PN-ABF 396

FINANCIAL MARKETS SEMINAR

Bureau for Private Enterprise
U.S. Agency for International Development

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Sponsored by: *Financial Markets Project*
Project Number: 940-2005
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April, 1986

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FINANCIAL MARKETS SEMINAR
HONDURAS
4/23/86

I. Explanation of risk:
- A. Risks controlled by financial institutions
- B. External risks not controlled by financial institutions.

I.A. Risks controlled by financial institutions:
1. Credit
2. Interest rate
3. Liquidity
4. Operational

I.A.1. <u>Credit Risk:</u> This is the banker's trade. It is a determination of whether or not a client is willing and able to pay principal and interest according to the terms of the original contract.

I.A.2. <u>Interest Rate Risk: (for examples see annex 1)</u>
- a. Primary source of bank profits.
- b. Element of risk, which after credit, banks try to manage most closely.
- c. The most conservative position. Purchase funds (deposits) at a fixed rate for a fixed term then sell (lend) funds for a fixed rate for the same term. In this case the spread (gross margin to the bank) is known at the beginning of the transaction.
- d. The least conservative position. Either take deposits at fixed rates and lend them at variable rates or take deposits at variable rates and lend them fixed.
- e. The real world. Most banks will have portfolios of deposits and loans all with different maturities and at different rates. Prudent bankers will assign blocks of deposits to fund blocks of specified loans, thus assuring a margin. To the extent that loans are over or under funded in a specific category they will enter the money markets to buy or sell deposits and loans either to match their positions or improve their return. This is technically known as trading.

<u>Situation in Honduras:</u>

Largely because government bonds are the dominant determinant of interest rate level, and these are fixed by fiat and not market forces, there is no serious rate risk in the Horduran banking system

I.A.3 Liquidity Risk: (for examples see annex 2)

a. Liquidity risk is the ability of banks to respond to the call of depositors at the maturity of their deposits.
b. After credit risk, liquidity risk is the biggest factor in bank solvency.
c. In a reasonably free market rates are, in part, a function of tenor, consequently rate and liquidity risk are managed in tandem.

Situation in Honduras:
With all deposit and loan instruments, of any significance of a short tenor, there is very little liquidity risk in the market. This does not mean that some institutions may not be illiquid, ie. have loaned out more than they have in deposits.

I.A.4 Operational Risk:

a. Operational risk includes such things as; proper audit procedures, security measures, modern bookkeeping techniques, etc..

The different kinds of risks and their management by the financial system will lead to the creation of different kinds of financial institutions and products.

I.B. External factors affecting risk:

1. Government policies ,
2. Economic and political environment

External factors and gov't. policies to a large degree control the real and perceived interest and liquidity risks run by bankers.

I.B.1 Government policies:

1. Reserve Requirements (see annex 3)
2. Disintermediation techniques - Forced deposits, special taxes on certain financial instruments, or on the income from the instruments, the sale of bonds or other gov't. obligations at preferential rates or under preferential conditions. (see annex 4).
3. Rediscount rate manipulation
4. Subsidies competition and/or limitation on profits

Situation in Honduras
The way the gov't. manages 1,2 and 4 effectively keeps, an effective money market from developing and actively discourages long term investment.

I.B.2. Economic and Political Environment:

1. Inflation
2. Exchange rate manipulation

3. Political stability

Situation in Honduras

The government is trying to maintain price stability by limiting economic activity through high reserve requirements. For historic and 'national honor' reasons the currency is over valued. External conditions are conducive to political instability.

ANNEX 1

Rate Risk Examples:

1. Fixed rate environment
   Deposit taken at 10%
   Loan made at 12%
   Net margin 2%
   No interest risk exists

2. Deposit and loan rates float freely and are adjusted immediately
   Deposit taken at 10% floating > to 12%
   Loans made at 12% floating > 14%
   Net margin 2%
   Under normal condition and all things being equal no interest risk exists

3. Most portfolios will contain a mixture of loans and deposits that; float freely, are fixed for the term or are adjusted periodically to reflect current market conditions. As a matter of prudent portfolio management bankers will assign certain classes of deposits to cover certain classes of deposits. Following are some of the conditions which may result as a function of market forces.

   Deposits taken at 10% > to 12%
   Loans made at 12% remain the same
   Net margin is 0

   Deposits taken at 10% < to 8%
   Loans made at 12% remain the same
   Net margin is 4%

   Deposits taken at 10% stay the same
   Loans made at 12% > to 14%
   Net margin is 4%

   Deposits taken at 10% stay the same
   Loans made at 12% < to 8%
   Net margin is -2%

ANNEX 2

Liquidity risk examples:

1. Matched Position - Take a deposit for 30 days and lend it for 30 days. At the maturity of the loan funds will be available to pay the depositor on demand.

2. Missmatched Long Position - Take a deposit for 6 months and lend it out for 30 days. Clearly, there is no liquidity risk since there will be no call on the deposit at the maturity of the loan. However, there is an interest rate risk since there is no guarantee that funds can be lent at the same rate, or at all.

3. Missmatched Short Position - Take a deposit for 30 days and make a loan for 6 months. At the maturity of the deposit it will have to be replaced with another deposit, if available.

Note 1: In markets where the money market is not well developed, banks tend to run matched or long positions. Consequently, in the absence of long term deposits there is no long term lending. This is the case in Honduras.

Note 2: In markets where the money markets are well developed and funds are freely traded, banks tend to open positions since liquidity risks are reduced and money is to be made in trading against long and short positions.

ANNEX 3

Reserve Requirements

Reserve requirements affect the expansion and contraction of credit through their influence on the multiplier effect. The multiplier effect says that funds lent out will be redeposited in the banking system and available for relending. Reserve requirements take funds out of the system thus reducing the efficiency of the multiplier effect. There are two basic types of reserve requirements, those imposed by banks on themselves to provide for immediate liquidity and other contingencies. These normally run from 10 to 15%. The other reserve requirements are those managed by the government to control the creation of credit. These run about 10% in the U.S. and 30% in Honduras. In effect $100 deposited in the U.S. will create $350 in additional credit while the same $100 in Honduras will only create $155 of credit.

ANNEX 4

The disintermediation effect of Honduras' gov't. bond program. A comparison of bond purchase vs lending:

Bond Purchase		Lending	
$100	New deposit	$100	New deposit
- 30	Resv Req	- 30	Resv Req
		- 10	Own Reserves
70	Available to invest	60	Available to invest

note: Since gov't. bonds are totally liquid a bank would not set up additional reserves. It must also be rememberd that bonds are tax exempt.

		(tax)
$70 @ 10% yields $7	$60 @ 17% yields $10.50 -	$5.04 = $5.44
$70 @ 11% yields $7.7	$60 @ 18% yields $11.12 -	$5.35 = $5.76
$70 @ 12% yields $8.4	$60 @ 19% yields $11.73 -	$5.63 = $6.10
e70 @ 13% yields $9.1		

With marginal cost of funds at . 9 to 10% there is little incentive to increase the loan portfolio.