THE PRECARIOUS NATURE OF SOVEREIGN LENDING: IMPLICATIONS FOR THE BRADY PLAN

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Introduction

The so-called Brady Plan—the new policy of officially subsidized reduction of the private debts of less developed countries (LDCs), as announced by U.S. Treasury Secretary Nicholas Brady on March 10, 1989—is merely a new twist in the U.S. government's eight-year-old policy of preventing LDC debtors and their foreign commercial creditors from working out soured LDC debts on their own terms.[1] This U.S. policy of avoiding conventional-style default at all costs originated with the Treasury Department's and the Federal Reserve's crisis management of Mexico's 1982 moratorium on principal payments to its foreign creditor banks. Given that U.S. money center banks' loan exposure to Latin America in 1982 averaged 160 percent of their capital base, and that the U.S. government (that is, taxpayers) were already leashed through federal deposit insurance to the bank's plight, there was little alternative to the initial interventionist policy.

In 1990, however, unlike eight years ago, European, U.S., and Japanese banks are increasingly well positioned to formally realize the imbedded losses on their LDC loans. Indeed, through innovative, privately initiated, and mutually beneficial debt-reduction techniques, the creditor banks and LDC debtors retired nearly $50 billion in external LDC debt from 1984 through early 1989—before the Brady Plan. The Brady Plan, in fact, chilled much of this private

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[1]While the foreign debt of all LDCs totals $1.3 trillion, the foreign debt of the "rescheduling" LDCs—those enmeshed in the debt crisis of the 1980s—totals about $600 billion.

debt-reduction activity, particularly LDC debtors' debt-equity swap programs.

In the guise of "jump-starting market-based debt reduction," the Brady Plan is only a new development in the post-1982 U.S. policy of papering over LDCs' de facto (and de jure) defaults on foreign bank loans. This policy continues to allow private banks in the United States and other industrial countries to collect more interest—and suffer fewer losses—on their bad LDC loans by slowly transferring much of the bad debt exposure to the multilateral lending agencies, and thus to the industrial nations' taxpayers. Proponents of the Brady Plan argue that it will be a cost-effective endeavor if the commercial banks absorb large losses in the officially subsidized, debt-reduction agreements. As the argument goes, debtor governments will gain so much breathing room that they will dutifully service all obligations on the remaining debt. In short, once debt is restructured, in many cases with World Bank and IMF interest payment guarantees in place, the LDC debt problem will vanish. Like the "war to end all wars," the Brady Plan is to be the rescheduling to end all reschedulings.

Such a scenario defies not only the experience of hundreds of years of sovereign debt defaults, but also the post-1982 record, whereby major debtors have each rescheduled and stretched out their foreign commercial bank debts between three and nine times. For centuries governments have borrowed private money, squandered it on corrupt and unproductive state schemes, defaulted, and then negotiated easier terms with their creditors, only to default again. The fundamental aim of the Brady Plan, like the previous debt policy of U.S. Treasury Secretary James A. Baker, is to prevent the *private* bargaining process whereby indebted sovereign borrowers (the honest and dishonest alike) and their creditors have long settled delinquent debts at a fraction of their nominal value.

Debtors and creditors would exploit debt-reduction techniques of the private sector far more aggressively if not for LDCs' annual receipt of large World Bank and IMF loans. Throughout the mid- to late 1980s, the indebted LDC governments effectively "round-tripped" these funds to private creditor banks as debt service. Also since the late 1980s, the World Bank and IMF appear to be increasingly round-tripping much of their disbursements to borrowers back to themselves, as debt service requirements on old World Bank and IMF obligations grow. In a protracted attempt to paper over de facto LDC defaults with new credits, U.S. policy under Secretary Brady, as under Secretary Baker before him, is permanently chaining LDC debtors to financial and economic micromanagement by the World

Bank and IMF. In the course of this process, the policy is financing the build-up of the next LDC debt bomb, which will involve World Bank and IMF debts.

Previous episodes of sovereign debt default suggest that the debts which LDC governments acquired during the 1970s and 1980s also will eventually be settled at a fraction of their face value. In the present debt crisis, the official debts to the international lending agencies, which are steadily replacing the bad private debts, will go largely unpaid. Yet, previous episodes of sovereign default, particularly the 1930s episode, indicate that debtors and creditors can, indeed, negotiate significant levels of debt reduction when left to work things out for themselves and to exploit the development of a secondary market in debt claims.

Centuries of Sovereign Default: A Brief Review

The precarious nature of sovereign lending is preserved in a history of default that dates back to medieval times (Lewis 1986/87).[2] The English monarchy developed such a record of default that creditors learned to require tangible collateral. Edward III, for example, had to pawn the crown jewels to obtain Florentine bank credit for his part in the Hundred Years War. The famous German banking house of the Fuggers helped bankroll the early success of the Hapsburgs in expanding their dominion over Germany, the Netherlands, Belgium, Italy, the Iberian Peninsula, and beyond. The Fuggers' problems in collecting on those loans drove them from the sovereign lending business.

The most spectacular defaulter in the early history of international debt was Philip II of Spain. He turned to the Genoese bankers after the Fuggers declined to finance his various enterprises, which included the Armada, the reconquest of Belgium, and campaigns against the Ottomans. While Spain's New World minerals brought unprecedented wealth, Philip's finances were in perpetual disarray. (This chaos was perhaps the first example of a government's natural resource windfall abetting an unsustainable fiscal outlay.) Various types of bonds were invented to fund Philip's imperial projects and these bonds were traded actively, with large discounts emerging when Philip's credit rating was low. In March 1577, for example, the paper traded for 55 percent of face value. Philip defaulted on his Genoese debt in 1557, 1560, and 1576. He then turned to Portuguese financiers, and defaulted on debt to them in 1590, 1606, and 1627.

[2]Except as otherwise noted, this section relies heavily on Lewis's (1986/87) study, to which Tammen contributed.

The structure of international lending remained largely unchanged from the 17th through the early 20th centuries. Foreign lending took the form of either short-term trade finance or special purpose loans at fixed interest rates. The latter were used to build much of South America's and Russia's infrastructure. Sovereign debt defaults remained common, particularly throughout the 19th century. Creditor country governments generally maintained a hands-off approach, with certain notable exceptions, such as the British occupation of Egypt in 1880 and the French occupation of Mexico in 1863. But these exceptions were justified on political grounds, not on the basis of collecting bad debts. Even the U.S. gun-boat diplomacy in the Caribbean from the 1890s through the 1920s was based more on protecting the Panama Canal than on protecting private investors.

The interwar years were marked by sovereign defaults throughout Central and Eastern Europe, China, and Latin America. This period was also marked by some highly resourceful strategies on the part of borrowers to benefit from their default. When Germany had difficulty meeting obligations stemming from its World War I reparations, the United States organized various teams of experts to negotiate easier terms. The 1924 Dawes Plan stretched reparations out over a 50-year period—with payments tied to a prosperity index—and included a special loan to help halt hyperinflation. Still, as soon as Germany had to make significant net repayments to the United States, it defaulted. The subsequent 1929 Young Plan further stretched out reparations and provided another special loan, but this plan was eventually defaulted on as well. Brandeis University's historian Stephen Schuker (1988) examined the period's balance of payments statistics and found that the net capital flow ran to Germany during both the inflation and stabilization phases of the Weimar Republic. Not only did the Reich entirely avoid paying net reparations to its wartime opponents; it actually extracted the equivalent of reparations from the Allied powers, principally the United States. The gross capital inflow amounted to 5.3 percent of German national income during the entire period of 1919–31.The net capital inflow, after subtracting all reparations transferred and after making generous allowance for the disguised return of German funds, still came to a minimum of 2.1 percent of national income over the same period (Schuker 1988, pp. 10–11).

These reparations to Germany allowed the maintenance of living standards in the Weimar Republic at a level appreciably higher than was justified by domestic production. The Weimar experience provides a striking parallel to Latin American governments' postponement of economic adjustment throughout the 1980s, while those

governments annually contracted for large levels of new loans from the World Bank and IMF. As Schuker (1988, pp. 11, 46) writes:

> Savings and investment remained notably low compared with either the prewar pattern or the long-term trend. The inflow of funds accommodated increased wages and salaries, even in sectors with lagging productivity gains, and despite the more precipitous decline in the length of the work week in Germany than elsewhere. These funds also found reflection in mounting government welfare expenditures before as well as after the onset of the Depression, in an uneconomic shift to white-collar employment in labor-force composition, and (although precise figures remain a matter for conjecture) in the accretion of German assets abroad that would later help finance Nazi rearmament. . . . As the Depression deepened, Germany possessed a rationalized industrial plant, a social welfare system unrivaled anywhere except in Great Britain, and a conglomeration of municipal amenities that commanded the wonder of the world. The foreigners who had financed much of it held paper claims—just as they had in 1919–23.

Finally, the round of Latin American bond defaults of the 1930s is most relevant to the debt crisis of the 1980s. The international commercial upheaval of 1920–21 brought a sharp drop in export revenues, which resulted in large public deficits and balance-of-payments problems for Latin American governments. To refinance many loans, as well as to finance ambitious new public works and urban modernization projects, most Latin American governments embarked on a foreign loan splurge. Between 1922 and 1928, U.S. banks sold almost $2 billion in Latin American bonds to North American investors (Marichal 1989, pp. 182–84).

By the late 1920s, however, a decline in bond quality showed that investors realized Latin American borrowings were being used to meet earlier bond obligations. After 1929, most Latin American nations were unable to float new issues. By 1930, only a third of all Latin issues was being serviced in full. In short, the disappearance of new money preceded most defaults. The situation was similar to Weimar Germany, which was willing to repay past loans only so long as the net transfer of capital was favorable.

In relating the Weimar and Latin American defaults to the present round of de facto defaults, a liquidity squeeze as precipitator of default is only the first of several parallels. In recent years, numerous proposals have surfaced for a global solution to LDC debt, and they strikingly resemble plans floated in the 1930s (Eichengreen and Portes 1989, p. 80). Six or more "debt facility" proposals, such as one introduced in 1988 by American Express Chairman James D. Robinson III, would have governments of creditor countries finance

a new facility—likely linked to the IMF or World Bank—that would buy up LDC debt at a discount and negotiate with debtors for disposition of the debt.

Similarly, the Kindersley-Norman Plan of 1931 (named after a director and the governor of the Bank of England) would have had governments of the main creditor countries capitalize a new international entity that would finance itself by selling bonds to private investors. Another proposal floated in the 1930s would have given the Bank for International Settlements (established in 1930 as part of the Young Plan) the resources necessary to intermediate and resolve the bond crisis. These plans required a serious commitment by the governments of major creditor countries, namely the United States and United Kingdom. Such commitments did not materialize; large investors, too, were uninterested. J. P. Morgan argued that investors would not fund any international facility unless control over it would rest with them (Eichengreen and Portes 1989, p. 81).

While the various global plans never got off the ground in the 1930s, privately initiated transactions retired a significant level of debt, chiefly through Latin governments' repurchases of their bonds in the secondary market at prices well below par. In 1939, the Foreign Bondholders Protective Council[3] estimated that a dozen countries in default had repurchased 15–50 percent of their bonds since 1930. Erika Jorgensen and Jeffrey Sachs (1989) estimate that Bolivia repurchased 5 percent of its defaulted debt at an average price of 16 cents on the dollar and that Chile retired 18 percent at 59 cents; Colombia, 22 percent at 22 cents; and Peru, 31 percent at 21 cents on the dollar.

In public, bondholder committees opposed the repurchases and insisted that available foreign exchange should be used to service the bonds on contractual terms. But the committees were more receptive to the practice in private than in public, especially when the repurchase was accompanied by resumption of at least partial debt service payments, and also when the creditors were unlikely to receive a better offer (Eichengreen and Portes 1989, p. 82). In 1937, Britain's Corporation of Foreign Bondholders (CFBH), according to its records, quietly acquiesced in Chile's use of $4 million for repurchases. In 1940, as part of a settlement recommended by the CFBH, Brazilian authorities devoted "at least $400,000 in each of four years" to purchases in the British market. And in 1941 negotia-

[3]This council was founded by U.S. bondholders in 1934, with State Department encouragement, and was patterned after Britain's Corporation of Foreign Bondholders, which was founded in 1868.

tions, the CFBH grudgingly agreed to Colombia's request that it be allowed to purchase all of its British debt in the market.

Even more revealing were bondholders' responses to efforts of the U.S. Securities and Exchange Commission to curb the repatriation of bonds by defaulters by restraining banks and brokers from dealing on behalf of governments in default. CFBH records note that during SEC hearings in 1937, bondholder representatives maintained that such restraints on repurchases would be met with "strong and . . . effective criticism on the grounds that, by limiting the market in such bonds, it would act detrimentally to the bondholders" (Eichengreen and Portes 1989, p. 82).

Nearly 50 years ago, Henry Wallich (1943, p. 332) admitted the ethical problem that "arises when repurchases are made after the bonds have depreciated owing to suspension of service, for in that case the repurchasing debtor is profiting from his own default." Yet, Wallich (1943) also noted a great advantage to repurchases of Latin American government bonds in light of the high export earnings of such countries during World War II: "If part of the reserves that are currently being acquired [by debtor countries] are not used for repurchases now, the chances are that after the war they will be utilized for imports and not for the service of foreign debts."

Wallich, of course, proved to be correct. When settlements were finally negotiated, British and American creditors did recover their principal, on average.[4] But the realized internal rate of return for several issues reached substantial negative levels (for example, −7.4 percent for Brazil, −9.8 percent for Bolivia, and −14.76 percent for Hungary), indicating that not just interest but substantial principal was written off (Eichengreen and Portes 1989, p. 79).

The benefits that Brazil and Mexico derived from protracted settlements suggest that their present governments should take a long view of the resolution possibilities for their external debt difficulties. Brazil suspended interest payments on most of its foreign debt in 1931. In 1932, a plan was announced to issue 20- and 40-year bonds to capitalize interest arrears, with interest payments to resume in 1934. In 1934, however, a set of easier terms was negotiated. In

[4]Calculations by Eichengreen and Portes (1989, p. 79) suggest that, for creditors with diversified foreign bond portfolios who were willing to hold out for final settlement, the average nominal internal rate of return (weighted by issue value) was roughly 4 percent on dollar bonds and about 5 percent for sterling issues. Although dollar bondholders settled for approximately half of contractual interest and sterling bondholders settled for only slightly more, dollar bondholders did only slightly worse than if they had held domestic Treasury bonds, and sterling bondholders did slightly better. Ex ante risk premiums were nearly sufficient to compensate American bondholders for foreign lending risks, and the premiums more than sufficed for British bondholders.

1937, debt service payments were suspended again. In 1940, Brazil announced a temporary settlement. Finally in 1943, Brazil and its creditors negotiated a permanent readjustment, with creditors suffering losses as noted above (Eichengreen and Portes 1989, p. 78).

As for Mexico, only when it received massive U.S. wartime assistance in 1942 was there a lasting agreement on its foreign bonds. These bonds were late 19th-century government borrowings and railway bonds on which Mexico first defaulted in 1914. A succession of debt agreements followed throughout the 1920s and 1930s. One such agreement in 1930 consolidated all Mexican government bonds into a single, new, 45-year bond with a submarket interest rate and all interest arrears wiped out. In 1931, debt service was paid in blocked pesos; and in 1932, it was suspended. Then in 1942, despite the fact that the projected flow of U.S. aid alone would have facilitated full service of Mexico's obligations, claims of $510 million were paid off for less than $45 million—roughly nine cents on the dollar (Lewis 1986/87, p. 50).

The 1980s Antidefault Cartel

In the German and Latin American defaults of the 1930s, permanently assembled international lenders of last resort, such as the World Bank and IMF, did not exist.[5] As related above, sovereign debtors and their foreign bondholders negotiated debt reschedulings and settlements directly, usually through bondholder committees. The Weimar Reichsbank's President Hjalmar Schacht and his Latin American counterparts recognized the Roosevelt administration's general indifference to bondholders' concerns and learned to exploit divisions among their creditors (Schuker 1988, p. 140). While these debtors profited from their own delinquency, to the extent that taxpayers in creditor nations remained largely out of the loop, this solution was relatively equitable.

In the 1980s round of sovereign defaults, creditors were chiefly commercial banks from Europe, the United States, and Japan. By definition, banks are far more integrally tied into national and international monetary systems than are bondholders. Yet, despite the fact that banking systems of Europe, the United States, and Japan are already backed by national lenders of last resort, the key feature

[5]By a strict definition of lender of last resort, the World Bank and IMF do not qualify given that they do not have the authority to create money (that is, to provide unlimited liquidity upon demand). However, because both institutions lend to numerous countries that cannot attract such sums in the marketplace, they bear a significant resemblance to lenders of last resort and are, thereby, described here as such. For further discussion, see Barth and Keleher (1984).

of the U.S. LDC debt policy since 1982 has been the formation of a veritable cartel of lenders of last resort to prevent conventional default on sovereign debts at all costs. In response to the Mexican payment moratorium in 1982, Federal Reserve Chairman Paul Volcker pressed the IMF to leverage its lending power by coercing Mexico's creditor banks into involuntary lending as the price for preserving their claims.[6] From this action, the cartel quickly grew to encompass the Federal Reserve and industrial nation (OECD) central banks, the IMF, the multilateral development banks (chiefly, the World Bank), the Paris Club of official creditors, the U.S. Treasury, the Group of 7 finance ministers, and the U.S. Federal Deposit Insurance Corporation. Anna Schwartz (1988, p. 15) describes Washington's socialization of private loans to LDCs succinctly:

> The strategy devised by the U.S. treats not only the debtor countries but also the creditor banks as wards of the U.S. regulators. . . . The regulators abetted the accumulation of the debt by U.S. banks, praising them for effectively recycling surplus current account funds of OPEC countries, and abstaining from cautionary injunctions as the portfolio of foreign debt grew.[7] The regulators permitted the banks to evade the provision that limits loans to a borrower to no more than 15 percent of a bank's capital. Loans to various state-operated firms and institutions in a foreign country—all guaranteed by the government—were regarded as individual loans.
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> When the debt problems erupted, the banks were not urged to reduce dividends and build loan loss reserves. Instead public policy was based on the fiction that the Latin American debts on the books of the banks were assets that had full face value, despite their discounted value in secondary markets.

In the early 1980s, U.S. bankers and regulators considered the capitalization of debts in arrears (while preserving the book value of existing obligations) as altogether different from default. Indeed, Jeffrey Sachs (1982, p. 226) argued: "In no sense is private debt rescheduling merely a polite name for default." While, historically, bond reschedulings had seldom resulted in debtors eventually hon-

[6]In response to Mexico's August 1982 suspension of principal payments on its external debt, the U.S. Treasury Department and the Federal Reserve Board, in conjunction with the Basle-based Bank for International Settlements, moved quickly to provide $1.85 billion as an emergency bridge loan to Mexico. In addition, the United States provided $1 billion in food aid and another $1 billion in prepayment for Mexican oil. The Federal Reserve was chiefly responsible for securing for Mexico a $3.6 billion IMF loan and a $5 billion loan from Mexico's foreign creditor banks. This was the first instance of what would afterward become the standard practice of linking a new IMF loan with a rescheduling (often with new money) agreement by a commercial bank.

[7]Here, Schwartz references statements by Chairman Burns (1977) and Chairman Volcker (1980).

oring their obligations in full after having been "tide over" with easier terms or new funds, the U.S. debt strategy aimed to overcome this record. Still, it must be granted that the severely over-exposed position of U.S. banks to Latin America at the time of the 1982 Mexican moratorium—combined with government backing of U.S. banks through federal deposit insurance—meant that the initial official U.S. response could hardly have been otherwise.[8]

In October 1985, U.S. Treasury Secretary Baker updated the tide-them-over strategy, moving from an approach on the basis of macroeconomic austerity to one in which the IMF, World Bank, and private creditor banks would provide debtors with substantial net flows in exchange for market-oriented reforms. The premise was that debtors would reform forthwith and grow their way out of debt. The Baker Plan called for LDC debtors, over a three-year period, to receive $9 billion in loans from multilateral development banks (MDBs) and another $20 billion in loans from private bank creditors.

The Baker targets were, in fact, met. From 1985 through 1988, the "Baker 15" middle-income LDCs that were heavily indebted received $20.2 billion in disbursements from their private creditor banks and $22.8 billion in disbursements from multilateral creditors (including $15.9 billion from the World Bank) (Wertman 1990, p. 8). Over this three-year period, both commercial banks and official creditors managed to maintain positive net flows (disbursements on new loans minus amortization on old loans) to the targeted group of LDCs. Official creditors averaged $6 billion annually; commercial banks averaged $3.3 billion annually. But in strict terms of cash flows or net transfers (disbursements on new loans minus debt service on old loans) during the period, official creditors averaged only $700 million annually, and commercial banks averaged $-17 billion annually (World Bank 1989, p. 37).

The wide divergence in private versus official new loan provision has effected a slow transfer of relative LDC debt exposure from the commercial banks to Western taxpayers by using international institutions. Since 1982, LDC debt held by official creditors (the IMF, World Bank, and industrial nation governments) has grown by 135 percent, while LDC debt held by private banks has increased by only 46 percent (World Bank 1989, p. 2).

[8]The Federal Reserve reports that in 1983 exposure of U.S. banks, as a percentage of capital, to all LDCs was 172 percent (271 percent for U.S. money center banks); exposure to Latin America, in particular, was 106 percent (all U.S. banks) and 160 percent (U.S. money center banks).

Despite commercial banks having met the Baker Plan's target for new lending during 1985–88, the negative net transfers to the banks indicate that banks were lending only those sums required to ensure continued repayment on previous loans. Baker's early 1988 announcement of support for a $75 billion capital increase for the World Bank ($14 billion to come from the United States) was borne of the necessity to have the World Bank continue annual positive net transfers to the debtors to counteract for private banks' negative net transfers. Just as the World Bank's capital increase was an integral part of making the Baker Plan work, the November 1989 announcement of U.S. support for a funding increase for the IMF[9] was synonymous with making the new Brady Plan work. The Brady Plan contained a key role for the IMF; and the price for the IMF Managing Director Michel Camdessus's playing ball was the capital expansion he had quietly sought for several years.

During the mid-1980s, economic commentators first began referring to the Ponzi scheme (or pyramid scheme) that was represented by commercial banks extending to LDCs only those new loans that were necessary to get paid on old loans. Somewhat later, in 1988, LDC debt watchers began decrying a new development in the Ponzi scheme—the round-tripping of World Bank (and IMF) loans to Western commercial banks as debt service. Round-tripping was accomplished largely through the World Bank's relatively new policy-based lending, which in recent years has packaged as much as $500 million in a single loan for quick disbursement to the largest Latin debtors.[10] On June 13, 1989, for example, the World Bank approved three $500 million policy-based loans to tide Mexico over further.

Since 1989, a further development in the Ponzi scheme has come into view. As of April 30, 1989, IMF loans that were outstanding to borrowers and were more than six months in arrears totaled nearly

[9]In May 1990, the IMF's member governments, including the United States, formally initialed a 50 percent increase in IMF resources, or quotas, from $120 billion to $180 billion. The increase required a new contribution of $12 billion from the United States.

[10]The World Bank's policy-based lending (that is, loans in exchange for promises of economic reform rather than for infrastructure projects) has been stepped up since 1980 and particularly following the 1985 initiation of the Baker Plan. Mexico, Argentina, and Brazil have each received one or more $500 million policy-based loans in recent years, for such things as agriculture sector reform or trade sector reform. Such loans are ostensibly used to provide the hard currency needed to finance LDC imports, but in fact they are nothing more than general budgetary support. While all money is fungible, this nonproject-related assistance is highly fungible. Indeed, the amount of a policy-based loan (or package of them) is determined solely by the size of a debtor nation's financing gap in a given period—a clear signal that the funds are largely used for private debt service.

$4 billion. Since 1986, IMF borrowers in this category increased from 8 to 11, and overdue obligations increased six-fold. Growing accounts in arrears have afflicted the World Bank, too, where $3.2 billion in loans are on nonaccrual status. These growing numbers of World Bank and IMF loans in arrears indicate that the World Bank- and IMF-financed Ponzi scheme is coming home to roost. The two lending goliaths now have to consider what annual level of new loans is necessary so that even they can get paid.

Table 1 illustrates this borrowing treadmill, vis-à-vis the World Bank, on which 17 highly indebted middle-income countries are now stuck. Despite new loan commitments to these countries being up from $6.1 billion in 1986 to $8 billion in 1989, net transfers from the World Bank have fallen from $319 million to $ – 1.9 billion over the period. The World Bank, linchpin of the Baker—and now the Brady—strategy, is caught in a trap of dumping ever-higher levels of new loans into the indebted LDCs while its negative net cash flow to them widens.

Finally, a deteriorating bottom line at the IMF is also signaled by its new forbearance framework, which loosely parallels the relaxed regulatory environment that proved so fateful to the U.S. savings and loan industry during the 1980s: an environment of taxpayer guarantees. In September 1989, IMF Managing Director Camdessus confirmed a formal policy change whereby the IMF will now extend loans to debtor countries that had not yet, at that time, reached agreements with their private creditors (Camdessus 1989, p. 8). Since May 1989, the IMF has approved more than $10 billion in loans (Philippines, Costa Rica, Mexico, Venezuela, and Argentina) under this framework, which forwards new loans to LDCs that are able to pry ever-less money out of their private creditors. While at first glance this transfer may not appear so critical—all the affected countries but Argentina did conclude agreements with their private creditors relatively soon after the IMF loans—it indicates that as LDCs' private bankers increasingly pull the plug, the IMF and the World Bank are opening the spigot. Under the Brady debt strategy, the extent to which the World Bank and IMF will be forced to round-trip funds to themselves will only accelerate.

In fact, the Brady Plan's role for World Bank and IMF guarantees on restructured, written-down commercial bank debt—already a part of the 1990 debt-reduction agreements of Mexico and Venezuela—will only increase the pressures on the World Bank to maintain positive annual net transfers to the affected LDCs. Particularly with the World Bank, the fear that even one activation of an LDC's interest guarantees might jeopardize the Bank's AAA credit rating will be

TABLE 1

THE WORLD BANK AND THE 17[a] HIGHLY INDEBTED, MIDDLE-INCOME COUNTRIES: GROWING COMMITMENTS AND DECLINING NET TRANSFERS ILLUSTRATE THE PONZI SCHEME

(US$ MILLIONS; FISCAL YEARS)

	1986	1987	1988	1989	Total 1986–89
IBRD and IDA Commitments	6,070.5	6,719.4	6,482.8	8,021.0	27,293.7
Gross Disbursements	4,212.8	6,132.1	5,405.5	4,739.9	20,490.3
Repayments	1,907.5	2,709.4	3,492.2	3,546.3	11,655.4
Net Disbursements	2,305.3	3,422.7	1,913.1	1,193.6	8,834.9
Interest and Charges	1,986.4	2,646.6	3,180.7	3,119.2	10,932.9
Net Transfer	318.9	776.1	−1,267.4	−1,925.6	−2,098.0

[a]The 17 countries include Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cote d'Ivoire, Ecuador, Jamaica, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, and Yugoslavia.

SOURCE: World Bank (1989a, p. 47).

enough to keep the World Bank annually committing substantial new loans to these borrowers.

Real-Politik among Private Bankers and Sovereign Debtors

Despite the fact that U.S. policy until late 1987 stubbornly retained the fiction that LDC debts were worth 100 cents on the dollar,[11] bankers began facing reality well before then. Starting in 1982, a secondary market in LDC debt slowly developed as banks undertook interbank swaps to restructure lopsided sovereign portfolios and to manage risk. Market volume received a boost when Brazil began allowing debt-equity swaps in 1984, and Chile and Mexico instituted the first formal debt-equity programs in 1985. Total secondary market transactions increased from $2 billion in 1984 to $50 billion in 1988. Within this market, annual debt conversions arranged by commercial banks plus LDC public and private debtors grew 10-fold, from $2.1 billion in 1985 to $22.4 billion in 1988 (see Tables 2 and 3).

The leading instrument for debt conversion has been the debt-equity swap, in which an investor purchases debt in the secondary market at a discount and exchanges it for local currency, bonds, or state-owned equity shares from the debtor government. In recent years, the potential benefits of debt-equity swaps for LDC economies have been largely left out of the popular discourse on LDC debt. Debt-equity swaps have been unfairly criticized as necessarily inflationary and as a subsidy to direct investments in LDCs, which would have taken place in any event. Besides whittling away at LDC debt, debt-equity swaps also (a) attract new foreign investment; (b) attract back-home "flight capital" held abroad by LDC citizens; (c) provide long-term financing for LDC companies when domestic credit markets are tight; and (d) frequently finance new export-oriented investments, which earn much-needed hard currency.

The Additionality Debate

LDC officials frequently complain that debt-equity swaps lack "additionality" (that is, they do not pull new foreign investment funds into debtor countries, but merely subsidize investments that would have been made in any event). Joel Bergsman and Wayne

[11]At the September 1987 annual meetings of the World Bank and IMF, Treasury Secretary Baker first announced the updating of his debt strategy with the menu approach, which supported such debt relief options as exit bonds and debt-equity swaps. This strategy appears to mark the first time the U.S. government recognized that the foreign debts of numerous LDCs were not worth face value.

TABLE 2

DEBT CONVERSIONS BY SELECTED COUNTRIES, 1984–89

(US$ MILLIONS)

Country	1984	1985	1986	1987	1988	1989[a]
Debt Conversion[b]						
Argentina	31	469		35	1,130	500
Brazil	731	537	176	1,800	9,175	4,000
Bolivia				1	349	20
Chile	11	313	987	1,983	2,905	2,000
Costa Rica			7	146	17	10
Ecuador				125	258	
Honduras				6	11	
Jamaica				2	100	
Mexico		769	1,023	3,804	6,670	6,000
Nigeria					95	200
Peru					15	
Philippines			43	287	806	300
Sudan					1	
Uruguay					97	
Venezuela					477	
Yugoslavia					50	
Zambia					3	
Other						750
Total	773	2,088	2,236	8,188	22,358	13,780
All Transactions[c]	2,000	4,000	7,000	12,000	50,000	40,000

[a]Projected.

[b]Debt-equity, debt-debt swaps (that is, transactions that convert external debt claims on the debtor country to another form), and debt repurchases. Debt-equity swaps are recorded at the book value of debt converted into equity.

[c]Debt swaps; all transactions including interbank transactions; estimates.

SOURCE: World Bank (1989b, p. 15).

Edisis (1988) of the World Bank's affiliate International Finance Corporation (IFC) interviewed the investing participants of 104 debt-equity transactions in an effort to understand the extent of additionality. Bergsman and Edisis (1988, p. 10) found that the swap mechanism made a difference in nearly half of the swaps by multinational corporations, as well as in all of the swaps arranged by creditor banks for their own accounts—a total of 61 percent of the swap transactions studied.

The IFC study also found that additionality increases as swap programs mature. Since foreign investments are one to two years in

TABLE 3

CONVERSIONS OF DEVELOPING COUNTRY EXTERNAL DEBT, 1984–88

(US$ MILLIONS)

	1984	1985	1986	1987	1988
Conversions					
Debt-Equity Swaps	773	1,843	1,522	3,335	9,205
Exit Bonds	0	0	0	15	4,725
Buy-Backs	0	0	0	0	648
Informal Swaps	0	0	0	3,500	5,414
Other	0	245	714	1,337	2,366
Total Conversions	773	2,088	2,236	8,188	22,358

SOURCE: World Bank (1989a, p. 18).

gestation, most investments in the early stages of a swap program are ones that would have occurred without the subsidy. As more and more investors became aware of the benefits of a program, these benefits become decisive for a larger percentage of transactions. For example, investors from many parts of the world, including countries that have not had close business ties with Chile, have started to look at Chile for investment possibilities. Since 1987, largely through debt conversion, Chile has attracted investments of $200 million from Australia, $250 million from South Korea, $250 million from Taiwan, and $600 million from New Zealand (Brooke 1989).

Additionality is also higher for investments in export-oriented industries, which earn much-needed hard currency for the host country.[12] The IFC study identified several cases in which swaps caused businesses to create new export-oriented companies in Latin America rather than in Southeast Asia. In other cases, investments in pre-existing companies soon led to increases in capacity and to startups of entirely new lines of production. Table 4 gives further evidence that debt-equity swaps are an important catalyst for sorely needed foreign direct investment; it indicates that such investments in Mexico and Chile have been highest during the period when debt-equity swaps have been in use.

[12]Conversely, investments oriented toward domestic markets tend to be those that would have been made without the swap incentive.

TABLE 4

FOREIGN DIRECT INVESTMENT (FDI) THROUGH SWAPS AND BEFORE SWAP PROGRAMS: CHILE AND MEXICO

(US$ MILLIONS; ANNUAL AVERAGES)

	FDI through Swaps (1985–87)	Normal FDI (1979–82)	Depressed FDI (1983–86)
Chile	400	139	65
Mexico	1,133	791	141

SOURCE: Bergsman and Edisis (1988, p. 3).

Debt-Equity Programs: Chile's Model, Others' Disappointments

Largely through its debt swap program, Chile has retired approximately $8 billion in foreign debt since 1985—equivalent to more than half of its medium- and long-term commerical bank debt at year-end 1985. Chile's debt service ratio (the annual debt payments as a percentage of export revenues) fell to 28 percent in 1988 from 73 percent in 1982 (*Reuters* 1989). In short, Chile has essentially conquered its foreign debt crisis.

Chile's 1985 debt conversion program has been well detailed in numerous sources;[13] only a brief reiteration of its model features is necessary. To prevent its swap program from fueling inflation, Chile's central bank honors the debt presented by investors with 15-year inflation-indexed bonds rather than pesos. The investor obtains cash by selling the bond in Chile's capital market. This arrangement, together with the central bank's monthly ceilings of $100 million in Chapter 19 conversions (relating to foreign investors), sterilizes the potential inflationary effect. Chile's 1988 inflation rate was a manageable 12 percent—tame by Latin American standards. To avoid granting the swap subsidy to all foreign investments, the rules for capital and profit repatriation are stricter under Chile's swap program than the rules covering foreign investments made with new money outside the mechanism. Chilean nationals, who participate through debt-for-local-currency swaps, accounted for nearly half of the swaps completed through mid-1989 ($2.4 billion). Foreign investors accounted for $2.6 billion (Durr 1989).

Critical to the Chilean program's success has been the maintenance of a very favorable investment climate, produced in large part by the government's decisive attack on the fiscal deficit and its

[13]See, for example, Hanke (1987) and Tammen (1989).

sustained and aggressive privatization program. Chile's economic growth has averaged about 6 percent over the past three years. The Chilean debt-equity program's straightforward design and administration also have been critical to its success.

While nearly a dozen LDCs, aside from Chile, had some type of debt-equity swap program in place in 1988, most programs have included terms that deter potential investors. Many programs have been intermittently restricted or suspended. Some LDCs have weighed down their swap programs with new money requirements—stipulations that an investor must bring new funds into the country outside the swap program to finance a portion of the investment. For example, Argentina's October 1987 program includes a 30 percent new money requirement. In addition, in Argentina swaps cannot be used to purchase existing enterprises, including state-owned companies. This latter restriction is particularly regrettable given that each year Buenos Aires has to find 30 percent of the total financing costs of 117 state industries (Mead 1989).

In Brazil, the debt-equity program precludes the acquisition of a majority foreign interest in a Brazilian entity. In the Philippines, the central bank charges a 20 percent fee on swaps, effectively halving the discount that the investment receives. In 1988, Manila's central bank, fearing the swaps' inflationary impact, set a $180 million per year ceiling on debt swaps. It also announced that new investments would receive preference for approval over investments in existing facilities. The various restrictions served to nearly halt debt-equity activity in the Philippines. In Mexico, the government halted its 18-month-old debt-equity program for public-sector debt in November 1987 ($3 billion had been retired), citing its inflationary impact and concerns that the swaps were subsidizing investments that would have taken place without the incentive.[14] Still, throughout 1988 and early 1989, private Mexican firms acted on their own initiative to directly buy back their debt from foreign banks with cash at steep discounts. By year-end 1989, these so-called corporate restructurings

[14]International automobile manufacturers, including Chrysler Corp., Ford Motor Co., Nissan Motor Co., Ltd., and Volkswagen AG, accounted for much of the initial activity under the Mexican debt-equity swap program. Since the firms were planning expansion prior to the program, Mexican officials have often cited these swaps as evidence of a lack of additionality. The planned expansions were, in fact, in response to an early 1986 Mexican government decree that forced foreign automobile firms to step up exports. In addition, as mentioned earlier, the first swaps in any program will be linked to investments previously under consideration.

had retired nearly all of Mexican private firms' $14 billion in foreign debt.[15]

Other Private Debt Reduction Innovations

In 1988, Chile and Bolivia recalled how the widespread debt buy-backs, which followed the 1930s bond defaults, allowed the debtor to capture fully 100 percent of the secondary market discount. Bolivia repurchased $240 million of its foreign debt—not serviced since 1984—at only 11 cents on the dollar with funds anonymously donated by foreign governments. Chile spent $168 million to buy back and retire $299 million of its foreign debt, paying an average 56 cents on the dollar. In September 1989, Chile announced plans to buy back another $550 million of its remaining $6.3 billion in outstanding commercial bank debt.[16] Today, the chief advantage for participating commercial banks remains what Wallich noted after the bond defaults of the 1930s. Straight debt buy-backs offer the prospect for debtor countries to divert some hard currency funds away from wasteful domestic spending or the financing of import consumption to at least partial debt repayment.

In early 1988, under a mechanism pioneered with Morgan Guaranty Trust Company, Mexico had hoped to use $2 billion in reserves to purchase U.S. Treasury bonds worth $10 billion at maturity in 20 years. These bonds would collateralize the principal of $10 billion worth of new government bonds that Mexico would issue and exchange with its foreign commercial creditors for $20 billion in current Mexican debt—effecting principal forgiveness of 50 percent. But banks were unhappy that interest on the new bonds would carry no collateral backing. Projected interest payments were estimated at about 85 percent of the total flow of funds to bond holders. Creditor banks bid average discounts of 30 percent. Mexico exchanged $2.6 billion in new bonds for $3.7 billion in old Mexican debt—achieving debt reduction of only $1.1 billion. Afterward, the Mexican government initiated efforts to arrange a new version of the debt-for-bonds swap, which would carry World Bank or creditor government guarantees on interest. The 1989 Bray Plan contains just such a provision, which has subsequently been incorporated into the 1990 debt-reduction agreements of Mexico and Venezuela.

[15]Conversation with Peter Truell of the *Wall Street Journal*, January 4, 1990.

[16]Accordingly, in November 1989, Chile purchased another $140 million in commercial bank debt at a discount of 41 percent. The hard currency funds for this buy-back, however, came from World Bank and IMF borrowings under the framework of the Brady Plan.

Heavier Doses of Reality: Creditor Banks Reserve for Losses

In 1983–84, commercial banks in Europe initiated a first round of discrete provisioning for expected losses on LDC loans, under direction from their banking authorities. These provisions were tax deductible in most European countries. In contrast, U.S. regulators encouraged banks to maintain the 100-cents-on-the-dollar fiction. In fact, in 1985 Reagan Administration officials proposed to eliminate the small tax incentive that encouraged U.S. banks and thrifts to provide for anticipated loan losses. The partial tax deductibility of loan loss reserves ended in 1986, and such reserves became deductible only at the time of charge-off—when losses are actually recorded. At the same time, however, loan loss reserves did count toward meeting U.S. banks' and thrifts' regulatory capital, despite their providing no protection to the insurer once bad debts are properly written off (therefore, such reserves did not constitute a capital cushion.) Throughout the 1980s, most other creditor country regulators, including those in Canada, Germany, the Netherlands, Switzerland, and the United Kingdom, helped to strengthen their banks' balance sheets by providing tax deductibility for loan loss reserves, while not allowing reserves to count as capital. By contrast, U.S. regulators have had it backward.

By early 1987, the secondary-market prices of LDC loans had so depressed the prices of U.S. bank stocks that the over-exposed banks no longer had much to lose by initiating orthodox loan loss provisioning. In May 1987, Citicorp put aside $3 billion in loss reserves for LDC debt, setting off a round of reserving among U.S. money center banks and large U.K. banks. Another round of reserving took place in late 1987 and early 1988, when U.S. regional banks initiated a large buildup of reserves, improvement of their equity capital ratios, and aggressive debt reduction strategies.

The most recent round of provisioning took place in September 1989, when U.S. money center banks strengthened reserves for LDC debt to an average level of 58 percent. Prior to this round, U.S. money center banks' loan loss reserves averaged only 25–30 percent—an insufficient level to embark on the size of debt reduction projected under the Brady Plan. It remains unclear whether the recent reserving was driven more by the necessity to position balance sheets for the Brady Plan, or by some banks' desire to wash their hands of LDC debt and the anticipated coerced Brady Plan deals. Likely, some of both factors has been at work. In the case of Morgan Guaranty, its decision to increase reserves to fully 100 percent of its LDC loans appears to indicate the latter strategy.

In early 1987, the weighted average price of LDC debt on the secondary market was just under 70 percent, indicating that the money center banks' provisioning to 25–30 percent was nearly adequate at the time. The continued price decline throughout 1987 and 1988, however, suggested the need for larger provisions. Still, some U.S. regulators in early 1989 maintained that U.S. banks were well positioned for any specter of loss. L. William Seidman, chairman of the Federal Deposit Insurance Corporation, told the House Banking Committee:

> Since 1982, the nine money-center banks have been successful in building their primary capital to a level which would allow them to withstand any likely event in the LDC arena. . . . [They] would continue to be solvent even if they wrote down to current secondary market levels all their exposures to the six major LDC countries. *Moreover, even in what surely could be considered a worst-case scenario, each of the nine money-center banks could write off 100 percent of their outstanding loans to these six countries and, on an after-tax basis, each of these banks would remain solvent* [emphasis in prepared testimony; Seidman 1989].

Two months after Seidman delivered this judgment that U.S. banks could withstand projected losses on LDC debt, U.S. Treasury Secretary Brady announced his new policy to, essentially, force them to do so. Yet, if there were any doubt in early 1989 that U.S. money center banks could go it alone with loan loss reserves of 25–30 percent, this doubt disappeared with the September 1989 reserving to an average of 58 percent. Given that LDC debt was selling at a weighted average of about 30 percent of face value in early 1989 (prior to announcement of the Brady Plan), the major U.S. banks are now close to being fully provisioned against the market's estimation of projected loss. Little doubt now remains that U.S. money center banks can go it alone. The still rather vulnerable balance sheets of Bank of America and Manufacturers Hanover could be aided by an immediate regulatory revision to allow for the full tax deductibility of loan loss reserves.

Brady Plan Only Stifles Private Debt-Reduction Activity

The new debt strategy that Brady announced on March 10, 1989, while initially a bare skeleton of a policy, appeared to debtors and their creditor banks to be the big public bailout for which they had waited, and lobbied, for several years. Indeed, investors recognized that Western taxpayers were about to underwrite the outcome of future debt-reduction deals. The market value of LDC debt began to rise immediately—only to fall again in late 1989 as the very high

early expectations for the plan subsided (see Table 5). Initially, the popular press was so swept up in reporting Brady's "bold new direction" that it was weeks before the fog cleared and certain realities settled in. Only modest sums of public money would be available from the World Bank, IMF, and Japan to back the initiative. This supply would produce only an estimated $6 billion in annual debt reduction over three years.

In the meantime, what happened to private sector debt conversion activity during 1989? Brazil suspended its debt-equity program on January 15, 1989. Argentina held no debt-equity auctions in the first half of the year. In the Philippines, the volume of debt conversions remained small. As Table 2 shows, seven countries carried out debt conversions for the first time in 1988; yet nine nations ceased conversion activity in 1989. Ecuador, for example, accounted for $258 million in debt swaps in 1988, but suspended all activity in early 1989. As one Ecuadoran official explained: "The Central Bank has said to hold off until after the [potential of the] Brady debt policy firms up" (Embassy of Ecuador 1989). Total debt conversion dropped off markedly, from $22.4 billion in 1988 to $13.8 billion in 1989 (see Table 2).

Conclusion

The present LDC debt crisis has much in common with previous episodes of sovereign debt default. Following a centuries-old tradi-

TABLE 5

SECONDARY MARKET PRICES OF DEVELOPING COUNTRY DEBT: THE TEMPORARY BRADY REBOUND

	Average Prices of Foreign Debt (in Cents per US$ of Face Value)			
	1/5/89	3/1/89[a]	7/17/89[b]	12/8/89
Argentina	22	18	19	13
Brazil	41	28	32	23
Chile	59	56	65	61
Mexico	42	34	44	37
Philippines	48	38	54	46
Poland	35	32	39	21
Venezuela	39	27	40	35
Yugoslavia	45	44	54	51

[a]Prior to Secretary Brady's March 10, 1989, announcement of his debt plan.
[b]Post–Brady Plan announcement; parties negotiating its first package (Mexico).
SOURCE: Salomon Brothers Inc. (January 5 to July 17) and Merrill Lynch (December 8).

tion, LDC debts to private creditors are being periodically renegotiated on ever-easier terms and stretched out across decades. Under the Brady Plan's debt-reduction agreements for Mexico and Venezuela, for example, transform large portions of these nations' medium-term debts into bonds with 30-year maturities (with taxpayer-financed interest guarantees).

Prior to Treasury Secretary Brady's 1989 initiation of a plan for officially assisted debt reduction, innovative debtors and private creditors were chipping away at ever-larger pieces of the debt by facing reality and making the best of a bad situation. Announcement of the Brady Plan served only to choke off much of the private sector's debt-reduction activity. But for the ever-larger, annual, new loan commitments from the World Bank and IMF, which serve to fill debtor nations' financing gaps, LDC debtors and their creditor banks would resolve a much larger share of the debt overhang through privately concluded debt-reduction opportunities, such as debt-equity swaps and straight debt buy-backs.

The eight-year-old U.S. strategy of papering over de facto LDC debt defaults with ever-larger levels of official lending has been laying the foundation for an unserviceable LDC debt burden to the World Bank and IMF. The Brady Plan adds only a new wrinkle to this slow transfer of private banks' LDC debt exposure to the World Bank and IMF (and the U.S. and other Western nation taxpayers who fund these institutions). Most U.S. banks are now very well provisioned against their LDC loans. U.S. policy should be to step out of the way and allow debtor nations and their creditor banks to drive their own hard bargains over these claims. The only consolation of the misguided Brady Plan is the likelihood that today's debtor fatigue over servicing private bank debts will become tomorrow's debtor fatigue with the growing multilateral institution debts. This extension of debts is likely to seriously jeopardize the financial integrity, and thus the staying power, of these two most pernicious of institutions of central planning—the World Bank and IMF.

References

Barth, James R., and Keleher, Robert E. "Is There a Role for an International Lender of Last Resort?" *The World of Banking* (November–December 1984): 25–27.

Bergsman, Joel, and Edisis, Wayne. "Debt-Equity Swaps and Foreign Direct Investment in Latin America." IFC Discussion Paper no. 2. Washington, D.C.: The World Bank, 1988.

Brooke, James. "Peru Trying to Shift Focus of Trade to Pacific." *New York Times*, 19 July 1989: p. 10.

Burns, Arthur F. "Statement on the Condition of the Banking System before the Senate Committee on Banking, Housing, and Urban Affairs." *Federal Reserve Bulletin* (March 1977): 238–46.

Camdessus, Michel. Transcript of a 21 September 1989 press conference. Washington, D.C.: The International Monetary Fund, 1989. Mimeo.

Durr, Barbara. "Chilean Debt Swaps Soar in First Half." *Financial Times* (London), 20 July 1989.

Embassy of Ecuador. Conversation with an economic attaché, Washington, D.C., 13 July 1989.

Eichengreen, Barry, and Portes, Richard. "Dealing with Debt: The 1930s and the 1980s." In *Dealing with the Debt Crisis*, pp. 69–86. Edited by Ishrat Husain and Ishac Diwan. Washington, D.C.: The World Bank, 1989.

Hanke, Steve H. "The Anatomy of a Successful Debt Swap." In *Privatization and Development*, pp. 161–68. Edited by Steve H. Hanke. San Francisco: Institute for Contemporary Studies Press, 1987.

Jorgensen, Erika, and Sachs, Jeffrey. "Default and Renegotiation of Latin American Foreign Bonds in the Interwar Period." In *The International Debt Crisis in Historical Perspective*, pp. 48–85. Edited by Barry Eichengreen and Peter Lindert. Cambridge, Mass.: MIT Press, 1989.

Lewis, Clifford M. "When Countries Go Broke: Debt through the Ages." *The National Interest* (Winter 1986/87): 46–52.

Marichal, Carlos. *A Century of Debt Crises in Latin America: From Independence to the Great Depression, 1820–1930*. Princeton: N.J.: Princeton University Press, 1989.

Mead, Gary. "Mistrust Fans the Flames of Troubled Privatization." *Financial Times* (London), 22 March 1989.

Reuters. Dispatch from Santiago, 11 January 1989.

Sachs, Jeffrey. "LDC Debt in the 1980s: Risk and Reforms." In *Crises in the Economic and Financial Structure*. Edited by Paul Wachtel. Lexington, Mass.: Heath, 1982.

Schuker, Stephen A. *American "Reparations" to Germany, 1919–33: Implications for the Third-World Debt Crisis*. Princeton Studies in International Finance no. 61. International Finance Section, Department of Economics, Princeton University, July 1988.

Schwartz, Anna J. "International Debts: What's Fact and What's Fiction." Address to the Western Economic Association, 2 July 1988. *Economic Inquiry* 27 (January 1989): 1–19.

Seidman, L. William. Testimony before the Committee on Banking, Finance, and Urban Affairs, U.S. House of Representatives, 5 January 1989.

Tammen, Melanie S. "Energizing Third World Economies: The Role of Debt-Equity Swaps," Backgrounder no. 736. Washington, D.C.: The Heritage Foundation, 1989.

Volcker, Paul A. "The Recycling Problem Revisited." *Challenge* (July–August 1980): 3–14.

Wallich, Henry C. "The Future of Latin American Dollar Bonds." *American Economic Review* 33 (June 1943): 321–35.

Wertman, Patricia. "The Baker Plan: A Remedy for the International Debt Crisis?" CRS Issue Brief, Congressional Research Service, updated 23 April 1990.

World Bank. *World Debt Tables 1989–90,* Washington, D.C.: The World Bank, 1989b.
World Bank. *Annual Report 1989.* Washington, D.C.: The World Bank, 1989a.