affected by an increase in foreign interest rates. Since consumption is slow to react to the fall in national disposable income, the impact effect on savings is negative. This is reflected by the negative sign of the coefficient of  $r^*_t$ ; a one-percentage point increase in the real foreign interest rate reduces the private saving ratio by 4% during the same year. This effect, however, is reversed during the next year as consumption adjusts to the adverse change in factor payments; the coefficient of  $r^*_{t-1}$  has the same value as the coefficient of  $r^*_t$  but a positive sign.

Net foreign assets are related to saving in several ways. Two-gap model theorists, for example, argue that countries experiencing chronic shortages of foreign exchange are prevented to attain desired spending levels. Thus, a removal of external constraints through the accumulation of net foreign assets may help to increase absorption reducing the saving ratio. In this case, net foreign assets and saving should be inversely correlated. External bottlenecks, in turn, are generally due to constraints in foreign demand for (or domestic supply of) tradable goods under conditions of low or nil access to foreign capital. Notwithstanding the validity of this argument for other LDCs, it does not seem to apply forcefully to Guatemala where lack of foreign credit or foreign assistance has not been an issue and access of local exporters to foreign (particularly US) markets has been relatively easy. In equation (16), the lagged value of net foreign assets is positively correlated to the saving ratio. This is consistent with a situation in which an increase in the stock of net foreign assets in period  $t-1$  leads to higher returns on these assets during the next period, increasing disposable income and resulting in a higher saving ratio.

Another result from equation (16) is that public saving exerts a negative, albeit small, effect on private saving: a 1.0% increase in public saving reduces private saving by 0.13%. The model does not determine whether crowding out is higher in the long run. Terms of trade also appear to be important determinants of the saving ratio; a 1.0% increase in the terms of trade accounts for a 0.8% increase in the saving ratio. Thus, erratic fluctuations in the terms of trade lead to relatively small changes in consumption (large changes in saving). Tariffs and the real exchange rate also have powerful effects on savings, presumably as they shift resources to exporters whose marginal propensity to save is high. A one-percentage point decrease in the tariff increases the saving ratio by 18% in the same year, while a 1.0% increase in the real exchange rate improves saving by 0.7% during the following year. Finally, there are liquidity effects associated with saving behavior; as real balances (money plus quasi money) increase, consumption is enhanced and saving is reduced. In this case, a 1.0% increase in real M2 balances increase the saving ratio by 0.37% with a lag of one year.

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Table A.1. Econometric Results, Money Demand and Balance of Payment Equations

Regression	Dependent Variable	Const.	$DC_t/M_{t-1}$	$\ln a_{t-1} \cdot DC_t/M_{t-1}$	$D \ln P_t$	$D \ln P_t \cdot D \ln E_t$	$\ln Y_t$	$D \ln Y_t$	$D \ln P_{t-1}$	$re_t$	$\ln a_{t-1}$	$\ln a_{t-1}$	$R^2$ DW
[1]	$\ln a_t$	-5.17 (3.80)	--	--	--	--	1.11 (3.9)	--	-0.68 (3.4)	-2.80 (3.3)	0.17 (1.4)	0.41 (2.6)	0.99 2.2
[2]	$DR_t/M_{t-1}$	0.08 (1.5)	-0.81 (3.8)	--	--	0.12 (1.8)	--	0.68 (1.1)	--	--	--	--	0.54 1.8
[3]	$(DR_t/M_{t-1}) - D \ln E_t$	-0.04 (0.4)	-0.71 (1.4)	--	0.91 (1.2)	--	--	1.70 (1.2)	--	--	--	--	0.27 2.3
[4]	$(DR_t/M_{t-1}) - D \ln P_t$	0.03 (0.6)	-0.93 (4.4)	--	--	--	--	0.88 (1.5)	--	--	--	--	0.64 2.0
[5]	$DR_t/M_{t-1}$	-8.14 (4.6)	--	-0.57 (4.0)	--	0.39 (2.2)	1.32 (4.7)	--	-0.68 (2.0)	-3.9 (4.8)	0.88 (1.5)	--	0.85 1.9

Note: Regressions were estimated using ordinary least squares. Annual data from 1961 to 1987 were used throughout.

**Table A.2 Data Used to Estimate Regressions [1] to [5]**

obs	M2	NFA	DCRED	M2R	GDPKP	INFL	NER	WPIUSA	CPI	RER	USINT
1961	143.1000	44.50000	98.60000	389.3878	2775.000	-0.005157	1.000000	0.351900	0.367500	0.957551	0.023800
1962	151.2000	31.44000	119.7600	402.9851	2873.000	0.020736	1.000000	0.352600	0.375200	0.939766	0.027800
1963	169.8000	42.30000	127.5000	451.9564	3148.000	0.001332	1.000000	0.351500	0.375700	0.935587	0.031600
1964	194.1000	38.90000	155.2000	517.7380	3293.000	-0.002132	1.000000	0.352300	0.374900	0.939717	0.035500
1965	209.4000	33.90000	175.5000	563.0546	3436.700	-0.008034	1.000000	0.359300	0.371900	0.966120	0.039500
1966	234.5000	24.00000	210.5000	626.3028	3626.400	0.006433	1.000000	0.371200	0.374300	0.991718	0.048800
1967	262.8000	35.60000	227.2000	698.3789	3775.200	0.005329	1.000000	0.372000	0.376300	0.988573	0.043300
1968	277.3000	38.10000	239.2000	723.4542	4106.500	0.018431	1.000000	0.381300	0.383300	0.994782	0.053500
1969	309.2000	47.60000	261.6000	789.7829	4301.000	0.021168	1.000000	0.396100	0.391500	1.011750	0.066900
1970	343.7000	76.50000	267.2000	857.5350	4546.500	0.023477	1.000000	0.410500	0.400800	1.024202	0.064400
1971	383.3000	88.00000	295.3000	960.8924	4800.300	-0.004752	1.000000	0.424200	0.398900	1.063424	0.043400
1972	476.9000	134.1000	342.8000	1188.980	5152.300	0.005500	1.000000	0.442900	0.401100	1.104213	0.040700
1973	579.8000	209.5000	370.3000	1270.377	5501.800	0.129159	1.000000	0.501100	0.456400	1.097941	0.070300
1974	668.3000	187.1000	481.2000	1256.912	5852.600	0.152710	1.000000	0.595400	0.531700	1.119804	0.078700
1975	808.5000	294.7000	513.8000	1343.693	5966.700	0.123679	1.000000	0.650400	0.601700	1.080937	0.058200
1976	1051.800	503.8000	548.0000	1578.568	6407.500	0.101981	1.000000	0.680700	0.666300	1.021612	0.049900
1977	1249.100	661.0000	588.1000	1669.027	6908.100	0.116197	1.000000	0.722400	0.748400	0.965259	0.052700
1978	1423.600	732.8000	690.8000	1756.663	7253.000	0.079590	1.000000	0.778600	0.810400	0.960760	0.072200
1979	1537.200	700.2000	837.0000	1703.646	7594.900	0.107419	1.000000	0.876200	0.902300	0.971074	0.100400
1980	1692.400	442.9000	1249.500	1692.400	7879.400	0.102808	1.000000	1.000000	1.000000	1.000000	0.116200
1981	1906.700	127.0000	1779.700	1711.119	7931.900	0.108226	1.000000	1.091300	1.114300	0.979359	0.140800
1982	2190.700	72.20000	2118.500	1959.832	7650.400	0.003136	1.000000	1.113300	1.117800	0.995974	0.107200
1983	2155.100	-221.6000	2376.700	1844.331	7455.100	0.044358	1.000000	1.127300	1.168500	0.964741	0.086200
1984	2399.100	-459.8000	2858.900	1985.517	7490.400	0.033494	1.000000	1.154100	1.208300	0.955144	0.095700
1985	3192.900	-334.3000	3527.200	2226.414	7446.200	0.171323	1.000000	1.149000	1.434100	0.801199	0.074900
1986	3875.100	-224.0000	4099.100	1973.367	7447.500	0.314293	2.500000	1.115000	1.963700	1.419514	0.059700
1987	4167.800	-305.2000	4473.000	1889.473	7574.500	0.116260	2.500000	1.145000	2.205800	1.297715	0.058300

**Note**

- M2: Money plus quasimoney (nominal)
- NFA: Net foreign assets (minus long-term foreign liabilities)
- DCRED: Domestic credit (M2-NFA)
- M2R: Real M2 stock (M2/CPI)
- GDPKP: GDP at constant prices
- INFL: Domestic rate of inflation (from CPI)
- NER: Nominal exchange rate
- WPIUSA: Wholesale price index, USA
- CPI: Consumer price index, Guatemala
- PER: Real exchange rate (NER\*WPIUSA/CPI)
- USINT: Treasury bill rate, USA.

Source: IMF, International Financial Statistics.



GUATEMALA - FINANCIAL SECTOR REPORT

Loan Portfolio Classification and Provisioning for Bad Debts

Loan Portfolio Classification System

1. Optimum Policy. Loan portfolio classification is more an art than a science, so there is not an optimum or best loan classification system. Nonetheless, there are systems that are better than others. Banks should systematically and realistically classify their loan portfolios as a function of risk of default. Similarly, external auditors and supervisors should be in the position to identify portfolio risks. In order to facilitate these tasks, and to guarantee that the quality of bank portfolios is measured with the same yardstick, governments should introduce regulations requiring banks to classify their assets as to quality according to specific criteria. The classification of the loan portfolio should be based not only on the repayment status of the loan, but also on the repayment capacity of the borrower (based on an assessment of financial condition) and the cash value of the collaterals. Loans should be classified based objectively on performance and subjectively on the obligor's financial condition and ability to repay the indebtedness.

2. A loan classification system that categorizes loans according to criteria similar to the following can be judged as adequate:

(a) Current

Loans in this category are neither past-due nor subject to criticism;<sup>1</sup>

(b) Sub-Standard

(i) Objective criteria: Non-performing loans past-due for more than 90 days but less than 180 days or loans for which estimated losses are up to 25% of the value; <sup>2</sup>

(ii) Subjective criteria: Loans which display well-defined credit weaknesses such as inadequate cash flow to service debt, undercapitalization, or insufficient working capital; lack of current sound worth or paying capacity of the obligor, or

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1/ A credit becomes past-due when any of the following conditions exist: (i) either principal or interest is due and unpaid for 30 days; (ii) interest payments equal to 30 days interest or more have been capitalized, refinanced or rolled-over into new loans.

2/ A credit becomes non-performing when any of the following conditions exist: (i) either principal or interest is due and unpaid for 90 days or more; (ii) interest payments equal to 90 days interest or more have been capitalized, refinanced or rolled-over into a new loan.

collateral pledged, if any; absence of adequate financial information or collateral documentation;

(c) Doubtful

- (i) Objective criteria: Non-performing loans at least 180 days past-due and not well secured by legally foreclosable collateral in process of collection;
- (ii) Subjective criteria: Loans that demonstrate all the weaknesses inherent in loans classified as substandard with the added characteristics that the timely collection of the debt in full is very uncertain; realizable collateral values under forced liquidation are not sufficient to protect from loss; and potential losses are estimated to exceed 30% of the face value of the loan;

(d) Loss

- (i) Objective criteria: Non-performing loans 360 days or more past-due and not well secured by legally foreclosable collateral in process of collection;
- (ii) Subjective criteria: Loans which are considered uncollectible and of such little value that continuation as a bankable asset is not warranted; loans classified as a loss include loans to insolvent firms with negative working capital and cash flow.

Provisioning for Bad Debts.

3. Optimum Policy. Mandating minimum provisions to the reserve for possible losses based on the classification of loans. Provisioning establishes discipline in the credit process and forces banks to reflect more accurately their true financial condition. Two types of provisions can be identified: specific and general. Specific provisions are those made according to risk of default based on the classification of the loan. General provisions are a small percentage (1%) of the total current loan portfolio and are made under the assumption that even the highest-quality segment of a portfolio will show some degree of loss.

1. Specific provisions:

- A. Current - none;
- B. Substandard - minimum of 25% of the aggregate outstanding balance;
- C. Doubtful - between 50% and 90% of the aggregate outstanding balance based on how long has the loan been overdue. For example, provisions for 50% of loans overdue between 180 and 225 days, provisions for 60% of loans overdue between 226 and 270 days, provisions for 70% of loans overdue between 271 and 315 days, and

provisions of 80% for loans overdue between 316 and 364 days; and

D. Loss - 100% of the aggregate outstanding balance.

2. General provision:

1% of the aggregate outstanding balance of all current assets.

4. A discretionary phase-in period could be established by the Central Bank to provide banks some time to adjust.

GUATEMALA - FINANCIAL SECTOR REPORT

Model for a Deposit Insurance/Financial Rehabilitation Fund

Organization and Staffing

1. Board of Directors. A small board of directors, perhaps five persons, would provide direction and leadership for the Fund. Board members would serve on a part-time basis, fulfilling their responsibilities through attendance at frequent meetings of the Board. Members would include representatives of the BG, the Treasury, the Board of Sworn Bank Auditors, the private sector and the chief executive officer of the Fund to ensure adequate coordination of all decisions affecting the banking system and its economic and financial implications. It would be desirable to have persons with financial or business experience. Active bankers would be prohibited from serving to prevent conflicts of interest. Members would serve for a specific term. The public sector members would always constitute a majority.

2. Chief Executive Officer. The position of chief executive officer should be similar to that in the private sector with appropriate compensation and responsibilities. The person selected should be a professional with a substantial background in banking, finance, and supervisory matters. This person should have the stature to deal effectively with individuals in all segments of government and the financial sector. This person would be selected by the Board of Directors and should be supported by a legal office consisting of at least one attorney with a background in banking and finance.

3. Administration Division. The administration division initially would consist of four professionals. They should have a financial and business background. They would have the following responsibilities:

- a. maintaining the corporate records such as bylaws, minutes of board meetings, etc.;
- b. maintaining the corporate accounting records and preparing financial reports;
- c. assessing and collecting premiums from member banks;
- d. investing surplus funds;
- e. dispersing funds for restructuring of banks, salaries, and other operating expenses;
- f. negotiating long-term loans and standby credits from the BG as needed;
- g. carrying out personnel functions; and
- h. acquiring and maintaining adequate premises, equipment, furniture, and supplies.

4. Operations Division. The operations division initially would consist of banking specialists. They must have a broad background in business and finance as well as specialized knowledge of bank operations. Their responsibilities would include the following:

- a. continuously reviewing information from the BG, Treasury, Board of Sworn Bank Auditors, and external auditors to identify distressed banks (banks that are insolvent or approaching insolvency);
- b. working closely with other regulatory authorities to make certain that the true financial condition of distressed banks is known, losses are charged off, and appropriate demands for new capital are made to present stockholders;
- c. in situations where capital remains grossly deficient, developing and implementing a plan to restructure and return the bank to the private sector, if possible, or to liquidate it if necessary;
- d. disposing of assets acquired in the restructuring of banks, emphasizing the sale of groups of assets to investors rather than labor-intensive efforts to collect individual loans;
- e. monitoring the condition of restructured banks which are being operated by the Fund and have not yet been returned to private or public ownership; and
- f. paying off depositors, at least to the extent of their insurance coverage, in the liquidation of failed banks.

#### The Staff

- a. the staff should be a core group of highly skilled professionals who would manage the work of the Fund, using temporary support from other sources including other government agencies, audit firms, consultants, and the legal profession;
- b. the staff should be relatively well paid, on a par with the private sector, to attract and retain highly qualified individuals; and
- c. the staff would focus its efforts entirely on handling failing or failed banks so as not to be distracted by other duties. The staff would rely on the Treasury, the Sworn Bank Auditors, and the BG to regulate, supervise, and monitor the condition of banks.

5. The Fund would be expected to have sufficient secretarial and clerical personnel in addition to the professionals described above. The Fund would use temporary support from other sources, such as other government agencies, audit firms, consultants, and attorneys during periods of intense effort involved in restructuring banks.

GUATEMALA - FINANCIAL SECTOR REPORT

Legal and Operational Framework for a  
Deposit Insurance/Financial Rehabilitation Fund

1. Principles and Objectives. The present ad hoc procedures followed in dealing with bank insolvency need to be strengthened through the incorporation of the following principles and objectives. These principles and objectives have successfully guided the rehabilitation and restructuring of financial institutions in other countries. Particular emphasis should be given to the design of the system to ensure that it will not benefit owners and/or managers of insolvent banks.
2. Legal and Financial Autonomy. Legal and financial autonomy is necessary for the Fund to be able to deal with insolvent banks. The Fund should be capable of functioning in a manner which:
  - a. is automatic, quick, and efficient with clearly delineated authority and responsibility;
  - b. is free from political interference;
  - c. permits it to develop its own organization and fulfill its staffing requirements for highly skilled personnel unimpeded by civil service salary constraints;
  - d. provides financial accountability;
  - e. enhances public confidence in the Government's ability to deal with bank failures and maintains the integrity of the banking system; and
  - f. ensures the primacy of its implementing legislation and related legal framework over commercial laws and other regulations which might otherwise provide barriers to the effective handling and treatment of failing or failed banks.
3. Removal of Management and Ownership. For reasons of equity, efficiency, and financial discipline, existing owners and management should be held accountable for their failures:
  - a. stockholders' equity and rights should be eliminated, with any right to collections to be handled on a strictly residual basis; and
  - b. the Fund should have the right to remove any and all management.
4. Ability to Deal with Non-performing Portfolio. In order to facilitate the rehabilitation of failed banks, it is essential that:
  - a. the Fund remove bad assets from the failed bank and replace those assets with cash or equivalent securities in an amount sufficient to balance assets and deposits; and

- b. the Fund dispose of non-performing assets promptly in order to maintain its cash flow, taking into account the need to rehabilitate economically viable firms and borrowers.

5. Prevention of Nationalization of Private Banks. In line with the Government's policy of fostering private ownership and initiative:

- a. the Fund should return restructured banks to the private sector within a maximum period of two years; and
- b. the Fund should avoid the public perception of nationalization, even for a temporary period, by establishing an independent mechanism to acquire ownership or control of failed banks.

6. Least Cost and Integrity of Banking System. The Fund should operate to:

- a. minimize the cost to the Government of dealing with the failure of any particular bank as well as the potential cost of resulting ripple effects on other banks throughout the system.

7. Operating Policies and Procedures. The Fund's operating policies and procedures for dealing with failed or failing banks should be as follows:

- a. through information obtained from the Treasury, the Board of Sworn Bank Auditors, the BC, and/or other sources, the Fund identifies a bank approaching insolvency or which is insolvent (insolvency occurs when net worth is reduced to zero);
- b. after a thorough analysis of the bank and after all known losses are charged off, the Fund would require the stockholders of the failing bank to replenish capital to at least the minimum capital adequacy requirement to restore it to profitable operations;
- c. assuming that stockholders do not replenish capital, the Fund would deal with the resulting insolvency or near insolvency in one of two ways:

First Option:

- The Fund would cancel the charter, close the bank, and merge its good assets and deposits with a new or existing bank;
- shareholders' equity is extinguished and shareholders lose all claims and privileges, and the Fund assumes temporary ownership and management;
- the Fund would dispose of all bad assets, including previously written-off assets from the failed bank and recapitalizing it with an amount sufficient to make it financially viable;
- a new or existing bank assures the deposits and purchases the rehabilitated bank. As part of the purchase and assumption, the Fund may receive a premium for the going concern value of the bank;
- the acquiring bank provides additional capital as needed to bring capital to a level which at least meets the minimum capital adequacy requirements of the BL; and

- the Fund may facilitate the merger with a temporary loan, deposit, or other instrument as needed.

Second Option:

- the Fund closes the bank and liquidates it;
- the Fund pays depositors up to insurance limits and is subrogated to rights of depositors;
- the Fund acquires all assets; and
- the Fund liquidates assets and pays claims of creditors according to legal preference; stockholders receive any residual value.

8. Financing of the Fund. Ideally, the Fund should be financially self-sufficient. However, given the level of financial distress thought to exist in the Guatemalan banking system, the initial demands upon the Fund are likely to exceed financing provided through insurance premia. The following explains the sources of financing for the Fund:

Primary Financing

- a. primary financing for the Fund would be provided through premia assessed against member banks for deposit insurance. Membership in the deposit insurance system would be mandatory for all banks; and
- b. an additional source of financing for the Fund would be the interest it receives on its investments. The Fund would be required to invest in securities offering safety and liquidity.

Secondary Financing

- a. secondary financing would be provided through long-term loans from the BG disbursed either in cash or government securities; and
- b. in addition, standby lines of credit would be available from the BG to meet unexpected funding requirements. These lines would have preference as to repayment by the Fund.

9. Losses Incurred in Dealing with Failed Banks. In restructuring failed banks, it is the role of the Fund to absorb losses. However, such losses should be recovered over time from the collection of insurance premia and the proceeds from the liquidation of assets. Loans made to the Fund by the BG would be repaid in full. However, special financial arrangements may be needed in case the Fund cannot repay the full amount of the loans.

10. Organization and Staffing. The Fund would be established as a separate legal entity with quasi-government status and its own staff and compensation programs. The principal elements of the Fund are discussed in Annex C.

11. Legal Framework. The BL needs to be amended to provide the Fund with the necessary powers and authorities to fulfill its responsibilities. In modifying the legal framework, care should be taken to harmonize changes with commercial law and other related laws; however, the changes should ensure that the BL is given primacy and that the measures needed to be



undertaken by the Fund are in no way diluted. The following items contain some of the important authorities which should be vested in the Fund. The Fund should:

- a. have a wide array of powers to buy assets, place deposits, make loans and borrow as needed to fulfill its responsibilities;
- b. have all the powers of a legal entity, e.g., to make contracts;
- c. have the authority to exercise such incidental powers needed to carry out its responsibilities;
- d. have the authority to obtain information from banks, the BG, the Treasury, and the Board of Sworn Bank Auditors and to require outside audits of banks paid for by banks or by the Fund at its discretion;
- e. have the authority to remove prior management and hire new management;
- f. have the authority to declare a bank insolvent, close it, and extinguish the rights of shareholders and to intervene in an institution that fails to meet the minimum capital adequacy requirements after an unsuccessful call for additional capital from shareholders;
- g. have the authority to effect mergers of banks and liquidate banks;
- h. would be required to act as receiver for all failed banks;
- i. have the authority to operate, manage, and rehabilitate a bank, with or without adequate capital, while attempting to sell or merge it;
- j. have the authority to take all actions necessary to collect assets acquired from banks. In this regard, the Fund will have full legal rights as successor of the failed bank, e.g., the ability to foreclose assets, restructure loans, convert debt into equity, enter into agreements with collection agencies, package and sell assets, etc.;
- k. have the authority to set the premium rate, levy premia, and collect delinquent premia; and
- l. be exempt from taxation.

GUATEMALA - FINANCIAL SECTOR REPORT

An Assessment of the Performance of  
Public Financial Institutions

Introduction

1. This Annex analyzes the performance of the four largest state-owned financial institutions: BANVI, CHN, BANDESA and CORFINA. The analysis is done individually for each institution.

Banco Nacional de la Vivienda (BANVI)

2. BANVI is a public financial intermediary established on June 20, 1973, under Congressional Decree No. 2-73. Under its charter BANVI is mandated to undertake housing finance and land development for lower-income groups and to promote private sector participation in housing through construction and development finance.

3. BANVI is a direct mortgage lender and developer as well. The bank provides interim construction finance to individual homeowners and to developers. In addition to housing and construction, BANVI is involved in loans to small businesses and retail operations, housing-related consumer loans and in developing and maintaining infrastructure and utility services for local governments.

4. BANVI has some 1,100 employees. Approximately 1,075, or 97.7%, are situated in Guatemala City. The bank is heavily overstaffed with about one employee per three mortgage loans outstanding. BANVI has four branches in Guatemala City and one in the Department of Quetzaltenango.

5. Lending procedures are ad-hoc and guidelines are almost nonexistent. Loan approval limits are very low, so that a large proportion of management time is involved in loan processing. Staff involved in loan approvals at all levels have had little or no formal training in credit and risk analysis and have mainly on-the-job experience. Loans are not systematically prepared. This explains the poor quality of BANVI's loan portfolio and its high arrears.

6. The situation is further aggravated as BANVI does not have experienced personnel to assess the risks involved in its different kinds of loans, such as those to small businesses retail operations, consumer loans and refinancing. Key bottlenecks are the lack of qualified analysts in the job market, especially in housing finance, the wide disparity in wage scales between public and private banks that discourages experienced personnel from government service, and management's lack of appreciation of the key importance of loan and risk analysis for good portfolio quality.

7. BANVI's operations are almost totally devoid of financial management policies, procedures and practices. Except for budget preparation, which is required by the SB, BANVI performs no corporate and strategic planning, no asset-liability management, and no marketing or market targeting on a geographical or income basis for its portfolio.

There are no formal management information systems (manual or computerized). In addition, no regular periodic portfolio analysis is performed. BANVI cannot readily produce timely reports on its loan portfolio relative to aging of arrears, defaults, and geographical or income dispersion.

8. BANVI's operations are undergoing a process of limited computerization and automation. Its major corporate functions such as accounting, billing, collections, servicing and financial reporting are currently not computerized. While some form of computerization is under way, BANVI should have a computerization and automation plan developed to upgrade its overall computerized capabilities.

9. Operational Performance. Between 1983 through 1987 BANVI financed some 2,304 dwellings with Q 41.1 million (US\$16.4 million) in mortgages. Operations in home construction finance expanded from 82 units in 1983 to 470 units in 1986, accounting for approximately 37% of BANVI's total lending during that year. On the other hand, mortgage financing and housing related loans accounted for 16% and 9% of lending, respectively. During 1987 the trend shifted to mortgage financing. Home construction declined by 63% to 175 units, while mortgage finance increased five-fold to 760 units from 123 in 1986. In 1987, housing related loans (primarily consumer collateralized loans) became BANVI's second most active lending activity, accounting for 33% of total loans originated during the year. The primary cause of the shift from construction financing to mortgage lending was the significant cost increase in construction, especially imported building materials.

10. Lending by BANVI has focused on moderate income borrowers. The average mortgage size in 1987 was about Q 17,000. Mortgage financing terms under BANVI's programs are quite liberal compared to those of private sector banks. Interest rates are concessionary, as low as 8% p.a. for the purchase of lots for housing. The highest rate charged is 16% p.a. for the purchase of owned housing. Loan to value ratios are as high as 95% with maturities up to 20 years. Despite liberal terms, BANVI's importance for construction and mortgage financing has only been marginal. In 1987 this amounted to about 30% of total assets.

11. Financial Performance. As of the end of 1987, BANVI's assets were predominantly in loans and discounts, amounting to Q 133.6 million (US\$53.4 million) or 71% of total assets. Of the total loans, Q 55.5 million (US\$22.2 million) or 41% were mortgages. Investments in various types of securities amounted to Q 14.7 million (US\$5.9 million) or 8% of total assets. Returns on these investment securities ranged from 9% on government securities to 11% p.a. on bonds of financial institution and FHA mortgage certificates. Accrued earnings were also shown as assets, although a good proportion (approximately 7%, or Q 4.4 million) of net loans outstanding as of end of 1987 were uncollectible.

12. Deposits totaling Q 39.1 million at year-end 1987 comprised the largest single liability, 22% of BANVI's total liabilities. Loans and advances from external sources, primarily from the Central American Development Bank (CABEI), amounted to 19%, while 19% were local notes and bonds, tax obligations and BANVI securities held by the BG.

13. At the end of 1987, BANVI was insolvent in view of its serious and continuing capital impairment and its negative cash flow over a five-year period. Losses carried forward have increased approximately five-fold from Q 2.1 million (US\$0.8 million) in 1985 to Q 10.6 million (US\$4.2 million) in 1987. Nonetheless, government equity contributions have kept BANVI from bankruptcy. In 1987, outstanding government contributions stood at Q 17.7 million (US\$7.1 million).

14. Since 1983 (with the exception of 1987), BANVI has been operating with negative spreads and margins, with no change in sight. There is clearly a lack of fiduciary responsibility and prudential management in BANVI's financial operations. With sizable administrative and overhead expenses contributing to its decapitalization, BANVI's situation becomes even more critical. What has kept BANVI from clear-cut bankruptcy is its "extraordinary income" adjustment accounts. These are adjustments for income accrued in previous years and booked in the current period. This is a questionable accounting procedure which casts doubt on the validity of financial statements. BANVI's extraordinary income represented 23% and 15% of total income in 1986 and 1987, respectively. The lack of financial management and planning, credit underwriting, portfolio analysis, and information technology have all contributed to BANVI's insolvency.

15. Although the cost of debt has been relatively constant over the last three years, about 4% on the average, two major elements have kept BANVI in the negative and will continue to have a major impact on future operations. First, growth in administrative expenses appear likely to continue. Growth was unprecedented in 1987, 30% over 1986, reflecting an overcapacity equivalent to three mortgages per employee. Second, extraordinary expenses have contributed significantly to the bank's negative margin, this will also continue as BANVI's portfolio deteriorates due to improper underwriting etc. Extraordinary expenses are costs related to the maintenance, servicing and disposition of repossessed collateral. In 1986, extraordinary expenses amounted to 70% of the total negative margin. This will continue to be a major factor as loan underwriting is weak and borrowers may be overextended.

16. As noted earlier, arrears and delinquencies amounted to 7% of net loans outstanding. However, this figure is highly suspect as BANVI is unable to profile its portfolio accurately relative to arrears, defaults and collections. It is estimated that arrears are as high as 40% of loans outstanding. Following up on arrears and delinquencies has been obstructed by slow manual posting of receipts, the lack of enforcement of sanctions against delinquent accounts, BANVI's own accounting backlog and its consequent lack of collection management and follow-up. It has been estimated that arrears amounted to approximately Q 24.04 million (US\$9.61 million) in 1987. Unless stemmed through improvements in servicing, management and collection efficiency, BANVI's arrears could prove to be a major contributor to the bank's eventual demise, as decapitalization is accelerated. In addition, negative spreads contribute to BANVI's decapitalization. Accordingly, there is a need for operational and financial restructuring and a recapitalization of BANVI.

Credito Hipotecario Nacional (CHN)

17. Background, Organization and Management. CHN was established on May 13, 1979, under Congressional Decree No. 25-79. Its mandate is to serve as the national mortgage bank. In practice, however, it operates more as a commercial bank, extending credit to agriculture, forestry, mining, industry, small retail operations and consumers. CHN provides mortgage financing to all of these sectors and services its own portfolio.
18. The bank has 608 employees, with approximately 70% deployed at headquarters and in seven branches in Guatemala City. The rest are located at ten branches in various Departments throughout the country. CHN is overstaffed as reflected in its high administrative expense level, 11% of average assets in 1987. Its total manpower equals one staff member per nine mortgages outstanding.
19. All loans are approved at the central office. Applications take approximately two to three months to complete, and credit and risk analysis are weak at all levels of the loan origination process. Loan operations are not staffed with personnel qualified to evaluate the risks of the different types of loans CHN is providing. Underwriting guidelines and operating procedures for loan and risk evaluation are virtually nonexistent.
20. Due to CHN's risk aversion policy, downpayment requirements for housing finance are normally about 30%, and in some instances 50% is required. CHN relies primarily on high downpayments and collateral and insurance as substitutes for a true credit and risk underwriting function. The top lending rate is 14% p.a. for mortgages with maturities up to 20 years, and FHA insures these up to 95% of their value. Loan approvals are centralized in the extreme. Loan limits are so low that loan decisions are centralized in the Board, and management and the Board have de facto been reduced to approving loans.
21. Like BANVI, CHN operations are totally devoid of financial management procedures and practices such as long-range corporate and strategic planning and asset-liability management. CHN has no meaningful management information system for dissemination and decision-making. Portfolio analysis is seldom performed, and market targeting is inefficient.
22. CHN operations are partially automated but not computerized. Its major operating functions such as accounting, bookkeeping, posting and account servicing are predominantly manual. Although management realizes the efficiencies to be gained from computerization, no plan is in the offing. Labor displacement has been cited as the main bottleneck, presumably a major concern of CHN's labor union.
23. CHN is supervised by the SB with respect to reserve requirements and financial statements. A SB auditor is stationed at corporate headquarters to monitor CHN's compliance with auditing and accounting procedures set by the Government.
24. Operational Performance. CHN is a direct lender and provides mortgage finance to individual homeowners and developers. In addition, CHN

is heavily involved in providing credit to other sectors of the economy, notably housing-related consumer lending, 31%; small business and retail operations, 15%; and agriculture, 13%. This is not unexpected as its mandate is sufficiently broad to allow CHN to operate within the guidelines of general programs for economic development, but is not necessarily restricted to mortgage finance as the name of the bank implies. The need to upgrade CHN's underwriting operations is critical as there are plans to expand credit facilities to various industries for regional development.

25. From 1983 to 1987 CHN financed 12,444 housing units through mortgages totalling Q 211.2 million (US\$84.5 million) with lending heavily concentrated in Guatemala City. Programs were also beginning to expand to other departments from 1983 to 1987 as indicated by the increase in credit facilities for agriculture and mining. Of CHN's total lending activities during this period, mortgage finance was dominant, accounting for approximately 65% of all lending activities. Though impressive in absolute terms, CHN's mortgage lending output remains marginal in relation to needs. Total CHN lending over the five-year period, 1983-87, represented only 43% of the estimated total urban housing needs for 1987 alone. The average mortgage granted in 1987 was between Q 25,000 and 27,000, suggesting that CHN's market and target beneficiaries are the moderate income segment of the population.

26. Financial Performance. In 1987, CHN's assets stood at Q 259.4 million (US\$103.8 million), of which Q 103.9 million or 40% were in mortgages, Q 8.67 million in various types of investment securities; and Q 11.5 million in accrued earnings, representing 4% of total assets. Because of CHN's roll overs, earnings on loans in arrears and in default are accrued and booked, inflating the bank's asset base. CHN's default rate in 1987 was 15% of net loans outstanding. Deposits amounting to Q 184.4 million (US\$72.8 million) were the largest single source of funds for loans and operations, amounting to 11% of total liabilities.

27. CHN has been operating with slightly positive margins since 1984. By most standards, the spread between CHN's yield on its average earning portfolio and its average cost of debt is sufficient and adequate, as high as 4.4% in 1987. However, its administrative and overhead costs are also very high (5.2%), reducing CHN's margin to less than 1%. At the end of 1987, CHN's capital was relatively stable for a government intermediary, with reserves and retained earnings amounting to 68% of total funds employed. Liquidity was also high, 17% and 15% in 1986 and 1987, respectively. CHN's average cost of debt has remained fairly stable since 1984, averaging 4.1%, while administrative and overhead expenses have been growing at annual rates of 33% in 1986 and 25% in 1987. It is unlikely that CHN will continue to show positive margins. Curtailing extraordinary expenses and putting a moratorium on hiring could move CHN toward profitability, but the latter could provoke a conflict with the bank's labor union.

28. CHN's default rate in 1987 was approximately 15% of net loans outstanding, but amounting to Q 19.5 million (US\$7.8 million), but this figure might actually be much higher, somewhere in the range of 25-30% of net loans outstanding. Although income from loans in arrears one year or more is considered non-collectible, CHN is still booking such accrued income in its financial statements. CHN's poor collection performance

stems largely from the lack of servicing procedures and ineffective sanctions and follow-up.

29. CHN is also hindered by the inefficiency of its accounting system which has been unable to keep pace with operations and does not provide information in a manner to enable profit center analysis. The lack of integrated, up-to-date financial records calls into question management decisions since these may be based on inaccurate, incomplete and misleading data.

Banco Nacional de Desarrollo Agrícola (BANDESA)

30. Background, Organization and Management. BANDESA is a public financial intermediary established in 1970 under Congressional Decree No. 99-70. BANDESA's mandate is to promote and administer credit facilities for agricultural development under programs of the Ministry of Agriculture. It was created through the consolidation of three government credit institutions: the National Agrarian Bank (BNA), the Production Development Institute (INFOP), and the Inter-American Cooperative Supervised Credit Service (SCICAS).

31. BANDESA has features of both a development bank and a commercial bank. The focus of its operations has been to provide financing to small- and medium-scale farmers who traditionally have lacked access to the private banking system. Substantial savings are deposited in its widespread rural agency network. However, these funds are largely not lent to small farmers due to stringent collateral requirements and the perceived high risks of agricultural lending. Small- and medium-scale farmer lending is financed primarily with external funds obtained from international donor agencies (e.g., USAID, IBD, etc.). These donor institutions have typically created trust accounts (fideicomisos) in support of specific project initiatives. Currently, BANDESA manages some 26 such trust funds with targeted financing for three main activities: (i) agriculture and livestock, (ii) rural housing, and (iii) rural artisans and small industry.

32. The bank has an extensive infrastructure network spread throughout the country. It provides its services through 8 district offices, 37 agencies and 36 "cajas rurales". The bank has approximately 1,200 employees, with 47% located in the Guatemala City central office. Until recently, there has been little, effective effort to decentralize decision-making authority within the bank and its extensive branch network.

33. Operational Performance. BANDESA's credit portfolio is predominantly agricultural, and in recent years BANDESA's agricultural lending has increased. In 1987, agriculture accounted for 71% of credit granted. Although the number of loans is large and average loan size is small (indicating a concentration in small- and medium-sized farmers), the total number of borrowers served by BANDESA approximately 32,000, has changed relatively little since 1983.

34. BANDESA suffers from high delinquency in its loan portfolio, particularly in the lending of its own funds. For 1987 it was estimated that approximately 48% of loans outstanding were in arrears. In 1983 this estimate was as high as 80%. More seriously, a majority of delinquent

payments are more than one year past due. This delinquent portfolio has immobilized much of BANDESA's depositor-generated funds and severely restricted the bank's ability to lend from this source.

35. BANDESA has been the principal source of credit for cooperatives since 1970. However, due to increasing delinquency in this portion of its portfolio, BANDESA has begun to restrict such lending severely. The bank has placed restrictions on loan size, requiring central office approval of all loans greater than Q 15,000. It has also imposed documentation requirements which are extremely difficult to meet. In addition, BANDESA has modified traditional cooperative lending policy by requiring all member beneficiaries to co-sign for cooperative loans. This group lending technique has resulted in improved loan repayment from cooperatives, but has sacrificed the economies of scale that can be attained through group lending. It has increased administrative and transaction costs and resulted in frequent and untimely delays in the approval and disbursement process.

36. Interest rates charged by BANDESA are typically less than the rates charged by commercial banks. Such concessionary rates for agriculture are a reflection of the Government's belief that small- and medium-scale farmers require subsidized credit to produce effectively and profitably. As one would expect, concessionary rates have had an adverse effect on BANDESA's profitability, and it has been incurring losses annually in its operations. BANDESA's principal source of income has become the commissions and administrative fees received for managing trust funds and the interest earned from investments.

37. Financial Performance. In 1987, advances and contributions from the Government equalled Q 11.4 million, 8.5% higher than its paid-up capital base. BANDESA's main source of funds is deposits, 67% of total liabilities in 1987. Most of these funds, however, are not lent to agricultural beneficiaries due to strict collateral requirements. Much of the liquidity from deposits is held in cash accounts at the BG.

38. BANDESA's financial performance has suffered significantly from a combination of inappropriate and ineffective credit policies, inefficiencies in its centralized credit delivery systems, and weaknesses in its financial management. As a result, it is technically insolvent. Between 1983 and 1988 it has run losses continually so that its capital has been seriously impaired. Over the five-year period, cash losses from operations totalled Q 20.1 million (US\$8.0 million) against an equity base of Q 10.5 million. BANDESA would have been technically bankrupt in 1987 had the Government not infused additional capital in the amount of Q 6.1 million. The major problems that have led BANDESA to insolvency are: (a) inefficient, inexperienced management; (b) the absence of financial management procedures and practices; (c) ineffective organization; (d) burdensome and complicated credit delivery requirements; (e) high arrears due to poor collection and servicing systems; and (f) accounting backlogs.

39. Since 1973 BANDESA has been experiencing negative cash flows. The bank's administrative and overhead expenses have been the primary reason, accounting for 84% of total expenses in 1987. At the same time, interest income has leveled off as a result of BANDESA's high arrears and poor



collection system. Arrears during this period represented approximately 49% of net loans outstanding. Direct Government equity infusions have been necessary to fund both operations and debt service. In 1987, Government support for BANDESA stood at Q 11.4 million (US\$4.6 million).

40. Since 1984, BANDESA has been operating with negative spreads. Between 1983 and 1986, during the curtailment of the economic stabilization program that resulted in a financial crisis, BANDESA's agricultural lending was seriously affected, giving rise to negative margins as high as 8.0% in 1984, and 1.8% and 0.8% in 1986 and 1987, respectively. Administrative and overhead expenses were equally problematic, reducing BANDESA to insolvency, and this trend is continuing with no end in sight. Some recommendations are put forward below to improve BANDESA's financial condition and, as a result, small farmer and agricultural lending throughout the country.

41. BANDESA's collection of arrears and defaults has been ineffective. The bank uses two systems for collection: an administrative collection system using in-house collection, and a judicial collection system using a lottery process to select outside lawyers. Both systems have been ineffective since their inceptions and have contributed instead to BANDESA's arrears and delinquencies. In 1987, delinquencies of three or more years amounted to Q 14.6 million (US\$5.8 million) or 83% of total arrears. From 1983 through 1987, collections have deteriorated as only 53% of amounts due were collected. Collection by BANDESA has been obstructed by its slow manual posting of receipts, its own accounting backlog due in part to limited automation, and inefficiency in collection management and follow-up.

#### Corporación Financiera Nacional (CORFINA)

42. CORFINA is the official Government finance corporation which was established on July 20, 1972. Its primary objective was to provide financing facilities for the industrial, mining and tourism sectors of the economy.

43. CORFINA is now technically bankrupt and totally insolvent and is under government receivership. However, CORFINA continues to operate, administering its remaining portfolio and some 32 trust funds, while also being involved in protracted litigation with Celulosas de Guatemala, S.A. (CELGUSA), a paper and pulp manufacturing company that had defaulted even prior to full operations.

44. CELGUSA is CORFINA's largest loan account and represents 99% of the company's credits in default and 81% of all loans granted to the industrial sector. Accumulated losses have totalled Q 97.4 million (US\$39.0 million) over the 1983-87 period. As of the end of 1987, Government support for CORFINA in the form of equity contributions amounted to Q 34.3 million (US\$13.7 million) in capital and Q 23.8 million (US\$9.5 million) in other contributions to its capital base.

45. CORFINA is a budgetary burden on the Government. The Government has to decide whether to liquidate or privatize it. The first decision, however, is to determine how the losses will be allocated and what can be done with the remaining portfolio of CORFINA.

A Proposal for a Program to Restructure Public Banks

46. A program to restructure public banks in Guatemala should address the following topics:

- (i) review the respective "ley orgánica" for possible charter changes and/or modifications to strengthen executive powers, to improve credit delivery systems and regional operations, and to orient incentive systems to market forces. Banks need to rationalize their current operations and their organizational structures to improve efficiency;
- (ii) establish strong financial management functions to include corporate and strategic planning, budget management and asset-liability management. Portfolio analysis and operations and financial performance reviews should be institutionalized within each bank;
- (iii) establish appropriate guidelines for loan analysis and operating procedures for the different types of loans provided;
- (iv) simplify the loan application process by including all necessary information and data to permit a simple grading system to expedite loan approvals. This will improve productivity and free staff to do marketing (which is urgently needed) and to intensify collection efforts. Marketing should be developed and institutionalized to improve credit delivery;
- (v) analyze portfolios and, where appropriate, write off all defaulted loans and provision those more than one year past due, unless foreclosure is in the offing. Public banks have carried past-due accounts in their portfolios almost from their inception so that balance sheets are weak. In addition, substantial administrative and overhead expenses have been incurred to repossess and maintain non-performing assets;
- (vi) adopt generally accepted accounting principles at all levels of accounting, bookkeeping and financial reporting. Public banks should be audited, at least annually, by an independent external auditing company in accordance with generally accepted accounting principles (GAAP) applied by independent auditors acceptable to the SB. Public banks also need formalized management information systems (MIS);
- (vii) institute close supervision by the SB, applying appropriate sanctions when necessary. Regulatory compliance and oversight should include: financial ratios, asset and credit distribution, arrears and defaults, and profitability levels;
- (viii) set up a separate servicing department responsible for collection and default/foreclosure management. Internal policies and servicing procedures should be reviewed and

strengthened relative to staffing, priorities, follow-ups and fee commissions;

- (ix) develop a broad training program for key bank staff with emphasis on bank management and compensation; and
- (x) upgrade automation and computerization capabilities.

GUATEMALA - FINANCIAL SECTOR REPORT  
Studies on Microenterprise Finance

1. A study carried out by the Fundacion para el Analisis y el Desarrollo de Centroamerica (FADES) contains information about the sources of financing for 800 microenterprises that were surveyed in Guatemala City and two nearby areas (Mixco and Villa Nueva).<sup>1</sup> This information reveals that only 18, less than 3%, had access to bank credit (Appendix, Table VII.1). All but four of these loans were for less than Q 2,500, and the four larger loans ranged from Q 7,500 to Q 10,500. Most of the bank loans were medium term, from two to five years, but three loans were short term, less than one year, and two were long term, more than five years. The majority of bank loans, twelve, required real property mortgages as guarantees, and the others required cosigners, while none used personal property (chattel) mortgages. On ten of the bank loans, the rate of interest was between 3% and 8% p.a., while seven had interest rates between 11% and 16% p.a., and one loan was reported with an interest rate of 24% p.a. Four of the eighteen borrowers (22%) reported difficulties in repaying.

2. With respect to informal sources of credit, there were 69 loans among the 800 microenterprises surveyed. Most of these loans were in cash (55), but fourteen loans were in kind, presumably from suppliers of inputs to the microenterprises. Sixty of these 69 loans were for less than Q 2,500, while eight were between Q 2,500 and Q 5,500 and one was for more than Q 8,000. Forty-four of these loans were short term, less than one year, and fifteen were medium term, between one and five years, while ten had unspecified terms. The vast majority of loans from informal sources (54) used cosigners for guarantees, while twelve used real property mortgages and three used personal property (chattel) mortgages for guarantees. On thirteen of the 69 loans from informal sources, the reported interest rate was under 16% p.a., the same range as bank loans. Another six loans reported interest rates between 20% and 40% p.a., while eight loans reported interest rates of more than 60% p.a. ranging as high as 120%. However, a substantial majority of loans from informal sources (42) reported no interest at all, but with no indication of whether interest was in fact not paid or whether it was collected in other ways, such as through fees and commissions or adjustments in the prices for other transactions between borrower and lender. Thirteen of the 69 borrowers (19%) reported difficulties in repaying.

3. In summary, few microenterprises in the FADES study had obtained bank credit and the guarantee most often required, a real property mortgage, can be considered quite strict. However, the interest rates on these bank loans appear quite low, and most of these bank loans were medium or long term. Concerning informal credit, on the other hand, the data shows that not all of these loans were very small or very short term; however, on the majority of them no estimate of implicit interest rates

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1/ El Sector Informal: Estudio sobre el Sector Informal de Produccion y Servicios en el Area Urbana Central de Guatemala, financially supported by the Fundacion Friedrich Naumann, published in 1987.

could be made, while at least 20% of such loans had interest rates over 20% p.a. In addition, a substantial majority of informal loans required only a cosigner for the guarantee, while a smaller percentage of borrowers reported they had difficulty repaying their loans than in the case of bank credit.

4. The findings of the second study are based on a survey of 450 microenterprises divided between micro-producers (270) and micro-merchants (180) and between Guatemala City (300) and Quetzaltenango (150).<sup>2</sup> The results of the survey are very similar to the FADES study in showing that few microenterprises have access to credit and those, that do, rely mainly on informal moneylenders or friends and relatives rather than on public or private financial institutions or cooperatives. Specifically, only 10% of the 450 microenterprises surveyed currently have a loan and only 15% could remember ever having had a loan (Appendix, Table VI.2). Of these loans, almost half were from friends and relatives, one-third were from moneylenders, and the remaining approximately 20% were spread among public and private institutions, cooperatives, and no reply (Appendix, Table VII.3). The use of other financial services are likewise quite limited for these 450 microenterprises (Appendix, Table VI.2). Only 15% had either a savings or a checking account at a bank, and only 11% reported that they purchased goods or services on a delayed payment basis.

5. With respect to the characteristics of loans, there tend to be some differences between the two studies (Appendix, Table VI.3). For example, the borrowers in the CAEM-AITEC study generally have somewhat smaller and shorter term loans. The most striking difference, however, is in reported interest rates: more than half of all borrowers in the CAEM-AITEC study reported interest rates of more than 3% p.a., whereas in the FADES study, only 20% reported interest rates of more than 20% p.a. In the FADES study, approximately 60% of borrowers from informal sources reported paying no explicit interest. In the CAEM-AITEC study, even though friends and relatives account for almost half of the loan from informal sources, only one-third of loans had interest rates of less than 1% p.m.

6. Another interesting aspect of the CAEM-AITEC study is the perceptions of interest rates (Appendix, Table VI.4). When all 450 microenterprises were asked what rate of interest they thought that they would be charged by a moneylender, only 7% thought that they would be charged less than 5% p.m., while 65% thought they would be charged between 5% and 50% p.m. Although the sample of all microenterprises is not directly comparable to the sample of actual borrowers because actual borrowers would be expected to pay lower rates than nonborrowers, the differences are nonetheless striking and suggest that the perception of moneylenders charging extremely high interest rates is pervasive regardless of what the reality might be.

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2/ Estudio Exploratorio para el Desarrollo de un Programa de Apoyo a la Microempresa, prepared by the Camara Empresarial de Guatemala (CAEM) and Accion Internacional (AITEC), in 1986-87.

Credit Projects to Promote Microenterprise Development

7. The studies covered in the foregoing discussion, even through they focus only on informal finance from the perspective of microenterprise borrowers, they are important from the policy perspective as they might serve as potential inputs into the various credit projects that are currently being proposed or developed to promote microenterprises in Guatemala. The number and magnitude of potential microenterprise credit projects currently under consideration or development could disrupt Guatemalan financial markets and also have a negative impact on the future of financing of microenterprises if some of them are carried out as currently planned.

8. Among these projects, there are two large government projects. The first of these projects began to be developed in 1986 with the creation of the Office of the Third Vice Minister of Finance, and the preliminary proposal was issued in May 1987 ("Proyecto Sistema de Intermediacion Financiera para el Desarrollo Integral"). This preliminary proposal is quite general but mentions the creation of a guarantee fund and a trust fund to facilitate lending to microenterprises. Since then, however, there has been no apparent development of this proposed project.

9. The focus within the Guatemalan Government for microenterprise lending appears to have shifted to the Office of the Vice President. A trust fund was created in this office in late 1987 ("Fondo de Desarrollo de la Microempresa Urbana") which has already begun operations, and as of March 1988, had lent more than Q 1.5 million to almost 450 microenterprises. Loans are made by the BT at 14% interest p.a. (plus a fee of Q 20) with a maximum term of four years and a maximum amount of Q 6,000. Loan proposals are developed and technical assistance is provided by private nonprofit institutions that receive a fee of Q 30 for each loan proposal (and they also receive a subsidy from the Guatemalan Government during the initial stage of the project). In lending decisions considerable attention is given to the guarantee for which the borrower is required to pay the costs of evaluation and inscription. Guarantees are thus likely to become the key device that rations this apparently cheap credit among microenterprises. It is difficult to see how the interest rates charged and small additional fees can possibly cover the costs incurred by the BT and the private nonprofit institutions in lending to microenterprises. In addition, the responsibility for loan recovery is divided between the bank and the nonprofit institutions, and such a division has almost everywhere led to serious problems of loan delinquency and default.

10. In addition, to these two government microenterprise lending projects, USAID together with CAEM has developed a guarantee fund to promote lending through the banking system to small and medium scale enterprises. However, since only 50% of the loan is guaranteed and there are stringent requirements with respect to loan recovery efforts, it is difficult to believe that the banking system will find this guarantee fund attractive, especially given the earlier negative experience with pay offs on loan guarantees.

11. The study by CAEM-AITEC also discusses briefly a number of microenterprise lending projects currently being carried out by various private nonprofit institutions including: Asociacion Civil Guatemalteca Hogar y Desarrollo (HODE), Fundacion de Asistencia para la Pequena Empresa (FAPE), Fundacion de Desarrollo de la Mujer, Alianza para el Desarrollo Juvenil Comunitario, Fundacion del Centavo, and Centro de Autoformacion para Promotores Sociales (CAPS). However, none of these projects have been able to lend a significant amount of money, either because of a lack of adequate funding or an inappropriate approach to microenterprise lending, or both. Moreover, these projects charge a maximum of 14% interest p.a. to their beneficiaries and thus have no hope of covering their costs and becoming viable in the long run.

12. Most of the microenterprise lending projects in Guatemala have been developed without the necessary prior study of the informal financing actually being used by microenterprises. Perhaps the only exception is the program currently being initiated by AITEC, which is based in large part on the CAEM-AITEC study of microenterprise finance, and attempts to create an approach that can be viable in the long run by focusing on loan recovery and interest rates adequate to cover project costs. Because of the lack of adequate prior study, the other microenterprise lending projects are not only likely to turn out to be nonviable, but may also "train" a number of microenterprises in subsidy seeking behavior and in nonrepayment of loans to the detriment of future projects that might otherwise be viable. Therefore, the problem with these approaches is not only that they cannot be viable in the long run but that they can make proper approaches more difficult to initiate in the future.

GUATEMALA - FINANCIAL SECTOR REPORT  
Proposed Securities Market Law

General Outline of the Two Versions

1. A summary description is given here of the contents of each chapter of the proposed law, together with a synopsis of the major points of difference between the two versions.<sup>1</sup>
2. Preamble. Both of the draft laws commence with a similar preamble, defining the scope of the law, its purpose and application. Public offers of securities are defined, and the designation of Stock Exchange or stockbroker is restricted to those approved under the law.
3. Commission Nacional de Valores. The establishment of a CNV to act as the principal organ of control and be responsive alike to the needs of government and the embryonic securities industry is common to both. The duties, membership and powers of the CNV are detailed.
4. The BG version suggests that the CNV should, while remaining autonomous, report to the Government through the Ministry of the Economy; the BNV version has the CNV administratively dependent on the BG. The BG's draft postulates a Board of Directors for the CNV, while the BNV envisages that the Commission itself will have working members performing similar duties. The BNV's CNV would have five members, with the representative of the BG as President, one representative of the Ministry of Finance, another from the Ministry of the Economy, one representing Stock Exchanges, and the last elected by stockbrokers. The BG's proposed Board would have one fewer, combining the representatives of the Stock Exchanges and stockbrokers. The BNV seeks to impose stricter qualifications on the CNV's membership, although the BG would be similarly strict in the appointment of the CNV's management. The BG would give the CNV power to order operating hours and dates for each broker.
5. National Register of Stocks and Stockbrokers. Two distinct registers are envisaged, one containing data on the instruments and issuers listed on authorized exchanges, and the other, the names of corporate and individual stockbrokers. Qualifications and admission to and removal from these registers are laid down.
6. The BG proposes a more judgemental approach by the CNV in authorizing registration of stocks, requiring it to determine which prospectus information permits the evaluation of the financial status of the issuer. The BNV is more cautious and only requires the certification that audited reports be included. There are other differences between the

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1/ Because there is a possibility of confusion between the different drafts and versions that are circulating, and because the author of this report was unable to fully understand the finer semantic points of the differences in the legal language, this synopsis may not be reliable. Instead, reference should be made to the source documents.



two versions on notice periods and procedures to be followed for suspension of registrations. The BG also requires having the capacity to become a stockbroking company itself, and to operate on any Stock Exchange, a function that BNV is opposing.

7. Public Offerings of Securities. This important subject is touched on but basically left to the CNV to administer as it sees fit. Neither version envisages a full set of requirements embodied in the law.

8. Although the BNV version indicates that information requirements will be recited in the Regulations, whereas the BG simply says that the CNV will publish norms, there are no substantive differences.

9. Stockbrokers. A summary is given for standards of probity and behavior expected of stockbrokers. Corporate brokers are to be known as "Casas de Bolsa" and individual brokers as "Agentes de Bolsa."

10. Stock Exchanges. The manner in which authorized stock exchanges are supposed to operate is described here, in particular how disciplinary and corrective action are to be taken to protect investors. This Chapter also deals with the ownership structure of stock exchanges.

11. While the BNV version ensures that no member of an exchange may have more than 5% ownership, it otherwise envisages a laissez faire attitude on the part of the law and the CNV as to how such exchanges are owned and controlled. By contrast, the BG is very concerned about transfers of shares in exchanges and would even be able to set the price at which these are sold if agreements were not otherwise reached. The BG would be able, under its proposed law, to subscribe for any number of shares in a stock exchange to ensure its better development. Such unequal treatment is not favored by the BNV.

12. Fiscal Incentives. Both drafts include a grant of exemptions, for listed securities, from income taxes on dividends and interest, from capital gains, and from IVA, the value-added tax.

13. Supervision and Taxation. Arrangements are described for stock exchanges to supervise their stockbroker members and issuers whose securities are listed. Responsibilities for the administration of taxation on behalf of the tax authorities are stipulated.

14. Penalties. Penalties for infractions of the law are defined. The BG is seeking to relate some financial penalties to the average daily commission earnings of stockbrokers, a quantity that would seem, on its face, to be rather difficult to determine, and possibly not the most appropriate basis for a penalty calculation.

15. Transitional. This outlines arrangements for the formation of CNV, and the use of technical support from BG in establishing and manning it.

GUATEMALA - FINANCIAL SECTOR REPORT

Institutional and Private Investors

Institutional Investors

1. For most securities exchanges, the most important investor groups are institutional investors. As markets have grown in sophistication and size, there has been an increased movement towards the management of investment funds by savings, investment, pension, insurance and other entities. Even in the absence of securities markets, many countries have found a demand for some means of savings beyond simple deposit accounts with banks. Guatemala currently has a spectrum of institutions in its financial sector offering a wide range of contractual and non-contractual saving facilities.
2. All of these financial institutions have the opportunity to purchase Government securities, but some are prevented by law or policy from using other investment avenues. The general philosophy of the management of such institutions is that the principal portion of their investment portfolio should always be in Government bonds. While other opportunities are to be examined closely, these managers find Government securities to be unimpeachable, fully safeguarding the interests of policyholders, savers, investors, pensioners and shareholders. According to portfolio theory, the level of interest rates and emerging market forces all play a role in illuminating the fallacy behind this comfortable reliance on Government securities, and it may be that the ongoing development of the BNV will provide further impetus to this end. Spreading knowledge about the relatively higher interest rates implicit in the market price of BIVAS is causing disquiet on the part of insurance company and pension fund managers, who are locked into huge holdings of Government bonds yielding between 5% and 8% p.a. However, they still see thin liquidity in BNV traded bonds as a countervailing disadvantage.
3. Insurance Companies. There were thirteen insurance companies operating in Guatemala in 1986. One company offers only general and casualty insurance, but each of the others has at least some business in life, personal accident or health insurance -- the principal categories that generate sizeable pools of investable funds. Aggregate investments of insurance companies amounted to Q 111 million, equivalent to 56% of their overall assets of nearly Q 200 million. Of total investment, 30% had been lent on the security of insurance policies or mortgages, 20% was held in savings deposits at banks, 12% was in real estate, and the remaining 38% was invested in bonds, most of which were direct or indirect obligations of Government. An improvement in investment returns could readily be achieved by exchanging some bank deposits and Government bonds for competitive public and private bonds. Of course, there would be a need for risk analysis for higher yielding assets, but a higher proportion than the current 3% in bonds of private financial institutions is likely to prove advantageous.

4. By law, insurance companies are not permitted to invest in private corporate instruments unless the return is guaranteed to be more than 10% p.a., difficult for equities, though currently exceeded by financiera bonds. Apart from this restriction, and the need to hold funds ready to lend to policyholders who have an absolute right to borrow certain sums at 6% p.a., insurance company managers seem willing to be introduced to the concept of investment through securities markets. Normal concerns for liquidity and depth need to be answered, and only experience can bring confidence, but there is a likelihood that up to 10% of insurance company portfolios could be invested through the BNV in the foreseeable future. At the end of 1986, this was equivalent to Q 11 million and is likely to grow faster than inflation as the life and health insurance industry penetrates untapped markets in Guatemala.

5. Pension Funds. For over 40 years, Guatemala has had a formal social security structure embodied in the IGSS. This system applies to all employed persons in the country who, together with their employers and the Government, are legally obligated to make earnings-related payments to the IGSS. The scope for private pension schemes is correspondingly limited, although a few employers have seen fit to start such schemes. Aggregate data are not available, but details of two such schemes were gathered from interviews with their managers. If suitably encouraged, such funds could use the facilities expected to become available through the BNV to invest in corporate stocks and bonds, although the amount of such investments is likely to remain limited unless more pension funds are created.

6. The pension fund of the University of San Carlos (USC) was opened in 1966 and currently receives contributions from about 7000 staff and pays benefits to about 300 pensioners or their dependents. This institution was still in its start-up phase when contributions vastly exceed benefits payable. All employees of the USC are members of the plan and contribute 3.5% of their salaries to the fund which is matched by the USC's contribution of 9.7%. A small element of life assurance is included, but the principal benefit is a retirement pension based on age, length of service and average salary for the final two years of work. On a pensioner's death, a reduced pension is payable to dependents. When leaving the service of the USC, a contributor receives a payment from the fund of one month of salary for each year of service, which ends the right to any further benefits.

7. The USC's pension fund had assets of Q 18 million at its last valuation, with an actuarial surplus over obligations of Q 1.5 million. The investment policy is to invest in bonds and other issues of banks and financieras after ensuring that adequate funds are available for immediate use in bank savings deposits and current accounts. The manager commented that it was vital for the fund to only make investments with Government guarantees and that the obligations of banks and financieras, regulated by the SB, were thereby guaranteed. While not legally correct, this attitude suggests reluctance to embrace private sector investments. The fund has avoided the unrewarding policy of direct investments in Government Bonds yielding less than 9% p.a., preferring to secure yields up to 13% p.a. on bonds of regulated financieras. Attracted by the high yields, the fund has recently invested in BESTs, indicating that its investment committee is

alert to the limited investment opportunities available. Like other pension funds, including the IGSS, the USC's fund is obligated to lend to its members at an attractively low interest rate of 9% p.a. in amounts up to six months of salary. Over Q 7 million of the fund's assets are lent in this way, and a further Q 1.5 million is advanced through BANVI for house purchases by members at a rate of 11% p.a., of which the pension fund receives 8% p.a.

8. A pension fund was established in 1962 for the approximately 1500 staff members of the BG, the SB and the Fondo de Regulacion de Valores (three of the executive arms of the JM). At the end of 1986, there were 262 pensioners or beneficiaries receiving retirement or disability benefits. Membership is compulsory for permanent employees, who contribute 2.7% of their salary, while the employer pays 12.3%. During the last two years, pensions payable have exceeded contributions from active members, but returns on fund investments more than make up the shortfall. The value of the fund was nearly Q 40 million at the end of 1986, compared to pension payments of Q 2.8 million and contributions of Q 2.6 million during the year. Investment income was Q 3.8 million. The fund is administered by the Administration Board, and investment policy is determined by the Junta de Vigilancia (JV). Apart from bank accounts with balances sufficient to meet normal cash flow, all fund assets are in government bonds, and the JV appears to see no reason to broaden the fund's portfolio.

9. Instituto General de Seguridad Social (IGSS). The IGSS was set up in 1946 to provide a national social security system. The tripartite funding principle described in the organic law involves the employee paying 4.5% of his salary, the employer paying 10% and the Government contributing 4%. The intention was that the Government would pay in both capacities when it was the employer. Benefits are provided for injury, illness, death, disability and retirement. The Government has not paid its "Government" portion to the IGSS and has also fallen into significant arrears on the amounts owing as an employer. This latter category has typically been paid at about 12-15% of the amounts due, although full payment for the 1986 employer amount of Q 16 million was made in 1988. However, it was not paid with cash, but rather with a series of Government bonds maturing over the next ten years and carrying an interest rate of 10% p.a. The IGSS is in litigation with the Government, but there seems little likelihood of recovering anything close to the governments' aggregate overdue amount of over Q 450 million.

10. Private sector employers also owe about Q 123 million to IGSS, and remedies are being pursued through the courts. The IGSS has over 20,000 court cases pending, and historic rates suggest that about 3000 will be settled annually. Moreover, it is rational for employers to default because the maximum assessable penalty, after being found guilty of non-payment with a delay of some 6-7 years, is 15% of the amount owing.

11. The IGSS fund stands at over Q 420 million, of which Q 398 million is invested in Government bonds with an interest rate of 10% p.a. All but Q 16 million of this total carries a guarantee of immediate repayment by the Government. To facilitate the payment of benefits, sight deposits of Q 9 million are held at BG agencies around the country, and the remaining Q

13 million is invested in financieras bonds (with the right to repayment after 30 days notice) at interest rates between 11% and 11.5% p.a. This investment was made against the specific recommendation of the authorities that the IGSS should not invest in banks or financieras. Despite disregarding this guidance, it is unlikely that IGSS' investment managers would be active investors in bonds of financial institutions traded on the BNV -- and even less active in other private bond and equity instruments.

#### Private Investors

12. The only evidence available concerning the amount of investable funds held by private investors in Guatemala is the information tabulated by the CV on holders of bank and financiera bonds along with some undocumented information from brokers. The private sector was described as holding about Q 100 million of financiera bonds in early 1988 and almost no bank bonds at all. Investors and financial institutions were said to hold about US\$100 million of BESTs (about 1% of GDP).

13. One way in which private funds are often invested is through collective instruments such as money market funds or unit trusts. The development of securities markets in Guatemala may open the way for such arrangements to emerge, but it is probably better to let them respond to perceived demand than to promote them too vigorously. Unit trusts with equity holdings face severe risks of being unable to liquidate their investments in thin markets when unit holders try to sell their units. Unit trusts are features of relatively mature markets and are thus unsuitable as a means to gather private funds to provide an early impetus to an emerging market.

14. As discussed in Chapter VI, there is an active and efficient group of NFIs in Guatemala offering, among other services, money-market accounts. Investors' funds are taken with either fixed or immediate withdrawal terms and used to purchase matching amounts of bonds, sometimes through the BNV. Although the investor theoretically has the right to demand a custodial certificate for matching assets, in practice the intermediary is operating a pool of funds, bearing the risk, and gaining any reward from mismatching. This is a very convenient service for investors and enables relatively small sums to earn higher rates based on bond rates rather than on the savings account rates at banks. Since there are definite risks for investors in dealing with enterprises of this nature, it might prove interesting for BNV brokers to offer similar services for their clients with the supervision of the authorities. The main resistance to this idea, which would attract new funds to the market, is likely to emanate from banks that would experience a net outflow of funds. The influence of bankers on the BNV and on the BG may be sufficient to stifle the development of money market accounts by brokers, if allowed, but this could be an important way of fostering public interest in and awareness of the facilities of the BNV. Furthermore, brokers would quickly realize that such accounts provide a safe haven for client funds between more permanent investments and enable the convenient movement of funds when required.

**A P P E N D I X**

**STATISTICAL TABLES**

Table I.1: GUATEMALA - Macroeconomic Indicators

Year	Monet. Base (% change)	M1 (% change)	M2	Infla- tion (GDP Deflator) (%)	Real GDP Growth (%)	Real Interest Rate (%)	Combined Fiscal Def. (% of GDP)	M2
1976	53.2	38.6	31.1	10.7	7.4	-	3.7	25.6
1977	12.7	18.6	17.6	12.6	7.8	-3.2	0.7	24.0
1978	9.8	8.9	12.4	7.9	5.0	1.0	1.2	24.2
1979	4.5	11.0	9.9	11.5	4.7	-2.2	2.6	23.5
1980	-5.3	2.4	11.0	10.7	3.8	-1.5	4.7	22.8
1981	6.2	4.1	11.2	11.4	0.7	-1.6	7.4	23.2
1982	16.8	1.4	14.1	5.0	-3.5	7.3	4.5	26.1
1983	-8.4	5.1	2.1	6.4	-2.6	2.4	3.3	25.7
1984	6.6	7.5	12.9	3.6	0.5	5.2	4.1	27.7
1985	62.7	56.3	28.4	18.8	-0.6	-8.2	5.9	30.1
1986	21.5	18.1	20.2	41.5	0.1	-22.3	2.6	25.7
1987	1.0	11.8	15.3	8.0	3.5	2.8	3.5	26.7
1988	22.7	14.3	11.1	11.8	3.7	0.2	3.6	25.9
1989*	n.a.	13.7	n.a.	11.7	3.8	1.2	4.4	25.6

Source: Banco de Guatemala.

Observations: \* Stands for estimated.



**Table II.1: GUATEMALA - Minimum Reserve Coefficients  
(percent)**

Month	Year	Demand Deposits	Savings and Time Deposits
--	1946	25	10
--	1961	35	10
--	1974	30	15
--	1975	40	15
Jan.	1979	40	13
Feb.	1979	40	14
March	1979	40	15
April	1979	40	16
July	1979	40	15
Aug.	1979	40	14
Sept.	1979	40	12
Oct.	1979	40	11
Dec.	1979	40	12
Jan.	1980	40	13
Feb.	1980	40	14
March	1980	40	15
April	1980	40	14
May	1980	40	13
June	1980	40	12
Sept.	1980	40	10
Oct.	1980	35	10
July	1986	37	11
Aug.	1986	39	12
Sept.	1986	41	13

**Source:** Banco de Guatemala.

**Table II.2: GUATEMALA - Required and Actual Reserves of the Banking System**

(As percentage of deposits)

Year	Required Reserves	Actual Reserves	Excess Reserves
1974	21.40	24.70	3.30
1975	22.20	24.00	1.80
1976	22.90	30.60	7.70
1977	22.90	26.50	3.60
1978	22.30	23.90	1.60
1979	20.40	22.50	2.10
1980	16.60	17.90	1.30
1981	15.80	17.00	1.20
1982	15.40	18.70	3.30
1983	15.30	15.90	0.60
1984	14.90	15.20	0.30
1985	16.00	17.50	1.50
1986	20.00	21.10	1.00
1987	19.90	19.90	-0.10
1988	19.70	20.70	-0.30

Source: Banco de Guatemala.

**Table II.3: GUATEMALA - Public Debt Placement**

(millions of Q)

	1987	1988
<b>TOTAL</b>	<b>175.8</b>	<b>176.5</b>
<b>Banking System</b>	<b>125.4</b>	<b>17.4</b>
3 months 9.00%	-.-	-.-
6 months 9.25%	32.9	7.1
9 months 9.50%	79.7	10.3
12 months 9.75%	12.8	0.0
<b>Private Sector</b>	<b>50.4</b>	<b>159.1</b>
Insurance Comp.	3.9	1.2
Private Entities	-.-	0.0
Public	46.5	157.9

Source: Junta Monetaria

**Table II.4: GUATEMALA - Monetary Multipliers,  
Currency Ratios and Reserve Ratios**

(year average)

Year	multiplier				
	m <sub>1</sub>	m <sub>2</sub>	c	r	a
1977	0.926	2.43	0.246	0.265	0.549
1978	0.959	2.55	0.253	0.239	0.563
1979	0.943	2.60	0.259	0.225	0.558
1980	1.068	2.86	0.262	0.179	0.587
1981	1.101	3.005	0.244	0.170	0.616
1982	0.986	2.99	0.221	0.187	0.650
1983	1.021	3.34	0.201	0.159	0.649
1984	1.018	3.43	0.197	0.152	0.649
1985	1.072	3.03	0.231	0.175	0.666
1986	1.160	2.81	0.225	0.211	0.596
1987	1.005	2.94	0.226	0.199	0.605
1988	1.019	2.95	0.236	0.207	0.654

c: currency outside banks relative to total deposits  
 r: bank reserves relative to total deposits.  
 a: quasi-money relative to total deposits  
 m<sub>1</sub>: M<sub>1</sub> relative to monetary base  
 m<sub>2</sub>: M<sub>2</sub> relative to monetary base

Source: Banco de Guatemala.

**Table II.5: GUATEMALA - Assets and Liabilities of the Bank of Guatemala**  
 -As a percent of GDP-  
 Period 1966-1988

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	
<b>ASSETS</b>																								
NET FOREIGN ASSETS	4.4	5.6	5.3	5.6	4.2	4.7	6.3	8.2	6.1	8.2	11.7	12.6	12.3	10.4	5.4	6.8	6.1	-0.1	0.0	-1.1	0.7	-0.5	-1.1	
CREDIT TO THE PUBLIC SECTOR	1.8	2.1	2.0	2.2	1.8	2.4	2.3	0.9	2.5	1.3	1.7	0.1	0.2	1.2	3.0	8.5	11.3	13.4	16.2	14.3	6.2	4.4		
CREDIT TO BANKS	3.1	3.3	3.1	2.7	2.7	1.7	1.8	1.2	1.2	1.4	0.3	0.2	0.5	1.2	1.6	1.7	1.0	1.8	1.7	1.1	0.8	0.7		
CREDIT TO FINANCIAL INST.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.7	0.6	0.7	0.7	0.6	0.4	0.3		
NET OTHER ASSETS	0.1	-0.7	-0.7	-0.4	1.5	0.8	0.3	0.2	0.5	-1.0	-1.4	-1.4	0.0	0.5	-2.7	-4.5	0.5	-2.7	-4.5	0.8	5.1	6.5		
<b>Liabilities</b>																								
MONETARY BASE	8.6	8.5	7.9	8.2	8.3	8.4	10.1	9.7	9.1	9.4	11.9	10.4	10.14	9.3	8.2	8.0	9.2	8.1	8.3	11.4	9.8	8.9		
CURRENCY ISSUE	5.8	5.6	5.2	5.3	5.0	5.0	5.4	5.3	5.0	4.8	5.4	5.2	5.3	5.3	4.8	4.7	4.6	4.8	4.8	6.2	5.1	5.3		
BANK RESERVES	2.8	2.8	2.7	2.9	3.3	3.5	4.7	4.3	4.1	4.6	6.5	5.3	4.8	4.0	3.4	3.3	4.6	3.3	3.4	5.2	4.7	3.6		
CREDIT MEDIUM AND LONG TERM	0.0	1.1	1.3	1.3	1.1	1.0	0.8	0.4	0.3	1.0	1.4	1.2	1.3	1.1	1.0	2.0	2.7	3.7	4.5	1.3	2.6	1.7		
CAPITAL AND RESERVES	0.7	0.7	0.6	0.6	0.8	0.9	1.1	1.0	0.8	0.7	1.1	1.0	1.0	1.1	1.6	1.7	1.6	1.4	1.3	1.1	0.8	0.8		

Source: Banco de Guatemala.

**Table II.6: GUATEMALA - Public Sector Deficit Finance  
(in percent)**

Year	Domestic Financing	Foreign Financing
1972	41.2	58.8
1973	49.2	50.8
1974	69.4	30.6
1975	66.5	33.5
1976	80.2	19.8
1977	74.1	25.9
1978	43.7	56.3
1979	15.4	84.6
1980	73.0	27.0
1981	82.3	17.7
1982	82.1	17.9
1983	70.7	29.3
1984	76.0	24.0
1985	74.0	26.0
1986	75.5	24.5
1987	70.5	29.5

Source: Banco of Guatemala.

**Table II.7: GUATEMALA - Floating Debt  
(millions of Q)**

	New	Net Change
1977	48.6	-11.8
1978	44.9	-5.9
1979	75.1	30.9
1980	92.2	24.6
1981	162.9	80.7
1982	120.8	-42.6
1983	78.2	-42.9
1984	143.8	61.5
1985	100.5	-38.4
1986	241.5	146.4
1987	NA	96.9
1988	NA	67.0
1989*	NA	200.0

Source: Banco da Guatemala.

Observations: \* Stands for estimated

**Table II.8: GUATEMALA - Swaps of BESTs Issued in 1983-1984  
By BESTs Issued in 1988**

(Millions of US\$)

December 31, 1988

Swaps with US\$ denominated BESTs	151.6
Swaps with Quetzal denominated BESTs	150.8
1983-1984 BESTs not swapped	<u>77.9</u>
	380.3

**Retired BESTs Issued in 1983-1984**

(Millions of US\$)

Dec. 31, 1988

Import PL-480/88	13.2
Debt/Equity Swaps	3.3
Tax Liabilities	13.0
Foreign Line of Credit - IDB	27.2
Others	<u>11.7</u>
	68.4

Source: Banco de Guatemala.

**Table II.9: GUATEMALA - Losses of the Bank of Guatemala**

	<u>Exchange Rate Losses</u>		<u>Total Losses</u>
	Millions of Q	(% of GDP)	(% of GDP)
1984	42.4	0.30	
1985	333.0	3.00	4.5
1986	230.4	1.55	1.8
1987	253.1	1.44	2.1
1988	158.4	0.78	1.7
1989*	NA	NA	1.3

Source: Banco de Guatemala.

Observations: \* Stands for estimated

**Table II.10: Guatemala- Banks Spread or Net Margin  
Between Financial Income and Expenditures  
(In percent)**

Year	Reserve Requirement on Savings Deposits	Maximum Deposit Rate	Marginal Cost of Funds	Total Spread	Spread due to Non-remunerated Reserve Requirements	Spread due to Other Factors ("Normal" Spread)
	(1)	(2)	(3)	(4)	(5)	(6)=(4)-(5)
1983	10.0	9.0	10.0	5.5	1.0	4.5
1984	10.0	9.0	10.0	4.9	1.0	3.9
1985	10.0	9.0	10.0	5.7	1.0	4.7
1986	12.0	9.0	10.23	6.3	1.23	5.1
1987	13.0	11.0	12.64	5.8	1.64	4.2
1988	13.0	13.0	14.94	6.9	1.94	5.0

**Source:** Superintendencia de Bancos

**Observation:** Column (3) is calculated as Column (2) over one hundred minus Column (1).

**Table II.11: GUATEMALA- Domestic Public Debt- Accrued Interest Costs. May 1**

(in millions of Quetzales)

Government Bond Holders	Interest Costs		
	Actual Interest Rates (1)	Assuming Avg Term- to-Maturity Interest Rate of 13% p.a. (2)	Difference (2)-(1)
Total Outstanding	235.7	364.2	128.5
Private Sector 1/ Public Banks and Official Entities	50.1	75.3	25.2
Funds 2/ Bank of Guatemala	82.9	96.5	13.6
	9.9	17.2	7.4
	92.8	175.2	82.4

1/ Insurance companies, private banks, private entities and the general public.

2/ Securities Stabilization Fund and institutional funds.

**Table II.12: GUATEMALA- Banks' Net Foreign Exchange Positions as of 9/30/89**

(in millions of US\$)

	Assets	Liabilities	Position
Private Banks	70.2	164.8	-94.6
Foreign Banks	2.6	17.4	-14.8
State Banks	2.0	89.8	-87.8
Total	74.8	272.0	-197.2

Source: Superintendencia de Bancos



**Table II.13: GUATEMALA - Bank of Guatemala**

**Revenues on Base Money Creation and Losses**

(in percent of GDP)

	1984	1985	1986	1987	1988	1989
I. Seignorage	-0.1	2.2	-0.4	-0.8	0.9	-0.1
II. Inflation Tax	0.4	2.3	2.1	0.9	0.8	1.6
III. Chg. Base Money	0.3	4.4	1.7	0.1	1.7	1.5
IV. Losses	0.7	4.5	1.8	2.1	1.7	1.3

Source: Banco de Guatemala

**Note:** The total revenues from the monetization process (changes in base money over GDP) are broken down between seignorage (increases in the real stock of the base) and the inflation tax (the product of the inflation rate and the real stock of base money).

**Table III.1: GUATEMALA - Sources of Investment Finance  
(as % of GDP)**

obs	Investment	External Saving	Domestic Saving	Private Saving	Public Saving
1966	10.8	1.4	9.4	7.9	1.5
1967	12.9	4.5	8.4	7.4	1.0
1968	15.1	3.0	12.1	10.6	1.0
1969	11.4	1.0	10.4	8.8	1.6
1970	12.8	0.6	12.2	10.7	1.5
1971	14.4	2.3	12.1	10.1	1.9
1972	12.1	0.4	11.7	9.9	1.8
1973	13.7	-0.4	14.1	11.8	2.7
1974	18.6	3.1	15.5	12.8	2.7
1975	16.1	1.7	14.4	12.0	2.4
1976	21.4	1.6	19.9	16.2	3.6
1977	20.0	0.6	19.4	14.6	4.8
1978	21.6	4.3	17.3	12.7	4.6
1979	18.7	2.5	16.2	12.6	3.6
1980	15.9	2.3	13.6	10.8	2.8
1981	17.1	6.6	10.4	8.8	1.6
1982	14.2	4.5	9.6	8.0	1.6
1983	11.1	2.5	8.6	6.9	1.7
1984	11.6	4.1	7.5	7.1	0.4
1985	11.5	4.2	7.3	5.5	1.8
1986	10.1	0.2	9.8	7.8	2.0
1987	13.2	6.1	7.1	4.7	2.5

**Source:** Banco de Guatemala.

**TABLE III.2: GUATEMALA - Saving, Investment, and the  
Balance of Goods, Services, and Unrequited Private Transfers  
1965 to 1986**

(percentage of GNP)

	<u>Gross domestic investment</u>			<u>Gross national saving</u>			<u>Balance on goods, services, and unrequited private transfers</u>		
	1965-73	1973-80	1980-86	1965-73	1973-80	1980-86	1965-73	1973-80	1980-86
Latin America and Caribbean									
Argentina	19.8	23.8	15.2	19.9	22.7	10.4	-0.1	-0.6	-4.7
Bolivia	25.4	25.3	7.0	22.4	18.4	-1.7	-3.0	-6.8	-8.7
Brazil	21.2	23.7	20.6	19.2	19.1	17.2	-2.0	-4.6	-3.3
Chile	14.3	17.4	17.4	12.5	11.8	6.8	-1.8	-5.5	-10.6
Colombia	18.9	18.8	19.8	16.5	18.7	14.4	-2.5	-0.1	-5.4
Costa Rica	21.8	25.5	24.4	13.0	13.4	12.7	-8.8	-12.2	-11.7
Ecuador	19.0	26.7	22.9	14.6	21.0	18.0	-4.4	-5.7	-4.9
Guatemala	13.3	18.7	11.9	11.0	14.3	7.7	-2.2	-4.3	-4.2
Jamaica	32.0	20.2	23.1	20.9	12.2	6.9	-11.1	-8.0	-16.2
Mexico	21.4	25.2	25.3	19.2	21.2	23.4	-2.2	-4.0	-1.9
Peru	27.7	28.9	26.7	27.1	24.6	22.3	-0.6	-4.3	-4.4
Uruguay	12.0	15.7	13.3	11.5	11.3	10.0	-0.5	-4.4	-3.3
Venezuela	29.5	32.5	20.0	30.3	35.2	24.3	0.8	2.6	4.3

Source: World Development Report, 1988 - Table A.11.

**Table III.3: GUATEMALA - Assets and Liabilities of the Commercial and Development Banks**  
**-As a percent of GDP-**  
**Period 1966-1988**

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Assets</b>																							
CASH	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4
DEPOSITS AT THE BANK OF GUATEMALA	2.8	2.8	2.7	2.9	3.3	3.5	4.7	4.3	4.1	4.6	6.5	5.3	4.8	4.0	3.4	3.3	4.6	3.3	3.4	5.2	4.7	3.6	4.3
CREDIT TO THE PUBLIC SECTOR	0.7	0.4	0.6	0.4	0.4	1.0	2.4	3.0	1.7	2.6	2.3	2.0	1.3	0.6	0.8	0.9	1.4	0.7	0.5	1.3	2.0	1.4	0.7
CREDIT TO THE PRIVATE BANKS	11.7	13.7	13.9	13.9	13.2	13.1	12.9	12.0	12.8	12.9	12.6	12.9	14.8	15.5	16.3	16.6	17.1	18.8	19.9	18.2	14.2	16.2	16.7
NET OTHER ASSETS	1.8	0.8	0.6	0.9	1.1	1.1	6.8	2.1	1.2	1.2	0.2	0.0	0.4	0.6	0.4	0.9	1.2	1.3	1.7	2.1	1.6	1.4	1.7
<b>Liabilities</b>																							
SHORT TERM FOREIGN LOANS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.2	-0.4	-0.4	-0.1	-0.2	-0.7	-0.9	0.0	-0.3	-0.3	-0.7
LONG TERM FOREIGN LOANS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.0	0.0	0.0
BANK OF GUATEMALA LOANS	3.1	3.3	3.1	2.7	2.7	1.7	1.8	1.2	1.2	1.4	0.3	0.2	0.3	1.2	1.6	1.7	1.0	1.8	1.7	1.1	0.8	0.7	0.0
DEPOSITS	11.8	12.4	12.6	13.3	13.6	15.1	22.9	18.5	17.1	18.6	20.2	18.4	18.9	18.2	18.0	18.5	21.5	20.9	22.9	23.9	20.6	21.4	20.0
CAPITAL AND RESERVES	2.5	2.5	2.6	2.5	2.2	2.3q	2.5	2.2	2.0	1.9	1.8	1.8	2.5	2.3	2.1	2.1	2.1	2.3	2.1	2.2	1.8	1.3	1.0

Source: Banco de Guatemala.

**Table III.4: GUATEMALA: Sectoral Composition  
of Commercial Bank Credit  
(New Loans in %)**

	Agriculture	Industry	Commerce	Other
1980	22.9	32.0	17.8	27.3
1981	23.1	29.5	20.3	27.1
1982	21.3	30.4	20.4	27.9
1983	21.7	33.4	25.7	19.2
1984	18.4	28.6	22.1	30.9
1985	16.2	34.0	24.6	25.2
1986	15.9	29.3	30.0	24.8
1987	13.4	32.0	26.2	28.4
1988	13.3	33.0	24.9	28.8

**Source:** Banco de Guatemala

Table III.5: GUATEMALA - Debt and Equity in a Sample of  
Non-Financial Enterprises - Dec. 1987

(in Thousands of Quetzales)

Size and Number of Enterprise	Debt	Equity	Debt/Equity
Six small enterprises (each with capital of Q500 or less)	2,084	1,559	1.34
Sixteen medium-and-large enterprises (each with capital greater than Q500)	81,917	52,490	1.56

Source: Mission's estimates.

Table IV.1: GUATEMALA: Market Shares  
(in percent)

	<u>Net Loans</u>		<u>Total Assets</u>	
	1983	1986	1983	1986
Private Banks	66.3	70.3	65.1	68.0
State Banks	9.4	8.9	12.3	11.5
Foreign Banks	5.5	4.2	6.1	4.9
Fin Comps	18.8	16.6	16.5	15.6
Fin Comps exc CORFINA	6.2	7.6	6.2	6.7

Source: Superintendencia de Bancos.

Table IV.2: GUATEMALA - Banks Ranked by Asset Size and Type of Ownership  
(December 31, 1987)

<u>Banks</u>	<u>Ownership</u>	<u>Asset Size</u> (000's)	<u>Percentage</u> <u>of Total</u> <u>Assets</u>	<u>Equity</u> (000's)
<b>I) <u>Large Banks</u></b>				
Industrial	Private local	625434	11.0	47513
Occidente	" "	542750	9.5	30062
Granaf Towson	" "	471832	8.3	24013
<b>II) <u>Medium Banks</u></b>				
Agricola	" "	355755	6.2	22293
Inmobiliario	" "	322436	5.7	26797
del Cafe	" "	283655	5.0	11957
Del Agro	" "	268898	4.7	20134
Internacional	" "	215677	3.8	17121
Metropolitano	" "	211512	3.7	14107
<b>III) <u>Small Banks</u></b>				
Exportador	" "	149492	2.6	12215
Construccion	" "	125780	2.2	6908
Del Quetzal	" "	75956	1.3	5060
Promotor	" "	56159	1.0	3790
<b>IV) <u>Public Banks and Others</u></b>				
CHN (Mortgage)	Public	259376	4.5	21196
Banvi(Housing)	Public	187864	3.3	37035
Bandesa(Agric)	Public	161575	2.8	17622
Ejercito	Army "	202723	3.6	17049
Trabajadores	Unions "	83834	1.5	11099
<b>V) <u>Foreign Banks</u></b>				
Lloyds	" Foreign	180837	3.2	13211
Bank of America	" Foreign	85226	1.5	7616
<b>VI) <u>Finance Companies</u></b>				
Corfina	Public	488080	8.6	-44580
Industrl & Agr	Private	149788	2.6	20061
Guatemalteca	"	102324	1.8	8852
Industrial	"	64464	1.1	7244
Inversion	"	35465	0.6	2742
<b><u>Total Financial System</u></b>		<b>5706892</b>	<b>100.0</b>	

Source: Superintendencia de Bancos.

**Table IV.3: GUATEMALA - Evolution of Banks' Market Shares**

(As percentages of Total Assets)

<u>Asset Size</u> (mill of Quetzals)				<u>No of Banks*</u>
	1983	1986	1987	1987
>450	28.9	37.3	38.6	3
200-450	26.6	32.3	31.4	6
50-200	44.5	30.4	30.0	4

\* Excludes Banco Inmobiliario, Banco de los Trabajadores, Banco del Ejercito and foreign banks.

Source: Superintendencia de Bancos.

**Table IV.4: GUATEMALA: Solvency Indicators**

(As of December 31, 1987;

(in thousands, unless otherwise indicated)

<u>Type of Bank</u>	<u>Arrears over 1 Year</u> (1)	<u>Equity</u> (2)	<u>Coverage Ratio (X)</u> (1)/(2)	<u>D/E Ratio (X)</u>
3 Large Banks	7481	101589	7.4	15.2
6 Medium Banks	81343	112408	72.4	8.8
4 Small Banks	7461	24183	31.0	15.8
2 Foreign Banks	2229	20827	10.7	11.8
2 Special Banks	15613	28148	55.5	9.2

Source: Superintendencia de Bancos.



**Table IV.5: GUATEMALA: Portfolio Arrears**  
(in percent)

<u>Banks</u>	<u>Deferred Profits (1987)</u> <sup>1/</sup>	<u>Total Arrears/Portfol</u>	
	<u>to Total Assets</u>	<u>1983</u>	<u>1987</u>
Large Bank 1	0.4	23.33	3.84
Medium Bank 1	1.5	NA	8.46
Medium Bank 2	1.4	20.11	5.65
Medium Bank 3	12.1	46.61	3.43
Large Bank 2	0.7	8.15	4.04
Other Bank 1	12.7	20.12	21.40
Large Bank 3	0.6	7.31	4.35
Other Bank 2	4.6	17.68	9.32
Medium Bank 4	0.8	25.85	12.46
Medium Bank 5	4.0	8.11	22.12
Medium Bank 6	0.5	17.02	10.71
Small Bank 1	2.1	0.91	22.61
Foreign Bank 1	4.2	NA	NA
Foreign Bank 2	0.3	NA	NA
Small Bank 2	0.0	0.0	0.82
Small Bank 3	0.0	0.0	6.99

**Source:** Superintendencia de Bancos.

- 1/ Unpaid interest receivables are estimated by observing a contra re account "deferred profits" where unpaid interest is registered.
- 2/ Total arrears are expressed as percentages of the total portfolio year-end and not of average portfolio balances. These figures include only principal not interest arrears.

**Table IV.6: GUATEMALA-Banking Sector Trends in Administrative Expenses  
Personnel Costs/Normal Risk Assets\*  
(in percent)**

<u>Asset Size 1987</u> (mill of Quetzals)	<u>Priv Banks**</u>		<u>Public Banks***</u>		<u>Foreign Banks</u>	
	1983	1987	1983	1987	1983	1987
>450	1.45	1.53	3.20	3.94	3.32	3.15
200-450	1.55	1.96				
50-200	NA	1.34				

\* Normal risk assets are all assets less fixed assets.

\*\* Excludes Banco Inmobiliario and Banco de los Trabajadores and Banco del Ejercito as well as foreign banks from the numerator.

\*\*\*BANDESA, BANVI and CHN.

Source: Superintendencia de Bancos.

**Table IV.7: Guatemala-Banking System Efficiency  
and Profitability Indicators  
(in percent, December 1987)**

<u>Banks</u>	<u>Equity Coverage</u>	<u>Adm Exp/Snew loans</u>	<u>ROA</u> %	<u>Perf Exp/TOR</u> %
Large Bank 1	11.8	3.90	1.4	24.8
Medium Bank 1	4.7	5.92	1.1	32.0
Medium Bank 2	13.6	9.50	1.7	35.6
Medium Bank 3	0.7	18.37	0.1	46.4
Large Bank 2	6.7	5.49	1.6	34.6
Other Bank 1	1.2	8.40	-1.6	71.1
Large Bank 3	34.6	5.30	2.3	7.8
Other Bank 2	2.5	6.80	0.9	42.3
Medium Bank 4	4.2	6.8	2.0	29.7
Medium Bank 5	0.5	7.80	0.6	37.9
Medium Bank 6	1.6	10.82	0.5	41.2
Small Bank 1	0.9	7.60	0.4	37.4
Foreign Bank 1	3.5	23.00	1.02	49.0
Foreign Bank 2	213.1	5.21	2.54	28.4
Small Bank 2	NA	5.82	1.15	25.27
Small Bank 3	NA	1.31	2.23	16.6
Small Bank 4		4.17	-0.04	38.3

Source: Superintendencia de Bancos.

**Table IV.8: GUATEMALA: Guarantee Requirements**

<u>Type of Guarantee</u>	<u>Maximum Percentage financed</u>	<u>Maximum Term</u>
Government paper or similar instruments	80%	5 years
Other securities or merchandise guarantees	70%	5 years
Mortgage backed	50%	23 years

Source: Leyes Bancarias de Guatemala, 1981, 8ª EdiciFn.

**Table IV.9: GUATEMALA: Summary of Financial Indicators of Public Banks**

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
<b><u>Profitability</u></b>					
BANVI	91.6	85.0	(3351.7)	(5165.6)	(666)
CHN	522.2	789.6	1161.9	1275.5	1751.4
BANDESA	(8901.9)	(6942.4)	(544.6)	(2488.3)	(1180.2)
CORFINA	(11390.5)	(16653.5)	(20855.4)	(23988.3)	(24452.3)
<b><u>Networth Before Transfers</u></b>					
BANVI	28415.3	28500.3	25148.6	19983.0	1931.0
CHN	14492.9	15282.6	16444.5	17720.0	19471.3
BANDESA	(16180.2)	(23122.6)	(23667.2)	(26155.5)	(27335.7)
CORFINA	(8097.5)	(24750.9)	(45606.3)	(69594.6)	(94047.0)
<b><u>Government Transfers</u></b>					
BANVI	250	250	6076.8	17691.1	17691.1
CHN	-	-	-	-	-
BANDESA	23468.8	23710.9	5286.6	5286.6	11363.7
CORFINA	3416.2	3666.4	23401.0	23655.8	23769.9

Source: Public Banks.

**Table IV.10: GUATEMALA: Public Banks' Yields and Costs, 1984-87**  
(in percent)

	1984	1985	1986	1987
<b>BANDESA</b>				
Interest	2.64	4.09	4.09	4.5
Extraordinary income	<u>1.94</u>	<u>7.09</u>	<u>5.27</u>	<u>10.5</u>
Total income	4.58	11.18	8.95	15.0
Debt	1.78	1.82	2.00	2.0
Administrative expenses	10.82	9.84	8.66	13.0
Extraordinary expenses		.05	.08	.0
Cost of capital	<u>12.60</u>	<u>11.71</u>	<u>10.74</u>	<u>15.0</u>
Spread	.86	2.27	1.68	2.4
Margin	(8.02)	(.53)	(1.79)	(.5)
<b>CHN</b>				
Interest Income	7.42	7.38	8.44	8.8
Extraordinary income	<u>1.02</u>	<u>3.75</u>	<u>3.44</u>	<u>1.4</u>
Total income	8.44	11.13	11.88	10.2
Interest on debt	3.96	3.69	4.05	4.0
Administrative expenses	3.99	3.96	4.53	5.0
Extraordinary expenses	<u>0.03</u>	<u>2.84</u>	<u>2.73</u>	<u>0.0</u>
Cost of capital	7.98	10.49	11.31	9.0
Spread	3.46	3.69	4.39	4.2
Margin	.46	.64	.57	.0
<b>BANVI</b>				
Interest income	2.30	2.83	3.20	8.0
Extraordinary income	<u>5.04</u>	<u>4.97</u>	<u>7.01</u>	<u>2.5</u>
Total income	7.34	7.80	10.21	11.0
Interest on debt	3.17	4.32	4.47	4.4
Administrative expenses	4.71	4.60	6.57	6.0
Extraordinary expenses	<u>0.11</u>	<u>0.97</u>	<u>2.38</u>	<u>0.0</u>
Cost of capital	8.00	9.89	13.42	11.4
Spread	(0.87)	(1.49)	(1.27)	3.0
Margin	(0.66)	(2.09)	(3.21)	(0.0)

Source: Public Banks.

**Table IV.11: GUATEMALA: Non-Performing Assets/Capital**

**Ratios as of September 30, 1989**

Banks' Assets (in Millions of Quetzales)	Pastdue Loans/ Total Loans (1)	Reserve/ Pastdue Loans (2)	Pastdue Loans/ Net Worth (3)	Pastdue Interest/ Pastdue Loans (4)	Pastdue Interest/ Net Worth (5)	Pastdue Interest/ Total Loans (6)	Foreclosed Assets/ Net Worth (7)	Receivables from Assets Sales/ Net Worth (8)	Non-Performing Assets/ Capital Ratios		
									Columns (3)+(5)+(7) (9)	Columns (9)+(8) (10)	
4)	451	0.05	0.01	0.44	0.41	0.18	0.02	0.00	0.00	0.63	0.63
6)	942	0.27	0.01	1.55	0.11	0.17	0.03	0.02	0.01	1.75	1.76
5)	374	0.27	0.01	2.10	0.05	0.11	0.01	0.03	0.00	2.24	2.24
13)	224	0.15	0.00	0.96	0.23	0.22	0.04	0.07	0.23	1.26	1.49
12)	240	0.15	0.01	1.16	0.20	0.23	0.03	0.08	0.56	1.47	2.03
11)	252	0.20	0.00	1.08	0.00	0.00	0.00	0.00	0.00	1.08	1.08
3)	541	0.20	0.01	2.13	0.06	0.12	0.01	0.04	0.05	2.28	2.33
1)	855	0.03	0.00	0.27	0.45	0.12	0.01	0.00	0.03	0.39	0.42
7)	325	0.47	0.00	1.90	0.03	0.05	0.01	0.79	0.61	2.74	3.35
8)	295	0.20	0.01	1.63	0.05	0.08	0.01	0.01	0.04	1.73	1.77
9)	267	0.21	0.00	1.94	0.29	0.56	0.06	0.00	0.18	2.51	2.69
2)	752	0.09	0.00	0.62	0.12	0.07	0.01	0.00	0.02	0.70	0.72
16)	191	0.00	0.00	0.04	0.25	0.01	0.00	0.00	0.00	0.05	0.05
15)	107	0.04	0.00	0.41	0.05	0.02	0.00	0.00	0.00	0.43	0.43
14)	112	0.17	0.02	0.49	0.66	0.33	0.11	0.00	0.24	0.82	1.06
17)	28/										
	Foreign	0.20	0.00	1.30	0.04	0.06	0.01	0.00	0.17	1.36	1.52
10)	254/										
	Foreign	0.16	0.00	1.30	0.00	0.01	0.00	0.00	0.33	1.31	1.63
	Bandesa	0.26	0.14	1.44	0.86	1.24	0.23	0.28	0.03	2.96	2.99
	BANVI	0.05	0.01	0.12	1.44	0.17	0.08	0.01	0.02	0.30	0.31
	C.H.M.	0.13	0.02	0.93	0.54	0.50	0.07	0.10	0.09	1.53	1.61

**Source:** Banco de Guatemala

**Observations:** Pastdue Loans = one day pastdue.

Pastdue Interest = interests due but not collected.

Receivables from Assets Sales = amounts due on loans to purchasers of foreclosed (repossessed) assets.

Table VI.1

Guatemala: Bank Credit and Informal Credit for Microenterprises  
(number and percent of borrowers in each category)

Number of Microenterprises Having Loans out of the 800 Surveyed

Bank	18 (2%)			
Informal	69 (9%)			
<u>Amount</u> (Quetzales)	<u>0-2500</u>	<u>2501-5500</u>	<u>5501-10.500</u>	
Bank	14 (78%)	0 (0%)	4 (22%)	
Informal	60 (87%)	8 (12%)	1 (1%)	
<u>Terms</u> (years)	<u>1 or Less</u>	<u>2 to 5</u>	<u>More than 5</u>	<u>No Fixed Term</u>
Bank	3 (17%)	13 (72%)	2 (11%)	0 (0%)
Informal	44 (64%)	15 (22%)	0 (0%)	10 (14%)
<u>Guarantee</u>	<u>Real Property Mortgage</u>	<u>Personal Property Mortgage</u>	<u>Cosigner</u>	
Bank	12 (67%)	0 (0%)	6 (33%)	
Informal	12 (18%)	3 (4%)	54 (78%)	
<u>Interest Rate</u> (\$ per year)	<u>0-8%</u>	<u>9-16%</u>	<u>17% or More</u>	<u>No Interest</u>
Bank	10 (55%)	7 (39%)	1 (6%)	0 (0%)
Informal	10 (15%)	3 (4%)	14 (20%)	42 (61%)
<u>Problems with Repayment</u>		<u>Yes</u>		<u>No</u>
Bank		4 (22%)		14 (78%)
Informal		13 (19%)		56 (81%)

Source: FADES and Fundacion Naumann, El Sector Informal: Estudio Sobre el Sector Informal de Produccion y Servicios en el Area Urbana Central de Guatemala, 1987

Table VI.2

Guatemala: Use of Financial Services by Microenterprises

	<u>Yes</u>	<u>No</u>	<u>No Reply</u>
Have a Bank Account	65 (15%)	339 (75%)	46 (10%)
Buy on Time	50 (11%)	393 (87%)	7 (2%)
Have a Loan Currently	45 (10%)	405 (90%)	0 (0%)
Have Had a Loan	66 (15%)	382 (85%)	2 (0%)

Source: CAEM and AITEC, "Estudio Exploratorio para el Desarrollo de un Programa de Apoyo a la Microempresa."

Table VI.3

Guatemala: Interest Rates that Microenterprises Think

They Would Be Charged by a Moneylender

(number and percent of 450 microenterprises surveyed)

<u>Interest Rate</u> (% per month)	<u>Less than 1</u>	<u>1.1-5</u>	<u>5.1-10</u>	<u>10.1-20</u>	<u>20</u>
	5 (1%)	27 (6%)	133 (30%)	77 (17%)	83
	<u>50.1-100</u>	<u>100.1-300</u>	<u>More than 300</u>	<u>No Reply</u>	
	4 (1%)	6 (1%)	9 (2%)	106 (24%)	

Source: CAEM and AITEC, "Estudio Exploratorio para el Desarrollo de un Programa de Apoyo a la Microempresa."

Table VI.4

Guatemala: Characteristics of Loans Received by Microenterprises

(Number and percent of borrowers in each category)

	Public Institution	Private Institution	Cooperative	Moneylender	Friend or Relative	No Reply
<u>Source</u>	3 (7%)	2 (4%)	2 (4%)	15 (33%)	21 (47%)	2 (4%)
<u>Amount (Quetzales)</u>	Less than 125 17 (38%)	125-250 4 (9%)	251-625 11 (24%)	626-1250 6 (13%)	More than 1250 6 (13%)	2 (4%)
<u>Term (months)</u>	Less than 1 12 (27%)	1-3 16 (36%)	over 3-6 5 (11%)	over 6-12 6 (13%)	More than 12 4 (9%)	2 (4%)
<u>Interest Rate (x per month)</u>	Less than 1 15 (33%)	1.1-3 5 (11%)	3.1-7 5 (11%)	7.1-10 6 (13%)	10.1-20 9 (20%)	20.1-50 3 (7%)

Source: CARM and AITEC, "Estudio Exploratorio para el Desarrollo de un Programa de Apoyo a la Microempresa."



C H A R T S

CHART III.1: SOURCES OF INVESTMENT FINANCE

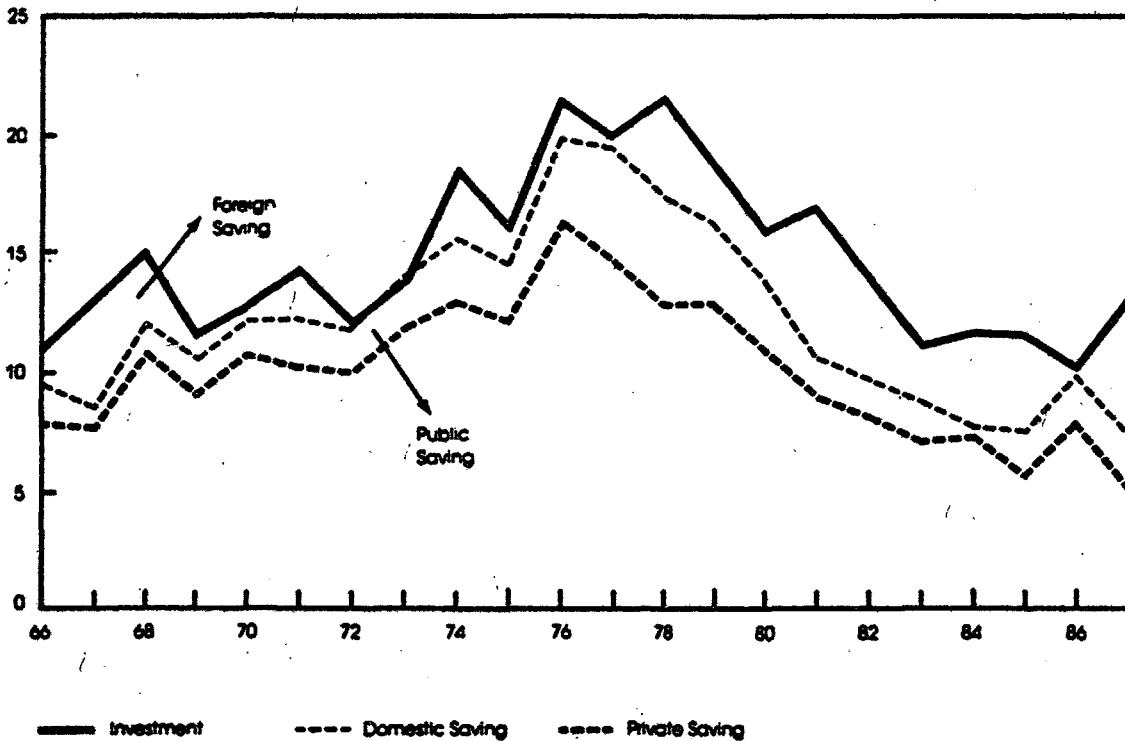


CHART III.2: PUBLIC SECTOR SAVING, TERMS OF TRADE AND NET FOREIGN ASSETS

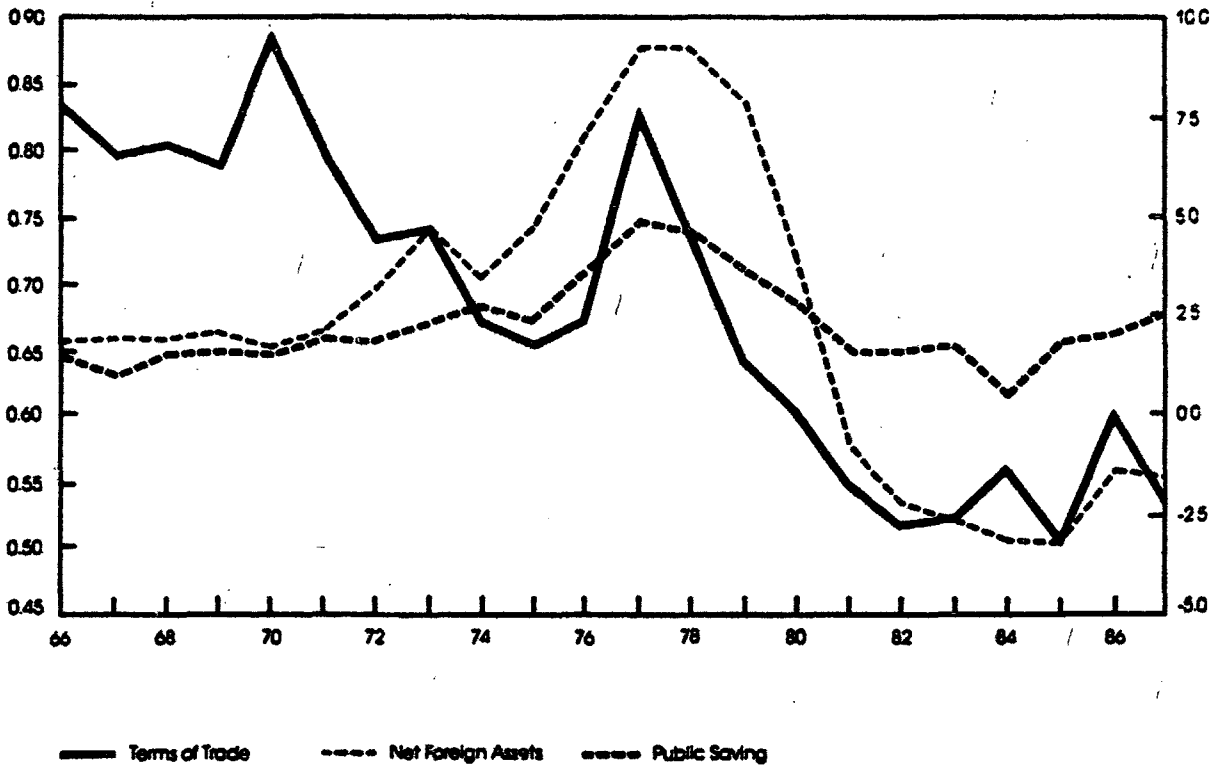
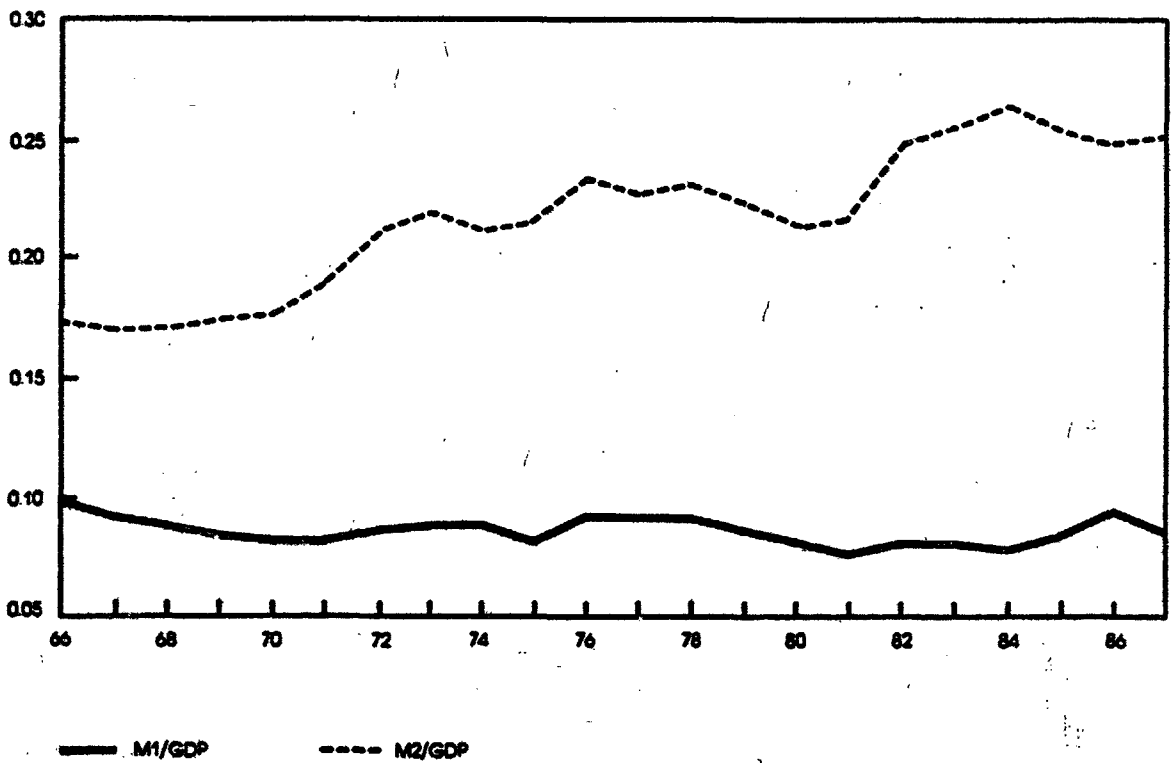


CHART III.3: FINANCIAL DEEPENING



# Chart IV.1 GUATEMALA

## Structure of the Financial System

