ECONOMIC GROWTH CENTER

YALE UNIVERSITY

Box 1987, Yale Station
New Haven, Connecticut

CENTER DISCUSSION PAPER NO. 376

STORIES OF THE 1930s FOR THE 1980s

Carlos F. Diaz Alejandro

April 1981

Stories of the 1930s for the 1980s

Carlos F. Diaz Alejandro
Yale University

Once upon a time foreign money doctors roamed Latin America prescribing fixed exchange rates and passive gold-exchange-standard monetary rules. Bankers followed in their footsteps, from the halls of Montezuma to the shores of Daiquiri. To the delight of local dignitaries, the not-so-exigente financiers would yield convertible cash for IOU's. Such normalcy during the late 1920s appeared even more attractive than that immediately preceding the first world war. In some countries, such as Brazil, convertibility and fixed rates appeared to have been purchased at the price of sluggish growth; in other countries, such as Colombia, gold standard rules permitted significant inflation. Yet most observers emphasized the virtues of a monetary system which minimized possible shocks from irresponsible domestic politicians and maintained international creditworthiness. Concern also existed in the 1920s about the weakness in some markets for staple export products, often aggravated by rising protectionism at the Center, but both foreign loans and the optimism of the times made such concerns fleeting ones.

The Latin American balance of payments equilibrium of the late 1920s was rudely and repeatedly shocked from the outside, starting in 1929 and throughout the 1930s (and 1940s). The occasional domestic earthquake, crop failure, or indigenous madman in authority, paled into insignificance compared with the external shocks; in the case of the latter it could often be argued that he was an endogenous product of the disturbed external circumstances and examples.

This paper will chronicle the major external shocks of the 1930s and some of the ways various Latin American economies coped with them. It will be seen that the performance of several economies was remarkably good, under the circumstances. This will lead us to examine the mechanisms of adjustment at work during that decade, and the extent to which they were prodded along by Autonomous Policy. Exchange rate developments will be examined first. This will be followed by a look at monetary and fiscal policies, a section hobbled even more than others by lack of data. During the 1930s most Latin American countries performed moratoria on their external public debts; discussion of the causes and consequences of that controversial and memorable step deserves a section of its own. Some reflections close the paper.

Shocks and performance

In a world of fixed exchange rates, the slowdown in the Center economies already visible in 1929 was quickly translated into a decline of export values in the Periphery. The deepening slump plus additional protectionist measures at the Center, such as the U.S. Smoot-Hawley tariff of 1930, the British Abnormal Importations Act of 1931, the Ottawa Commonwealth preferences of 1932, and similar actions by the French, German, and Japanese empires, led to sharp declines in the Latin American terms of trade and a milder fall of their export quantum. The purchasing power of exports, which for countries such as Brazil and Cuba was already declining in the late 1920s, took a sharp dive between 1928/29 and 1932/33, as may be seen in Table 1 for a sample of Latin American countries.[1] A vigorous recovery after 1932/33 was interrupted by the 1937/38 recession in the U.S.; for the decade as a whole the purchasing power of exports showed declines between 25 and 40 percent. The early years of the second

TABLE 1

Foreign Trade Indicators in Selected Latin American Countries, 1928/29-1942/43

(Percentage changes between years shown)

A. Purchasing Power of Exports

	Argentina	Brazil	Colombia	Cuba	Mexico
1928/29-1932/33	-41.2	-42.3	-36.0	-56.1	-61.9
1932/33-1936/37	63.4	33.3	24.0	61.8	77.5
1936/37-1938/39	-28.8	-9.2	-5.0	-8.4	-9.9
1938/39-1942-43	-10.7	3.7	-9.7	40.6	-6.2
1928/29-1938/39	-31.5	-30.1	-24.7	-34.9	-39.0

B. Import Quantum

	Argentina	Brazil	Colombia	Cuba	Mexico
1928/29-1932/33	-50.0	-56.2	-59.6	-68.0	-55.4
1932/33-1936/37	45.1	63.3	93.0	94.6	82.2
1936/37-1938/39	-1.4	-2.0	10.9	-2.0	-11.0
1938/39-1942/43	-57.5	-28.1	-53.3	17.3	8.2
1928/29-1938/39	-28.4	-29.9	-13.5	-39.0	-27.7

Sources and method: Basic data, except for Cuba, obtained from CEPAL 1976. Percentage changes were computed between two-year averages. Cuban purchasing power of exports and import quantum obtained by dividing indices of the value of exports and imports by the United States wholesale price index. Direccion General de Estadistica 1959, pp. 24-25.

world war had mixed effects on Latin American economies: loss of European markets and shipping shortages led to fresh export troubles in 1940 and 1941 in several countries.

While overall trends in the Center countries dominated the Latin American export picture, the export performance of individual countries was also marked by good or bad luck in the "commodity lottery" as well as by attempts at export promotion and diversification, even under the gloomy conditions of the 1930s. Examples of export gains after 1933, with good fortune and policy efforts playing different roles, include the cases of Peruvian and Colombian gold, Mexican silver (on which more will be said later), Argentine corn and fruits, Brazilian cotton and Venezuelan oil.

As already noted, during the 1920s Latin American balance of payments were bolstered by large capital inflows, with New York replacing London as the source of long term portfolio funds. Direct foreign investment was also significant, and began to go into manufacturing activities. Well before Latin American countries showed signs of skipping scheduled servicing of the external debt, gross capital inflows fell sharply. After 1930 little fresh capital came in. With the dollar price level falling unexpectedly by around one quarter between 1928-29 and 1932-33, debt servicing rose dramatically in real terms, compressing the capacity to import beyond what is suggested in Table 1-A. As may be seen in Table 1-B, the import quantum fell even more than the purchasing power of exports between 1928-29 and 1932-33, except in Mexico. By 1934 all countries except Argentina, Haiti and the Dominican Republic had suspended normal servicing of the external national debt. From then to the end of the decade import volumes as a rule recovered faster than the purchasing power of exports.

The early years of the second world war provided a different kind of shock to most Latin American economies: even when the foreign exchange was available imports could not be obtained, either because of strict rationing by the Allied powers or due to shipping shortages. The more distant a country from the Allied powers, geographically and politically, the more intense and longer-lived was this supply sock; for Argentina it could be said to have lasted well into the late 1940s, while it was much milder and briefer for Mexico, with its overland links to the U.S., and for Cuba after the Axis submarines had been driven from her coasts.

The emergence of a protectionist and nationalistic Center, prone to deflation and war, was the greatest shock to Latin American economies during the 1930s. It is true that as early as 1934 Cordell Hull, U.S. secretary of state, started a policy of reducing U.S. tariffs, but such policy made slow progress, and had to whittle down a tariff wall raised not only by the Smoot-Hawley Act but also by the deflation-induced increase in the incidence of specific duties (Haberler 1976, pp.33-34). Other major industrialized countries retreated further into protectionism, bringing their colonies ever more closely into their commercial and financial "economic communities", with negative trade-diverting consequences for sovereign Latin American countries. The memory of this betrayal of Hume, Smith, and Ricardo would linger longer in the Periphery than in the Center.

The open Latin American economies of the late 1920s were quite vulnerable to this sequence of outside shocks, especially in the early 1930s. Yet bits and pieces of evidence indicate that at least some of

those economies managed to weather the storm better than the U.S. (and Canada). Table 2 presents available national accounts data for the four largest republics. Compared to the U.S., aggregate output during 1929-39 experienced less violent fluctuations and expanded faster in the four Latin American countries. One should note, however, that measurements of Gross Domestic Product shown in Table 2 do not take into account losses of real income arising from deteriorating terms of trade. Taking these losses into account reduces Brazilian aggregate growth during 1929-39, for example, from 4.3 percent per annum to 3.2 percent, according to the source listed in Table 2. For Argentina, it may be estimated that a similar correction would reduce annual growth from 1.6 percent to 1.2 percent per annum. On the other hand, estimates for Gross National Product (not available) would show faster growth rates, as factor payments abroad fell sharply during the 1930s, as will be seen later.

Table 2 also shows an interesting contrast between U.S. and Latin American aggregate performance during the early war years. Supply shocks and fuller use of capacity around 1939 kept Argentine, Brazilian and Colombian expansion during 1939-43 at annual rates below those registered even during 1937-39.

It could be argued that the aggregate performance shown in Table 2 is far from impressive, and that the favorable contrast with the U.S. is mostly explained by the larger weight of price- and income-inelastic rural output in Latin American aggregate production. In fact, the most impressive evidence of favorable Latin American performance during the 1930s will not be found in aggregate data. The 1930s were a decade of major structural changes: some sectors boomed while others collapsed. The major leading sector was industrial output, as may be seen in Table 3.

TABLE 2

Aggregate Real Output in Selected Countries, 1929-1943

(Percentage changes between years shown)

	Argentina	Brazil	Colombia	Mexico	USA
1929-33	-9.7	7.6	9.9	-10.3	-28.9
1933-37	23.2	31.7	16.4	28.0	47.0
1937-39	4.9	7.1	13.0	7.2	1.7
1939-43	8.4	9.7	4.5	25.3	53.3
1929-39	16.7	51.7	44.6	23.0	6.3

Sources and method: Data for Argentina, Colombia and Mexico were obtained from CEPAL 1978. Those from Brazil were obtained from Haddad 1978, Table 1. All of these data refer to gross domestic product at constant prices.
USA data were obtained from Census 1960, p.139. These data refer to Gross National Product at constant prices.

TABLE 3

Real Industrial Production, 1929-1943

(Percentage changes between years shown)

	1929-33	1933-37	1937-39	1939-43	1929-39
Argentina	-6.5	31.5	10.0	18.0	35.2
Brazil	6.9	53.7	13.4	19.1	86.2
Colombia	24.7	49.2	24.7	16.1	132.1
Cuba	-50.0[a]	90.2	-8.8	4.7	-13.2[a]
Mexico	-7.9	46.8	12.7	45.9	52.3
Uruguay	n.a.	n.a.	n.a.	n.a.	58.3[a]
USA	-36.9	66.7	-5.0	133.3	-1.7

[a]Percentage change relative to 1930

n.a. = data are not available

Sources and method: As in Table 2, except for Cuba and Uruguay. Except for Cuba, Latin American data refer to value added by the manufacturing sector, measured at constant prices. USA data refer to the Federal Reserve Board index of manufactures, given in Census 1960, p.409. Cuban data obtained from Perez-Lopez 1977, p.53. Uruguayan data obtained from Millot, Silva and Silva 1972, p.251.

Here we do find a remarkable contrast between, say, Brazilian and Colombian industrial growth and that of the U.S.; Brazilian industrial expansion during the 1930s was also faster than that experienced by the same country during the 1920s.

So far the term Latin America has been used loosely. Table 3 shows one Latin American country whose performance was weaker and more erratic than that of the U.S. The Cuban case suggests that a typology may be desirable; for reasons that will become clearer later on, one may differentiate between the larger or active Latin American republics and the smaller or passive ones. While data for the latter type are especially scarce, the conjecture is that the small or passive republics, mainly those in the Caribbean and some in Central America, were dragged down by the U.S. performance as surely as the states of Mississippi and Arkansas. Size is not the only characteristic differentiating the two types of countries, as Cuba in the late 1920s had a domestic market not very different from that of Uruguay (or Chile), whose performance was similar to those of larger countries. Note that "small" or "large" in this typology do not necessarily refer to the capacity of different countries to influence their external terms of trade.

The early war years cooled the industrial boom in Argentina, Brazil and Colombia; not surprisingly, Mexico shows a performance during 1939-43 in between those of the other large Latin American countries and that of the U.S.

The structural changes noted above for the economy as a whole can also be found within the industrial sector. Even as some manufacturing activities closely dependent on pre-1929 export-oriented prosperity were shrinking or stagnating (examples include meat-packing, flour-milling and sugar-refining), other activities, sometimes a handful, made dramatic output advances during the 1930s. Textiles, cement, petroleum refining,

tires, pharmaceuticals, toiletries and food-processing for the home market are examples of booming sectors. For several countries textiles appear as quantitatively the most important, often providing more than 20 percent of the net expansion of manufacturing value added, and growing at annual rates above 10 percent. The rural sector also witnessed a gain in the production of "importables" relative to "exportables".

Output growth in the booming industrial sectors far outstripped the expansion of total domestic absorption of those manufactured goods, which followed more closely the somewhat sluggish growth of aggregate output. Export expansion explains little of this gap: it was import contraction, in both absolute terms and relative to domestic absorption, which completes the picture. Import-substitution, defined in its purely accounting sense as a decline in the ratio of imports to domestic absorption, became the engine of growth of the 1930s, and not just in manufacturing; several rural activities experienced trends similar to those described above for textiles, cement, and pharmaceuticals. Such import-replacement,often squeezing productive capacity already installed during the 1920s, helped both to cope with balance of payments difficulties and to maintain levels of employment; for countries such as Argentina and Brazil there is evidence that the industrialization drive seems to have been quite labor-absorbing, with output elasticities of employment around one.

The cement industry provides a concrete example of some aspects of the import-substitution process sketched above. Table 4 compares three-year consumption averages in the late 1920s and 1930s, and the share in that absorption produced domestically. Mexico and the South American republics, with a few exceptions, show both some increase in total

TABLE 4

Cement: Consumption and Output

	Apparent Cement Consumption in 1936-37-38 (1927-28-29=100)	Domestic Output as Percentage of Apparent Consumption	
		1927-28-29	1936-37-38
Argentina	150	35	94
Bolivia	128	28	69
Brazil	112	14	89
Chile	115	44	99
Colombia	126	6	72
Mexico	152	87	97
Ecuador	140	15	57
Paraguay	145	0	0
Peru	127	46	66
Uruguay	76	79	92
Venezuela	116	14	28
Central American Republics(six)	113	12	12
Cuba	37	90	93
Haiti	50	0	0
Dominican Republic	79	0	0
Canada	49	102	100
United States	64	100	100

Sources and Method: Basic data in physical magnitudes obtained from European Cement Association 1967, pp. 27-43. Apparent consumption refers to cement production plus imports less exports.

consumption and an impressive jump in the share of home production. Public works programs in Argentina and Mexico led to especially vigorous expansion in consumption, while the leap in the coefficient of domestic supplies is most notable for Brazil and Colombia. The Caribbean islands, in contrast, present a picture as melancholy as that for Canada and the United States. The Central American republics show no gain in import substitution, but a surprisingly good performance in total consumption.

Exchange rate policies

All Latin American countries which experienced vigorous industrial expansion during the 1930s had by 1932 at the latest abandoned convertibility and other gold-standard rules of the game. Exchange controls were adopted in many countries following the devaluation of the pound sterling in September 1931. Large or active countries by 1933 had exchange rates relative to the dollar significantly above the late 1920s parities and the use of multiple exchange rates became widespread. These measures were adopted as gold and foreign exchange reserves dwindled or disappeared, and there was little enthusiasm in their enactment; governments viewed them as regrettable emergency operations and there was much improvisation and confusion in their management. Yet governments had the good sense of rejecting advice, such as that proffered by Sir Otto Niemeyer to the Brazilian government in July 1931, to adopt deflationary measures so as to return to convertibility at fixed parities (de Paiva Abreu 1974,p.15).

Small or passive countries, such as Guatemala, Haiti, Dominican Republic, Panama and Cuba maintained their peg to the U.S. dollar throughout the 1930s. The last two countries did not even have a Central Bank

or a corresponding central monetary authority (such as those of Brazil, or pre-1935 Argentina). Exchange control measures in these small countries were timid or nonexistent.

Regardless of the exchange rate policy followed, a country subjected to an exogenous and permanent worsening of its international terms of trade should witness over the long run a decline in the price of its non-traded goods and services relative to the domestic price of importable goods, encouraging a movement of resources toward the import competing sector, additonal to that generated by the decline in exportable prices. Under a gold-exchange standard with fixed rates and with collapsing international prices for both imports and exports, non-traded goods prices and domestic liquidity had a long way to fall. It is the working hypothesis of this section that countries willing and able to devalue their exchange rate moved toward the new constellation of domestic relative prices more speedily than those with fixed rates, thus limiting both price and monetary deflation, and containing their negative impact on real output.

Table 5 shows nominal exchange rates with respect to the dollar in the four largest Latin American countries. Starting in 1933 these data refer to average rates relevant for imports. There is some erratic behavior during 1932-34 in Argentina and Brazil, countries caught in tricky triangular relationships with the United States and the United Kingdom, involving in different mixes unbalanced commercial and financial flows. But the depreciating trend is clear. Like exchange controls, the depreciations were accepted by the authorities with some reluctance, and even after abandonment of convertibility attempts were made to limit

TABLE 5

Nominal Average Import Exchange Rates, 1925-1939
(Units of local currency per one U.S. dollar)

	Argentina (Pesos)	Brazil (Cruzeiros)	Colombia (Pesos)	Mexico (Pesos)
1925	2.49	8.17	1.02	2.03
1926	2.47	6.87	1.02	2.07
1927	2.36	8.35	1.02	2.12
1928	2.36	8.29	1.02	2.08
1929	2.39	8.48	1.03	2.15
1930	2.74	9.21	1.04	2.26
1931	3.46	14.3	1.04	2.65
1932	3.89	14.1	1.05	3.16
1933	3.23	12.7	1.25	3.50
1934	3.49	14.7	1.66	3.60
1935	3.53	17.4	1.78	3.60
1936	3.45	17.2	1.75	3.60
1937	3.25	16.0	1.77	3.60
1938	3.42	17.6	1.79	4.52
1939	3.87	19.2	1.75	5.19

Sources and method: - Sources for Argentine data are given in detail in Diaz Alejandro 1980b, p.21. Brazilian data obtained from Malan et al 1977, p.515. Colombian data obtained from Ocampo 1980, p.213, and from sources cited there. Mexican data obtained from Nacional Financiera 1977, p.216.

their extent. Exchange rates applicable to traditional export earnings and the purchase of foreign exchange for debt service depreciated by less than those shown in Table 5. Indeed, one immediate motivation for adopting exchange controls and multiple rates was to guarantee the Treasury's cheap access to the foreign exchange required to service the external public debt. Hard-pressed Treasuries also welcomed the fresh revenues generated by the spread between high selling and low buying exchange rates.

Purchasing-power-parity should not be expected to hold in an economy subjected to real shocks. As may be seen in Table 6, price levels in major Latin American countries generally fell by less and rose by more than United States prices during the 1930s. But the differences are small relative to the magnitudes of exchange rate depreciation, as may be seen directly in Table 7. This table calculates indices of real import exchange rates, deflating the nominal rates of Table 5 by the price levels given in Table 6; comparisons are only made vis-a-vis the United States.

As the price level indices of Table 6 have as broad a coverage of goods and services as possible, the real exchange rates of Table 7 can be taken as rough proxies for the domestic price of importable goods relative to the non-traded goods price, or alternatively, as an index of profitability in import substituting activities. Table 7 data are only proxies because they do not take into account increments in Latin American protection, due either to tariffs or quantitative restrictions, which occurred during the 1930s, while using the United States G.N.P. deflator as an indicator of international prices for Latin American importable goods. While the neglect of protection underestimates the

TABLE 6

Price Level Indicators, 1925-1939
(1929=100)

	Argentina	Brazil	Colombia	Mexico	USA
1925	104.1	116.1	91.7	92.8	101.0
1926	101.0	95.1	103.7	93.5	101.0
1927	100.0	93.0	100.0	95.1	99.0
1928	99.1	103.7	111.2	97.0	100.0
1929	100.0	100.0	100.0	100.0	100.0
1930	101.0	87.6	79.2	105.7	96.0
1931	87.0	78.1	64.0	89.7	85.0
1932	78.0	79.3	53.6	79.1	77.0
1933	88.0	77.7	55.2	81.0	75.0
1934	78.0	82.6	76.8	80.2	80.0
1935	82.7	86.5	80.0	88.2	79.0
1936	89.7	87.9	84.8	98.5	82.0
1937	92.1	96.3	86.4	119.4	83.0
1938	91.5	99.3	97.3	124.0	83.0
1939	92.9	101.3	101.6	127.0	82.0

Sources and method: Argentine data as in Table 5; they refer to the cost of living index in the Federal Capital. Brazilian data refer to an implicit G.D.P. deflator, given in Haddad 1978, p.166. Colombian data refer to a combination of wholesale food price indices (pre-1937) and a cost of living index (beginning in 1937); obtained as in Table 5. Mexican data refer to an implicit G.D.P. deflator, given in Solis 1970, pp. 104-105. U.S. data refer to the implicit G.N.P. deflator, given in Census 1960, p.139.

TABLE 7

Indices of Real Import Exchange Rates, 1925-1939

(1929=100)

	Argentina	Brazil	Colombia	Mexico
1925	101.1	83.7	109.0	102.7
1926	103.3	86.0	96.4	104.0
1927	97.7	104.9	98.0	102.6
1928	99.6	94.3	89.0	99.7
1929	100.0	100.0	100.0	100.0
1930	108.9	118.9	122.4	95.5
1931	141.4	183.5	134.1	116.9
1932	160.7	161.5	146.4	143.1
1933	115.2	144.6	164.9	150.7
1934	149.7	167.8	167.9	166.9
1935	140.7	187.4	170.6	150.0
1936	132.0	189.2	164.3	139.4
1937	122.9	162.7	165.1	116.3
1938	129.9	173.5	148.3	140.7
1939	142.9	183.3	137.1	155.8

Sources and method: Calculated from data in Tables 5 and 6, as explained in the text.

increase in the relative price of importables, the second consideration probably contributes toward overestimation.

An additional bit of insight may be obtained comparing wholesale price indices with those for the cost of living. Only two Latin American countries have reliable series for the 1930s; those are presented in Table 8 and contrasted with United States data. Wholesale prices cover both importables and exportables; it is thus remarkable that for both Argentina and Chile wholesale prices since 1929 fell less and rose more than the cost of living index, a trend in marked contrast with that for the United States. Data on money wages are very scarce for the period under consideration; if one assumes wages followed the cost of living, the evidence presented in Table 8 is compatible with the hypothesis of rising profitability in the production of tradable goods, mainly in the import-competing sector.[2]

It has already been observed that, contrary to what would happen in many Latin American countries after the second world war, during the 1930s both exchange rates and protectionist measures moved in the same direction in active countries, i.e., real depreciations, tariff increases and import and exchange quantitative restrictions were thrown into the balance of payments battle, particularly in compressing imports. A full discussion of commercial policies, including the complexities of bilateral clearing arrangements imposed on the region by British and German policies, is outside the scope of this paper. But in light of postwar policies and controversies, it is worth noting that in the important case of Argentina, the real average export rate was not allowed to appreciate, in spite of the gloomy outlook for

TABLE 8

Wholesale Price Indices Relative to Cost of Living Indices

(1929=100)

	Argentina	Chile	U.S.A.
1930	94	88	93
1931	106	81	86
1932	120	115	86
1933	107	139	92
1934	131	138	101
1935	121	135	105
1936	113	137	105
1937	126	146	108
1938	119	133	100
1939	120	128	100

Sources and method: Argentine and Chilean data obtained from League of Nations 1945, pp. 193 and 197. United States data as in Table 6.

exports (see Diaz Alejandro 1980b, pp. 2-3 for documentation, including real rates with respect to both the U.S. dollar and sterling). Traditional exports facing market restrictions abroad were of course handled so as to avoid further price declines, but non-traditional exports were given favorable treatment, earning the more depreciated rates which had to be paid by importers lacking licenses. A major architect of these policies was Raul Prebisch.[3] Modest export diversification occurred in Argentina and in some other countries.

Monetary and fiscal policies

The rise of importable goods prices relative both to exportable and non-traded goods prices resulting from the exogenous deterioration in the external terms of trade as well as from exchange-rate and protectionist measures encouraged investment in import-substitution. But aggregate demand was subjected to powerful deflationary forces which could have overwhelmed those incentives. The decline in export values signalling the crisis was accompanied by immediate balance of payments deficits which drained reserves and money supplies, according to gold standard rules. The export fall had important multiplier effects. This section will examine how those deflationary pressures on aggregate demand were contained and eventually reversed. In countries without well-developed financial markets it is difficult to isolate purely fiscal from monetary policies. During the 1930s only Argentina had financial markets of some sophistication, so this section will discuss aggregate macroeconomic policies without establishing very fine distinction between monetary and fiscal ones.

Table 9 presents data on money supplies. With the exception of Cuba, Latin American countries show briefer or shallower post-1929

declines in money supplies than the United States. By 1932 Brazilian money supply exceeded that of 1929; the corresponding Colombian date is 1933. The end of convertibility in Argentina, Brazil, Colombia and Uruguay was helpful in stemming the loss of liquidity, while in Cuba the inability to break out of (then) orthodox monetary rules led to a monetary deflation even greater than that of the United States.

Maintenance of liquidity was not simply a matter of ending convertibility. On the one hand, even after the abandonment of the gold standard, some countries such as Argentina shipped gold abroad to service the external debt and sold foreign exchange to stem currency depreciation. Both measures cut the monetary base. On the other hand, as early as 1931 South American monetary authorities began to adopt measures which Professor E.W. Kemmerer and Sir Otto Niemeyer would have found unsound. Thus, the Argentine "Caja de Conversion" whose old and only duty was to exchange gold for domestic currency and vice versa, began in 1931 to issue domestic currency in exchange for private commercial paper. By 1932 the old "Caja" even issued domestic currency against Treasury paper (Banco Central de la Republica Argentina 1972, pp.262-263). The Colombian Central Bank began in 1931 for the first time to engage in direct operations with the public, discounting notes endorsed by two first-class corporations and lending on the security of warehouse receipts. Government bonds were purchased in large quantities by the Colombian Central Bank since 1932. As noted by Robert Triffin, with the introduction of exchange control in 1931 in Colombia, international reserves ceased to govern monetary issue, which from then on was predominantly influenced by internal considerations of economic policy or budgetary expediency. (Triffin 1944, pp. 23-25). Very much the same could be said for all active Latin American countries.

TABLE 9

Nominal Money Supplies

(End of 1929=100)

End of:	Argentina	Brazil	Colombia	Cuba	Uruguay	USA
1928	101.3	100.9	136.6	107.5	90.5	101.5
1929	100.0	100.0	100.0	100.0	100.0	100.0
1930	100.1	95.5	79.3	74.5	103.2	96.0
1931	89.3	99.5	70.2	61.5	100.9	81.4
1932	88.5	107.2	84.2	51.0	101.0	74.2
1933	87.3	103.0	104.5	49.9	103.7	67.2
1934	87.9	119.2	124.4	46.8	105.6	76.4
1935	87.6	130.7	127.5	49.5	112.2	87.9
1936	96.2	143.6	153.4	56.3	131.8	98.1
1937	102.2	150.3	158.2	66.4	146.6	95.9
1938	100.2	186.4	175.1	64.4	150.5	101.5
1939	103.3	195.2	180.8	68.0	154.5	111.7
1940	105.4	209.5	195.6	75.6	163.0	125.7
1941	122.1	271.1	217.4	89.1	175.6	139.7

Sources and method: Argentine data refer to an aggregate slightly higher than "M_2"; obtained from Comite Nacional de Geografia 1941 and 1943. This series follows closely the "M_2" of Diz 1970, p.146, for the period of overlap. Brazilian data refer to the "M_2" series of Neuhaus, 1975, pp. 158-59. Colombian data refer to the "M_1" series presented in Banco de la Republica 1971, pp.104-105. Cuban data refer to the "M_1" series presented in Wallich, 1950, pp.38,76,and 152. Uruguayan data refer to the "M_2" series presented in Banco Central del Uruguay n.d. United States data refer to the "M_2" series presented in Friedman and Schwartz, 1963, Table A-1, pp. 712-716.

The then heterodox South American monetary policies started around 1932 were in some ways a "relapse" into past inflationary propensities, a past which was meant to be exorcised by the adoption of gold standard rules. Thus, the Argentine "Caja" relied on nearly forgotten laws to rediscount private commercial paper; indeed, memories of wild inflation under inconvertible paper during the late nineteenth century, memories still fresh during 1929-31, hampered and slowed down the adoption of more self-assured and expansionist monetary policies. It should also be borne in mind that as late as the early months of 1931 there were optimistic reports of an upturn in the major economies (Banco Central de la Republica Argentina 1972, p.280).

In contrast with the United States, there are no reports of widespread bank failures in South American countries during the early 1930s. Also in contrast with the United States, monetary aggregates fail to reveal a flight into currency and away from bank deposits; if anything, during the early stages of the depression the opposite appears to have occurred, as may be seen in Table 10. In active Latin American countries monetary authorities simply did not let banks fail, casting fears of moral hazard to the wind. While moratoria on domestic bank debts were decreed in many countries (much earlier than in the United States), freezing banks' assets, commercial banks were supported in a number of ad hoc ways, not all of them conducive to maintaining actual liquidity. Thus in Brazil as early as October 1930 withdrawals of bank deposits were restricted by decree (Neuhaus 1975, p.104). Rediscounting of commercial banks' loans was also vigorously carried out by Central Banks and institutions such as the Banco do Brasil and the Banco de la Nacion Argentina. Unorthodoxy was sometimes cloaked by

TABLE 10

Currency Held by the Public as Percentage of Money Supply

End of:	Argentina	Brazil	Colombia	Chile	Cuba	Uruguay	USA
1928	18.1	30.5	63.8	n.a.	43.5	30.9	8.2
1929	18.1	28.0	66.4	n.a.	44.9	29.8	8.3
1930	17.1	26.9	64.6	n.a.	39.7	26.1	8.6
1931	17.3	26.8	65.4	19.2	44.7	27.1	12.3
1932	16.4	27.2	58.0	21.8	37.7	23.3	14.2
1933	16.7	28.7	59.6	18.4	47.8	26.0	15.7
1934	18.2	26.4	58.4	18.1	45.9	28.2	13.0
1935	19.6	28.8	59.6	19.4	44.0	28.8	12.1
1936	19.9	30.2	60.6	19.6	41.2	33.2	12.2
1937	25.5	30.6	57.9	20.6	43.4	30.9	12.6
1938	20.6	25.3	57.2	21.8	42.8	30.9	12.0
1939	20.5	26.1	56.2	23.8	45.9	29.6	12.1
1940	21.5	25.8	50.3	24.6	49.2	31.6	12.6
1941	21.2	25.9	54.0	26.1	50.5	29.8	14.9

Sources and method: Sources as in Table 9. Chilean money supply data refer to "M_2", as given in Deaver, 1970, pp. 60-63. Comparable data before 1931 are not available (n.a.)

gestures to the old financial orthodoxy; Argentina claimed to have used "profits" from increases in the peso price of gold to create an institution which supported the commercial banks (Banco Central de la Republica Argentina 1972, p.264).

A fairly detailed look at the budget of the Argentine central government should cast some light on major trends in expenditures and taxes, and on the possibilities for aggregate demand management during the 1930s. The first column in Table 11 shows total expenditures at current prices, which reached a low point in 1932, expanding thereafter until 1939. Comparing nominal expenditures with the Buenos Aires cost of living index shown in Table 6, it may be seen that 1929 real expenditures were surpassed even during the provisional regime of General Uriburu (September 1930-February 1932), which had pledged an elimination of the excesses of the ppulist government of President Yrigoyen. After touching a post-1929 bottom in 1933 real expenditures expanded significantly during the second half of the 1930s. A major road-building program was undertaken by the government of General Justo (1932-1938), himself a civil engineer, which added 30,000 kilometers of all-weather and improved roads by 1938 to a system that had only 2,100 kilometers of such roads in 1932 (Potash 1969, p.85). The late 1930s also witnessed an expansion of military expenditures.

The second column of Table 11 compares two major injections in the Argentine income stream: government expenditures and exports. The latter gained relatively to the former so that by the late 1930s they were almost of the same magnitude.

TABLE 11

Indicators of Size and Structure of Argentine Central Government Budget

	Total Expenditures at Current Prices (1929=100)	Ratio of Total Expenditures to Merchandise Exports	Percentages of Total Expenditures: Tax Revenues	Changes in Floating Debt	Public Works	Debt Service	Military
1928	93.0	0.38	80.4	n.a.	15.0	n.a.	21.2
1929	100.0	0.46	75.7	20.7	19.0	n.a.	19.1
1930	110.5	0.78	60.8	32.4	17.3	18.3	18.6
1931	91.9	0.62	75.5	17.7	8.6	22.4	21.0
1932	86.0	0.66	87.4	-39.1	5.4	29.2	20.0
1933	89.1	0.79	91.2	-13.7	9.4	28.3	19.7
1934	94.5	0.65	96.2	-1.7	14.1	23.4	20.6
1935	99.3	0.63	99.7	-77.6	16.0	20.5	21.6
1936	106.4	0.64	93.2	-3.2	17.5	19.3	23.8
1937	123.6	0.53	90.4	7.8	19.3	16.0	25.8
1938	129.4	0.91	86.4	19.8	20.2	14.7	n.a.
1939	147.8	0.93	80.4	-1.9	15.8	15.3	n.a.
1940	133.7	0.92	93.2	21.9	15.8	18.5	n.a.

Sources and method: Budget data obtained from Comite Nacional de Geografia 1941, pp. 402-405; and Comite Nacional de Geografia 1943, pp.206-210. Merchandise exports at current pesos obtained from Diaz-Alejandro 1970, p.479. Military expenditures obtained from Potash 1969, pp. 34 and 99; they include pensions and some public works, which are (probably) included also in the column for "public works". Tax revenues are broadly defined to include various fees and charges.

Tax revenues lagged behind expenditures during President Yrigoyen's administration; in 1930 nominal tax revenues, heavily dependent on import duties, fell in absolute amounts as may be seen in Table 12. Large deficits were registered in 1930 and 1931, which could be regarded as induced by the decline in foreign trade, rather than as autonomous acts of policy. Both the Uriburu and the Justo administrations (and the brilliant technocrats in charge of their economic policies) took a dim view of government deficits, and made repeated pledges to correct the situation. As in other Latin American countries, fiscal heterodoxy was discredited in Argentina by lax budgets during the late 1920s. Both the Uriburu and the Justo administrations attempted to reduce expenditures and to increase taxes during the early 1930s; an income tax was introduced in 1932 and tariff rates were increased earlier.

During the early 1930s budget deficits were primarily financed by increases in the "floating debt", i.e., delays in payments to suppliers and civil servants or payments in public debt instruments of low liquidity. Such financing methods, of course, contributed to giving government deficits a bad name, and raised doubts about their net expansionary effects, as they came close to forced loans. Only in the late 1930s an active market was to be developed for public debt instruments. It may be seen in Table 11 that starting in 1932 the "floating debt" was reduced, but it is unclear to what extent it was settled in cash or in longer-term public securities. Money supply data shown in Table 9 suggests the latter was the predominant form of settlement.

Another consideration reducing the countercyclical potency of fiscal policy during the early 1930s is the increased share in the budget of debt service payments, mainly made to foreigners. As may

TABLE 12

Argentine Central Government Tax Revenues

	Total Tax Revenues at Current Prices (1929=100)	Percentages of Total Tax Revenues: Customs and Harbor Duties	Exchange Differential Profits	Income Taxes
1928	98.8	54.6	0	0
1929	100.0	54.9	0	0
1930	88.7	52.1	0	0
1931	91.7	46.1	0	0
1932	99.3	38.7	0	7.2
1933	107.4	38.2	0.1	8.1
1934	120.3	33.1	12.6	7.4
1935	130.9	33.1	12.1	7.9
1936	131.2	31.9	9.0	7.3
1937	147.6	36.8	5.8	9.0
1938	147.7	34.1	6.5	9.8
1939	157.1	27.3	9.6	9.5
1940	164.5	22.0	16.2	10.2

Sources and method: As in Table 11

be seen in Table 11, payments on the public debt reached 29 percent of expenditures in 1932; this may be contrasted with the meagre 5 percent devoted to public works. The import content of the budget probably peaked at the worst possible moment.[4] Other Latin American countries were to find the budgetary weight of debt service an additional inducement to suspend normal payments.

In short, there is no evidence that during the early 1930s the Argentine government sought to increase the full employment budget deficit as a means to compensate for the fall in aggregate demand. On the contrary, there is evidence that attempts were made to shift upward the tax schedule and to lower that for government expenditures. It may be said, however, that even during the early 1930s the efforts to reduce the deficit induced by the decline in foreign trade and aggregate demand were tempered by either certain common sense or by the sheer inability to cut expenditures and raise taxes fast enough. The relative size of public expenditures in the income stream thus grew by default already in the early 1930s, helping to sustain economic activity. Since 1933 public expenditures expanded in a deliberate way. Such an expansion had at least a balanced-budget-multiplier effect on the rest of the economy. In addition, the new Central Bank since 1935 facilitated the creation of a market for the domestic public debt, allowing some modest deficit-financing. Finally, the structure of expenditures during the late 1930s favored domestic expansion, in spite of some increase in the import content of military expenditures (Potash 1969, p.99).

Fiscal trends in other active Latin American countries may be briefly contrasted with those for the Argentine, using scanty or

impressionistic evidence. Calamities, civil disturbances or border wars led to increased public expenditures in several countries, apparently financed directly by monetary expansion, in the early 1930s. Examples include political turmoil in Chile during late 1931 and 1932 (when that country had a short-lived socialist government); the war between Peru and Colombia over Leticia in 1932; the second Chaco War between Bolivia and Paraguay, also in 1932; the Sao Paulo rebellion of 1932 and a severe drought in the Northeast in Brazil.

Brazil provides an interesting and documented example of a compensatory increase in government expenditure in the early 1930s, besides those resulting from Northeast drought and Sao Paulo rebellion. Since 1906 Brazil had attempted to sustain coffee prices both abroad and at home via buffer stocks. As coffee prices fell in the early 1930s the government purchased large quantities of that product. A good share of those purchases were financed either by foreign loans or by new taxes, but about 35 percent appear to have been financed essentially by money creation (Silber 1977, p.192). The new taxes levied on exports, or the relative exchange rate appreciation generated by foreign loans, could be said to have improved Brazilian terms of trade, relative to the relevant counterfactual situation (as argued by Fishlow 1972 and Cardoso 1979). Argentina also started regulating the production and export of major traditional exports during the 1930s, but without the massive fiscal impact of the Brazilian coffee purchases. The exchange differential profits shown in Table 12, however, were the Argentine counterpart to the Brazilian export taxes, both attempting to raise revenues as well as to protect the terms of trade.

Brazil, like Argentina, clearly expanded public expenditures during the late 1930s, and probably reduced the import content of those expenditures even more than Argentina, as it suspended normal debt servicing in September 1931. In 1937 Brazil announced the suspension of all debt servicing, and none occurred during 1938 and 1939 (de Paiva Abreu 1978, pp. 109 and 119). In both Argentina and Brazil the 1930s witnessed an important diversification of public revenues, with a remarkable expansion in non-customs taxes, which by 1932 (Argentina) and 1933 (Brazil) had exceeded the levels reached in 1929, at current prices. A similar trend toward tax diversification has been reported for Colombia and Mexico (Wallich 1944a, pp. 122-123).

Whatever the hesitations and improvisations of the early 1930s, by the second half of the decade the active Latin American countries had developed both a respectable array of monetary and fiscal tools, as well as the will to use them to avoid deflation. Thus, the 1937-38 recession in the United States was felt in the foreign trade statistics much more than in those for industrial output. South American countries damaged by the loss of European markets and shipping shortages in 1940 mobilized to adopt emergency stabilization measures, such as the Plan Pinedo in Argentina (Diaz-Alejandro 1970, p.105). Soon thereafter, however, fiscal and monetary tools had to go into reverse gear to offset inflationary pressures arising from expanding foreign exchange reserves and supply shortages. That transition was not managed smoothly, perhaps with the exception of pre-1944 Argentina[5], but that is another story.

The impotency of passive countries may be illustrated by the contrasting experiences of Cuba and Mexico in their tinkering with silver for monetary and fiscal purposes during the early 1930s.

Both countries hit upon the expedient of issuing silver coins, which both added to liquidity and yielded seignorage "profits" to the treasury, justifying expenditures. In Cuba modest issues were made during 1932-33, and in 1934 a revolutionary government appeared to herald a bold new monetary system independent of the dollar by planning new issues and by making silver pesos full legal tender for the discharge of old as well as new obligations contracted in dollars or in old Cuban gold pesos. Shortly thereafter a mild form of exchange control was decreed. Foreign banks apparently threatened to export all dollars from Cuba; capital flight followed. The government caved in, lifting rather than expanding controls. Only the legal tender status of silver for all contracts in such currency remained of the 1934 reform. Even a Central Bank was to wait until 1948. (Wallich 1944b,pp. 351-352.)

Mexico, after some deflationary measures in 1930 and 1931, adopted early in 1932 a series of expansionary monetary and fiscal steps, relying mainly on issues of silver pesos.[6] Central Bank control over commercial banks was extended and strengthened. Foreign banks threatened to leave Mexico, and as the Mexican authorities held firm, most of them actually did. Mexican-owned commercial banks took their place. These and other policies, framed under the remarkable leadership of Alberto J. Pani, contributed to vigorous recovery of the Mexican economy. Mexican reliance on a silver standard did not generate unmanageable problems when the United states raised silver prices;Mexico simply prohibited the export of silver money in April 1935 and ordered all coins to be exchanged for paper currency. A year and a half later, after the world price of silver had fallen, silver coinage was restored. (Friedman and Schwartz 1963, p.491).

As a major producer and exporter of silver, Mexico of course benefitted from higher international silver prices, which accelerated her recovery. The Mexican case was in this respect different from the disastrous Chinese experience (Friedman and Schwartz 1963, pp. 699-700; contrast with the slip in Haberler 1976, p.10).

The service of foreign capital

Before the first world war portfolio and direct investments, mainly from Europe, flowed into Latin America. Those from the United States were then relatively small, and concentrated in the Caribbean, Central America and Mexico. During the 1920s United States investments soared throughout the region, while European ones stagnated or declined. The expansion of public borrowing in the New York bond market was particularly noteworthy.

Table 13 presents estimates of the stock of British and United States investments of all kinds in Latin America toward the end of the 1920s. In per capita terms they remained below corresponding figures for Canada, but impressive levels were registered in Argentina, Chile, Uruguay, Costa Rica, Mexico and especially Cuba. Both in Canada and Latin America the two major foreign investors had accumulated a stock of claims around four times the value of annual merchandise exports. Assuming a five percent rate of return, profits and interests of foreign capital must have accounted for about 20 percent of annual export earnings.

Relations with foreign investors had remained prickly throughout the nineteenth and early twentieth centuries. Defaults had occurred on bonds issued in London, and numerous frictions were generated by direct investments. The Royal Navy was no stranger to South American waters, once even attempting a naval blockade of Bolivia, and the United States

TABLE 13

Ratio of Stock of all British plus U.S. investments to Annual Merchandise Exports and Population, circa late 1920s

	Stock of Investments to Exports	Investments per capita (Current U.S. dollars)
Argentina	2.8	$258
Bolivia	3.3	56
Brazil	4.4	47
Chile	3.9	195
Colombia	2.4	41
Ecuador	3.7	24
Paraguay	2.4	34
Peru	2.7	53
Uruguay	2.9	164
Venezuela	3.3	82
Costa Rica	3.5	134
Guatemala	2.8	39
Honduras	2.2	52
Nicaragua	3.1	43
Salvador	1.8	15
Panama	11.2	88
Cuba	5.5	494
Haiti	2.0	12
Mexico	8.8	172
Dominican Republic	0.8	24
Total: Latin America	4.0	$107
Canada (all foreign Investments)	4.7	$635

Sources and Method: For Latin American countries the basic data comes from Winkler 1971 ("first published in 1928"), pp. 276,278, and 283. Export data refer to 1927 while those for investments are said to be for 1929 (forecasts?). Canadian data obtained from Urquhart and Buckley 1965, pp. 14, 169, and 173. Canadian data refer to 1926 and cover direct and portfolio investments from all sources.

Marines were an important presence in the Caribbean and Central America. During the 1920s, however, the investment climate appeared reasonably good, with the exception of Mexico. The continuous tensions between Mexico and the United States over oil and other U.S. investments led a perceptive observer to worry about "...the conflict between the vested rights of Americans in the natural resources of the Caribbean countries and the rising nationalism of their peoples" (Lippmann 1927, p.353).[7]

These longer-term considerations were overwhelmed after 1929 by short-term budgetary and balance of payments difficulties in servicing foreign capital. The unexpected fall in dollar prices sharply increased the real cost of external obligations denominated in nominal terms. Protection and depression abroad cut into exchange earnings, actual and potential. While much of the external debt of those days was long-term, it still called for some amortizations. The drying up of foreign capital markets after 1930 made roll-over operations for both long-and short-term debt very difficult. The collapse of import duty revenues cut a traditional budgetary source for payments on the external debt.

Table 14 shows estimates of the ratio of the long-term external public debt to annual exports, both in current dollars. A steep increase occurred between 1929 and 1935, due to the fall in exports. More complete data are available for Argentina and Brazil; these are presented in Table 15, which also gives Canadian data. By 1931 all net profits and interests on foreign capital amounted to 47 percent of exports in Canada, 41 percent in Brazil and 27 percent in Argentina. All public debt services (including amortizations) reached 38 percent of exports in Brazil and 14 percent in Argentina. It was seen in Table 11 that debt service reached 21 percent

TABLE 14

Latin America: Ratio of Stock of Long-Term External Public Debt to Yearly Merchandise Exports f.o.b.

1929	1.49
1935	2.25
1945	0.77
1972-73	1.14
1974-76	1.06
1977-78	1.48

Sources and Method: Data for 1929 through 1945 obtained from CEPAL 1964, pp.24 and 27. Data since 1972 obtained from Inter-American Development Bank 1980, pp.431 and 443. The coverage of "Latin America" differs between these two sources; such a difference, however, is unlikely to modify the broad trend shown above.

TABLE 15

Argentine and Brazilian Financial Remittances as Percentages of Merchandise Exports, f.o.b.

	All Public Debt Services		All Net Profit and Interest Remittances		
	Argentina	Brazil	Argentina	Brazil	Canada
1914	12.5	18.2[a]	29.3	n.a.	44.5
1921-25	6.3	11.9	16.6	n.a.	20.3
1926-28	5.6	14.9	18.1	n.a.	17.1
1929	6.2	18.2	19.8	n.a.	22.2
1930	11.2	30.0	28.6	38.7	32.8
1931	13.8	37.9	27.2	40.5	46.9
1932	14.5	21.3	29.4	25.4	53.5
1933	15.6	17.0	31.6	13.1	42.5
1934	13.1	12.2	24.6	15.7	32.6
1935	11.2	14.0	22.8	25.1	28.1
1936	9.9	12.2	21.3	23.9	24.7
1937	6.5	12.1	16.0	23.5	21.7
1938	8.3	-	23.4	-	28.6
1939	9.0	-	23.8	3.8	27.5
1940-43	8.7	4.3	21.3	10.4	11.9
1973	20.5	15.3	14.3	18.3	9.0
1974-76	23.0	18.7	13.3	22.9	7.8
1977-79	24.1	33.0	11.6	33.2	10.4

[a]Refers to 1911-15
n.a.=data are not available

Sources and method: Pre-1944 Argentine data obtained from CEPAL 1956, Table 18, p.293. Pre-1944 Brazilian data obtained from de Paiva Abreu 1980, Tables 1 and 2. Data since 1973 for both countries obtained from World Bank 1980, Volume II; International Monetary Fund 1980a and International Monetary Fund 1980b.

"All Public Debt Services" include both interest and amortization; to obtain the third column before 1944 it was assumed that amortization amounted to 40 percent of all public debt services. "All net profit and interest remittances" include both private and public net profit and interest remittances.

Pre-1944 Canadian data obtained from Urquhart and Buckley 1965, pp. 159 and 160. Data since 1973 obtained as above.

of Argentine government expenditures in 1931. Chile in 1932 faced interest and amortization charges, including those on short term maturities, far exceeding export earnings (Wallich 1943, p.321).

Starting late in 1931 exchange control authorities delayed issuing permits to foreign companies for remitting abroad profits, which had also been reduced by the crisis. More drastically, and also starting in 1931, most Latin American countries suspended normal payments on the external debt, and asked foreign creditors for conversations aimed at rescheduling and restructuring that debt. Those negotiations were to stretch out well into the 1940s, and into the 1950s in some cases. Different countries carried out the conversations with various degrees of enthusiasm; Cuba, for example, while servicing her debt irregularly during the 1930s maintained better relations with her creditors than Brazil, whose dealings with creditors during the late 1930s, especially with British ones, were acrimonious.

Rescheduling and liquidations of European-held debt plus the recovery of international trade had lowered sharply the debt/export ratio by 1945, as may be seen in Table 14, a trend which probably continued until the early 1960s. Even in Argentina and Canada, which maintained normal debt service during the 1930s, profits and interests relative to export tended to decline in the late 1930s and early 1940s, as may be seen in Table 15. For Latin America as a whole interests plus profits as a percentage of all export earnings were down to 7 percent in the early 1950s; only during the 1970s were these indicators to reach again the levels of the late 1920s (Bacha and Diaz-Alejandro 1981, Table 7).

The contrast between Argentine and Brazilian policies toward debt service in the 1930s casts some light on the nature of international economic relations during those years. (The punctual debt servicing by the Dominican Republic and Haiti presents no mystery: the United States Marines stationed in those countries at the time provide a plausible explanatory variable). In merchandise account Brazil traditionally had an export surplus with the United States and an import surplus with the United Kingdom. Argentina had an export surplus with the United Kingdom, and an import surplus with the United States. Both the Argentine and Brazilian debts had become diversified during the 1920s, but more than half was still held by British interests.

Argentina had an export surplus with a country organizing commonwealth preferences, also threatening to impose bilateral exchange clearings, and where financial interests of the City still exerted great political influence. Australia, Canada and New Zealand appeared eager to replace Argentina in British markets. British pressures culminated in the Roca-Runciman treaty of 1933, whose features were not unlike those of 1930s economic treaties between Germany and eastern European countries. The bitterness felt both in Argentina and the United States at this treaty is aptly summarized in a long rhetorical question of Virgil Salera: "But could not more far-sighted [Argentine] leadership have avoided the granting of thoroughgoing preferences of the sort that were actually conceded under the terms of the Roca pact, concessions which, besides encouraging international ill-will in the case of those countries discriminated against, reduced Argentina to something close to an economic vassal of a power that had never preached nor practiced <u>universal</u> narrow bilateralism as a new and more satisfactory type of international economic policy?" (Salera 1941, p.89). Under these circumstances Argentina could hardly afford to tamper with the normal servicing of her debt.

Brazil had an export surplus with a country committed to multilateral trade plus convertibility, and where the New Deal viewed financial interests with some suspicion. United States exporters to Brazil knew that an additional dollar spent in Rio for debt servicing, mainly to British interests, would mean one less dollar for Brazilian imports from the United States (Brazil had run out of reserves as early as 1930). The British could do little when faced by erratic Brazilian debt service. Furthermore, during the second half of the 1930s there was preoccupation in Washington with German influence in Brazil, leading to even more tolerant views of Brazilian debt service irregularities (de Paiva Abreu 1978). Similar geopolitical considerations may also explain the relatively mild response of the Roosevelt administration to the Mexican oil nationalizations of 1938.

International capital markets never quite recovered from the 1930s defaults. Such an experience, particularly that involving non-industrial countries, is still used to buttress arguments favoring the organization of sanctions against possible LDC defaults during the 1980s (Eaton and Gersovitz 1980, pp. 7-9 and 53). Without heavy penalties on defaults, it is argued, international capital markets will mobilize too few funds, as bankers ration credit to offset the adverse selection imperfection. As there are no more recent examples of widespread defaults than those of the 1930s, it is important to inquire whether the defaults resulted mainly from virtual impossibility to pay and from unexpected changes in international rules, or whether debtor countries coolly broke their contracts basically because they calculated that they could get away with it, due to lack of sanctions.

Writing in The American Economic Review for 1943 Henry C. Wallich argued that, at least for Latin American dollar bonds, the causes of default were well-known and deserved little elaboration: "If the depression of the 1930's had been mild, and if the steady expansion of world trade and capital exports had continued thereafter, defaults probably would have been infrequent and could have been settled without much difficulty...Without...attempting to deny that insufficient care was exercised, and that Latin American countries were encouraged to borrow excessively one may question whether these factors were decisive (Wallich 1943, p.321).

Other commentary of the 1930s and 1940s emphasized that imperfections in the 1920s capital markets arose not just from the inability of honest and competent bankers and underwriters to tell which borrowers really planned to service their debts, independently of financial position. Many underwriters were accused not just of negligence in seeking information about borrowers and their projects, but also of deliberately misleading the proberbial widows and orphans (Winkler 1932 and even Cumberland 1932). Much New Deal legislation sought to check dishonesty in financial intermediation.

The crisis of the 1930s went beyond macroeconomic collapse and the protectionist upsurge. The industrialized countries themselves led in the undermining of belief in the sanctity of contracts; examples include the British default on the war debt, Germany's failure to make payments on the greater part of her international obligations, and the derogation of the gold clause in the United States (Wallich 1943, p.322). During the 1940s the United Kingdom froze growing sterling balances of many developing countries, balances whose real value was sharply eroded by inflation, and actually contemplated complete repudiation.

A substantial body of British economic opinion even today regrets that repudiation was not adopted (Bolton 1972).

By the late 1930s the ability to service the debt had improved in many Latin American countries and indeed some servicing did occur throughout the 1930s. There were gains to be made in avoiding repudiation, even in the absence of Eaton-Gersovitz sanctions. Some countries purchased their own partially or wholly unserviced bonds, which were selling at a discount, in foreign markets. This was regarded by some as perfidious: you default, ruin the prices of your bonds, and then quietly buy them back. As late as 1943 Henry Wallich argued that such repurchases were not only defensible but, under the circumstances, constituted the best method of dealing with the defaulted bonds "...not merely from the viewpoint of the debtor but to some extent even from that of the bondholder" (Wallich 1943, p.332).

The repurchase, Wallich argued, avoided a rigid settlement at a time when the international economic outlook was very uncertain. Repurchases had a technical advantage which today seems archaic: they could be carried out by Central Banks, whose exchange reserves were rising in the early 1940s, while normal servicing was the responsibility of Treasuries, whose revenue situation had been hurt by the fall in imports and the corresponding decline in duties. Wallich noted that by the late 1930s and early 1940s the defaulted Latin American bonds had become unsuitable to the portfolios of their original holders, so it could be assumed that a large part was held by speculators. This consideration, plus the macroeconomic advantages derived by the United States from capital exports during the 1920s, plus the irregularities found on both sides in many loan transactions, made the ethics of resuming debt service highly problematical. The early use of Keynesian

analysis led Wallich to write, somewhat tongue-in-cheek, that: "'Tis better to have lent and lost than never to have lent at all" (Wallich 1943, p.328). He recommended a generous policy toward the debtors, without a hint of new codes for sanctioning defaults. Indeed, he suggested that the service of loans which the EXIMBANK began to extend to Latin American countries since 1940 should be made contingent upon the exports of each country.

Regardless of the ethics and legalities of defaults, the economics of the 1930s induce tolerance. What Gottfried Haberler has written justifying the suspension of German reparations applies a fortiori to Latin American defaults: "...when productive resources were allowed to go to waste in idleness and countries everywhere were restricting imports to protect jobs, it made no economic sense whatsoever to insist on the transfer of real resources as reparations" (Haberler 1976, p.28). Reparations, like debt service, were fundamentally victims of the Great Depression: "...there can be hardly a doubt that the transfer of the reparations as fixed by the Young plan would have been possible--in the absence, to repeat, of a serious depression and depression-induced protectionism" (Haberler 1976, p.31).

Concluding reflections

For most Latin American countries the 1930s and early 1940s were "the worst of times and the best of times". After the initial external blows the active countries steadily gained in both ability and will to maintain growth regardless of foreign conditions. The public sector undertook new development tasks, while the national private sector seems to have experienced an upsurge. Countries learned to rely on domestic finance for capital formation and to do without many imports. Import-substitution extended to economic policy: gone were Kemmerer,

Niemeyer and Fisher[8], their place partly taken by Prebisch and Pani, and partly by new "imports" such as Triffin and Wallich. Domestic economic policy witnessed a most creative period, encouraged by the new foreign advisors. Thus Triffin defended Latin American exchange controls (Triffin 1944b, pp. 112-113) and advised Paraguay to peg to a basket of currencies (Triffin 1944c, pp. 6-7). Latin American experiences sparked further insights in the late 1940s: Polak outlined the "absorption approach" in a paper written in connection with Mexico's 1948 devaluation (Polak 1948). Polak has also noted, in private conversation, that the early development of the monetary approach to the balance of payments was heavily influenced by Rodrigo Gomez, of the Central Bank of Mexico.

Policies which made sense during 1929-1945 turned out not to be so desirable after the second world war. Some countries adapted to the more prosperous and peaceful international economic conditions fairly quickly, while others remained obsessed by export-pessimism and fears of unemployment and of a new world war. Thus, while Mexico sought new sources of foreign exchange and achieved price stability by the 1950s, Argentina and Brazil remained tangled in extreme protectionism and inflation. To what extent the Argentine and Brazilian policy errors of the 1950s were inevitable consequences of the 1930s is highly questionable, and beyond the scope of this paper.

To conclude, two lessons of the 1930s seem particularly relevant for the 1980s. In a world of erratic changes in terms of trade, unpredictable protectionism and high capital mobility, commitment to fixed exchange rates, unlimited convertibility and gold-standard-type monetary rules seems rash and risky. The second lesson applies to creditor countries.

If by their actions they seriously disturb the normal expectations existing at the time loans were made, they may destroy the reverse transfer mechanism. Such lesson would apply either to old or new capital exporters, and unusual actions would include protectionism, the tolerance of prolonged depression, or extravagant increases in oil prices or interest rates.

Footnotes

[1]For a closer look at the evolution of terms of trade and export quantum see Diaz-Alejandro 1980a, pp. 351-382. For Chile both the terms of trade and the export quantum collapsed, leading to the steepest decline in the purchasing power of exports registered in Latin America.

[2]A look at disaggregated cost of living indices can also be revealing. In Uruguay, for example, the clothing price index rose relative to that for foodstuffs.

[3]See the fascinating lectures given by Raul Prebisch in Mexico during 1944, available in Banco Central de la Republica Argentina 1972, especially pp. 290-291. The link between exchange rate policies and industrial expansion is explicitly made in these lectures; see p.295.

[4]Within the military budget outlays for imported equipment seem to have been reduced while those for salaries and pensions were increased (Potash 1969,p74-75). But the quantitative impact of such a shift appears small relative to debt service data.

[5]In an article published in 1944, Robert Triffin asserted: "In the short period since 1935 the Central Bank of Argentina has developed into an outstanding institution among central banks not only in Latin America but in older countries as well. Credit for this achievement is due largely to the brilliant leadership of Raoul [sic] Prebisch, general manager of the bank during most of this period, and to an extremely able staff of executives and research workers" (Triffin 1944b, pp. 100-101).

[6]For Mexico I shamelessly follow the unpublished work of two young Mexican scholars, who happen to be graduate students at Yale: Enrique Cardenas and Jaime Zabludowsky. My summary of their researches does not do full

justice to their papers. I am grateful for their permission to use those papers.

[7]While adopting a paternalistic tone, highly offensive today ("One persistent motive in these uprisings is the desire to assert the national independence and the dignity of an inferior race"), Lippman concluded with words which could be read with profit 54 years later in the United States State Department: "And nothing would be so certain to arouse still further this illwill as the realization in Latin America that the United States had adopted a policy, conceived in the spirit of Metternich, which would attempt to guarantee vested rights against social progress as the Latin peoples conceive it" (Lippmann 1927, pp.357 and 363).

[8]Kemmerer's prestige in the United States and in Latin America seems to have peaked in the late 1920s. For a summary of his views see his Presidential address to the American Economic Association (Kemmerer 1927). Irving Fisher advised the Calles government in Mexico during the early 1930s, but the nature of his advice is unknown (Suarez 1977, pp. 51-52).

References

Bacha, Edmar L., and Diaz Alejandro, Carlos F. 1981. Financial Markets: A View from the Semi-Periphery. Yale Economic Growth Center Discussion Paper No. 367.

Banco Central de la Republica Argentina. 1972. La Creacion del Banco Central y La Experiencia Monetaria Argentina Entre Los Años 1935-1943 Buenos Aires. Two volumes.

Banco de la Republica. 1971. Informe Anual del Gerente a la Junta Directiva, 1970-71. Bogota

Banco Central del Uruguay. n.d. Series Estadisticas Monetarias y Bancarias. Montevideo

Bolton, Sir George. 1972. Where critics are as wrong as Keynes was. The Banker. 122: 1385-1388.

Cardoso, Eliana A. 1979. Inflation, Growth and the Real Exchange Rate: Essays on Economic History in Brazil. Ph.D. diss., Massachusetts Institute of Technology.

Census. U.S. Bureau of the Census. 1960. Historical Statistics of the United States. Washington, D.C. Government Printing Office.

CEPAL. 1956 Document E/CN.12/429/Add.4. Santiago de Chile.

_____ 1964. El Financiamento Externo de America Latina, New York: Naciones Unidas.

_____1976. America Latina: Relacion de Precios del Intercambio Santiago de Chile: Naciones Unidas.

_____1978. Series Historicas del Crecimento de America Latina. Santiago de Chile: Naciones Unidas.

Comite Nacional de Geografia. 1941. Anuario Geografico Argentino. Buenos Aires.

_____. 1943. Anuario Geografico Argentino, Suplemento 1942 Buenos Aires.

Cumberland, W.W. 1932. Investments and National Policy of the United States in Latin America. The American Economic Review 22: 152-173.

de Paiva Abreu, Marcelo. 1974. A Missao Niemeyer. Revista de Administracao de Empresas 14: 7-28.

_____1978. Brazilian public foreign debt policy, 1931-1943. Brazilian Economic Studies 4: 105-141

_____1980. O Brasil e a economia mundial, 1929-1949. Rio de Janeiro Mimeographed.

Deaver, John V. 1970. The Chilean Inflation and the Demand for Money. In Meiselman, D. ed., Varieties of Monetary Experience. Chicago: The University of Chicago Press.

Diaz-Alejandro, Carlos F. 1970. Essays on the Economic History of the Argentine Republic. New Haven: Yale University Press.

_____1980a A America Latina em Depressao 1929/39. Pesquisa e Planejamento Economico 10: 351-382.

_____1980b. Exchange rates and terms of trade in the Argentine Republic, 1913-1976. Yale Economic Growth Center Discussion Paper No. 341.

Direccion General de Estadistica. Ministerio de Hacienda. 1959. Resumenes Estadisticos Seleccionados. La Habana

Diz, Adolfo Cesar. 1970. Money and Prices in Argentina, 1935-1962. In Meiselman, D., ed., Varieties of Monetary Experience. Chicago: The University of Chicago Press.

Eaton, Jonathan, and Gersovitz, Mark. 1980. Poor Country Borrowing in Private Financial Markets and the Repudiation Issue. Princeton Research Program in Development Studies Discussion Paper 94.

European Cement Association. 1967. The World Cement Market in Figures Paris.

Finch, David. 1951-52. Investment Service of Underdeveloped Countries. International Monetary Fund Staff Papers. 2:60-86.

Fishlow, Albert. 1972. Origins and consequences of import substitution in Brazil. In de Marco, Luis, ed., International Economics and Development. New York: Academic Press.

Friedman, Milton, and Schwartz, Anna J., 1963. A Monetary History of the United States, 1867-1960. Princeton: Princeton University Press.

Haberler, Gottfried. 1976. The World Economy, Money, and the Great Depression, 1919-1939. Washington, D.C.: American Enterprise Institute for Public Policy Research.

Haddad, Claudio L.S. 1978. Crescimento do Producto Real no Brasil 1900-1947. Rio de Janeiro: Editora da Fundacao Getulio Vargas.

Inter-American Development Bank. 1980. Economic and Social Progress in Latin America: 1979 Report. Washington, D.C.

International Monetary Fund. 1980a. Balance of Payments Yearbook Washington, D.C.

_____1980b. International Financial Statistics. Washington, D. C.

Kemmerer, E.W. 1927. Economic Advisory Work for Governments. The American Economic Review 17: 1-13.

League of Nations. 1945. Statistical Yearbook of the League of Nations, 1942/44. Geneva

Lippmann, Walter. 1927. Vested Rights and Nationalism in Latin America. Foreign Affairs. 5: 353-364.

Malan, Pedro S.; Bonelli, Regis; de Paiva Abreu, Marcelo; and de C. Pereira, Jose E. Politica Economica Externa e Industrializacao no Brasil(1939/52) 1977. Rio De Janeiro: IPEA/INPES.

Millot, Julio; Silva, Carlos; and Silva, Lindor. 1972. El Desarrollo Industrial del Uruguay. Montevideo: Universidad de la Republica.

Nacional Financiera. 1977. Statistics on the Mexican Economy. Mexico D.F.

Neuhaus, Paulo. 1975. Historia Monetaria do Brasil, 1900-45. Rio de Janeiro: IBMEC.

Ocampo, Jose Antonio. Comentarios. 1980. Ensayos sobre Historia Economica Colombiana. Bogota: FEDESARROLLO.

Perez-Lopez, Jorge F. 1977. An index of Cuban industrial output, 1930-58. In Wilkie, J.W., and Ruddle, K., eds. Quantitative Latin American Studies; Methods and Findings. Los Angeles: UCLA Latin American Center Publications.

Polak, J.J. 1948. Depreciation to meet a Situation of Overinvestment. International Monetary Fund Document RD-707. Washington, D.C.

Polak, Jacques J. 1953. An International Economic System. Chicago: The University of Chicago Press.

Potash, Robert A. 1969. The Army and Politics in Argentina 1928-1945. Stanford: Stanford University Press.

Salera, Virgil. 1941. Exchange Control and the Argentine Market New York: Columbia University Press.

Silber, Simao. 1977. Analise da politica economica e do comportamento da economia Brasileira durante o periodo 1929-39. In Versiani, F.R., and de Barros, J.R.M. eds. Formacao Economica do Brasil: A Experiencia da Industrializacao Sao Paulo: Saraiva S.A.

Solis, Leopoldo. 1970. La Realidad Economica Mexicana: Retrovision y Perspectivas Mexico D.F.: Siglo Veintiuno Editores.

Suarez, Eduardo. 1977. Comentarios y Recuerdos (1926-1946). Mexico D.F.: Editorial Porrua, S.A.

Triffin, Robert. 1944a. Money and Banking in Colombia. Washington, D.C.: Board of Governors of the Federal Reserve System.

_____ 1944b. Central Banking and Monetary Management in Latin America. In Harris, Seymour E., ed., Economic Problems of Latin America. New York: McGraw-Hill Book Company, Inc.

_____1944c. New Monetary and Banking Measures in Paraguay. Federal Reserve Bulletin. January: 1-11

_____1945. Monetary Developments in Latin America. Federal Reserve Bulletin. June: 1-14

Urquhart, M.C., and Buckley, K.A.H., eds. 1965. Historical Statistics of Canada. Cambridge: Cambridge University Press.

Wallich, Henry C. 1943 The future of Latin American dollar bonds. The American Economic Review 33: 321-335.

_____ 1944a. Fiscal Policy and the Budget. In Harris, Seymour E., ed., Economic Problems of Latin America. New York: McGraw Hill Book Company,Inc.

_____1944b Cuba: Sugar and Currency. In Harris, Seymour E., ed., Economic Problems of Latin America. New York: McGraw Hill Book Company Inc.

_____1950. Monetary Problems of an Export Economy: The Cuban Experience 1914-1947. Cambridge: Harvard University Press.

Winkler, Max 1932. Investments and National Policy of the United States in Latin America. The American Economic Review 22: 144-152

_____ 1971 Investments of United States Capital in Latin America Port Washington, New York: Kennikat Press

World Bank. 1980 World Debt Tables Washington, D.C.