ABSTRACT

Technical Report
Macrofinancial Aspects of the Honduran Economy

by

Juan Carlos Protasi and Robert C. Vogel

The report reviews recent economic developments in Honduras, examines the fiscal deficit, foreign debt and inflationary financing of the deficit, describes central bank policies, and assesses domestic savings mobilization. It concludes that monetary policy instruments employed by the central bank do not allow the necessary transparency for the proper functioning of the financial system or for monetary stability. The report calls for:

- independence of the central bank from the direct influence of both the government and private sector;
- elimination of reserve requirements when the fiscal deficit has been brought under control;
- gradual replacement of reserve requirements by simultaneously reducing central bank rediscount credits, while at the same time selling public debt through open market operations;
- consideration of the possibility of implementing an auction system for rediscounts such as is under consideration or already being implemented in other Latin American countries (e.g., Jamaica, Chile and Bolivia); and
- use of market-oriented monetary instruments to hold credit expansion under control, such as open market operations to sterilize an excess supply of funds.

The main recommendation for improving credit policy is to focus on promoting a recovery in the demand for money and deposit mobilization through the pursuit of realistic interest rate policies in the context of liberalized financial markets.

PRE/SMIE:FDuncan:2/11/93:ABSMACFN.HON

PN-ABH-674

A Report to
The Government of Honduras
and
The United States Agency for International Development

TECHNICAL REPORT

MACROFINANCIAL ASPECTS OF THE HONDURAN ECONOMY

Juan Carlos Protasi
Robert C. Vogel

December, 1990

IMCC, Corporate Offices
30 W. Mashta Drive
Suite 405
Key Biscayne, Florida 33149

IMCC, Washington Operations
2101 Wilson Boulevard
Suite 900
Arlington, Virginia 22201

Policy Analysis and Implementation Project (522-0325)
Contract No. PDC-0095-Z-00-9053-00 D.O. Nos. 2 and 5

A Report to

The United States Agency for International Development

Honduras

TECHNICAL REPORT

MACROFINANCIAL ASPECTS OF THE HONDURAN ECONOMY

Juan Carlos Protasi
Robert C. Vogel

December, 1990

The Inter-American Management Consulting Corporation
IMCC

30 W. Mashta Drive, Suite 405
Key Biscayne, Florida 33149

and

1601 N. Kent Street, Suite 904
Arlington, Virginia 22209

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF CHARTS

I. RECENT ECONOMIC DEVELOPMENTS

Economic developments in Honduras during the 1980s were characterized by severe structural weaknesses in the economy that resulted in low rates of economic growth and widening financial imbalances. These weaknesses were exacerbated by a sharp deterioration in the terms of trade and the effects of political and military conflicts in the Central American region, together with the inability of successive governments to adjust domestic policies in response to the real macroeconomic deterioration. As a result, real growth of GDP declined to 2.1 percent in 1989 and probably to zero in 1990, while gross domestic investment has fallen to less than 13 percent of GDP.

The development strategy pursued by Honduras in the past was based on promoting industrialization through import substitution. This strategy was implemented by widespread protectionism and a diverse range of fiscal incentives that produced a distorted and inefficient allocation of resources among productive activities, in particular discouraging agriculture -- the sector with the greatest potential -- in favor of manufactured consumer goods. As part of this strategy, Honduras resorted to international financing to develop the country's economic infrastructure through a major public investment program, especially in the energy sector, in order to expand domestic production. In addition, public sector participation in productive activities was expanded through the channeling of external funds to private sector enterprises. In a short period of time, the increased use of and dependence on external resources increased the country's external debt ratio from 60 percent of GDP in 1980 to 68 percent in 1989 and to 140 percent by 1990.

As a result of the increased fiscal deficit, strong pressures were placed on the balance of payments. A current account deficit amounting to 7.3 percent of GDP was financed mainly through the accumulation of external arrears that simultaneously pushed up the parallel foreign exchange rate, thereby contributing to an increase in domestic inflation to an unprecedented 20 percent for 1989, with 30 percent expected for 1990.

A. Investment and its Financing through Saving

The combined effects of this strategy with the impact of decreasing flows of external funds, rising debt service, deteriorating terms of trade and the negative impact of regional political problems on private investment, brought about a continuing disequilibrium in public finances and a systematic reduction of the availability of resources for private investment.

Table 1 shows the recent developments in the sources of finance for investment. National saving has declined steadily from 15 percent of GDP at the end of the 1970s to 3.6 percent in 1989, which is among the lowest of all Latin American countries. The combined negative effects of the terms of trade and payments to foreign factors of production -- mainly interest payments -- sharply reduced national saving capacity, which was already low even compared to the average for countries with foreign debt problems (about 16 percent of GDP over the same period). Although for many years foreign saving compensated for the lack of domestic saving and thereby provided the resources necessary to maintain investment, the availability of external funds was sharply curtailed by the debt crisis and has remained stagnate at about 5 percent of GDP.

Domestic investment, which had reached a healthy 27 percent of GDP at the end of the 1970s, declined steadily along with saving. Private investment was reduced to a third of its former share, from 15.4 percent of GDP in 1978 to around 5 percent in the late 1980s, while the share of public investment in GDP was almost halved during the same period. In spite of this poor performance of saving and investment, the Honduran economy managed to sustain moderate growth averaging about 3.5 percent per year over the last six years. This may have been due to a more intensive utilization of idle capacity that had been installed in the past, public as well as private.

B. The Current Economic Situation

By the beginning of the 1990s, the Honduran economy clearly exhibited structural weaknesses that made growth unsustainable in the longer run. The most serious obstacles to continued growth are the high level of external indebtedness -- US$ 3.3 billion as of the end of June 1990 that has converted the country into a net exporter of capital with debt service payments accounting for 30 percent of exports -- a large fiscal deficit and a lack of attractive conditions and sufficient resources to finance future investment, especially in the form of decreased domestic saving mobilization. All these issues are discussed below in this report.

To cope with these problems, the new Honduran Government has undertaken a major adjustment program to stabilize the economy and to try to restore its external viability. To this end, the Government has enacted reform measures in the areas of exchange rate and tariff policies to try to attain sustained economic growth based on exports. In addition, a series of significant revenue enhancement measures have been enacted through which the fiscal deficit is to be brought under control. Nevertheless, the financial sector continues to be highly repressed, thereby potentially undermining the benefits that could be attained from these liberalization measures.

Table 1. SOURCES OF INVESTMENT FINANCE
(percent of GDP)

	1984	1985	1986	1987	1988	1989
1. Gross Domestic Investment	19.0	18.0	14.2	14.7	13.0	12.3
1.1 Capital	20.5	17.9	14.3	12.7	12.8	13.3
1.1.1 Private	8.3	7.6	7.3	7.5	7.8	7.8
1.1.2 Public	12.2	10.3	7.0	5.2	5.0	5.5
1.2 Inventories	-1.5	0.1	-0.1	2.0	0.2	-1.0
2. Depreciation	4.5	4.4	3.6	3.4	3.2	3.1
2.1 Private	3.1	3.0	2.3	2.3	2.2	2.0
2.2 Public	1.4	1.4	1.3	1.1	1.0	1.1
3. Net Domestic Investment Capital	14.5	13.6	10.6	11.3	9.8	9.2
3.1 Private (1)	5.2	4.6	5.0	5.2	5.6	5.8
3.2 Public (2)	10.8	8.9	5.7	4.1	4.0	4.4
Inventories	-1.5	0.1	-0.1	2.0	0.2	-1.0
4. Net Saving	14.5	13.6	10.6	10.3	9.9	9.2
4.1 National	4.7	7.8	6.7	5.8	4.8	3.6
4.2 Private	2.4	5.3	4.8	3.9	3.5	3.1
4.3 Public	2.3	2.5	1.9	1.9	1.3	0.5
4.4 Foreign	9.8	5.8	3.9	5.5	5.1	5.6
5. Saving-Investment Gap (-surplus)	11.3	5.7	4.0	3.5	4.8	6.6
5.1 Private (3)	2.8	-0.7	0.2	1.3	2.1	2.7
5.2 Public (4)	8.5	6.4	3.8	2.2	2.7	3.9
Memorandum items						
6. Terms of Trade	-8.9	-7.9	-6.4	-7.6	-7.3	-8.1
7. Net Foreign Factor Payments	-6.6	-6.9	-8.2	-7.2	-7.3	-7.1
Total	-15.5	-14.8	-14.6	-14.8	-14.6	-15.2
8. GDP growth	2.8	3.5	3.5	5.2	5.2	2.3

Source: BCH

(1) = (1.1.1.) - (2.1)
(2) = (1.1.2) - (2.2)
(3) = (3.1) - (4.2)
(4) = (3.2) - (4.3)

II. THE FISCAL DEFICIT, FOREIGN DEBT AND INFLATIONARY FINANCE

A. The Fiscal Deficit

Honduras has a relatively large public sector which is mainly responsible for the fiscal imbalances that have prevailed during the past decade. Table 2 shows the behavior of the overall fiscal deficit which has been divided into the fiscal deficit of non-financial public sector and the para-fiscal deficit of the financial public sector. The first corresponds to the usual definition of the fiscal deficit and includes the central government and public sector enterprises, while the latter corresponds to the BCH deficit and includes exchange rate losses, debt service payments and other payments that are not included in the government budget.

After reaching a minimum in 1986, the fiscal deficit began to grow steadily from that point on in spite of the substantial reduction in public gross investment shown in Table 1. The deterioration in the fiscal situation can be attributed in part to fluctuations in terms of trade, the effects of regional conflicts and the construction of the large El Cajon hydroelectric project which was financed mainly by external grants and loans. However, both the overall fiscal deficit and the external current account deficit continued to widen even after the capital expenditures associated with the El Cajon project tailed off. As the winding down of this project was accompanied by a decline in external grants and loans, domestic public sector financing requirements rose markedly and there was a sizable build up of external payments arrears.

At the same time, the para-fiscal deficit has remained almost constant and highly significant -- averaging 40 percent of the overall deficit and 5 percent of GDP -- and, as the main escape valve for certain government expenses that are not included in the official budget, constitutes one of the most vulnerable aspects of fiscal and monetary policy.

Since both components of the deficit have been consistently high for many years, there is a clear indication that the government's fiscal problem can be considered structural, so that its rigidity does not permit its reduction with temporary measures. The inability of successive governments to introduce major reforms to reduce the size of the public sector, along with the failure to adjust domestic policies on a timely basis in response to changes in the external environment, has resulted in a sustained increase in public debt, in continuing external current account deficits and more recently in a marked expansion in the money supply.

Table 2. PUBLIC SECTOR DEFICIT
(percent of GDP)

	1985	1986	1987	1988	1989
Domestic					
mill.Lps	1868.2	2125.9	2397.8	2874.5	3124.6
% of GDP	26.7	28.0	29.5	32.2	31.9
Abs.Change	166.4	257.7	271.9	476.7	250.1
Abs.Ch.as % of GDP	2.4	3.4	3.4	5.3	2.6
Extarnal					
mill.Lps	4958.0	5507.1	5819.0	6166.5	6661.5
% of GDP	70.8	72.5	71.6	69.0	68.1
Abs Change	820.0	549.1	311.9	652.0	495.0
Abs.Ch.as % of GDP	11.7	7.2	3.8	7.3	5.1
Total					
mill.Lps	6826.2	7633.0	8216.8	9041.0	9786.1
% of GDP	97.4	100.5	101.1	101.2	100.4
Abs.Change	986.4	806.8	583.8	1128.7	745.1
Abs.Ch.as % of GDP	14.1	10.6	7.2	12.6	7.6

Source: Elaborated on the basis of BCH and IMF estimates.

B. Financing the Fiscal Deficit

One of the more disquieting features of Honduran fiscal deficits is the nature of their financing. Typically, three quarters of the deficit has been externally financed -- including foreign assistance -- and, although this has been reduced to about 50 percent for 1989, it is still high and difficult to sustain. The share of foreign financing of the public deficit had reached 4.5 percent of GDP, making the Honduran economy extremely vulnerable to the growing unwillingness of foreign lenders to extend additional credits to Latin American countries. As external grants and loans fell from 4.1 percent of GDP in 1988 to 1.4 percent in 1989 (according to IMF estimates) reliance on external payments arrears rose to 3.1 percent of GDP, attaining an unprecedented high level of payments arrears of US$ 590.3 millions.

Domestic financing rose to an estimated 8.6 percent of GDP in 1989 (the difference between the total deficit of 13.1 and the foreign financing), thereby increasing pressure for greater money emission and negatively affecting the long period of stability that Honduras had been able to sustain by relying on foreign assistance and indebtedness. It should be noted that the fiscal deficit numbers in Table 3, which are IMF estimates, differ substantially from those in Table 1. However, the latter include the increases in other net assets of the BCH (and the resulting expansion of domestic credit) which is in fact a proxy for the para-fiscal deficit.

Table 4 describes the recent behavior of public debt, and it can be seen that the level of overall indebtedness has apparently reached a limit of about 100 percent of GDP. Domestic indebtedness has continued to increase, reaching about 32 percent of GDP by 1989, as it has substituted for foreign indebtedness as Honduras became increasingly unable to obtain financial support from abroad to sustain its level of public expenditures. In addition, the absolute changes in the public debt may be an indication of a higher fiscal deficit than officially reported, thereby confirming the existence of a hidden deficit that has created pressure for higher indebtedness and increased monetization.

The external debt structure -- mostly multilateral (43 percent) and bilateral (38 percent) -- leaves little potential for reduction through market instruments, as commercial bank debt is only 7 percent. The main creditors are Paris Club countries (USA, Japan and France) and regional countries (Venezuela and Mexico) which together account for 38 percent of total debt. Honduras will thus have to renegotiate and reschedule its debt with the Paris Club and the multilateral agencies.

The debt problem seriously affects the performance of the Honduran financial sector, especially in that debt service -- which reached 31 percent of GDP in 1989 -- will increase the level of interest payments and thus require higher taxes which will, in turn, reduce disposable income and domestic saving. The balance of payment difficulties encountered in serving the foreign debt will require further external assistance and adjustment in the exchange rate and interest rates to close the current account gap and to promote private capital inflows.

Table 3. IMF: SELECTED ECONOMIC AND FINANCIAL INDICATORS

	1986	1987	1988	Est. 1989	Proj. 1990
(Annual percent changes, unless otherwise specified)					
National income and prices					
GDP at constant prices	3.1	4.6	5.0	2.1	—
GDP deflator	5.8	1.4	4.7	7.1	25.0
Consumer prices (annual average)	4.4	2.5	4.5	9.8	25.0
(end of year)	3.2	2.9	6.7	11.4	38.3
External sector (on the basis of U.S. dollars)					
Exports, f.o.b.	10.7	-4.5	7.5	8.2	2.8
Imports, c.i.f.	-0.6	4.0	5.4	8.9	0.3
Non-oil imports, c.i.f.	6.6	0.2	6.7	6.3	1.4
Export volume	-0.3	12.0	-2.3	4.5	6.3
Import volume	3.4	—	1.5	4.7	-3.6
Terms of trade (deterioration -)	15.5	-18.0	6.0	-0.7	-7.0
Effective exchange rate (depreciation -)					
Nominal	-8.0	3.1	15.0	18.0	...
Real	-4.0	-7.1	3.8	9.9	...
Central Government					
Revenue	7.5	12.3	8.4	5.3	61.3
Expenditure and net lending	2.2	12.0	8.4	12.0	30.2
Money and credit					
Domestic credit 1/	11.9	21.4	12.5	15.4	22.1
Public sector	3.1	5.6	6.9	7.0	--
Private sector	8.5	15.5	5.6	8.4	22.1
Money and quasi-money (M2) 2/	10.9	17.3	11.5	12.1	23.0
Velocity 3/	2.1	2.3	2.4	2.4	2.4
Interest rate (annual rate, time deposits)	9.5	6.6	8.7	8.7	...
(In percent of GDP)					
Central Government deficit (-)	-7.4	-7.8	-7.7	-6.8	-5.2
Rest public sector deficit (-)	1.6	1.1	0.2	-0.4	1.4
Central Bank losses (-)	--	--	--	--	-3.1
Combined public sector deficit (-)	-5.8	-6.7	-7.5	-9.2	-6.9
Domestic financing	1.3	2.3	2.2	4.7	0.5
Foreign financing 4/	4.5	4.4	5.3	4.5	6.4
Public sector savings	1.4	0.7	0.6	-1.5	0.4
Gross domestic investment	14.2	14.7	13.1	12.9	13.0
Gross national savings	7.7	6.6	5.6	5.6	6.7
External current account deficit (before official transfers) (-)	-6.5	-8.0	-7.5	-7.3	-6.3
External debt 5/					
Inclusive of use of Fund credit	72.5	71.6	69.0	68.1	65.7
(In percent of exports of goods and services)					
Debt service 6/	29.3	32.3	32.1	30.0	27.1
Interest obligations	15.6	16.9	16.5	15.2	15.0
(In millions of U.S. dollars)					
Overall balance of payments	-11.5	-61.2	-106.6	-248.1	67.1
Gross official reserves (months of imports)	1.0	1.2	0.9	0.3	0.9
Stock of payments arrears 7/	105.0	292.4	379.3	390.3	--

Sources: Central Bank of Honduras; and Fund staff estimates.

1/ In relation to the stock of liabilities to the private sector at the beginning of the period.

2/ Excludes deposits for import arrears.

3/ Ratio of nominal GDP to average stock of M2.

4/ Includes foreign grants and change in external arrears.

5/ Public and publicly guaranteed external debt with original maturity of one year. Includes interest in arrears.

6/ Service on public and officially guaranteed external debt with original maturity of one year and over plus interest on short-term debt; includes IMF.

7/ Includes IMF.

Table 4. PUBLIC DEBT
(in millions of Lps and as a percent of GDP)

	1985	1986	1987	1988	1989
Domestic					
Millions of Lps	1868.2	2125.9	2397.8	2874.5	3124.6
Percent of GDP	26.7	28.0	29.5	32.2	31.9
Abs. Change	165.4	257.7	271.9	476.7	250.1
Ch. as a percent of GDP	2.4	3.4	3.4	5.3	2.6
External					
Millions of Lps	4958.0	5507.1	5819.0	6166.5	6661.5
Percent of GDP	70.8	72.5	71.6	69.0	68.1
Abs Change	820.0	549.1	311.9	652.0	495.0
Ch. as a percent of GDP	11.7	7.2	3.8	7.3	5.1
Total					
Millions of Lps	6826.2	7633.0	8216.8	9041.0	9786.1
Percent of GDP	97.4	100.5	101.1	101.2	100.4
Abs. Change	986.4	806.8	583.8	1128.7	745.1
Ch. as a percent of GDP	14.1	10.6	7.2	12.6	7.6

Source: Calculated from BCH and IMF estimates.

C. Monetary Financing of the Fiscal Deficit

The dramatic growth in the Honduran fiscal deficit systematically increased public sector demand for credit from the domestic banking system. As Table 5 shows, net credit to public sector from the banking system grew from 6.3 percent of GDP in 1980 to 15.6 percent in 1989. Credit to the public sector was basically channelled through the purchase of government bonds by the BCH and by commercial banks, while development banks and saving and loans associations have continued to be net debtors of the government.

Table 6 shows the flow of funds for BCH, from which three important aspects can be highlighted. First, net credit to the public sector has a U-shaped pattern in accordance with the behavior of the fiscal deficit which declined until 1986 and began to grow thereafter (see Table 2). Second, credit to public sector was financed at the beginning of the 1980s by losing international reserves, while by the end of the 1980s -- when reserves had run out and foreign finance was curtailed -- inflationary finance was the only remaining mechanism. Third, a trade-off between public and private sector credit is apparent, as credit to the private sector grew rapidly during the period when the fiscal deficit was declining, while by the end of the 1980s it was declining as the public sector increased its demand for credit sharply.

D. Measures to Deal with the Fiscal Deficit

In early March 1990, the new Government introduced a comprehensive program of economic reforms designed to correct the severe distortions affecting the Honduran economy. Especially noteworthy are the path-breaking measures aimed at: (1) a sharp reduction in the fiscal deficit; (2) improvements in customs duties to lower effective protection and to enhance revenue collections; (3) increases in the prices of good and services sold by public companies; and (4) an acceleration of the privatization program.

To this point under the new program, fiscal performance has been tightened mainly through expenditure restraint and reduced credit from the banking system to public sector. On the other hand, government revenues are lagging behind IMF projections. Moreover, there is reason to believe that government expenditures may rise again in the near future as the fiscal improvements accomplished so far cannot be seen as permanent. The current reductions in public sector investment and public sector real wages are unlikely to be sustained in the long run. In addition, the proposed 1991 budget apparently seeks to underestimate the fiscal deficit by registering imports, debt service and capital flows at

the highly overvalued official exchange rate.

With the recent liberalization of the foreign exchange market, exchange rate losses associated with external debt service and the difference between the official rate (2 Lempiras per dollar) and interbank rate (5.5 Lempiras per dollar) are being assumed de facto by the BCH. Exchange rate losses are being incurred mainly as a result of the imbalance between revenues from BCH rediscounts and the servicing of the foreign credit lines used to fund these rediscounts, as well as foreign loans channeled to public sector investments. Since international reserves are exhausted, the increase in exchange rate losses will put strong upward pressure on the monetary base. There is also an implication of exchange rate losses beyond their impact on the money supply as expectations may be raised that devaluation losses will be covered in the future. If private debtors believe that they will not be forced to carry exchange rate risk, foreign debt is likely to increase beyond a social optimum, including the back to back use of offshore funds. Under the new policy of a free foreign exchange rate, there is no justification for the BCH to continue to assume the losses to other parties resulting from their foreign exchange transactions.

Last, but not least, the BCH has been involved in additional credit expansion through increases in its other net assets that are associated with several kinds of expenses not included in the official budget. As an example of the magnitude of these unrecorded expenses, the increase in non-classified other net assets for the period January through July 1990 was 430 millions Lempiras greater than the programed increase of 376 million Lempiras for the entire 1990 calendar year. The importance of this hidden fiscal deficit was also indicated above in Table 2.

The lack of transparency in the fiscal accounts associated with BCH exchange rate losses and unrecorded expenses through non-classified other net assets is a false point of departure for the stabilization program that the government is trying to implement because it does not allow the BCH to specify and hence attempt to control all the different forces that can create pressure for increased monetary emission.

Table 5. BANKING SYSTEM: SOURCES AND USES OF FUNDS
(percent of GDP)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Uses										
Net Int'l Reserves	2.3	- 0.1	- 4.3	- 4.2	- 5.6	- 5.1	- 4.6	- 3.3	- 2.5	- 2.4
Net Credit Pub. Sector	6.3	7.5	10.0	13.5	14.7	13.2	12.2	13.9	14.6	15.6
Private Sector	28.3	28.9	31.2	33.3	35.4	34.8	34.8	37.3	35.8	35.4
Other Assets	7.9	10.2	14.5	13.9	15.8	15.4	15.3	13.7	14.0	14.7
Total Sources	44.8	46.5	51.2	56.5	60.3	58.3	58.4	61.6	61.7	63.2
Currency	5.3	5.4	5.4	6.0	6.1	5.8	5.5	5.9	6.3	6.8
Monetary Deposits	6.6	6.1	6.9	7.5	7.4	6.3	6.6	7.3	7.3	8.1
Quasi-Money	15.0	15.8	18.4	20.0	22.3	20.7	21.1	23.3	24.0	23.7
External Indebtness	9.4	10.3	9.2	11.2	11.9	12.7	12.9	13.7	12.7	12.3
Net Worth	8.5	8.9	11.3	11.8	12.6	12.8	12.3	11.4	11.4	12.3

Source: BCH Panorama Financiero.

TABLE 6. CENTRAL BANK: FLOW OF FUNDS
(Changes in millions of Lempiras)

	Int'l Reserves	Net Credit to Public Sector (1)	Net Credit to Banking and Private Sector	Total	External Indebtedness	Monetary Base	Net Worth
1981	- 217.9	226.6	66.5	75.2	19.7	35.5	20.0
1982	- 228.8	180.4	51.4	3.0	- 42.7	25.4	20.3
1983	+ 8.6	96.5	126.2	231.3	155.7	36.1	39.5
1984	- 79.8	97.2	137.4	154.8	68.2	52.2	34.4
1985	- 1.3	81.0	156.7	236.4	145.1	26.3	65.0
1986	+ 6.4	- 19.7	133.8	120.5	96.2	13.0	11.3
1987	+ 138.0	48.7	17.7	204.4	145.1	80.6	- 21.3
1988	+ 24.6	228.0	6.5	259.1	40.6	152.1	66.4
1989	- 50.1	317.1	107.7	374.7	92.5	206.2	76.0

Source: BCH Balance del Banco Central.

(1) Incluides Non-Clasified assets.

III. CENTRAL BANK POLICIES

A. Introduction

Monetary policy in Honduras has been greatly influenced by the financial needs of the government, BCH rediscount policies and the foreign exchange regime, as well as changes in external prices of coffee and bananas. In addition to credit coming directly from the BCH to the government, non-remunerated reserve requirements and compulsory portfolio allocations are mechanisms designed primarily to secure subsidized financing for the government. However, these sources of finance have not been sufficient, and the government has also had to increase its external indebtedness and to resort to compulsory financing schemes such as accumulating external arrears. Recent monetary expansion has, moreover, had significant negative effects on the balance of payments and on expectations of devaluation and inflation which reduce the competitiveness of domestic financial assets. Accordingly, improvements in fiscal and monetary management are prerequisites for macroeconomic stability and the development of financial markets that could stimulate saving and investment.

B. Money Supply Behavior: The Monetary Base and Money Multipliers

1. The Money Supply

Compared to most other Latin American countries, monetary expansion in Honduras has been modest. However, as Chart 1 clearly shows, the money supply, measured by either M1 or M2, although relatively stable until 1988 -- increasing at about 10 percent per year -- became more expansionary in 1989, an election year, and thereafter has reached unprecedented annual rates of expansion of 30 percent and 20 percent for M1 and M2 respectively.

The monetary process in Honduras can best be understood by examining Charts 2, 3, 4 and 5. Several facts become clear when those graphs are inspected:

M1 grew faster and fluctuated more than M2, making the latter the more predictable monetary aggregate;

changes in the money supply have been largely dominated by changes in the monetary base, with changes in the money multipliers exerting only a slight influence;

changes in the monetary base have been influenced primarily by

monetary emission, as bank reserves have remained stable;

a strong seasonal pattern dominates the money supply, with the fourth quarter being the most expansionary, such that it is not unusual to observe a decline in the money supply during the rest of the year -- which is what has happened during past few months of the current year.

2. The Money Multipliers

Each Lempira of increase in the monetary base can give rise to a multiple increase in the money supply. During some periods -- mainly in the fourth quarter -- the money multipliers have counteracted the effects of the expansion in the monetary base, thereby making the money supply less variable.

In Honduras, the money multipliers are quite high compared to most other countries. The M1 multiplier has been fairly stable, averaging 1.8, while the M2 multiplier has averaged 4.9 during the last five years, with a slight tendency to decline.

As long as non-remunerated reserve requirements are identical for all kind of deposits, the behavior of the money multipliers depends on liquidity preference, that is, on the ratio of currency to total deposits (time and savings) and the reserve ratio (bank reserves relative to total deposits). The latter ratio is underestimated in Honduras because non-remunerated required reserves are only about 5 percent of deposits, while the main part of required reserves are held as government bonds yielding 4 percent per year that are not included in the money multiplier. Although this lower measure of the monetary base overestimates the apparent expansionary capacity of the banking system, the BCH does not include these government bonds in its definition of the monetary base because they are not BCH liabilities. By correcting the monetary base to includes these forced investments in government bonds, the adjusted M2 money multiplier becomes approximately 2.

3. Liquidity Preference

Theory indicates that the M2 multiplier will grow as liquidity preference declines, and the opposite will happen when reserve requirements increase. As long as reserve requirements (which are discussed below) remain stable and are not differentiated among different kinds of deposits, the explanation for a declining M2 money multiplier is related to liquidity preference, that is, the ratio of currency outside banks to deposits.

An econometric model was developed to explain the behavior of the liquidity preference coefficient, and the formulation of this model and the results of its estimation are shown in Annex 1, in Table A-1 in particular. According to these results, the level of transactions in the economy (proxied by GDP), inflationary expectations, nominal interest rates on deposits, and seasonal factors explain 90 percent of the total variation in liquidity preference.

Currency outside banks is low compared to most other Latin American countries, probably as a result of the long tradition of stability in Honduras, but also reflecting confidence in the banking system. Currency outside banks has averaged only 18.7 percent with respect to total deposits and only 15.8 percent with respect to total liquidity (M2), and this has allowed the banking system to expand the money supply steadily with only a few exceptions -- such as 1988 when the monetary base was restrained and the expansion of both M1 and M2 dropped significantly. Liquidity preference is also highly responsive to seasonal changes, and, according to this, reductions of 2.5, 4.3 and 3.5 percentage points from the average can be expected during the first, second and third quarters of the year.

Chart 7 shows that liquidity preference has been increasing steadily during the past two years. Given that the level of transactions has not been growing very fast, this increase in liquidity preference can be explained by two facts:

inflationary expectations -- which have presumably been growing adaptively with inflation (see Chart 1); and

nominal interest rates on deposits -- that represent the opportunity cost of holding cash, so that higher interest rates discourage people from holding cash, while lower interest rates stimulate people to hold more cash -- have remained low in a more inflationary environment, thereby causing liquidity preference to increase.

The implications of these results for strengthening the banking system and for not allowing the M2 money multiplier to continue to fall are straightforward. Reserve requirements should be reduced (including the holding of low interest rate government bonds), while higher interest rates should be allowed that would encourage people to bring currency into the banks. However, reserve requirements permit the BCH to capture part of bank deposits at low cost as banks hold non-remunerated reserves or buy low interest rate government bonds, so that the BCH can, in turn, acquire foreign exchange reserves to pay external obligations or allocate credit to the banking system. If reserve requirements are lowered then the foreign debt service of the public sector, the public sector's continuing deficits and the BCH's rediscount operations have to be financed either with bond sales at much

higher interest rates or by printing money -- and printing money would, of course, exacerbate inflation and balance of payments pressures. Therefore, a prerequisite to undertaking these measures is to bring the public sector fiscal deficit under control and to reduce BCH rediscounts in order not to accelerate inflation or to cause the balance of payments to deteriorate even further.

During a transition period to a more equilibrated fiscal situation it is recommended:

(1) to allow for higher interest rates to reduce the liquidity preference of the public;

(2) to look for genuine financial support for the public sector in order to reduce pressures on the BCH; and

(3) to reduce rediscount credit to the banking system.

These issues will be discussed further below.

Chart 1. MONETARY EXPANSION AND INFLATION

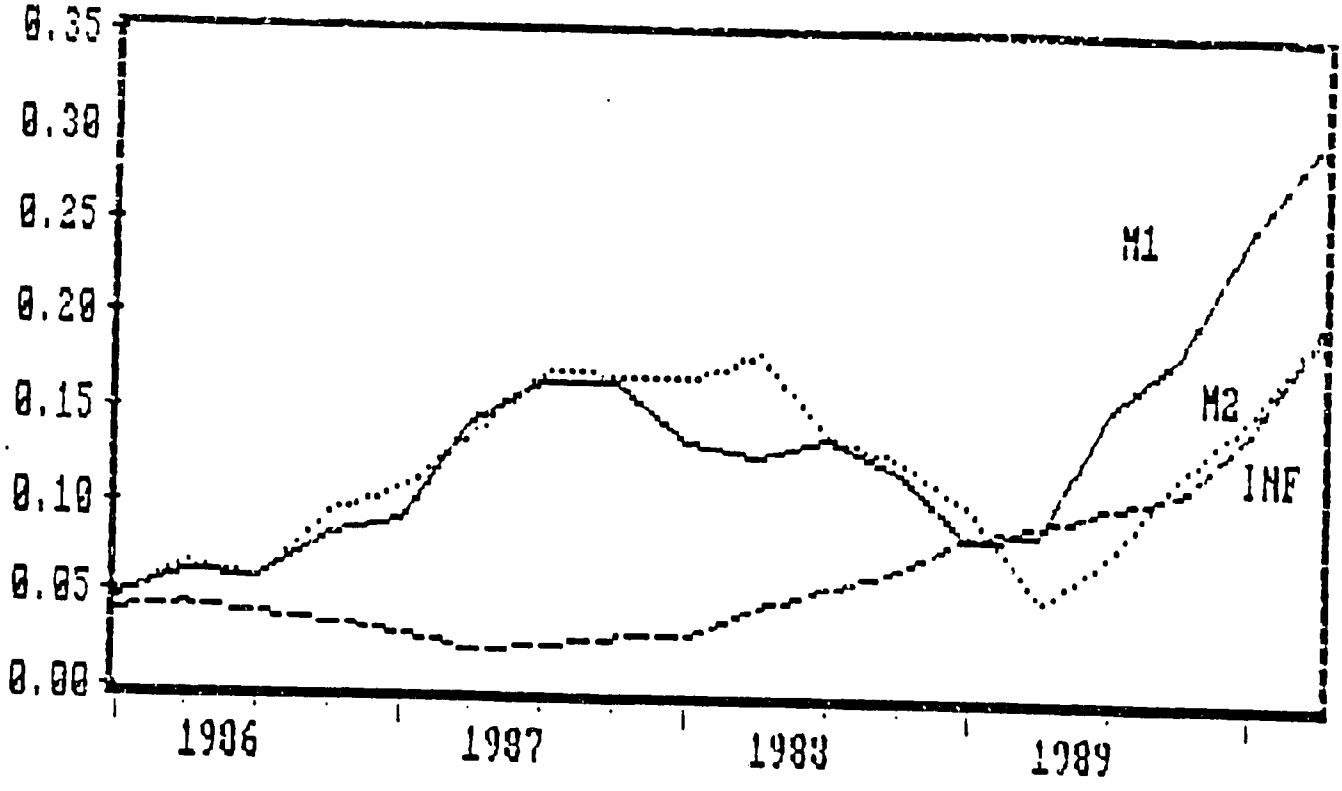


Chart 2. CHANGES IN THE MONETARY BASE AND THE MONEY SUPPLY

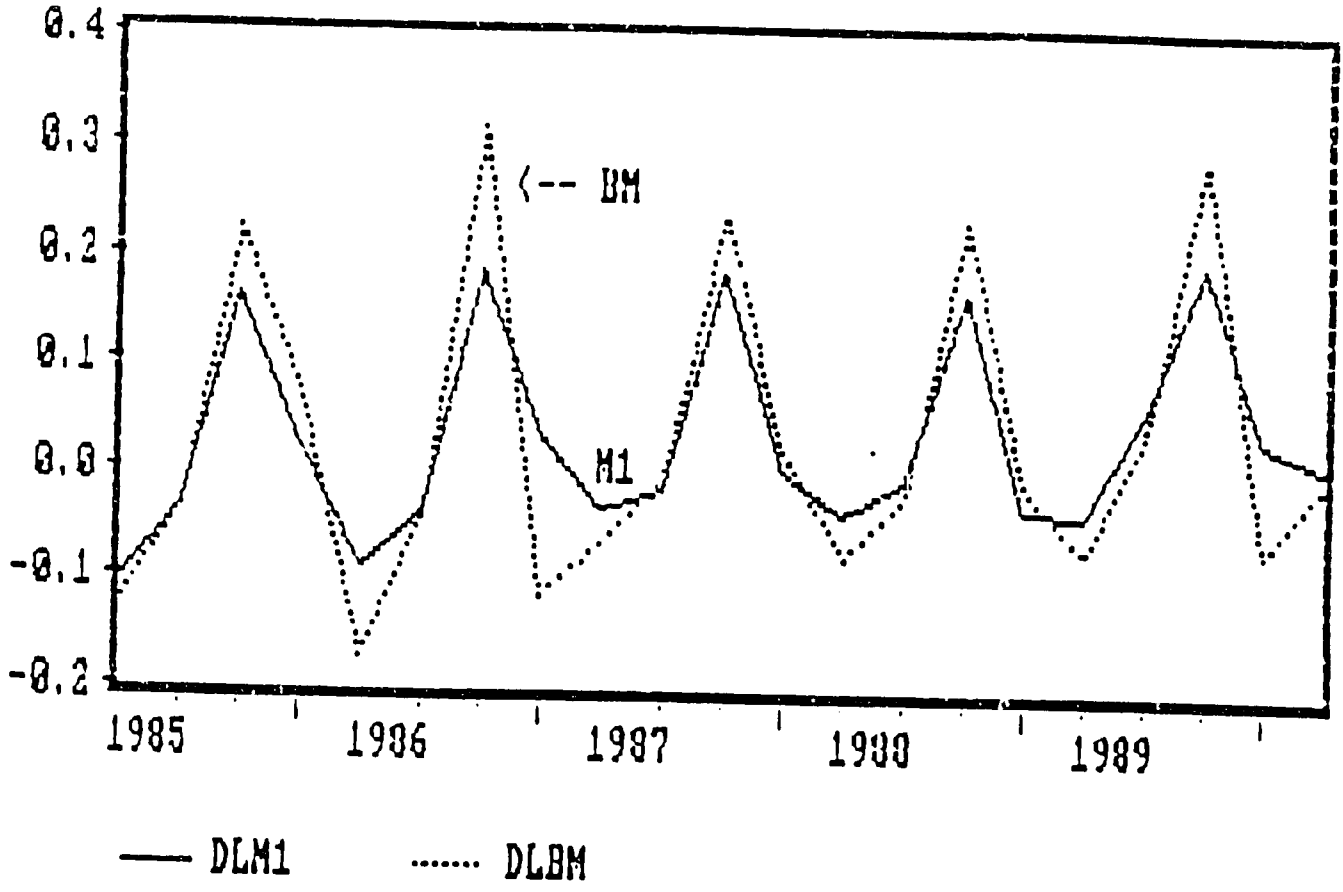


Chart 3. MONETARY EXPANSION: M1 AND M2

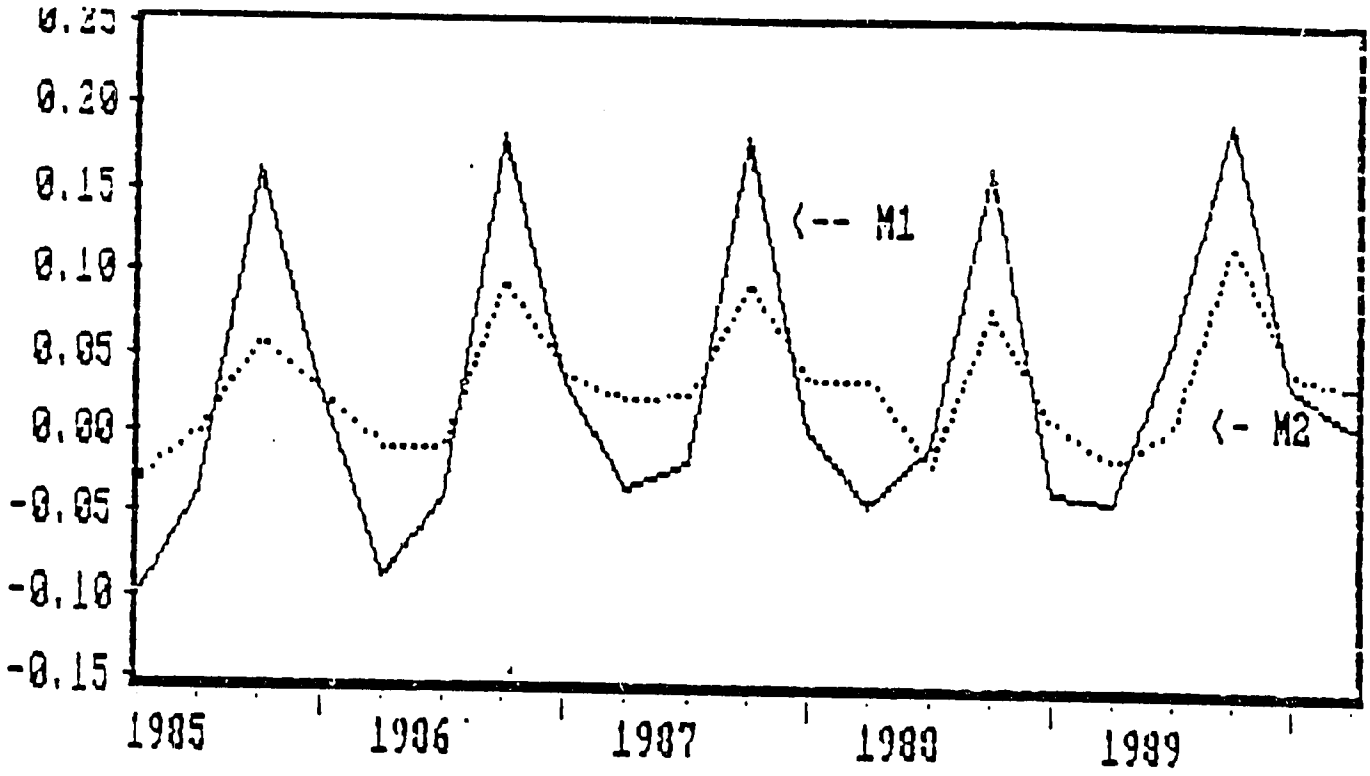


Chart 4. THE MONETARY BASE AND ITS COMPONENTS

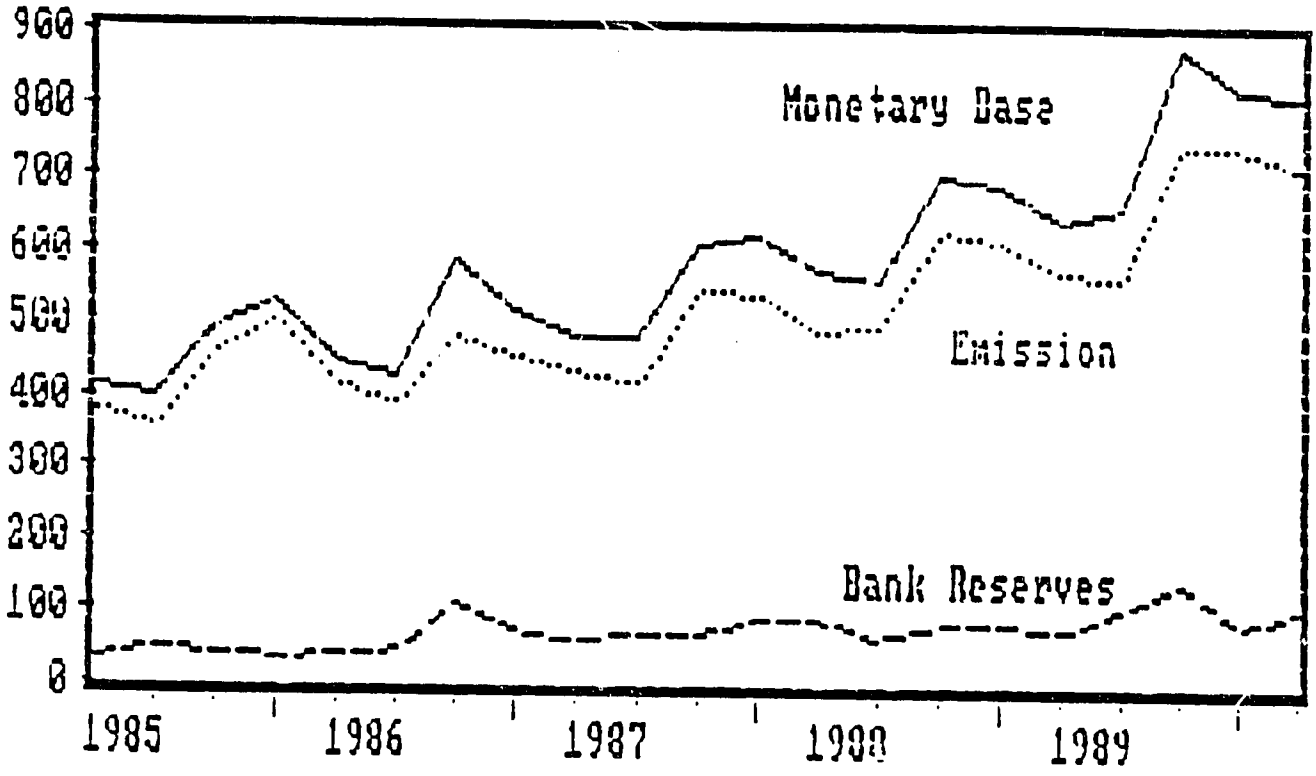


Chart 5. THE MONEY MULTIPLIERS

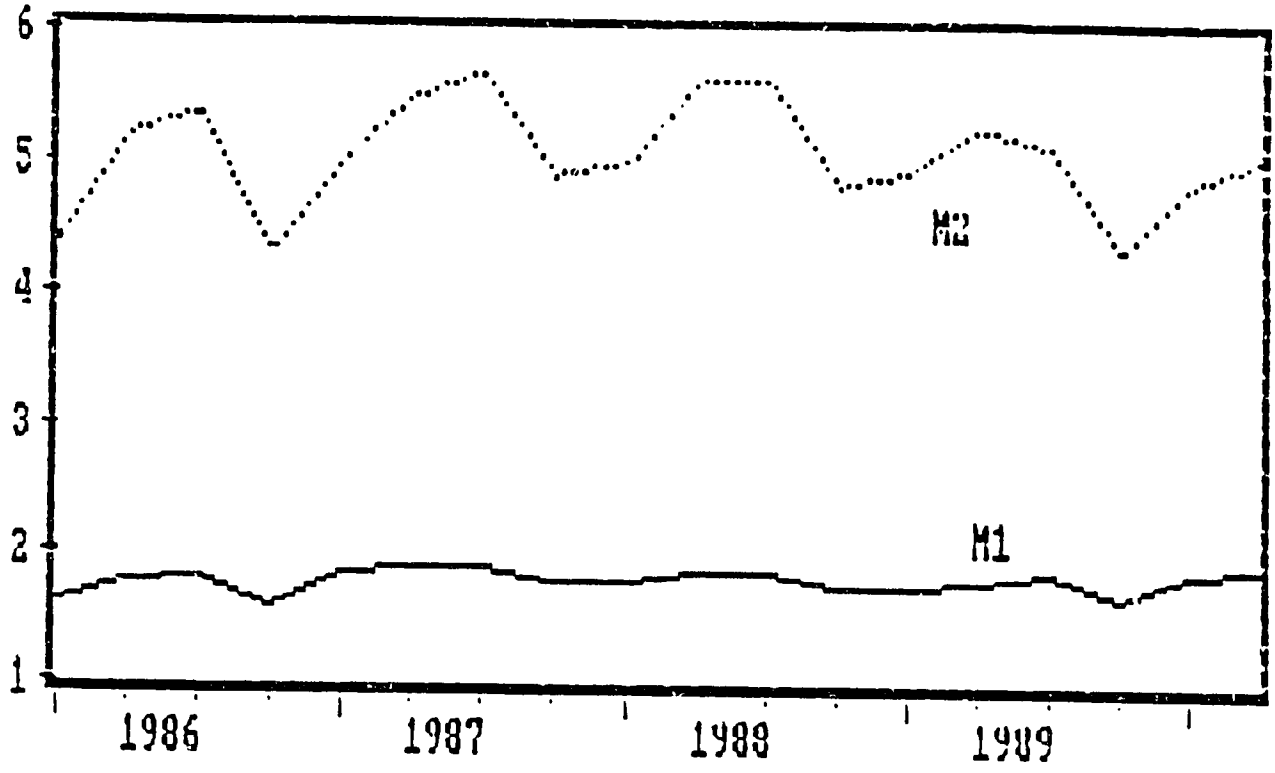


Chart 6. COMPONENTS OF THE MONEY MULTIPLIERS

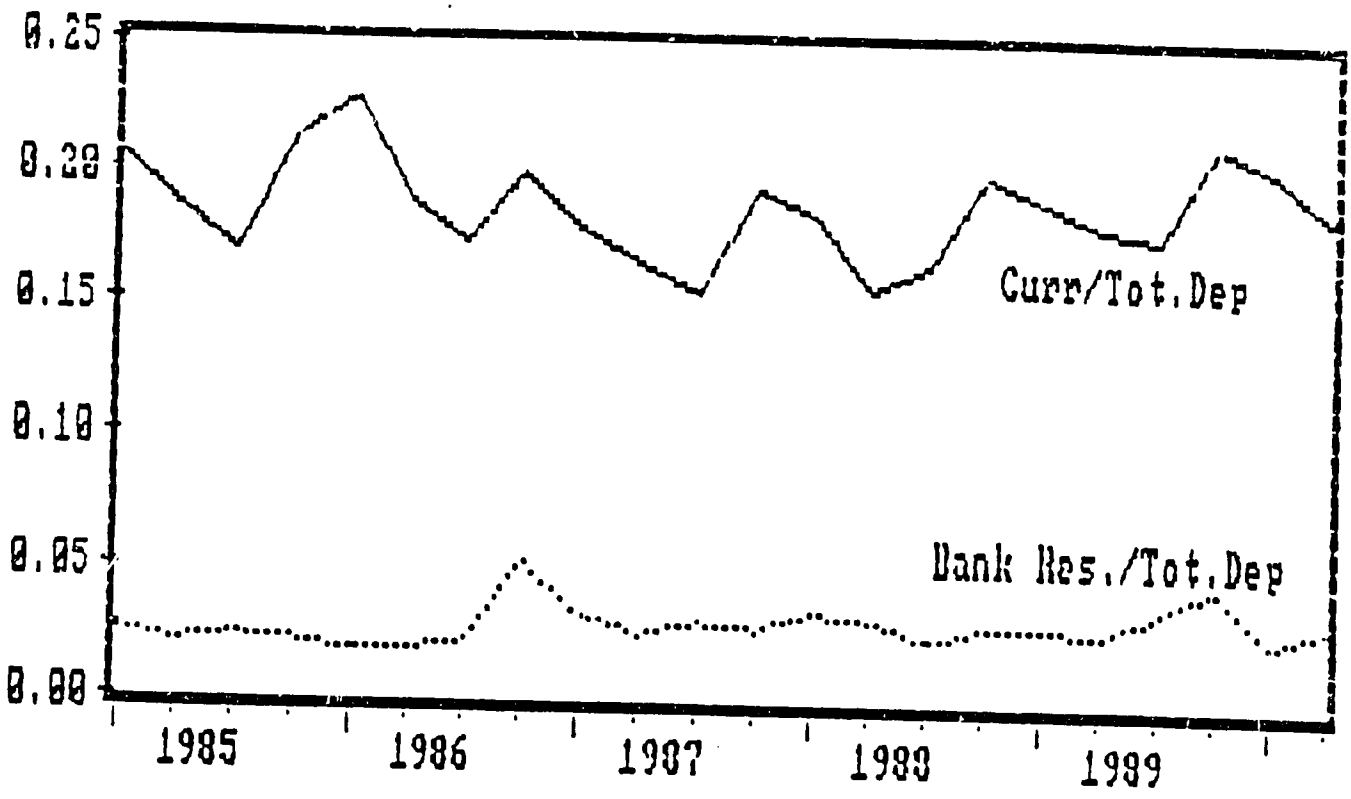
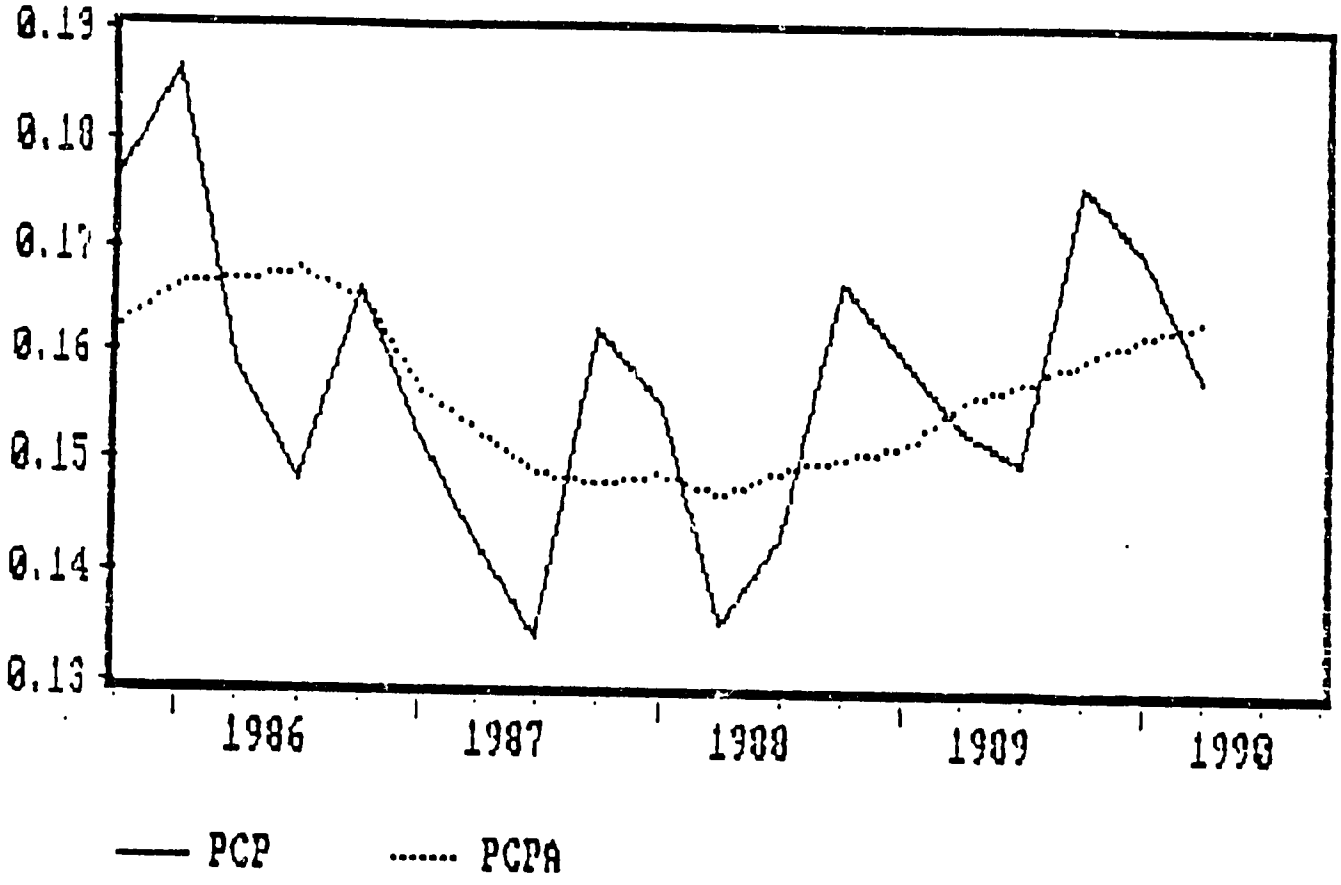


Chart 7. LIQUIDITY PREFERENCE AND ITS TREND



C. The Relationship among the Monetary Base, Domestic Credit and International Reserves

The Honduran monetary base has grown steadily in real terms during the past five years. (See Chart 8.) This is a positive result in that it reflects a greater demand for financial assets on the part of the public. However, it also has negative implications in that it reflects a greater participation of the BCH in financing the economy (mainly through increasing public sector foreign indebtedness) compared to the case in which the banking system increases the supply of funds for lending through increased deposit mobilization. In any event, it is much better to have an increasing real monetary base than a decreasing one -- because the latter case is likely to reflect a reflow of foreign indebtedness to international financial markets in the form of off-shore Honduran deposits, as has happened in many other Latin American countries.

Increases in the monetary base, along with financial support coming from external funds, allow the BCH to increase international reserves and domestic credit to the formal financial system and to the public sector. However, as can be seen from Table 6, the BCH lost international reserves systematically from 1981 through 1985 (with the exception of 1983) in spite of the increase in foreign indebtedness, thus implying a major increase in net foreign indebtedness (gross foreign indebtedness minus international reserves) to support public sector financing requirements and BCH rediscounts for bank lending to the private sector.

Chart 9 depicts the behavior in real terms of net domestic credit and international reserves of the BCH. Beginning in 1986, when the fiscal deficit reached its minimum, international reserves began to grow again as a result of the sharp reduction in net domestic credit along with the increase in foreign indebtedness. During 1989, the large increase in net domestic credit associated with the increase in the fiscal deficit and rediscount operations that occurred just before the elections -- this time not accompanied by new foreign funds -- leaked out again in the loss of international reserves. After the new government took office and began to implement measures involving fiscal adjustment and devaluation, net domestic credit was significantly reduced and, correspondingly, international reserves recovered substantially.

Chart 8. THE MONETARY BASE IN REAL TERMS

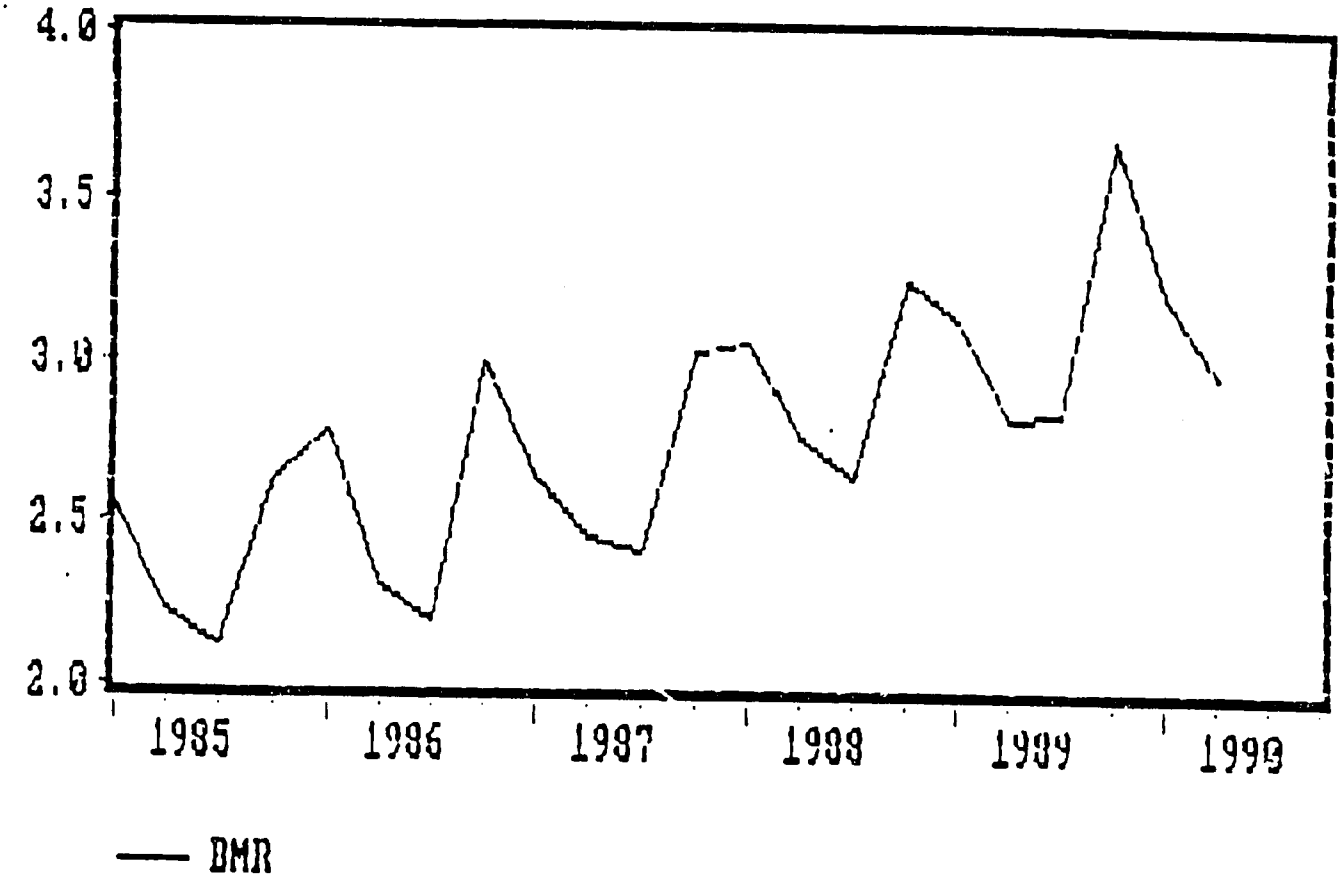
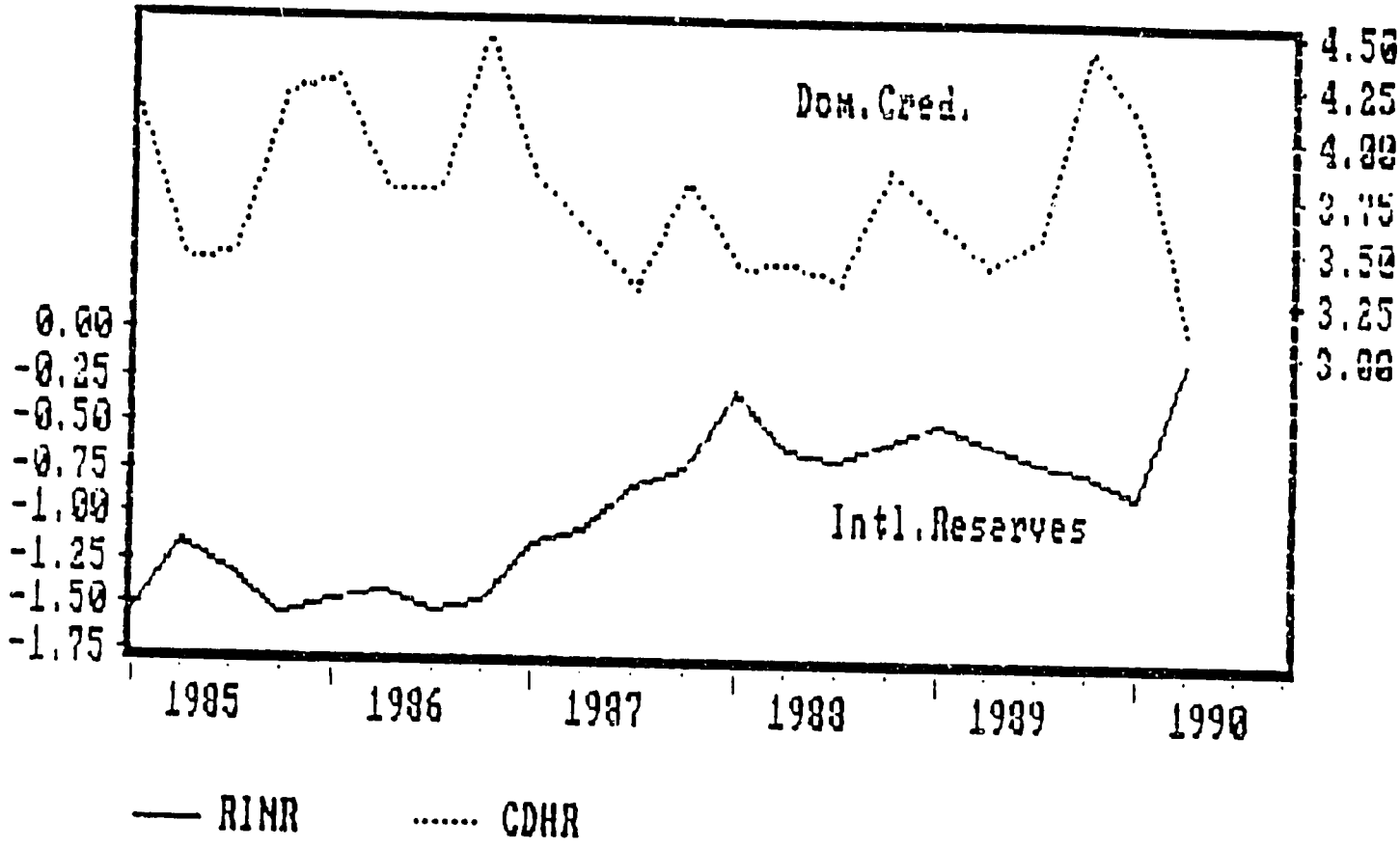


Chart 9. CENTRAL BANK DOMESTIC CREDIT AND INTERNATIONAL RESERVES IN REAL TERMS



D. Monetary and Exchange Rate Policies, Inflation and the Balance of Payments

For analytical purposes -- in contrast simply to accounting for changes in the monetary base -- it is useful to look at international reserves as a residual variable. In an open economy with a fixed exchange rate, which has traditionally described the case of Honduras, changes in international reserves are determined by the difference between the expansion of domestic credit (a policy variable) and the change in demand for the monetary base. According to this approach, the money supply is an endogenous variable, and -- as long as the BCH has enough international reserves -- any disequilibrium in the money market is resolved by changes in the international reserves held by the BCH (passive monetary policy).

Demand for the monetary base (given the money multiplier) is, in turn, determined by the demand for financial assets. As shown in Annex 1 which examines the determinants of deposit mobilization, the demand for financial assets is determined by wealth or permanent income, inflationary expectations and the level and structure of interest rates. Moreover, as developed in detail in the same annex, the change in international reserves is derived as a residual after the demand for the monetary base is determined by changes in domestic credit, output, inflation and the money multiplier. According to this approach, increases in domestic credit raise the demand for goods -- including both foreign and domestic goods -- and the demand for foreign assets as well. In order to cover the increased demand for foreign assets and goods, international reserves must be sold by the BCH to maintain the prevailing exchange rate, and as long as the domestic supply of goods is not perfectly elastic domestic prices will go up.

The estimates in Annex 1 indicate that monetary imbalances in Honduras have mainly been corrected through changes in international reserves and prices. This is explained by the fact that interest rates and exchange rates have been fixed by the government. Between 1985 and 1990, 96 percent of the changes in net domestic credit were offset by changes either in the level of international reserves or in the level of prices. (There was, however, insufficient data to split the effects of credit expansion precisely between prices and international reserves, which would be of interest but would require a more sophisticated model and more periods to obtain reliable estimates.) The excess supply of domestic credit that did not leak out through international reserve losses was corrected through adjustments in the prices of domestic goods, thereby effectively appreciating the Lempira even though the nominal exchange rate was fixed. Table 9 shows the behavior of the real exchange rate (the relative price of tradeable good to

nontradeable goods) and reveals a substantial appreciation relative to 1980 through 1987. Since the nominal exchange rate did not change, both the trade and the capital account deteriorated and the country lost international reserves.

Previous studies of Honduras have shown that domestic inflation has historically been explained basically by foreign inflation -- until the parallel exchange rate began to differ systematically from the fixed rate. Chart 1 shows that inflation accelerated during 1988 and 1989 after money supply growth began to accelerate and a quasi-official parallel exchange market -- established at the end of 1987 through the CETRA certificates for exporters -- began to grow as well, reflecting the pressure on the balance of payments. After the CETRA market was implemented, the real exchange rate began to depreciate steadily. (See Table 9, where an index below unity implies a real depreciation of the Lempira.) More recently, however, a steep devaluation, followed by the implementation of a free exchange market, was needed to cope with the balance of payments crisis generated mainly by fiscal and monetary imbalances, and this has caused a further depreciation of the real exchange rate.

Table 9. REAL EXCHANGE RATE INDEX
(1980=100)

Year	Central America	USA	General
Jan.			
1982	144.1	100.2	113.7
1983	129.6	104.1	120.6
1984	132.6	107.5	131.4
1985	138.6	107.1	138.0
1986	151.0	101.7	118.0
1987	153.1	106.8	110.3
1988	142.8	99.0	95.9
1989	132.2	87.3	88.5
1990	133.0	81.3	85.2
March			
1990	103.1	61.4	65.5

Source: Consejo Monetario Centroamericano, "Indices de Tipo de Efectivo en los paises Centro Americanos: Metodologia y Resultados.

The conditions described above are likely to change under the new system of flexible exchange rates and the recent partial removal of interest rate ceilings. An excess supply of money will immediately be reflected in nominal exchange rate depreciation rather than in reserve losses. Accordingly, monetary policy has become an instrument of macroeconomic management (active monetary policy). In addition, the exchange rate and domestic prices will be affected almost simultaneously by increases in the money supply, thereby reducing the sharp fluctuations in the real exchange rate that occurred under the previous regime during times of active domestic credit expansion.

This does not mean, however, that exchange and interest rate flexibility can 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 even in the short run now that it has given up control of the exchange rate. In other words, the link between money and prices -- between monetary growth and inflation -- will be tighter in the short run than under the previous regime, as Chart 1 suggests during 1988 and 1989 when the parallel foreign exchange market became important. Accordingly, under the new exchange rate system, the ability to maintain control over monetary policy, and consequently the exchange rate, will allow for a more stable rate of inflation.

Summarizing these findings it can be said that, as long as the fiscal deficit is under control and increases in credit to the banking system remain low, the BCH need not lose significant amounts of international reserves. However, when international financing is stopped and the fiscal deficit and credit to the banking system increase substantially, the resulting expansion of domestic credit produces a disastrous effect on international reserves, the exchange rate and inflation. Since the public does not wish to hold the corresponding increases in the money supply, it attempts to turn Lempiras into foreign exchange through capital flight. As long as the BCH wishes to maintain the exchange rate, it is forced to sell its international reserves until they run out. When BCH international reserves are exhausted, and the monetary base increases uncontrollably to finance the fiscal deficit and to allocate more credit to the banking system during an election year, the exchange rate will ultimately collapse and inflation will soar.

The present more stable monetary policy, which is based on tighter control of the fiscal deficit and BCH rediscounts, has produced a sharp contraction in net domestic credit and a corresponding recovery of international reserves. As long as the foreign exchange market has not been fully unified, there will be pressure for the relatively free interbank market to depreciate the Lempira continuously as exporters retain foreign exchange (e.g.,

through underinvoicing of exports and overinvoicing of imports) and cause the balance of payments to deteriorate. Recently, the government decided to adjust the exchange rate for commercial transactions from 4.3 to 5.5 Lempiras per dollar. Although this is a change in the right direction, it may not be sufficient, and total unification of the foreign exchange market would be a better remedy -- under tight monetary and fiscal policy -- to allow a more stable exchange rate and lower inflation.

E. Monetary Policy: Limitations and Instruments

With the adoption of a more flexible exchange rate system by the new government, monetary policy became an indispensable tool for adequate macroeconomic performance, so that the monetary authorities need to be empowered with sufficient autonomy and monetary instruments to manage monetary aggregates effectively. Currently there are three types of limitations on the ability of the BCH to carry on an active monetary policy in Honduras:

(1) lack of political independence of the monetary authorities from the government and the private sector;

(2) inadequacy of available instruments; and

(3) inadequate organizational structure (which will be discussed in more detail in a later section of this report).

Since the President and Vice-president of the BCH are nominated by the President of Honduras, BCH policies have to be in accordance with the government's wishes and guidelines. In particular, the BCH cannot reject a demand from the government for excess credit. An example of this has already been discussed -- monetary expansion through non-classified other net assets on the BCH's balance sheet. At the same time, banks and other private sector interests also have their representatives on the BCH board. As long as decisions on credit, exchange rate and interest rate policies are determined and conducted by such a board, it will be extremely difficult to undertake the appropriate measures necessary to attain monetary stability in a timely fashion. It is clear that conflicts of interest may often exist between the private banks and the BCH in conducting appropriate policies with respect to decisions on exchange rates, interest rates, open market operations and rediscounts. Accordingly, the basic law governing the BCH should be modified, making it an independent institution like the Supreme Court, without the participation of private bank representatives on its board and without its President being removed with each change in government.

The BCH is responsible for defining the guidelines for

monetary policies and for their implementation through the most appropriate instruments. The basic instrument for control is the monetary program elaborated by the BCH which establishes the limits within which the BCH and the government can operate and the operation of the basic policy instruments to control the money supply. In the past, public and private sector financing has not been implemented through transparent mechanisms, but instead different kind of instruments have been used, often to offset the monetary effects of credit expansion by the government to finance the fiscal deficit. Some of these mechanisms, moreover, are related to the monetary instruments. At the present time, BCH control of the money supply is related to the following instruments:

(1) reserve requirements;

(2) buying and selling of international reserves;

(3) the supply of government bonds;

(4) rediscount operations for credit to the private sector; and

(5) until recently, limits on credit expansion and interest rates ceilings.

1. Reserve Requirements

Reserve requirements obligate commercial and development banks and saving and loan associations to maintain cash and deposits at the BCH and holdings of government bonds equal to a specified proportion of their deposit liabilities. Finance companies, on the other hand, are not obligated to maintain such reserves. Table 10 shows the situation of the banks in recent years with respect to their cash reserves at the BCH and their required holdings of government bonds. From this table it can be seen that required holdings of government bonds and cash deposits at the BCH were almost constant during the last five years and that, on average, the banking system held approximately 30 percent of its total deposits in these two forms of required reserves. Reserves in the form of cash and deposits at the BCH represented an average of 15 percent of total required reserves, while the main portion was forced investments in government bonds.

The required reserve ratio is 35 percent for every kind of deposit, with the following exceptions:

(1) deposits in foreign exchange are required to have 100 percent reserves in the form of deposits at the BCH, while for dollar denominated CDs the requirement is 20 percent;

(2) bonos de caja are required to hold only 10 percent reserves (and, although these grew rapidly during 1989, they represent just 2.6 percent of total deposits); and

(3) for saving and loan associations, required reserves are 15 percent of time and saving deposits.

Although reserve requirements may be too high, their present structure has an advantage for the control of monetary aggregates in that changes in the composition of deposits cannot cause significant changes in the money multiplier and does not affect the term structure of interest rates.

Table 10. RESERVE REQUIREMENTS AND INVESTMENTS IN GOVERNMENT BONDS
(percent of total deposits)

Year	Actual Reserves			Required Reserves	Excess Deficit(-)
	Cash	Bonds	Total		
1983	6.9	20.0	26.9	25.6	1.3
1984	5.4	23.5	28.9	30.1	-1.1
1985	2.9	25.4	28.3	29.5	-1.2
1986	4.0	29.4	33.4	29.5	3.9
1987	4.3	26.4	30.7	28.0	2.6
1988	4.0	25.9	29.9	30.7	-0.8
1989	5.8	26.6	32.4	30.6	1.8

Source: BCN Estado de Liquidez del Sistema Bancario Nacional y Obligaciones Depositarias Sujetas a Encaje.

Reserve requirements are an expedient way to sterilize monetary emission from different sources, but to the extent that the BCH does not pay interest on reserves, while forced investments in government bonds pay only 4 percent per year, they act as an implicit tax on the banking system that translates into higher spreads through lower deposit rates and higher interest rates for borrowers. Assuming that banks equalize their marginal cost of funds across sources (and also assuming that the banking system has no operating costs) the maximum deposit rate divided by the proportion of these deposits that are freely disposable reflects the marginal cost to banks of mobilizing funds. The lending rate necessary to cover the cost of keeping non-earning reserves (ignoring the negligible interest paid on government bonds held as reserves) was 12.6 percent per year (8.8 percent/0.7) at the end of 1984 and 11.1 percent per year (7.8 percent/0.7) in March 1990; that is, a spread of 3.3 percentage points can be attributed to non-remunerated required reserves. In 1989, the average spread -- calculated as the difference between the banking system's financial income and expenditures -- was 9.8 percentage points, so that 38.5 percent of this spread could be explained by the revenues lost from non-remunerated required reserves.

In addition to the impact of non-remunerated required reserves on spreads, the availability of loanable funds from a given volume of deposits is reduced pari passu with an increase in the amount of required reserves held by the banks. Although paying the market rate of interest on required reserves removes the implicit tax completely, even in that case reserve requirements still crowd out investment when required reserves are used for government consumption or transfer payments. Although required reserves may be allocated to the private sector in the case of BCH rediscounts, as long as such lending takes place on a subsidized basis it includes a transfer to the private sector, and the amount of the transfer should thus be included in the fiscal deficit just like any other kind of subsidy. Only the complete elimination of reserve requirements can assure the maximum availability of funds for private investment.

Reserve requirements have traditionally been used in Honduras as a system to force bank participation in financing the fiscal deficit and in providing subsidized credit to the private sector, thereby avoiding a direct and transparent use of the inflation tax. When the entire money supply is held in the form of bank deposits, the inflation tax is extracted entirely through reserve requirements. Consequently, the higher the public's liquidity preference, the more the inflation tax is collected directly from cash holdings and the lower is the inflation tax paid by depositors (assuming that the demand for loans is perfectly elastic).

As indicated in the earlier discussion of money supply behavior, when interest rates on deposits were not able to rise

along with inflation, economic agents in Honduras gradually reduced the amount of deposits held by shifting to more liquid assets. This was a tax avoidance reaction to high a reserve ratio and increased inflation and it induced:

(1) a major expansion of intermediation through non-regulated finance companies, as resources originally placed in the form of deposits at banks were diverted to such institutions; and

(2) a substantial change in the structure of deposits in favor of sight deposits during 1989. (See Chart 10.)

A lower rate of inflation would reduce the burden of reserve requirements because it would decrease the gap between the zero return on required reserves and their opportunity cost -- the nominal rate of interest on loans -- which, although fixed by the government, in fact reflects inflationary expectations through other mechanisms (e.g., compensating balances or unrecorded direct payments). On the other hand, a higher required reserve ratio will lower the rate of interest on deposit, and consequently the volume of deposits, while at the same time raising interest rates on loans and decreasing their volume -- and hence reducing funds available for investment (assuming that the demand for loans is not completely inelastic).

To increase efficiency in the Honduran financial system -- and to increase the availability of funds for private investment in particular -- the BCH will have to reduce reserve requirements or remunerate them at market rates of interest. However, paying interest on required reserves will reduce spreads at the cost of increasing the overall public sector deficit. If the BCH were to pay the deposit rate -- approximately 8.5 percent -- on banks' required reserves -- which are approximately 10.5 percent of GDP (of which 83 percent are government bonds already yielding 4 percent interest) -- it would imply an increase in the fiscal deficit of 0.5 percent of GDP. The alternative of reducing or eliminating reserve requirements would have a similar impact on the fiscal deficit since the government would have to issue bonds at market rates of interest to sterilize the resulting monetary expansion. Accordingly, fiscal adjustment and a more transparent mechanism for financing the government's deficit will be necessary before any sustainable reduction in reserve requirements would be possible. Moreover, as long as required reserves are used to finance BCH rediscounts -- either directly or indirectly (as foreign funds are used to finance rediscounts while required reserves finance the fiscal deficit) -- policy recommendations must also incorporate possible adjustments in rediscount policy into the analysis, and this is done in a later section of the report.

Chart 10. SIGHT DEPOSITS RELATIVE TO QUASI-MONEY

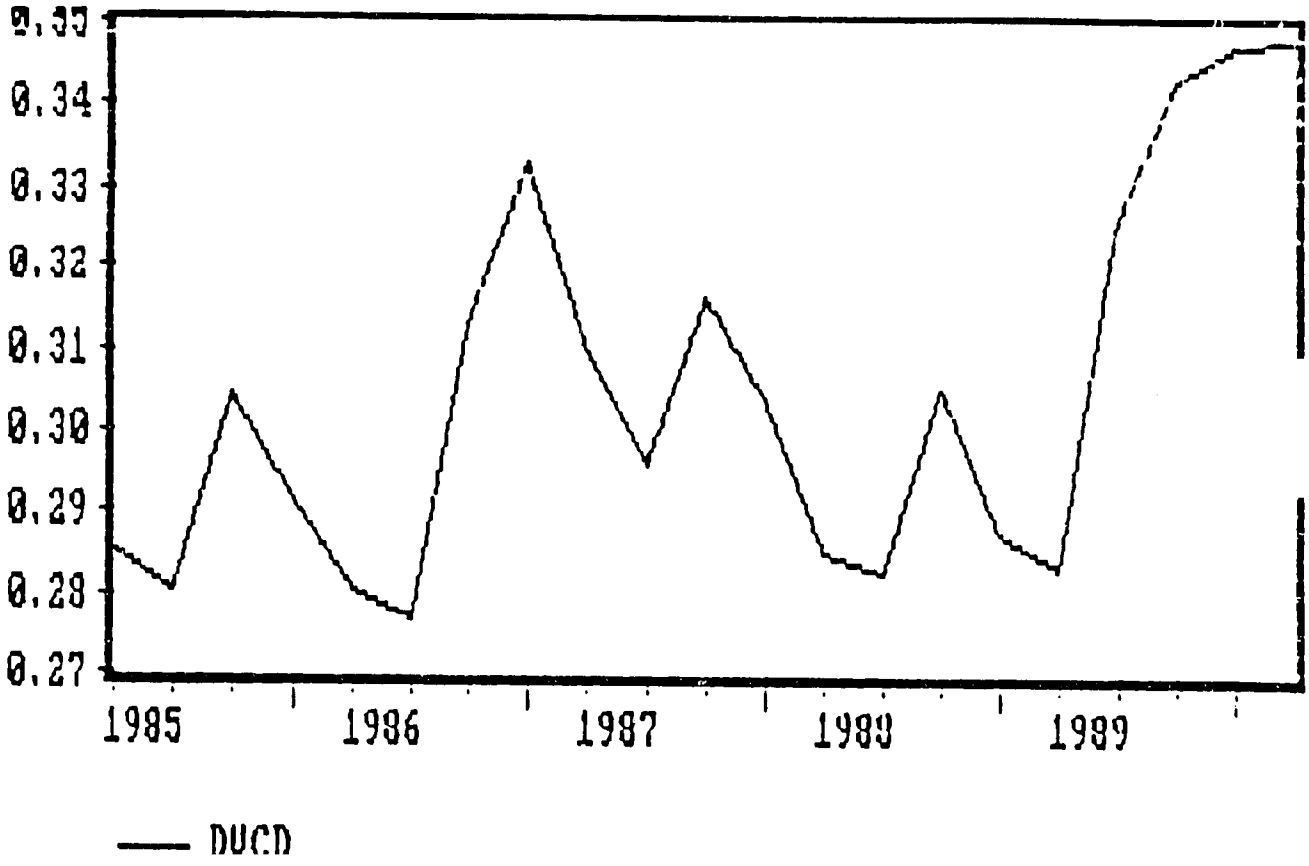


Table 11. THE BANKING SYSTEM: DEPOSITS, GOVERNMENT BONDS AND CREDIT FROM THE BCH
(millions of Lempiras)

Year	Reserves			Rediscount
	Deposits(1)	Gov.Bonds(2)	Total	Credits(1)
1983	79.5	322.2	401.7	476.9
1984	99.5	410.9	510.4	611.7
1985	95.5	459.1	554.6	766.4
1986	86.1	626.7	712.8	907.0
1987	102.7	665.3	768.0	932.0
1988	173.9	720.5	894.4	928.3
1989	262.4	844.8	1107.2	1029.5

Source: BCH: (1) Balance Sheets
(2) Estado de Liquidez del Sistema Bancario Nacional, Obligaciones Depositarias Sujetas a Encaje.

2. International Reserves

Buying and selling international reserves was the main instrument that allowed the BCH to control the money supply and inflation during the long period of stability in Honduras -- which was achieved in spite of credit expansion to the public sector and the banking system. During the 1980s, however, the BCH lost essentially all the large stock of international reserves that it had accumulated during the 1970s as a consequence of the coffee boom. After international reserves ran out, the growing fiscal deficit and continuing pressure to expand subsidized credit resulted in higher inflation and finally in devaluation.

After the new government took office, several important changes were made in the foreign exchange market. In particular, the removal of foreign exchange controls and the liberalization of the foreign exchange market for most commercial and financial operations freed up the foreign exchange position of the BCH. The adjustment program implemented by the new government together with a sharp devaluation in the exchange rate from 2:1 to 4.3:1 -- and more recently to 5.5:1 -- allowed the BCH to improve its international reserve position (see Chart 8) but not to the level that would allow the BCH to manage the money supply again through buying and selling international reserves.

At present, international reserves cannot be used to control the money supply because economic agents know that the BCH does not have enough foreign exchange reserves to control the foreign exchange market to the required extent. Until the fiscal deficit is reduced and the foreign exchange market is unified, it would be risky and naive to try to stabilize the money supply and inflation simply by selling dollars in the market -- or by not buying sufficient foreign exchange to fulfill external obligations.

3. Government Bonds

The types of government bonds can be classified according to the issuing institution: central government bonds, amounting to Lempiras 2,874 million; decentralized institutions' bonds, amounting to Lempiras 1,099 million; and local governments bonds, amounting to Lempiras 276 million. The main holders of government bonds are the BCH, with approximately Lempiras 1,600 millions -- 37.6 percent of the total bond issue -- and commercial banks with 18.8 percent. The private sector holds only Lempiras 276 million of government bonds -- a reflection in large part of the lack of capital markets in Honduras. (See Table 12 and 12A.)

As Table 12 shows, interest rates on central government bonds

range between 4 percent and 13 percent. These bonds, although issued with long maturities, can in fact be redeemed on sight for full value. In addition, their interest is tax exempt, thus making their effective rate substantially higher for bond holders in the highest income tax bracket. Although their effective rate -- approximately 22.2 percent -- was higher than that for any other financial instrument in Honduras, it is still negative in real terms when the recent inflation is taken into account. Nonetheless, as long as the marginal cost of funds for the banking system is below this rate, government bonds offer an attractive investment for commercial banks that is essentially without risk. The favorable effective rates and redemption features of government bonds have increased their importance among bank assets. These government bonds, together with forced investments and reserve requirements, have produced a substantial absorption of commercial bank resources by the central government.

Bonds issued by the central government have increased from Lempiras 2,100 million in 1986 to Lempiras 2,972 million at the end of 1989 -- a substantial 40 percent increase that reflects the deterioration of the overall government deficit. (See Tables 11 and 12.) Since the BCH was the main buyer -- acquiring 67 percent of the total increase -- the fiscal impact on the central government has been lower, but at the cost of reducing BCH earnings. Commercial bank holdings of government bonds rose by only 21 percent during the same period, thus reflecting a significant decrease in the rate of growth of their holdings of government bonds compared to previous periods.

According to the law creating the BCH, the BCH is allowed to sell government bonds and treasury bills that are already in its portfolio to the general public and commercial banks. Recently, the BCH has been trying to implement open market operations through an auction mechanism to sell short-term bonds. Although the auction mechanism is correct in theory, its implementation in practice has proved to be inadequate, as no bids were submitted to the BCH by banks or the general public at several recent auctions. Several different reasons can be given to explain the failure of the auction mechanism:

> First, open market operations implemented through an auction system can be an excellent instrument to regulate the money supply through buying and selling bonds or bills to commercial banks and the general public -- but as long as this is a market instrument, it requires that either the money supply or the interest rate be free to vary. In the case of Honduras, the BCH is trying to fix the price -- the interest rate -- and the quantity to be sold at the same time. In its last announcement, the BCH established the discount price in advance at an effective annual rate of 17 percent for the Lempiras 12.5 million to be sold. As the BCH did not receive any offers, this means that there is no demand for bonds at a

17 percent interest rate, so that the interest rate must be higher if the BCH really wants to sterilize the amount announced.

Second, it may be that the maturity of the bonds offered is not adequate to match the liquidity requirements of potential buyers. In this respect it could be more convenient to have a menu of maturities, for example, 7, 28, 56, 84 . . . days, thereby allowing for weekly maturities.

Third, the fiscal treatment is not the same as that for existing bonds. In an incipient capital market, the appropriate differential return may not initially be reflected in the price in the secondary market. Accordingly, if the fiscal treatment is different, the interest rate announced for the auction in the primary market should reflect such a difference.

Since government bonds are mostly acquired by banks, the BCH could risk losing control of interest rates if demanders agree ahead of time on what interest rates to bid. There are, however, certain remedies to reduce such a risk. One approach is to allow a wider range of firms, and even the public in general, to have access to the market in order to reduce the possibilities for effective collusion. Other mechanisms are to establish the possible rates to be bid with several digits and not to allow "non-competitive" bids, thereby forcing more bids at different interest rates. Finally, as the BCH does not in fact have to commit any particular amount of bonds to be sold, it could accept only the lowest bids if it appears that the participating bidders have attempted to collude to raise interest rates.

In summary, the recommendations for implementing open market operations are quite straightforward. The BCH should auction bonds with different maturities, without fixing in advance either the interest rate or the amount to be sold. An auction can the best mechanism to choose the interest rate and the amount of bonds to sell, once the information is known with respect to the bids submitted by the public in general and the banks.

4. Rediscount Policy

The BCH 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). Rediscount operations basically consist of the restitution of liquidity for loans previously made by commercial banks. The BCH either uses its own funds, that is, monetary emission, or external lines funded by international agencies.

Rediscounts are not given in advance, but after the financial institution has made its loan it can ask for liquidity from the BCH. The request could be for funds from the BCH's own resources for credit to priority activities -- for the production of basic grains (corn, beans, soybeans and rice) at an annual interest rate of 6 percent, for the marketing of basic grains at 11 percent, or for any other economic activity at 4 percentage points below the maximum loan rate. In addition, a commercial bank could ask for liquidity advances or liquidity assistance from the BCH at 2 points above the maximum loan rate. However, rediscounts cannot be made for commercial activities, with the exception of basic grains.

In the case of external funds, there are a large number of different rediscount lines based on funds lent or granted to the government by various donor agencies and put at the disposition at the BCH. The wide range of interest rates and other conditions associated with these different rediscount lines make them very difficult for the BCH to administer. Table 13 gives an overall picture of these interest rates, which turn out to be quite confusing as they range from 9 percent to 17 percent depending on the particular specialized source of funds. External rediscount funds are lent in Lempiras, and the BCH assumes the exchange rate risk. To the extent that rediscount rates are not at market levels, the BCH is not properly covering itself against this risk, and as a result several external rediscount lines have shrunk in real terms with the recent devaluations.

Rediscounts constitute a powerful monetary instrument, especially in that they represent almost 50 percent of net domestic credit on the BCH's balance sheet. When rediscounts are given to any financial institution, monetary expansion results, whereas monetary contraction occurs when rediscounts are cancelled. The monetary program elaborated by the BCH sets the overall limit for domestic credit expansion -- first, the amount for the public sector and then, as a residual, the maximum amount of credit available for rediscounts and advances to the private sector. In any case, there are problems with the BCH's management of rediscount lines as interest rates are set well below inflation so that rediscount policy must be implemented through non-price rationing mechanisms. In addition, as long as the BCH does not have at its disposal adequate market instruments -- such as effective open market operations -- for controlling the money supply, the strong seasonal effects of certain economic activities, especially agriculture, and the resulting seasonal pattern of rediscounts constitute a severe restriction for attaining monetary stability within the year.

Table 14 shows the sources of funds that finance rediscount credits and the final destinations of these credits. During 1989, rediscounts grew by less than inflation and thus declined in real terms -- mainly as a result of restraint in the use of the BCH's own resources. Agriculture is by far the largest recipient of

rediscounts, which is not surprising since this sector accounts for approximately 27 percent of GDP and more than 70 percent of exports. External discounted funds are mainly channeled through different specialized units at the BCH. The most important are (See Table 14):

UPCA (Unidad del Proyecto de Crédito Agropecuario) allocates credit through commercial banks and BANADESA (saving and loan associations are excluded) to agricultural projects. Financial support comes from the World Bank, but additional resources have to be contributed by financial intermediaries and final users.

USAID funds for agriculture are channeled through specialized institutions such as IHCAFE (Instituto Hondureño del Café), FDF (Fondo de Desarrollo Financiero) or directly through banking institutions with the final approval of USAID.

FONDEI (Fondo de Desarrollo Industrial) allocates credit to industry and tourism projects using Wordl Bank funds.

USAID provides financial support for agro-industries and export industries, and export industries are also financed with IBD funds.

Construction activities are supported with domestic resources from the BCH. FOVI (Fondo de la VIvienda) is a specialized institution that allocates credit for housing construction to lower income families through the banking system, saving and loan associations and INVA (Instituto Nacional de la Vivienda).

Table 13. MAXIMUM INTEREST RATES

	1982	1983	1984	1985	1986	1987	1988
TASAS MAXIMAS DE INTERES PARA OPERACIONES ACTIVAS							
I. PARA TODO DESTINO							
A. CON RECURSOS CAPTADOS INTERNAMENTE							
PRESTAMOS POR MAS DE L.10,000.00	19%	19%	19%	19%	19%	17%	17%
DESCUENTOS, TASA EQUIVALENTA AL	19%	19%	19%	19%	19%	17%	17%
PRESTAMOS PERSONALES HASTA POR L.10,000.00 1/	9%	9%	9%	9%	9%	8.5%	8.5%
B. CON RECURSOS CAPTADOS EN EL EXTERIOR	Libre	Libre	Libre	Libre	Libre	Libre	Libre
. PRESTAMOS CONCEDIDOS CON APEGO A REGLAMENTO DE FONDOS ESPECIALES							
A. FONDO DE GARANTIA DE LA PEQUENA INDUSTRIA		17%	17%	17%	17%	17%	17%
CON FONDOS DEL PRESTAMO No. 1650-HO	16%						
CON FONDOS DEL PRESTAMO No. 2075-HO	17%						
B. FONDO NACIONAL DE DESARROLLO INDUSTRIAL		17%	17%	17%	17%		
FINANCIADOS CON FONDOS PRIMER PROYECTO	16%						
FINANCIADOS CON FONDOS SEGUNDO PROYECTO	17%						
PRESTAMOS CONCEDIDOS CON RECUPERACIONES DE FONDEI						13%	13%
FINANCIAMIENTO INCREMENTO DE INSUMOS PEQUENA Y MEDIANA EMPRESA						15%	15%
FINANCIAMIENTO DE PROYECTOS HOTELEROS Y ACTIVIDADES CONEXAS						17%	17%
C. FONDO DE DESARROLLO AGROPECUARIO	16%	16%	16%	14.8%	13.73%	13.42%	13.42%
D. FONDO DE FIDEICOMISO PARA LA IND. DE LA CONSTRUCCION (VIVIENDAS - L.40.000.00)	15%	15%	15%				
E. FONDOS PARA LA PRE-EXPORT. Y EXPORT. DE CAFE Y AZUCAR	20%						
F. FONDOS PARA REACTIVAR LA IND. DE LA CONSTR.	14%	14%	14%	14%	14%	14%	14%

Table 14. BCH REDISCOUNTS: SOURCES OF FUNDS AND ALLOCATION BY SECTOR

	1988		1989		
	Mill. Lemp.	%	Mill. Lemp.	%	% growth
BCH Own Resources	433.2	46.7	472.1	45.7	9.0
Liquidity Assistance	199.4		217.5		
of which BANADESA	195.2		230.0		
Rediscounts	222.1		235.5		
of which					
Development Banks	43.7		52.8		
Comercial Banks	178.4		189.1		
Foreign Resources	493.2	53.3	560.0	54.3	13.5
Exports	28.0		42.2		
Prog.Rec.Ec.	24.5		3.0		
UPCA	166.3		179.5		
Small-Scale Coffee	32.7		32.0		
FONDEI	117.5		145.7		
Industrial Reactivation	7.7		12.5		
FOVI	116.5		140.1		
Other	-.-		5.0		
Total Rediscounts	926.4	100.0	1032.1	100.0	11.4
Agriculture	346.5	37.4	408.2	40.0	17.8
Construction	125.8	13.6	148.6	14.4	18.1
Manufacturing	207.5	22.4	204.0	19.7	-1.7
Other	246.6	26.6	271.3	25.9	10.0

Source: BCH, Crédito y Valores

Although rediscount policies play an important role in the Honduran financial system, they have significant negative effects:

First, they discourage banks' effort at resource mobilization because banks have access to cheaper funds from the BCH. Table 15, which compares liabilities of the banking system to the private sector and to the BCH for different years in the past decade, provides strong evidence for this conclusion. It can be seen that BCH rediscounts to the banking system, which grew especially rapidly until 1986 (see Table 6), have become increasingly important in financing the banking system. For each 100 Lempiras of deposits in 1980, the banking system had obtained 23 Lempiras from the BCH, and this ratio increased substantially to 43 Lempiras in 1986. Beginning in 1987, the restriction of credit to the banking system reduced financial support from the BCH sharply, thereby inducing greater deposit mobilization. Even though in 1989 the relative importance of BCH rediscounts was not as low as in 1980, at least the trend has been in the right direction -- toward stimulating deposit mobilization while maintaining monetary stability.

Second, they promote inefficiency in resource allocation as the effective cost of funds is lower than the opportunity cost. Because of this, moreover, the BCH is subsidizing either the intermediary or the final user.

Table 15. BANKING SYSTEM LIABILITIES
(millions of Lempiras)

	1980	1985	1986	1987	1988	1989
Total Liabilities	**1432.5**	**2751.5**	**3103.4**	**3522.5**	**3842.6**	**4274.4**
Private Sector	1161.0	1964.3	2167.6	2585.4	2895.6	3229.0
BCH	271.5	787.2	935.8	937.1	947.0	1045.4
BCH Relative to Private Sector	23.4	40.1	43.2	36.2	32.7	32.4
Percent Participation of						
Private Sector	81.0	71.4	69.9	73.4	75.4	75.6
BCH	19.0	28.6	30.1	26.6	24.6	24.4

Source: BCH, Balance Consolidado del Resto del Sistema Bancario

Rediscount policies attempt to allocate credit to certain priority activities such as agriculture, exports, industry or construction. Commercial activities are penalized as banks cannot have commercial loans equal to more than 25 percent of their total loan portfolios. Two reasons are typically given for favoring a particular sector: income distribution and resource allocation. Nonetheless, subsidized interest rate rediscounts are a less than ideal way to allocate credit for a variety of reasons:

1. Preferential low interest rates have not improved income distribution; in agriculture, for example, credit distribution is highly skewed toward large loans to wealthy farmers. According to UPCA statistics (1989 Annual Report, annex 5-B), only 135 loans out of more than 800 (17 percent) accounted for 67 percent of the total loan portfolio. An important reason for this concentration is collateral, as smaller farmers rarely have enough wealth and income, so that access to cheap credit is extremely difficult for them. (Such loan portfolio information was not available for other rediscount units of the BCH.)

2. With respect to resource allocation, preferential low interest rates do not change the availability of technologies, nor the lack of infrastructure which raises costs, nor the prices paid for inputs and received for outputs. All that is changed is one component of the price of capital -- which is reduced for individuals with access to credit at preferential interest rates. These individuals will be encouraged to select more capital intensive techniques for activities that might have been undertaken even without preferential low interest rates. It is not clear whether such capital intensive biases help to direct more resources to priority sectors, but they certainly do not improve the demand for labor in those activities that the government wants to promote.

3. Because of the essential fungibility of credit, preferential low interest rates are an ineffective way to redirect the allocation of resources in favor of a sector even with the most diligent and costly program of supervision. In effect, subsidized credit induces credit deviation since, instead of using their own capital, individuals with access to cheap credit will prefer to leave their funds untouched -- perhaps outside of Honduras -- and to ask for rediscounts. Cheap loans tend to increase the borrower's debt at the expense of equity; and, as long as preferential interest rates are below the rate of inflation, unprofitable projects can be implemented that will have no net positive effect on aggregate output. Cheap funds have to be rationed, and the rent seeking that invariably accompanies such subsidies reduces welfare and tends to corrupt the system, while causing losses to the BCH.

Moreover, as long as the BCH offers rediscounts at 15 percent and supplies bonds at 17 percent, it induces credit deviation by providing a significant spread without risk and with the only effort required to ask for money at one window and to buy bonds at the other.

4. Financial intermediaries apparently take the credit risk in rediscount operations, as the BCH charges their respective reserve accounts when rediscounts mature. However, so long as the banks have immediate access to liquidity rediscounts, the BCH is in the end refinancing bad portfolios. This presents a serious restriction for future rediscount policy because some private banks and almost every state bank need this liquidity facility to survive. (In another section of this report the financial condition of the banking system is examined in detail.)

According to these considerations, it should be highly advantageous to move away from subsidized rediscount lines for priority activities and borrowers and toward a system that utilizes price rationing mechanisms. However, it is first necessary to ask if such a change is possible. Although it undoubtedly is, changes in rediscount policies constitute a structural change for Honduras because rediscounts are related to and integrated with other policies such as reserve requirement policy, exchange rate policy and interest rate policy. For this reason, the discussion of possible changes in rediscount strategy will be left for the end of this chapter, after interest rate policy has been analyzed.

5. Interest Rate Policy

Interest rate ceilings complete the list of the monetary instruments of the BCH. By fixing the maximum interest rate on loans, the BCH tries to induce changes in the demand for money and credit by the private sector. Although interest rates on deposits are free from direct control, ceilings on loan rates indirectly pose limits on the former as well. Higher rates on loans will reduce the demand for credit by the private sector, while also inducing higher rates on deposits and thereby promoting deposits -- which in the end leaves more resources available at the banks for buying government bonds so that pressures to increase the monetary base can be reduced. The mechanism described can operate effectively if interest rates are positive in real terms, but otherwise -- if inflation is higher than the maximum interest rates permitted -- the demand for credit and money will not react appropiately. It can be seen in Chart 11 that interest rates were positive in real terms through 1988, but with a declining trend as inflation began to accelerate, and finally becoming negative in mid 1989.

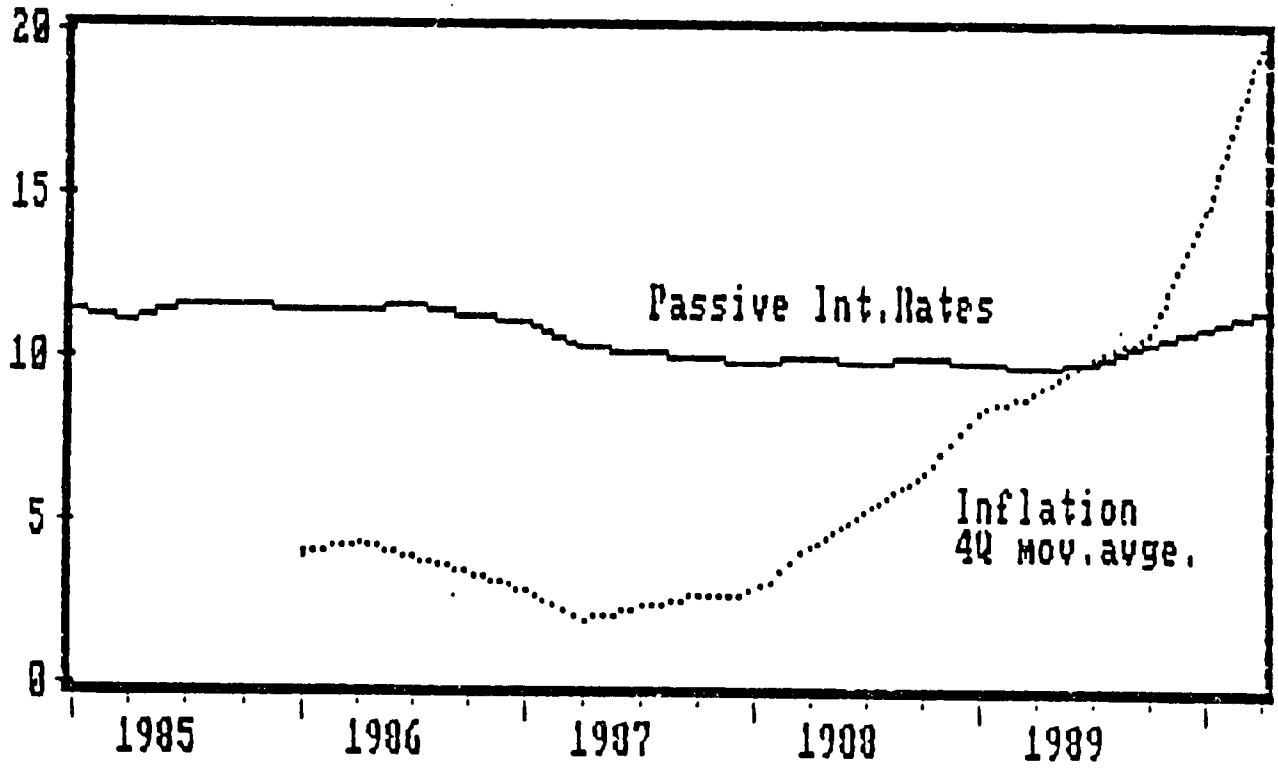
Interest rate ceilings discourage financial intermediation through regulated financial markets because related intermediaries are less able to compete in more risky and costly operations, such as credit to agriculture and to smaller manufacturing and service enterprises, with unregulated or informal lenders. Interest rate ceilings that are below the rate of inflation also induce higher liquidity preference by the public and thereby limit further the capacity of the banking system. In addition, interest rate controls stimulate the formation of economic groups and resulting loan portfolio concentration. They also, as already discussed, undermine deposit mobilization.

Controls over interest rates also have fiscal implications. The issuance of government bonds redeemable on demand with yields similar to the rates that can be paid on bank saving 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 banking system cannot compete with the 17 percent interest rate on government bonds for open market operations.

Controlling the rediscount rate has been an effective instrument of monetary control and a useful market signal in most developed countries. In order to be a useful instrument for monetary policy, the rediscount rate should reflect banks' marginal cost of mobilizing funds and the degree of tightness that the monetary authorities wish to impose on the economy. At the same time, bank spreads should be free to be determined by market competition.

Recently, the BCH has partially liberalized interest rates for new loans made by banks with their own funds, subject to the condition that a bank's "basic interest rate" has to be announced one week in advance to the Superintendency of Banks and cannot be changed for at least one month. On the other hand, the basic rediscount rate has been left unchanged at a 15 percent -- well below the expected inflation rate of 30 percent and also below the rate on government bonds. This is not a consistent interest rate policy.

Chart 11. INTEREST RATES AND INFLATION



F. Summary and Recommendations

In summary, the monetary policy instruments employed by the BCH and described above do not allow the necessary transparency for the proper functioning of the financial system or for monetary stability. One necessary condition for monetary stability is the independence of the BCH from the direct influence of both the government and private sector.

Reserve requirements constitute a source of finance for the fiscal deficit and for rediscounts to the private sector. As the fiscal deficit has increased, the government has tended to seek low cost sources of finance, especially credit from the BCH. Under such circumstances, the BCH has been pressured to increase reserve requirements in order to capture at low cost more of the resources mobilized by the financial system -- which constitutes a non-transparent source of finance. In addition, as discussed above, banks are forced to allocate a certain proportion of their portfolios to the purchase of government bonds carrying low interest rates. The impact of such forced investments on bank spreads is similar to that of reserve requirements, as the interest paid on forced investments is not sufficient to meet the interest costs on deposits.

Although the effects on loan and deposit rates will depend on the respective elasticities of the supply of deposits and the demand for credit with respect to interest rates, the effect of reserve requirements and forced investments on bank spreads is unambiguous. Moreover, like other taxes, reserve requirements and forced investments reduce resource mobilization in the financial system and encourage financial intermediation to move to the informal market.

Rediscount policy involving subsidized credit for priority activities and borrowers is an inappropriate vehicle for subsidies. The targeting of credit subsidies is difficult because credit is fungible which, combined with rent seeking behavior, results in the benefits most often accruing to unintended recipients. As mentioned above, the main beneficiaries of low cost rediscount funds in the agricultural sector are large-scale farmers, while medium and small farmers have to pay the cost of non-priority bank loans -- or resort to informal lenders. Moreover, controlling the amount of interest subsidies is difficult because the subsidies are imbedded in fixed low nominal interest rates, so that the amount of the subsidy varies with inflation and market rates of interest. To be transparent, subsidies should be allocated through the government budget.

Rediscount credits and the fiscal deficit have been financed

largely through reserve requirements, forced purchased of government bonds and monetary emission. Abstracting from the fiscal deficit, Table 11 shows how reserve requirements, which were sufficient in 1983 to finance most of BCH rediscounts, became increasingly insufficient as rediscounts grew rapidly until 1986, although credit restraint finally held rediscounts below the level of required reserves and forced investments in 1989.

Until the fiscal deficit can be reduced, global ceilings on credit to the private sector may need to be maintained as part of the policy basis for the monetary program of the BCH. The banking system is now a net lender to the public sector through reserve requirements and forced investments in government bonds, but this should change in the future. As part of a more liberalized financial framework for the future, reserve requirements should be eliminated, but with the present macroeconomic imbalances, this cannot be recommended until the fiscal deficit has been brought under control.

Under this fiscal constraint, a second best alternative would be to replace reserve requirements gradually by simultaneously reducing BCH rediscount credits, while at the same time selling public debt through open market operations. According to the levels of rediscounts, reserve requirements and forced investments shown in Table 11, it would be possible to eliminate rediscounts financed with the BCH's own resources simultaneously with the elimination of reserve requirement and forced investments in government bonds. The resulting change in the money supply, although depending on the exact composition of money holdings, will be trivial as the reduction in the monetary base will be compensated by the increase in the money multiplier. However, the implementation of this change will have to be gradual because some institutions -- especially the public banks and certain private commercial banks -- are highly dependent on BCH rediscounts.

The administration of rediscount credits financed with foreign resources has to be reorganized, and this point will be discussed in detail in the section of the report on BCH operations. Since subsidized credit has been rationed by non-price mechanisms -- because demand is always greater than supply -- BCH rediscounts have been allocated inefficiently, as already discussed. Accordingly, it would be useful to examine the possibility of implementing an auction system for rediscounts such as is under consideration or already implemented in other Latin American countries (e.g., Jamaica, Chile and Bolivia). In the case of an auction system, investment projects would compete for funds based on their respective rates of return and not according to other administrative practices. In addition, the rediscount rate determined in the auction would be related to other interest rates in the market that would already be liberalized. To implement an auction system would require a detailed analysis of the conditionality of existing foreign credit lines. With respect to

the current system, rediscount rates should be equalized at a rate at least equal to the marginal cost of funds for the banks, that is, the maximum of the highest deposit rate or the rate determined in the bond auction used to carry out the open market operation of the BCH.

In a liberalized framework, the BCH should employ appropriate market-oriented monetary instruments to hold credit expansion under control, such as open market operations to sterilize an excess supply of funds. The demand for credit would automatically be restrained through the prevailing new interest rate that would be higher than inflation, as well as more flexible. The BCH can nonetheless continue to control interest rates by managing the open market auction appropriately. Whenever the fiscal deficit is high, interest rates will rise, fewer projects will be profitable and the demand for credit -- including the demand for credit to speculate with foreign exchange -- will be reduced. When the fiscal deficit begins to be reduced, interest rates will decline and credit to the private sector will recover again. In addition, the interest rate determined by open market operations should be arbitraged with foreign rates through the expected rate of devaluation.

Through open market operations the BCH can hold the money supply under control, and the financing of the deficit will become more transparent. The cost of deficit financing will become larger, so that government expenditures will increase, but the benefits from increasing the credit capacity and lowering the spreads of the banking system will stimulate financial intermediation and economic activity.

IV. DOMESTIC SAVINGS MOBILIZATION

A. National Saving

Savings mobilization has been poor in Honduras compared to most other developing countries, including especially other countries in the region such as Costa Rica. National saving declined steadily from 15 percent of GDP at the end of the 1970s to 3.6 percent in 1989, due in part to the simultaneous negative effects of a deterioration in the terms of trade and increased foreign factor payments, especially in the form of interest, that reduced national saving capacity sharply.

For many years foreign savings compensated for the shortfall in national saving and provided the necessary resources for investment -- and to some extent foreign savings may even have crowded out domestic saving. As long as foreigners were willing to finance higher expenditures in Honduras, residents were able to spent more and consequently saved less. However, because of the debt crisis, the availability of external funds has been greatly curtailed, remaining stagnate at about 5 percent of GDP. (See Table 1.) In addition, many years of overvaluation of the real exchange rate stimulated consumption by making tradable goods less expensive and consequently discouraged saving.

National saving also declined because of lower public saving. As Table 1 shows, public saving has declined steadily with private saving during the last five years. The reduction in public saving resulted from increased expenditures and not from tax reductions -- otherwise private saving would have increased rather than decreased. The nature of interaction between private and public saving depends crucially on the extent to which expectations with respect to future taxes affect private saving. For example, when the public sector is a substantial net debtor, the private sector may anticipate significant increases in taxes, thus favoring present consumption at the expense of saving and investment. As the government recently approved a tax reform, and is planning to increase public saving, the consequences could be negative from the national saving perspective if the public sector does not reduce expenses.

From a policy standpoint, the environment in which saving decisions are made is related to household opportunities for borrowing and lending. In Honduras, there are few saving instruments from the regulated financial system at the disposal of the public. The usual ways that people in Honduras hold their wealth are: (1) deposits in the banking system, (2) housing and other durable goods; and (3) to a limited extent bonds of the government. In rural areas even this menu of assets may not be available, since access to the banking system in the countryside is

often very limited. Foreign currency denominated assets are allowed only for exporters and importers. Deposits in informal financial markets and abroad can be close substitutes for saving in formal domestic markets. Although deposits in informal markets are domestic deposits, and thus do not imply capital flight from the country, there is certainly capital flight from the formal financial system. Business firms, in contrast to individuals, save in the form of retained profits and to some extent by holding government bonds.

B. Financial Deepening

Financial deepening -- measured as M2 relative to GDP -- grew systematically until 1987 and reached 38.6 percent, but thereafter has stagnated (See Table 16 and Chart 13) reflecting the inability of the formal banking system to intermediate additional resources.

Table 16. FINANCIAL DEEPENING
(percentage of GDP)

	1980	1984	1985	1986	1987	1988	1989
Currency	5.3	5.8	5.8	5.5	5.9	6.3	6.8
M1 (Currency plus Dem.Dep.)	11.9	12.9	12.0	12.1	15.0	13.6	14.9
Quasi-Money	15.0	21.3	20.6	21.0	23.2	24.0	23.7
M2 (M1 plus Quasi-Money)	26.9	34.2	32.6	33.1	38.2	37.6	38.6

Source: BCH, Panorama Financiero

Currency and bank deposits are the main sources of funds for credit expansion by the financial system; and, according to Table 16, the system has not increased its capacity to expand credit to the private sector, as this capacity has remained at about 35 percent of GDP in recent years. In addition, the declining share of quasi-money in M2 and the increasing share of currency and demand deposits are symptoms of greater liquidity preference by the public -- perhaps related to increasing development of the informal financial system. (See Charts 12, 13 and 14.) Saving performance could be improved through increased mobilization by the formal financial system which, in turn, requires the ability to stimulate higher demand for financial assets. For this reason it is useful

to understand the main determinants of the demand for financial assets in Honduras.

Chart 12. M1 AS A SHARE OF M2

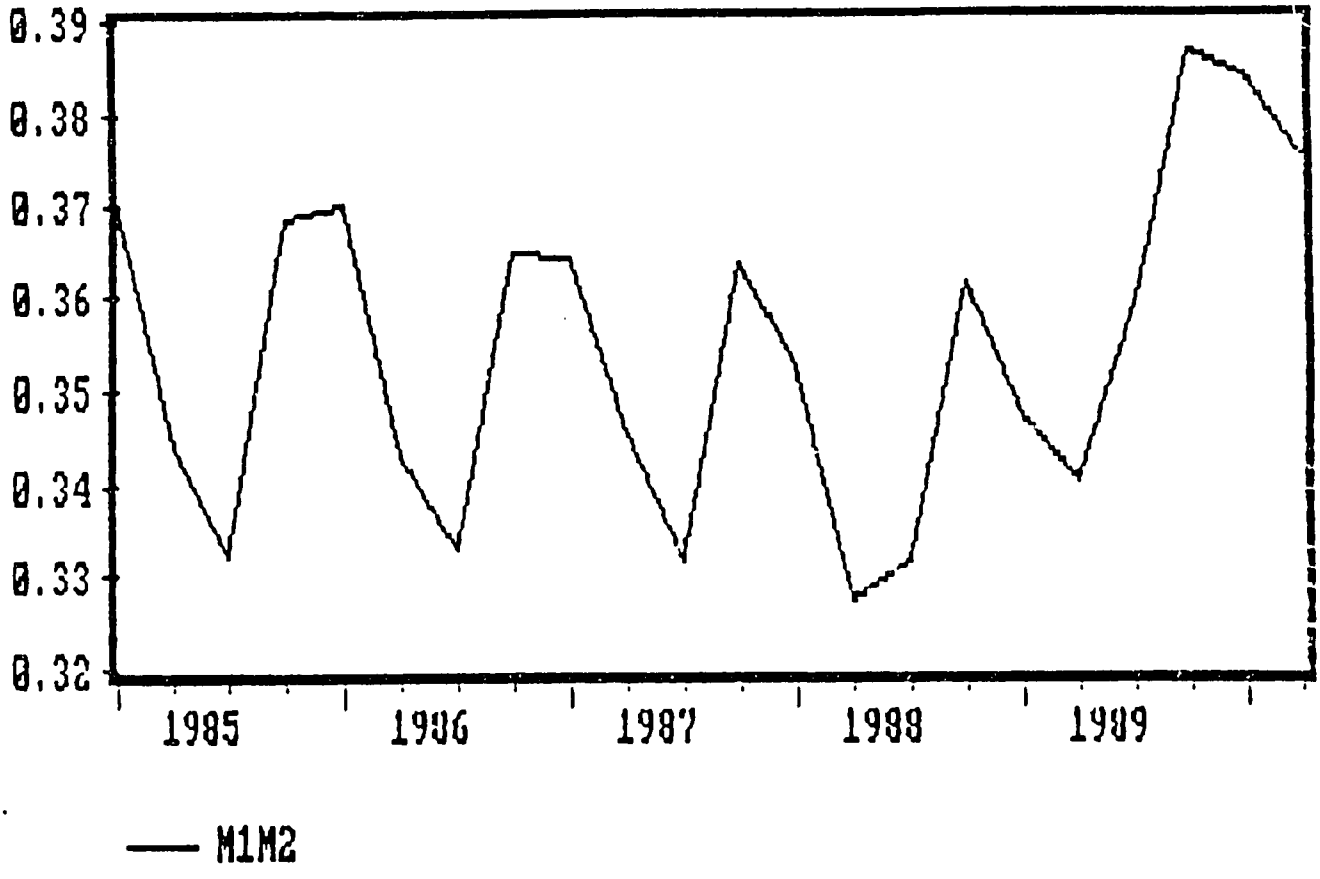


Chart 13. DEMAND FOR FINANCIAL ASSETS: M2

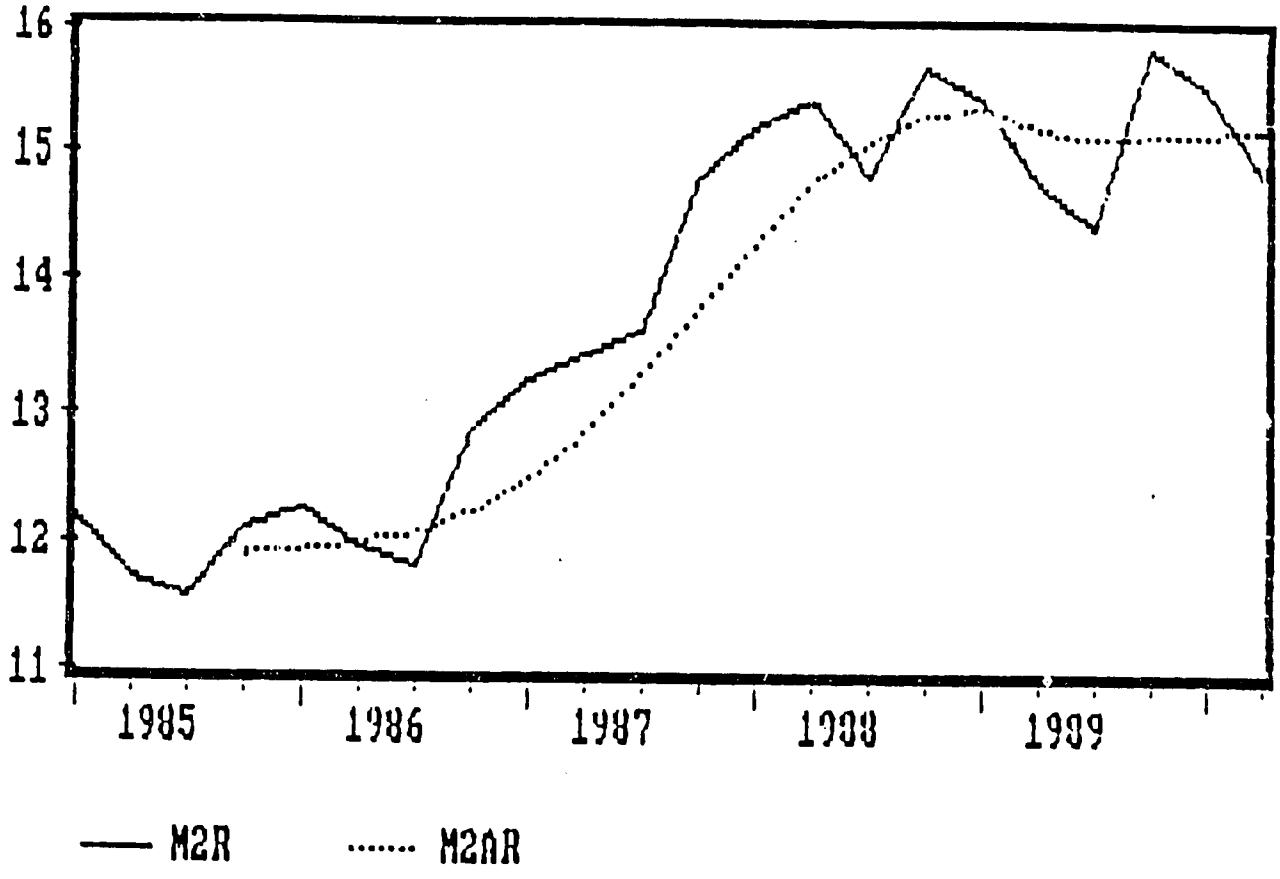
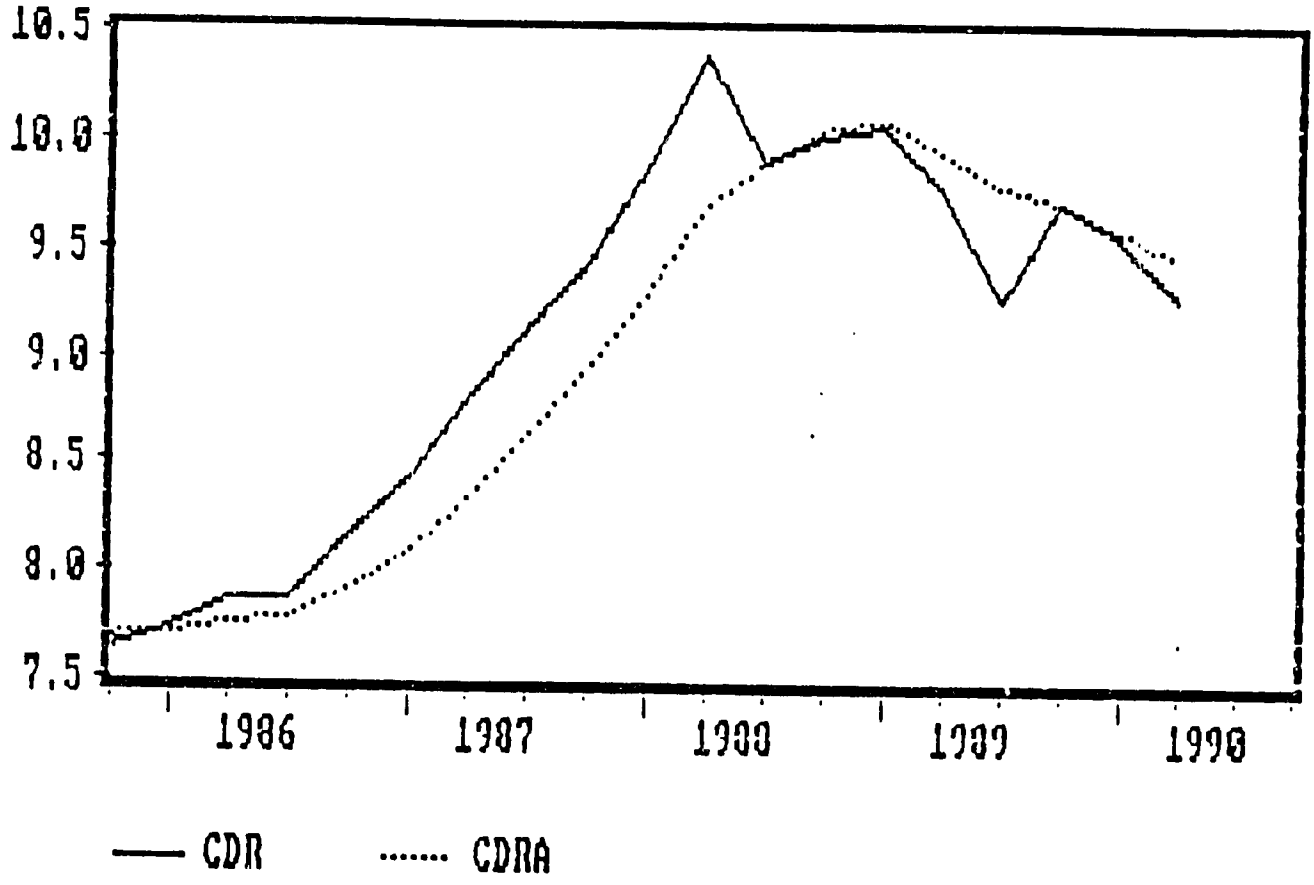


Chart 14. TIME AND SAVING DEPOSITS IN REAL TERMS



C. Determinants of the Demand for Financial Assets

While many factors can affect the demand for financial assets, the main determinants in the case of Honduras are substitution among Lempiras, dollars and goods together with income changes. The econometric estimates that lead to these conclusions are described in Annex 1.

The long run semi-elasticity for inflationary expectations (-5.48 for M2) is extremely high, thus reflecting a strong substitution between money and goods in the case of M2. This effect explains the stagnation in the demand for financial assets (M2) as the Honduran economy became more inflationary with the financing of the increased fiscal deficit. Substitution between dollars and Lempiras is clearly reflected in the substantial negative effect on the demand for financial assets of the rate of acceleration of the real appreciation of the Lempira.

The demand for M2 in general, and time deposits in particular, is strongly influenced by real interest rates, as indicated by the significance of expected inflation, but is not affected by nominal interest rates on Lempiras deposits. The effect of the level of transactions -- through an income elasticity exactly equal to 1.0 as theory predicts -- helps to explain the stagnation of M2 in real terms during the past two years, as the economy substantially reduced its rate of growth. There are also fairly strong seasonal effects that are significant during the second quarter in the case of M2 and in the third quarter in the case of deposits.

D. Implications for Credit Policy and Recommendations

A declining demand for money and poor savings mobilization in general have three major implications for credit policies:

First, according to this trend, if savings performance does not improve in the future, the banking system will become increasingly constrained in its ability to finance investment. The availability of credit for the private sector will be reduced further considering the increasing demand for credit by the public sector.

Second, the use of external lines to expand credit to the private sector will leak out as the BCH losses international reserves, and ultimately domestic inflation will be pushed up if the demand for financial assets does not recover.

Third, credit policy that relies on subsidized credits is in conflict with the promotion of saving, as already discussed.

Subsidized interest rates as they are applied to rediscount operations discourage deposit mobilization.

The main recommendation for improving credit policy in order to promote an efficient allocation of saving is to focus on promoting a recovery in the demand for money and deposit mobilization through the pursuit of realistic interest rate policies in the context of liberalized financial markets. This will simultaneously require a more stable and predictable monetary policy that can contribute to reducing inflationary expectations sharply and thereby permit Honduras to become a stable economy again.

A more stable monetary policy cannot be implemented under the present fiscal situation, so that a major fiscal adjustment is a prerequisite for resuscitating the demand for financial assets. Fiscal adjustment needs to be transparent and to reduce financial support from the BCH in order to help to reduce pressures on the money supply. To achieve this, the government must:

(1) define and pre-announce the monetary program and how the deficit will be financed in order to signal that the new government actually wants to control inflation as a prerequisite to promoting economic growth; and

(2) take the necessary actions to demonstrate to economic agents how far the government will go to carry out a successful anti-inflationary program.

In addition, a correct arbitrage of interest rates is required to avoid capital flight, along with driving down expectations of devaluation through a realistic exchange rate that encourages saving and the holding of domestic financial assets.

Adjustments in interest rate policies, as discussed above, should allow interest rates on both the assets and liabilities of the domestic banking system to reflect market conditions, either by liberalizing controlled interest rates completely or by gradually phasing out such controls. Interest rate policy reforms and financial reforms -- mainly eliminating subsidized and targeted rediscounts, reducing reserve requirements, introducing market oriented monetary policy instruments and restructuring the BCH to allow greater independence -- are intended not just to raise the overall level of private saving but also to influence its composition through channeling savings away from other destinations (such as capital flight into foreign financial markets or informal markets) and toward the domestic banking system, through which it can be more efficiently allocated to domestic investments.

Capital flight, reflected in a stagnation in the demand for domestic financial assets, is a major issue in view of the present heavily indebted condition of the public sector in Honduras. A

solution to this requires that domestic savers find the holding of domestic assets -- both financial and physical -- to be profitable. Unless investment in physical capital at home is profitable, even a well-functioning financial system would tend to place accumulated domestic savings abroad. Even if opportunities for domestic investment exist, financial repression (e.g., not unifying the foreign exchange market or penalizing dollar denominated assets with excessive reserve requirements) will tend to induce accumulated domestic savings to move abroad. In the presence of such capital outflows, domestic investment opportunities will go unexploited unless foreign financial intermediaries are willing to lend to domestic firms. Financial reform measures such as those discussed above can obviate the need for this external financial intermediation by changing the composition of national saving away from the accumulation of foreign financial assets toward the accumulation of domestic assets.

ANNEX I

ECONOMETRIC ESTIMATES

Model of the Demand for Money

Starting from the ideas of Cagan ("The Monetary Dynamics of Hyperinflation," Studies in the Quantity Theory of Money, Chicago 1956) the following model of the demand for money in real terms can be formulated, where M1/P and M2/P are respectively the narrow and broad definitions of money in real terms and P the consumer price index.

$$md_t = a_o + a_1 y_t + a_2 r_t + a_3 @_t + a_4 Der_t + u_t \qquad [1]$$

md is the logarithm of the real stock of money demanded (in the long run), r is the nominal rate of interest, @ is inflationary expectations, and Der is the logarithmic change in the real exchange rate.

The rate of interest and inflationary expectations capture the opportunity costs of holding non-interest bearing money as compared with interest bearing deposits or goods, and variations in the real exchange rate capture the effect of currency substitution resulting from an appreciation of the Lempira with respect to the dollar.

The expected signs are a2 > 0 for M2 and a2 < for M1, a3 < 0, and both a1 and a4 > 0.

Following the hypothesis proposed by Chow ("On the Long-Run and Short-Run Demand for Money," Journal of Political Economy, 1966), a partial adjustment process is assumed through which the actual quantity of money adjusts in the long to the amount demanded run according to the following relation:

$$m_t - m_{t-1} = \& (md_t - m_{t-1}) \qquad [2]$$

Assuming, in addition, that the public forms its inflationary expectations on the basis of inflation in the preceding period (inf -1), and then substituting [1] into [2], the following result is obtained:

$$m_t = \&a_o + \&a_1 y_t + \&a_2 r_t + \&a_3 inf_{t-1} + \&a_4 Der_t + (1-\&)m_{t-1} + \&u_t \qquad [3]$$

Equation [3] has been estimated for time and savings deposits in real terms (CDR) and for M2 in real terms (M2R). As can be seen

in the respective tables, the nominal rate of interest is not statistically significant, as could be expected since it was always fixed and therefore had too little variation to allow it to be statistically significant. The effect of the interest rate is instead reflected in the real rate of interest which is captured by the high elasticity for expected inflation -- the other component of the real rate of interest.

According to the estimates, there is also strong substitution between Lempiras and dollars which is reflected in the high elasticity for changes in the real exchange rate. In the case of savings deposits, however, substitution between Lempiras and dollars is not significant, suggesting that substitution is instead between currency and time deposits, on one hand, and dollars, on the other.

There are also significant seasonal patterns, as time and savings deposits are lower in the third quarter, while M2 is lower in the second.

Finally, the public delays on average about one and a half quarters in adjusting its holdings of real balances for either M2 or time and savings deposits.

ANNEX II

DEFINITIONS OF FREQUENTLY USED TECHNICAL TERMS

Monetary Aggregates

The Monetary Base (MB): total monetary liabilities of the BCH; these include currency in circulation (i.e., not including currency at banks) plus the reserves of commercial banks. Considered from the asset side, the monetary base is composed of international reserves and domestic credit -- to the public sector, the private sector, and the banking system. Domestic credit is in net terms, that is, deposits of the public sector at the BCH are subtracted from credit to the public sector.

> The monetary approach to the balance of payments can be useful to understand changes in the monetary base. Assuming a fixed exchange rate and a given level of the demand for money, if the BCH were to increase domestic credit, the Honduran people would use this excess money to buy more goods -- which would raise the price of domestic goods and increase the demand for imports so that the BCH would have to sell international reserves. Part of the increase in credit thus "leaks out" through the loss of international reserves by the BCH. If all goods in the Honduran economy were imported, all the excess money created by the increase in credit would end up reducing international reserves by an equal amount.

Money narrowly defined (M1): currency in circulation plus the monetary deposits of the consolidated banking system.

Money broadly defined (M2): total deposits of the consolidated banking system; that is, M1 plus quasi-monetary obligations.

> These monetary aggregates are often expressed in real terms, that is, the nominal aggregates are deflated -- using the consumer price index in the case of Honduras.

Money Multipliers

The money multipliers measure the capacity of the banking system to expand the monetary base of the BCH. Expressions for the money multipliers are:

M1 multiplier: $m1 = M1/MB = (CP + DV)/(CP + R)$

M2 multiplier: $m2 = M2/MB = (CP + DV + CD)/(CP + R)$

where

CP is currency in circulation;

DV is monetary deposits;

CD is quasi-monetary obligations; and

R is bank reserves.

M1 and M2 can then be expressed as:

$M1 = c + (1-a)/(c + r)$

$M2 = c + 1/(c + r)$

where

c is the preference for liquidity: $CP/(DV + CD)$;

r is the coefficient for reserves: $R/(DV + CD)$; and

a is the preference for quasi-monetary obligations: $CD/(DV + CD)$.

The three parameters "c", "r", and "a" relate to the behavior of the public and the banks; "c" and "a" relate to the degree of liquidity that is desired, and "r" is the result of the reserve requirements imposed by the BCH and the voluntary holdings of reserves by the banks.

The preference for liquidity is an important determinant of both multipliers and consequently of the expansionary capacity of the banking system. The behavior of the preference for liquidity was investigated with an econometric model that is discussed in the other annex. It is clear from those estimates that, due to the impact on the preference for liquidity, interest rates affect the expansionary capacity of the banking system significantly. In particular, higher interest rates reduce the demand for currency relative to deposits, thereby increasing the multiplier.

INDIVIDUALS INTERVIEWED

At the Central Bank of Honduras:

President (two)

Vice-President (three)

Assistant General Manager

Director of Economic Studies Department (numerous)

Director of Credit and Securities Department

Director of Accounting Department

Director of Organization and Administration Department

Manager of Agricultural Credit Unit

Manager of Industrial Development Fund

Manager of Housing Fund

Individual Responsible for Reorganization Plan (numerous)

At Private Commercial Banks:

President of Banco Atlantida

President of Banco Hondureno (Citibank)

President of Banco Ficensa

REFERENCES

Bijan Aghevli, et. al., "The Role of National Savings in the World Economy: Recent Trends and Prospects," International Monetary Fund occasional paper, March 1990.

Central Bank of Honduras, "Memorias Anuales y Boletinas Estadisticos," various dates.

James Hanson and Robert Vogel, "Low Interest Rates as Offset to Real Distortions," World Bank, unpublished paper, November 1986.

International Monetary Fund, "Request for Stand-by Arrangement," July 1990.

USAID/Honduras, Economics Department, various reports.

Richard Webb, et. al., "Credit Policy in Honduras in the Context of Macroeconomic Constraints," ECONSULT, 1988.

World Bank, "Structural Adjustment Loan," May 1990.