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Entry and Exit of Banks in Latin America and the Caribbean:
Public Policy Concerns and a Proposed Solution

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INTRODUCTION AND OVERVIEW

Almost everyone agrees that competition benefits consumers. Most people (or, at least, most economists) understand that competition is enhanced when potential competitors are free to enter markets. Banks, though, operate in a different environment than other firms. Unlike the situation in other industries, banks must obtain a charters from the government. Government officials have reason to be wary of granting charters, because, should a newly chartered bank become insolvent, it is likely that its creditors (depositors) will be “bailed out” with de facto or de jure government-provided deposit insurance. Or, new entrants might out-compete existing banks, causing them to incur losses that render them insolvent. Then the authorities will be faced with the prospect and cost of bailing out those banks’ depositors. This legitimate (from the viewpoint of taxpayers) concern might be used by existing banks to put additional political pressure on the banking authorities to get them to substantially limit the entry of potential competitors.

The banking authorities also are faced with the problem of how to resolve or otherwise deal with existing banks that are weak or insolvent without imposing costs on consumers or taxpayers. Two aspects of this concern should be delineated. One is the basic question – how can banking regulations be structured so that the future exit of weak and insolvent banks would be relatively costless? Its solution simultaneously solves the entry problem, because if unsuccessful entrants or the existing banks that they “defeat” can exit with little cost to the taxpayers, authorities who want to benefit consumers should not restrain entry into banking markets.

The second problem is transitional – how can the authorities resolve existing weak and insolvent banks without imposing costs on depositors or taxpayers? With respect to insolvent banks, there is no solution; when the economic market value of a bank’s (or any enterprise’s) assets are less than its liabilities, some creditors must take losses or be subsidized by someone else (e.g., taxpayers). These losses, though, can be mitigated; the sooner the authorities resolve insolvent banks, the less the losses will be. Weak banks are another story. The regulatory system suggested in this paper – a substantial capital requirement and structured early intervention and resolution – would require weak banks to become strong (by increasing their capital) or to exit the field before they impose costs on depositors or taxpayers. The United States adopted a similar capital-requirement system in 1991. At that time, presidential candidate Ross Perot predicted a “December Disaster” when the capital increase became effective. In fact, banks raised a substantial amount of capital and almost none closed.

The proposed bank regulatory system is based on two important related understandings about the conditions that are special to Latin America and the Caribbean. One is that banks in Latin America and the Caribbean are vital sources of business and personal credit. Rojas-Suárez and Weisbrod (1995a, p. 25) provide data which "indicate that most domestic financial credit needs [in Brazil, Chile, Colombia, Mexico, and Peru] are met through short-term bank loans and short-term government and central bank securities." Hence, bank failures often result in the bankruptcy of business that cannot repay prematurely called loans.

The second is that consumers have limited confidence in the stability of the banking systems in several countries in the region. Depositors' fears that banks might fail increases the volatility of demand deposit balances. As Rojas-Suárez and Weisbrod (1995c, p. 1) show, "small economic shocks often become amplified into large crises . . . [such that,] if problems in a banking system in the region emerge, investors' lack of confidence generates both significant withdrawals of private funds from banks and a reduction in the official sector's access to capital markets to a much greater extent than a similar crisis in an industrial country." A recent example is the 1995 "Tequila shock," wherein the sharp drop in the exchange value of the Mexican peso for the US dollar resulted in runs from Argentine banks, even though the Argentine peso was tied to the US dollar. In addition, banks in the region are very important vehicles for individuals' savings. In contrast, people in the highly developed countries can place their funds in many alternative institutions and market instruments. Consequently, if people are concerned about banks' safety, they are likely to save less than is optimal.

Thus, the stability of the banking system and the availability of individual banks for borrowers and depositors are particularly important for Latin America and the Caribbean. Consequently, I conclude that the closure of banks that results in loan recalls and a reduction in lending facilities should be avoided. Collaterally, deposits should be fully insured to reduce peoples' costs of using checks and saving for investments and future consumption.

It might seem that free entry into banking is incompatible with government-provided deposit insurance, because new entrants might become insolvent or engage in excessively risk behavior as a consequence of deposit insurance (the moral hazard problem). Furthermore, the banking agencies may not have the political will to act sufficiently quickly to forestall losses being imposed on prudently run banks, their customers, and taxpayers (the agency problem).

However, the proposed regulatory system, if adopted, could deal effectively with these concerns. Banks would be required to hold sufficient amounts of capital to restrain excessive risk taking and absorb losses that might

be incurred. The capital would include subordinated debt, which offers the advantages of eliminating the tax cost of equity (when interest on debt but not payments to equity holders is deductible against taxable income) and providing a market-driven restraint on risk (thereby solving the moral hazard problem). A system of structured early intervention and resolution provides pre-determined rules governing when and how the banking authorities first may and then must take actions when banks' capital declines below specified amounts (thereby solving the agency problem). Institutions with insured deposits would be required to report financial information to the authorities regularly. Independent external auditors and field examinations conducted by the authorities would establish the validity of the information from audits.

Under the proposed system, few (if any) banks would become insolvent and banks that are not successful would merge with or sell out to strong banks, rather than wait until the authorities must seize and dispose of them. Competition would be enhanced additionally were foreign banks encouraged to establish branches or subsidiaries in Latin American and Caribbean countries.

Justifications of the basic assumptions about the necessary attributes that the banking system in the region should have, derived from the understandings presented earlier, are presented first, followed by the proposed solution to the entry-exit problem.

BASIC UNDERSTANDINGS

Three basic assumptions underlie the analysis: borrowers and borrowing facilities should be protected; depositors should be guaranteed by the government against loss; and competition among providers of lending and deposit services is desirable.

Borrowers and Borrowing Facilities Should Be Protected

This assumption is not one that should be made for developed and large countries, because firms and individuals in these countries have many sources of funds. In addition to commercial banks, businesses and individuals can obtain funds from other depositories, such as savings banks, savings and loan associations, and credit unions. Loans can be obtained from non-depository lenders. For businesses, these include general-purpose lenders (such as General Electric Capital Corporation), sales finance companies, and factors (who make loans secured by accounts receivable). Individuals can obtain mortgage loans from mortgage companies, vehicle loans from sales

finance companies, and cash consumer loans from specialized finance companies. Large, relatively riskless businesses can obtain funds by selling commercial paper directly to investors. Furthermore, many banks serve consumers in developed countries, both domestic and foreign owned. Hence, should one or more banks fail, most businesses and individuals will not be affected very much.

In contrast, the people in many Latin American and Caribbean countries are served by far fewer lending institutions and markets. Hence, the failure of several banks or a large bank could result in outstanding loans being called prematurely. Also, loan demands would not be met until other lenders expanded or entered the market. This situation probably would impose financial costs on the failed banks' former borrowers, their customers and employees. These costs could result in their bankruptcy. This is an externality that should be mitigated, as long as the cost of the "cure" does not exceed the benefits therefrom.

To look ahead, costly disruption of borrowing facilities can be avoided efficiently by policies that reduce (indeed, virtually eliminate) the possibility that banks will become insolvent and have to be closed and by reducing barriers to entry by additional institutions that could offer alternative sources of loans.

Depositors Should Be Guaranteed Against Loss of Their Funds

Arguments Against Deposit Insurance

Good arguments can be made against government-provided deposit insurance. Similar to the situation facing creditors generally, depositors could assess the risk to which their funds are subject and place their funds in prudently managed and adequately capitalized banks and/or demand compensation for the risk that they might incur. Depositors' concerns, in turn, provide bankers with strong incentives to maintain their depositors' confidence and to avoid having to pay depositors high rates of interest and with having to deal with substantial and rapid depositors' withdrawals (runs). Thus, the moral hazard cost of deposit insurance could be avoided. Furthermore, the central bank could use open market operations to offset runs to currency that otherwise would result in a multiple decrease the nation's money supply and bank credit. Although runs that result in bank failures could disrupt the payments system, the system could be protected by rules governing collateral requirements, payments only for good funds, and netting of obligations.

Arguments For Deposit Insurance

Nevertheless, three important reasons support the provision of government guarantees to depositors: efficiency – government's comparative advantage in providing people with a safe and convenient payments and

saving medium; the political reality that elected governments will not permit depositors to absorb losses; and enhancement of competition by giving privately owned banks the same advantage as government-owned banks. Whether the deposit insurance should cover all or a portion of deposits is considered in the last part of this section. I conclude that 100 percent coverage of deposits is best.

Efficiency -- government's comparative advantage in providing "safe" depositories

A country's economy is enhanced when the means of effecting claims over resources at a point in time (via a circulating medium) and over time (via savings) is efficient. In the past, notes issued by banks were the principal means of making payments. At present, demand deposits largely serve this function. Checks are less costly for people to use and accept when they do not have to be concerned about the solvency of the bank on which the checks are drawn. Consequently, people would be more likely to use checks if they did not have to worry about the solvency of banks.

Banks also provide a convenient means for people to save for investment and future consumption. This vehicle is particularly valuable for people with relatively small amounts of resources, because the transactions cost of depositing and withdrawing savings is much less than that incurred for most other investments, such as stocks and bonds. However, people might under-use banks and, hence, engage in less saving than is optimal, if they have to incur the cost of determining and monitoring the extent to which their funds might be lost should a bank fail. Rather than each individual having to make this assessment, government could offer deposit insurance. In general, then, it would be socially beneficial for a government to insure deposits if the costs of this insurance (including direct costs imposed on banks and the cost of monitoring and administering the scheme) were less than the costs that individual depositors would have incurred.

Political reality -- deposit insurance will be provided

Even if, on the average, the benefits of government-provided deposit insurance did not exceed its cost, experience indicates that elected governments almost never allow depositors to incur losses as a result of bank failures. In the United States, for example, from the enactment of federal-government-provided deposit insurance in 1933 through 1991 (when the Federal Deposit Insurance Corporation Protection Act -- FDICIA -- was enacted), almost all depositors in banks, savings and loan associations, and credit unions were protected from loss of their funds, often by the assumption of their deposits by another bank or thrift. FDICIA now emphasizes limiting coverage, in fact as well as in law, to \$100,000 per account. Banks and thrifts that failed in Canada, Australia, Japan, and Western Europe have been merged into solvent banks, usually at the request of governments, thereby protecting

depositors. The government of Mexico protected depositors by nationalizing banks. Other governments have exchanged bad loans for government bonds to avoid having to close insolvent banks. Only a few exceptions stand out. Australia and some other countries have imposed some costs on depositors by requiring them to take government bonds in payment for their deposit balances. The United Kingdom limited deposit insurance to 75% of £20,000, which has been maintained in two failures. (It recently increased coverage to 90%.) Argentina has allowed some depositors to take losses; however, most depositors were protected by mergers and by central bank assistance supported by pension fund purchases of obligations.

Governments protect depositors from loss for several reasons. First, the banking systems in most countries have many depositors. These people comprise a large voting block that might incur specific personal losses compared to taxpayers generally, who rarely understand that they will bear the cost. Second, large depositors often exercise strong political pressure to be bailed out. Examples may be found in the region (e.g., Chile), the United Kingdom (would depositors in Barings have been left unprotected had the bank's liabilities not been taken over by another company?), and the United State prior to enactment of FDICIA. Third, large banks and groups of institutions often exercise strong political pressure to prevent being closed. Examples include the US savings and loans associations and farm-state banks. Fourth, the public and legislators fear bank runs and economic collapse. Although, central banks could take offsetting actions, people who want to be protected from loss can exploit this fear.

Private vs. government-owned banks

Although a government could provide banking facilities directly, via government-run banks or postal savings, the cost to the economy is likely to be greater than if these facilities were provided privately. Government enterprises tend to be inefficient and they are subject to misallocation of resources as the result of political pressures. Privately owned banks also have greater incentives to determine present and potential customer demands and to develop and adopt efficient innovations, processes, and services.

Nevertheless, several countries, including some in the region, have government-owned banks. These banks offer depositors 100 percent deposit insurance, because it is not conceivable that they would be permitted to fail with losses imposed on depositors. Hence, privately owned banks are at a comparative disadvantage. Government insurance of deposits for all domestically chartered depositories would, at least, tend to put privately operated banks on an equal footing.

Limited vs. Full Deposit Insurance Coverage

A good case can be made to limit deposit insurance to relatively small deposit amounts. The cost to these depositors of individually assessing and monitoring the risk of loss tends to exceed the benefits they might achieve. Holders of large deposit balances, though, could make these judgements, thereby reducing the moral hazard that otherwise would plague deposit insurance.

However, rather than monitor their bank's activities, holders of large deposit balances could arrange to transfer their funds almost instantly to another bank, if it appears that their bank might be or might become insolvent. They could accept higher interest payments for their deposits placed in a risk-prone bank and incur the cost of monitoring the bank sufficiently to decide when to run. It is likely that they could transfer their balances before the bank is closed. Thus, if the bank does get into financial trouble, the cost will be borne primarily by depositors who are neither fully insured nor sufficiently aware of the bank's condition. Many people would consider this to be "unfair," which might lead the government to extend insurance protection *ex post*. Furthermore, from the experience of many countries, runs by large depositors tend to result in government intervention and an extension of deposit insurance. For example in 1984, when it was rumored that the authorities might have to close the Continental Illinois Bank, the Federal Deposit Insurance Corporation extended protection to all creditors of the bank and its holding company to foreclose runs both at Continental and at apparently similar large banks. Although FDICIA imposes conditions designed to avert such "too big to fail" extensions of deposit insurance coverage, there has been no occasion, as yet, to put these provisions to the test.

A more important reason for my conclusion that Latin American and Caribbean governments should provide 100 percent deposit insurance coverage is that subordinated debt with remaining maturity of at least two years can be more effective than legally uninsured deposits for reducing the moral hazard cost of deposit insurance (as is explained below). However, it is vital that the insurance is limited to genuine deposits. This can be done by defining deposits as liabilities that can be withdrawn only at face value (*par*) and that bear interest at no more than the market rate on government obligations of the same maturity. The later requirement is suggested to constrain risk-prone banks from readily obtaining funds.

In addition, deposit insurance should be available only to institutions that meet the capital, reporting, and prudential requirements presented below. These requirements, if implemented, should limit the direct and indirect costs of deposit insurance to a very small amount.

Competition Among Providers of Deposit and Lending Services

It is a truism of economics that entry with few constraints usually is necessary and sufficient for competition to be effective. Consumers benefit when new suppliers enter a market and vie for their trade. New entrants usually must offer better products and services to businesses and consumers to overcome the cost to these potential customers of shifting their accounts from their present bank. Thus, it is likely that new entrants will have developed preferable (to consumers) alternatives that established suppliers either cannot provide or may not want to provide. Collaterally, the mere possibility that other suppliers may enter their market gives established suppliers strong incentives to please their customers and to innovate effectively.

However, completely unregulated entry of banks when their deposits will be covered by government-provided deposit insurance is likely to be costly. Opportunistic or dishonest people might establish banks that invest in excessively risky assets or engage in self-dealing or fraud, because they do not have to be concerned about monitoring by depositors to whom risk-reflecting interest would have to be paid. In addition, existing banks that cannot successfully compete might fail and their depositors might have to be bailed out, with the cost borne by taxpayers or other banks and their customers. If it is likely that the exit of existing banks will impose costs on taxpayers or other banks, it also is likely that government officials will heed existing bankers' self-interested demands for restraints on entry. Hence, the essential issue, to which I now turn, is how inadequate or unfortunate banks can exit without imposing costs on the implicit or explicit deposit insurance fund and without greatly disrupting their borrowers and other customers.

The regulatory structure now described both permits the banking authorities to allow essentially unrestrained entry and 100 percent deposit insurance. Collaterally, this structure substantially reduces (almost to zero) the probability that existing banks would exit in a manner that imposes substantial costs on borrowers and depositors.

PROPOSED SOLUTION TO THE ENTRY EXIT PROBLEM

The proposed solution consists of four elements. One is a capital requirement, which effectively deals with the moral hazard problem. The second is a structured early intervention and resolution (SEIR) rule for determining when a bank's capital is inadequate and what steps first may and then must be taken by the banking authorities, which effectively deals with the banking authority's agency problem. The third is limited prudential reporting and examination that enables the authorities to determine that the capital requirement is being met. The fourth is permitting, indeed, encouraging, the entry of foreign banks that are chartered and supervised in countries with strong capital and prudential requirements.

Capital Requirement

The proposed capital requirement, if adopted and implemented, would ensure that institutions offering insured deposits have strong incentives not to take excessive risks and sufficient resources to absorb losses that might be incurred. The banking authorities also will have both the incentive and the means to ensure that the capital requirement is being met.

The proposed capital requirement has two elements: the amount of capital relative to assets (both on and off the balance sheet) should be equivalent to the ratio that banks would hold if their deposits were not covered by government-provided insurance; subordinated (explicitly uninsured) debt that cannot be redeemed until the authorities can act should be both counted as part of capital and be required. Of course, the effectiveness of any capital requirement depends on the extent to which economic capital can be measured meaningfully. I conclude this subsection by outlining the measurement problems and suggesting solutions to those problems.

Capital-to-Assets Ratio

A required minimum ratio of capital to assets is necessary to overcome the moral hazard incentive of bankers to operate with low capital, given government insurance of deposits. Without such a requirement, opportunistic bank owners may be tempted to take excessive risks – risks they would not take if they paid the full cost of decisions that turn out badly. Even though some (perhaps most) bankers would not act opportunistically, the capital requirement is necessary for two additional reasons. One is that bankers may misperceive the extent to which they might incur loan losses and other costs, perhaps because economic conditions and their recent experience have been favorable. The other is that capital provides a cushion to absorb losses, whether expected or not.

Capital is the total claim by equity holders and creditors on a bank's resources that is not insured by the government and, hence, is at risk. It should be sufficient to absorb almost all of the losses that a bank might incur, so that these losses are not imposed on the deposit insurance fund or taxpayers. "Almost all" is specified, because there could be instances of massive fraud and severe economic downturns that deplete an unusually large proportion of a bank's assets. These risks are insurable. The amount of capital, though, would not be risk weighted, as is the procedure employed for the Basle international capital standard. The reason is that the Basle risk weights necessarily are crude (the risk categories are very wide – all commercial loans are weighted equally), the measurement is incomplete (covariances of cash flows are not accounted for), and the weights and categories are subject to political pressures (residential mortgages are given lower weights than other consumer loans, even though mortgages may be subject to greater interest-rate risk). Rather, the required ratio would be sufficiently high to discourage bankers from taking excessive risks and to cover the costs of the risks they do take. Furthermore, as is discussed later, the interest that banks must pay on subordinated debt is the equivalent of a risk-adjusted deposit-insurance premium.

Some bankers might object to a higher-than-present capital requirement, because capital is more costly than deposits. Indeed, capital is more costly, but for only two reasons. One is that deposits are government-insured and the insurance is under priced. The proposed capital requirement is designed to eliminate this under pricing. The other results from the income tax statutes present in many countries that permit companies to deduct against taxable income payments to debt holders, but not payments to equity holders. Consequently, debt (which includes deposits) is less costly than equity. Avoidance of this situation is one reason for permitting banks to meet their capital requirement with subordinated debt. In effect, they would simply be substituting a portion of their insured deposits with uninsured debt, both of which offer the same tax advantages.

Subordinated Debt Requirement

Subordinated debt is, by definition, uninsured. It must be issued in large denominations so that people will not confuse it with certificates of deposit and claim they thought it was insured. To be included in capital, subordinated debt also must have a remaining maturity of at least two years to allow authorities to act before it can be redeemed. Thus, holders of subordinated debt cannot "run" to avoid taking losses that the bank might incur.

In addition to being available to absorb losses, subordinated debt offers several advantages over equity. This source of capital serves as a means of imposing risk-determined deposit insurance premiums on banks, because, similar to the situation faced by corporations whose debt is not government-insured, the risks perceived by debt holders are reflected in the interest rates that the bank must pay to get creditors' funds. Unlike equity holders, debt

holders do not benefit when the risks result in high net profits, while they might lose if the cost of the risks exceeds the equity. The interest rates required on new debt and reported on traded debt, therefore, provide the banking authorities with early warning signals of the risks taken by banks. The difficulty or ease experienced by banks in refunding maturing debt also provides an early warning. Consequently, there is reason to require banks to have a substantial portion of their capital provided by subordinated debt, preferably debt that must be refunded continuously.

The authorities should recognize a serious possible limitation of subordinated debt. The benefits it provides from risk-reflecting interest rates and early warning signals would be limited or lost if equity holders were permitted also to hold subordinated debt, directly or indirectly. Furthermore, should a bank have incurred losses that absorbed its equity capital, its subordinated debt holders would be, in effect, equity holders. They then would have the same incentives as equity holders to take excessive risks.

Some bank owners, particularly those whose banks are small, might argue that it is difficult for them to find purchasers of subordinated debt. However, they could obtain funds from insurance companies, pension funds, and investors who otherwise would purchase the bonds of other corporations. Bankers who cannot find investors who would be willing to put their funds at risk should not be permitted to operate institutions that hold government-guaranteed deposits.

Measurement of Capital – Problems and Solutions

Own-and related-bank-financed (economically meaningless) capital

Rojas-Suárez and Weisbrod (1997) point out and illustrate how capital providers can avoid a capital requirement by borrowing from their own bank or from related banks, directly or indirectly. They recognize that self-lending generally is prohibited. However, in their words (p. 36, footnote omitted):

We argue that the concentration of wealth in Latin America and the accompanying illiquidity of equity markets permit investors who control banks to subvert the intent of capital requirements, even when the bank itself is subject to rigorous accounting standards. Investors in developing countries holding a majority interest in a bank can offset their equity position in that bank with a liability position to the same bank or to a bank owned by a related party—in effect, they can borrow from the bank (or a related bank) the funds necessary to acquire ownership in the bank. In contrast, in industrial countries, where markets are large and wealth is dispersed, it is much more difficult to finance the acquisition of a majority stake in a bank using loans from related parties.

Using simplified balance sheets, Rojas-Suárez and Weisbrod (1997, pp. 46-49) show how capital holders could avoid a self-lending prohibition with reciprocal borrowing, wherein two unrelated parties (A and B) mutually fund their capital contributions to banks they control with loans from the other's bank. Assume that party A becomes bankrupt and cannot pay his loan at all to bank B. That bank would become insolvent if its capital were less than the amount of the loan. With bank B insolvent, party B might not be able to repay her loan to bank A. This, in turn, could result in Bank A becoming insolvent.

This situation could be obviated with some additional rules that have generally been adopted. Loans for any purpose should not be made to capital holders and related persons and firms that, together, hold more than a small proportion of a bank's capital (say, five percent).¹ Loans to any one borrower or group of related borrowers should not exceed more than a relative small percentage of a bank's capital (say, fifteen percent). These rules, if enforced, would deal effectively with the problems raised by Rojas-Suárez and Weisbrod (1997).

This is not to say that enforcement necessarily would be simple. Augusto de la Torre, Governor of the Central Bank of Ecuador, provides an example from his country. He explains (de la Torre, 1997, p. 79):

We in Ecuador have found that business groups that own industrial companies and banks have actively used offshore jurisdictions to generate fictitious capital increases. Domestic deposits have been transformed into accounting capital (as opposed to real capital) by circulating them around the various Caribbean jurisdictions and others where similar practices prevail. A striking example is a bank in which the Ecuadoran authorities intervened. . . . [F]rom the end of 1994 until the beginning of 1996 . . . [t]he owners [of this very rapidly growing bank] had created fictitious capital by transferring deposits to offshore centers and then using those deposits to lend to the bank's shareholders, who in turn had used those funds to increase the bank's capital.

This situation is more difficult to discover. Bank examiners and independent external auditors, who should be specifically charged with this task, can detect it, however. For example, they should closely examine all large loans to determine the recipients and the reason for and disposition of loans made to other banks. These examinations should be preceded by an analysis of the holdings and relationships among a bank's capital holders (equity and subordinated debt). Closely held and rapidly growing banks should be examined particularly carefully.

¹ A related person would be defined as a close relative and a related firm might be one in which these people have an interest greater than their proportionate holding of the bank's capital.

Mismeasurement of Capital

Capital should be measured as the difference between the economic market values of a bank's assets and liabilities (other than subordinated debt that serves as capital). Because these values are rarely readily available or even precisely measurable, the amount of capital to which a capital requirement usually applies is accounting (book) capital. (An exception is marketable securities that, under US generally accepted accounting principles, must be reported at market values, although the balance sheet numbers are not changed from historical-costs if the securities will be held to maturity). Traditional accounting procedures tend to both under- and over-state capital (relative to economic values). Understatements of capital result from inflation; reported asset values usually are not increased to account for changed price-levels and long-term liabilities that were sold before an inflation was expected are not reduced to their present values. In addition, intangible assets, such as business development, employee training, goodwill, and charter value) are not capitalized and recorded as. Since these understatements result in greater economic- than book-value capital, there is a regulatory advantage.

Accounting (book-value) capital tends to be overstated as a result of changes in interest rates that decrease the present value of assets more than the present value of liabilities (duration imbalances) and when loans that might not be repaid as contracted are not adequately written down. The interest-rate-determined overstatement could be corrected by requiring banks to use current interest rates to determine and record the present values of restructured loans and fixed-interest obligations. More important, though, is understatement of allowances for bad loans. Rojas-Suárez and Weisbrod (1997, p. 41) point out that "[t]he most common failing [among Latin American and Caribbean countries] is . . . underprovisioning against potential loan losses." They present evidence showing the importance of this overstatement of loan values in the 1980s (Rojas-Suárez and Weisbrod, 1994). However, Michel Camdessus, managing director of the International Monetary Fund, indicates that this situation has changed. He states that "the Association of Banking Supervisory Authorities in Latin America and the Caribbean has developed regional standards on loan classification and provisioning and on the role of external auditors." (Camdessus, 1997, p. 15.) Application and monitoring of these standards can substantially reduce, if not entirely eliminate, understatements of banks' capital.

Therefore, I conclude that capital can be measured meaningfully, although probably imperfectly. That is one reason that a higher ratio of capital to assets is recommended. Before discussing the ways in which bank reporting and prudential examination can be effective for assuring that the measurements are likely to be accurate, I describe

the proposed rules that specify when and how the banking authorities should act to ensure that the capital requirement is maintained.

Structured Early Intervention and Resolution (SEIR)

SEIR was proposed in 1988 by Benston and Kaufman and was substantially adopted by the United States in 1991 as part of the Federal Deposit Insurance Corporation Improvement Act (FDICIA). It provides incentives for and imposes requirements on the banking authorities to act expeditiously and responsibly. Together with the capital requirement, the result should be almost no depositor bailouts.

Four capital zones or trip wires (or tranches) are established that define first when the authorities, at their discretion, may act and when they must act. The ratios suggested here are higher than those specified in FDICIA, which are too low, even for the United States. The ratios should be higher for Latin America and the Caribbean for the reasons enumerated by Rojas-Suárez (1995b, p. 5):²

financial data are not reliable: "accounting standards are not sufficiently developed" to evaluate the quality of banks' or their customers' financial statements

"the legal environment makes it difficult for [banks] . . . to gain possession of collateral in the event of default"

"there is a legacy of destabilizing economic policies"

"it is difficult to determine whether the borrower receiving a new loan has a business relationship with a borrower having a non performing loan" (p. 16).

The four zones and the pre-specified actions by the authorities are as follows:

Adequately capitalized banks

These are banks with capital/assets ratios approximately equal to those of firms without government-provided deposit insurance (perhaps 20 percent); they would be subject to minimum supervision that is limited to determining that the bank was reporting its financial numbers correctly and was not being managed fraudulently or recklessly.

First level of supervisory concern

Includes banks with capita/asset ratios below, say, 20%, but above, say, 12%; they would be subject to increased regulatory supervision and more frequent monitoring. The authorities would require a business plan for quick

² Goldstein (1997) describes similar problems present in less developed countries.

recapitalization and, could, at their discretion, impose such sanctions as restricting growth, prohibiting dividend payments, and restraining payments for services provided by related companies.

Second level of supervisory concern (inadequate capitalization)

If the bank does not bring its capital ratio back into compliance, the authorities must impose additional and harsher sanctions, including prohibition of dividend payments and interest payments to subordinated debt holders, and restrictions on growth and on transfers of funds to related entities.

Resolution

Should a bank's capital ratio falls below a predetermined point (say, 5 percent), the authorities must resolve the bank quickly through sale, merger, or liquidation. Rather than permit this to happen, an economically solvent bank most likely would voluntarily raise its capital ratio into compliance, liquidate, or sell out to or merge with another institution.

Prudential Reporting and Examination

Reporting Requirements

The banking authorities should regularly monitor the activities of institutions with insured deposits to determine whether or not the capital requirement is being complied with and to provide an early warning of possible problems that warrant closer examination and may require supervisory intervention. The requirement outlined should impose low costs on the institutions, because they surely would be maintaining and reviewing most of the information for purposes of internal management and oversight by the board of directors.

Deposit-insured institutions should submit monthly and annual reports to the banking authorities. The annual reports should be audited and attested to by independent external auditors (certified public accountants) who are approved by the banking authorities. All directors of the bank should sign the reports. To the extent feasible, assets and liabilities should be stated at current (present or market) values. Delinquent and non-performing loans should be clearly defined (e.g., payments over due by more than 30 or 60 days or where additional loans are made to enable payments to be met). Loans to related parties should be identified as such, as should the total amount of loans made to an associated group.

In addition, the authorities should conduct regular field audits to check that the reports are correct. These audits should be directed towards and limited to concerns about the measurement and adequacy of capital. Additional examinations should be made where the monthly reports or other information indicates substantial

growth or possible exceptionally risky operations. Banks owned or controlled by a few persons or groups should be more closely monitored and examined. The direct cost of these examinations should be charged to the banks examined.

Prudential Regulations

Self-dealing must be prohibited. This includes all loans to stockholders, subordinated bondholders, and bank managers and to parties related to them, whether personal or business. An exception, however, could be made for loans made to parties who have but a small interest in the bank (e.g., ownership of less than five percent of total capital). Loans to one or a related group of borrowers should be limited to a percentage of capital (perhaps fifteen percent). Additional, so-called prudential regulations that limit the activities in which banks can engage, are not required and are likely to be detrimental both to banks and consumers, because they tend to limit competition rather than actually reduce the risks in which banks might engage.

Foreign Banks

Gavin and Hausmann (1997) point out that, to achieve a competitive market for banking services, Latin American countries must meet several conditions. These include a stable macroeconomic environment, effective bank regulation conducted by experienced, well-trained people, and judicial enforcement of contracts. In addition, in some countries relatively few domestic investors may be willing to meet the capital requirements that should be imposed on banks with government-insured deposits. Gavin and Hausmann propose opening domestic markets to foreign banks (presumably including other Latin American banks). These banks can bring an additional source of funds and services to consumers. Not only will they tend to offer better products to consumers, as would a domestic new entrant, but they often bring with them improved procedures and products that were developed in their home countries. Foreign banks generally find it desirable to hire local people. Hence, they also can provide training for people who might leave to work for domestic banks or to establish their own banks. In addition, because foreign banks are diversified geographically, they are less subject than are domestic banks to domestic macroeconomic changes.

Consequently, I suggest that banks owned by foreigners that are chartered and supervised in countries with strong capital and prudential requirements should be encouraged to open branch offices in Latin American and Caribbean countries. These banks should be required to insure their deposits either from their home country funds or from other sources, such as collateral or insurance policies written by reputable and secure companies. The local

banking authorities, therefore, would only have to determine that these banks could fully meet deposit withdrawals by domestic depositors. Otherwise, there should be no restraints on the repatriation of funds by foreign banks to their home countries. Domestically chartered subsidiaries of foreign banks should be treated in the same manner as are other domestically chartered banks.

CONCLUSION

The proposed solution permits relatively free entry and meets Rojas-Suárez and Weisbrod's (1995b) three principals of good crisis management:

- "parties responsible for the crisis bear most of the costs of restructuring" – the capital requirement together with the reporting requirement should prevent owners of banks from taking excessive risks that imposed deposit insurance costs on taxpayers or on other banks;
- "prevent problem banks from expanding credit to delinquent borrowers" – the structured early intervention and resolution (SEIR) procedures together with the reporting and prudential requirements should prevent this from happening;
- "avoid financing the program with inflation by making the restructuring program a high priority" – the capital requirement that includes subordinated debt and SEIR should prevent restructuring from becoming necessary.

In addition, the proposed system can be implemented without disrupting present banking systems or banks that are well capitalized. Undercapitalized banks will be affected, but this is as it should be. Owners of some undercapitalized banks might prefer to merge with or be acquired by other banks, thereby relieving the banking authorities from later having to intervene and possibly resolve them. With entry unrestrained (except for capital and reporting requirements), consumers will not be disadvantaged from mergers and acquisitions that reduce the number of competitors. Thus, the entry-exit problem will have been solved.

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