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10 Collapse and (Incomplete) Stabilization of the Nicaraguan Economy

José Antonio Ocampo

10.1 Introduction

In the 1980s, the Nicaraguan economy faced massive macroeconomic disequilibria. Economic activity never recovered the large losses incurred during the 1979 revolution that brought the Sandinistas to power. Moreover, GDP fell steadily from 1983 to 1989. As a result of production losses and rapid population growth, by the latter year GDP per capita had returned to levels comparable to the 1940s. Due to the financial needs generated by a continuing war effort, private consumption per capita and real wages fell even more.

This process was accompanied by massive external disequilibria. As a result of these imbalances, the country had accumulated at the end of 1989 a foreign debt of $9,741 million, equivalent to 33 times the exports of goods, and more than four times the GDP, the worst debt ratios in the heavily indebted region (República de Nicaragua 1990). Finally, the collapse of real economic activity has been accompanied by equally massive domestic financial disequilibria, which exploded into hyperinflation in 1988. From January 1988 to January 1989, when this process was at its peak, inflation reached an astonishing 43,000%, the record so far in Latin America and one of the highest in world history.

Macroeconomic management faced a complex set of constraints, quite different from those confronted by other Latin American countries in the 1980s. Through the decade, Nicaragua continued to receive massive financing from abroad. Also, according to ECLAC estimates, the terms of trade did not fare badly, either.[1] However, these favorable events were overwhelmed by the impacts on production and resource availability of the revolution and the Contra

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1. This is not true according to alternative estimates by Bulmer-Thomas (1987, table A.14).

war, the U.S. trade embargo and veto on multilateral lending, excessive reliance on relatively inflexible bilateral assistance from the socialist countries, and a series of natural disasters.

The buildup of macroeconomic disequilibria was also closely associated with economic policy. In the first years of the revolution, the government adopted an expansionary public expenditure program to improve the poor social record inherited from the Somoza years and to accelerate economic growth. These goals, particularly the latter, were sacrificed when the government was forced to increase defense expenditure to face the Contra war. Up to 1988, the central government ran massive budget deficits. Monetary financing of the deficit, together with equally massive subsidies on the use of foreign exchange and credit resulted, with a lag, in hyperinflation.

The magnitude of existing disequilibria forced the government to adopt more ambitious adjustment programs in 1988 and 1989. In the former year, the program emphasized the correction of relative price distortions, particularly the simplification of the inefficient and costly multiple exchange rate system. In 1989, continuing efforts to correct exchange rate overvaluation were combined with a contractionary fiscal policy.

As this general characterization indicates, macroeconomic events in Nicaragua over the 1980s largely coincide with the concept of "populism," as defined by Dornbusch and Edwards (1990). In particular, following their definition, the approach of the Sandinistas to macroeconomic policy emphasized growth and income distribution and disregarded "the risks of inflation and deficit finance, external constraints and the reaction of economic agents to aggressive non-market policies." The sequence of events from expansionary aggregate demand policies to collapse and orthodox adjustment was also similar to the prototypical phases defined by these authors.

Nonetheless, the term "populism" seems somewhat inadequate to characterize the Sandinista period. Most important, some of the structural reforms adopted in the first years of the revolution and the very nature of political mobilization were typical of socialist rather populist regimes. On the other hand, contrary to Dornbusch and Edwards's definition, the major constraints faced by the Sandinistas were U.S. intervention and the Contra war rather than external financing. Finally, some of the typical policies of "populist" regimes were absent in the Nicaraguan experience. In particular, the Sandinistas never adopted an expansionary wage policy, and a series of tax reforms increased the domestic resources made available to the central government to finance the expansion of social services and investment.

This paper analyzes macroeconomic policies and performance in Nicaragua in the 1980s. It is divided in six sections, the first of which is this introduction. The second summarizes some features of the Nicaraguan economy prior to the revolution. The third considers the effects of revolution and the period of recovery which followed it. The fourth analyzes the buildup of macroeconomic disequilibria during the transition to and full-fledged war economy. The fifth

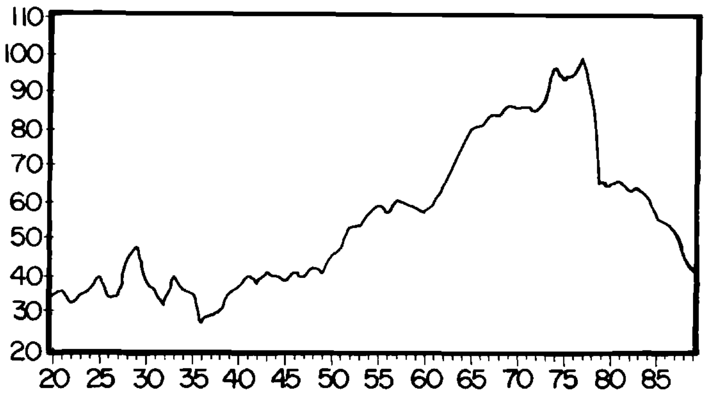

Fig. 10.1 Per capita income of Nicaragua, 1920–89 (1977 = 100)

shows the characteristics of the 1988 adjustment program and the hyperinflation that accompanied it. The paper ends with a close look at the 1989 stabilization program. The defeat of the Sandinistas in the February 1990 elections is taken as the closing date of the analysis.

10.2 The Nicaraguan Economy prior to the Revolution

The recent study by Bulmer-Thomas (1987) indicates that there was little growth in GDP per capita in Nicaragua from the 1920s to the late 1940s (see fig. 10.1). This period of relative stagnation was followed, however, by an export-led boom from the 1950s to just before the revolution. GDP per capita multiplied by 2.5 during this period. As this process was matched by rapid population growth, GDP expanded at an average rate of some 6% a year, the fastest in Central America. The rapid growth of cotton exports was the initial basis for expansion. Later on, the process was reinforced by new primary exports (beef, sugar, shellfish, etc.) and a boom of agroindustrial and other manufacturing exports to members of the Central American Common Market, or CACM (Bulmer-Thomas 1987; CEPAL 1981; Gibson 1987a).

Rapid economic expansion was not translated into an equally rapid improvement of social indicators. At the end of the boom, illiteracy, child mortality, and life-expectancy levels were among the worst in Latin America—comparable, however, to other Central American countries, excluding Costa Rica and Panama.[2] Income distribution remained highly skewed, at levels also similar to Nicaragua's Central American neighbors (Brundenius 1987, table 2). There is little evidence on how distribution evolved during the period of expansion. However, available data on labor incomes indicate that real wages

2. See CEPAL (1988a, pp. 13, 45, 50) and n. 4 below.

were basically trendless in the 1960s and 1970s.[3] As this was accompanied by widespread and growing informality in the labor market (Gibson 1987a, table 2), it may indicate that income distribution deteriorated in the last phases of the boom. On the other hand, the concentration of wealth in hands of the Somoza family and his political clique was remarkable, as the data on nationalizations following the revolution later revealed.

Economic management was fairly orthodox throughout the boom. From the late 1950s to just before the revolution, the exchange rate was pegged at a rate of seven cordobas per U.S. dollar. Since 1963, the currency was freely convertible. Orthodox fiscal and monetary policies guaranteed low inflation rates but also the transmission of external shocks to the domestic economy. As a reflection of limited fiscal and current account deficits, foreign indebtedness remained within close bounds (Gibson 1987a, 1987b).

The economy and economic management experienced, however, increasing hardships in the 1970s (CEPAL 1981). Reconstruction efforts after the 1972 earthquake broke the tradition of fiscal conservatism. In the last years of the Somoza regime, budget deficits increased to an average of over 5% of GDP (see table 10.2 below). This was also reflected in increasing foreign indebtedness. According to ECLAC estimates, the external public-sector debt quadrupled from 1972 to 1979 (from \$230 to \$961 million). The counterpart of this process was persistent current-account disequilibria, enhanced by the adverse effects of the 1973 oil shock, the slowing down of growth of trade within the CACM, growing overvaluation of the cordoba, and capital flight in the months before the victory of the Sandinistas (see below). To face growing disequilibria, the Somoza government established mild exchange controls in late 1978. In April, 1979, it devalued the basic exchange rate to 10 cordobas per dollar and introduced a multiple rate system.

10.3 Revolution and Recovery, 1979–81

The economic legacy of the last years of the Somoza regime and the revolutionary uprising was complex. Economic activity severely contracted in 1978 and 1979, by an accumulated 34.4% (table 10.1). The capital stock was also severely affected. Losses associated with the destruction of buildings, equipment, and stocks, the looting of inventories, the slaughter of immature beef cattle, and the smuggling of herds were estimated by ECLAC at \$381 million (CEPAL 1981), equivalent to 18% of 1980 GDP. National Accounts records indicate that the loss of inventories in 1978–79 was equivalent to 14.4% of GDP (see table 10.1). To these, we must add capital flight for \$535 million in the 18 months preceding the revolution (CEPAL 1981), portfolio

3. Using the average wage estimated by INSSBII, and the GDP deflator as a price index, real wages (1981 = 100) increased slightly from 1960–64 to 1965–69 (from 100.2 to 107.0) but then stagnated and declined (106.0 in 1970–74 and 103.2 and 1975–79).

Table 10.1 **Macroeconomic Indicators, 1978–89**

	GDP Growth Rate (%)	GDP (1977 = 100)	GDP per Capita (1977 = 100) (%)	Investment as % of GDP (Constant Prices)	Fixed Investment (%)	Change of Inventories (%)	Private Consumption per Capita (1977 = 100)	Real Wages (1985 = 100) Using GDP Deflator	Using CPI	Average Monthly Inflation (CPI) (%)
1978	−7.9	92.1	89.4	10.7	12.7	−2.0	93.2	139.9		.4
1979	−26.5	67.7	65.0	−6.4	6.1	−12.4	67.9	126.7		4.5
1980	4.6	70.9	64.9	16.8	14.6	2.2	80.0	119.4		1.9
1981	5.4	74.7	66.2	24.4	22.2	2.2	68.7	120.8	186.0	1.8
1982	−.8	74.1	63.6	20.2	18.0	2.2	59.9	116.9	165.5	1.7
1983	4.6	77.5	64.3	21.0	18.1	3.0	56.5	114.6	142.9	2.4
1984	−1.6	76.3	61.2	21.6	18.7	2.8	53.6	112.0	135.9	3.4
1985	−4.1	73.1	56.7	22.3	19.8	2.6	49.3	100.0	100.0	13.0
1986	−1.0	72.4	54.3	22.3	18.7	3.5	45.3	101.4	59.5	19.5
1987	−.7	71.9	52.1	22.1	19.1	3.0	42.9	73.9	24.6	24.9
1988	−10.9	64.0	44.9	24.9	21.0	3.9	33.8	50.5	14.9	62.4
1989	−2.9	62.2	42.1	22.7	14.0	8.7	41.7	33.3	11.6	27.2

Sources: SPP, INSBII, and INEC.

losses by industrial and commercial firms and, of course, the casualties inflicted by the war.

The revolutionary government brought with it some emergency measures and a plan for economic recovery but, above all, an agenda for structural change. The latter was presented as a program for a "mixed economy," in which the state would assume control of the properties of the Somoza family and his clique and some "key" economic sectors and considerably expand social expenditure and its contribution to capital accumulation. The state would also encourage the organization of the popular classes through unionization in urban areas and cooperativization in the countryside. As a result of the enhanced role of the public sector, new rules of the game for the private sector would be designed.

One of the first decrees issued by the government after the military victory on 19 July 1979 was the nationalization of the properties of the Somoza family and their allies who fled the country. It was followed by the nationalization of the financial system, foreign trade, large-scale (particularly gold) mining, forestry, and fishing. Few other important nationalizations took place in the following years, but the government periodically exercised the right to confiscate the properties of capitalists suspected of counterrevolutionary activities or practices that led to the decapitalization of their businesses (Stahler-Sholk et al. 1989). Government's share in GDP rose from 15% to 40% in the early 1980s, but then stabilized. The private sector retained a dominant share of agriculture, manufacturing, domestic commerce, and most services (World Bank 1981; Baumeister and Neira 1986; Ruccio 1987; Brundenius 1987).

The initial nationalization decrees also brought some 20% of land property under state control. Land redistribution accelerated as a result of the Agrarian Reform Decree issued at the second anniversary of the revolution. As a result of both measures, more that 50% of rural property was affected in the years following the revolution. During its first phases, the government emphasized the development of parastatals and cooperatives, but soon evolved into encouraging small-scale farming. The redirection of agrarian policy was largely induced by the need to erode peasant support for the Contras in some regions of the country. Nonetheless, it also reflected the social programs of the revolution and the policy of self-sufficiency in food staples (Enriquez and Spalding 1987; Neira 1988; Wheelock 1989).

The initial nationalizations created a large parastatal sector. As in most countries undergoing similar processes, the management problems generated by such a sudden expansion of the state sector were costly (Colborn 1990). On the other hand, the redesign of new rules of the game for the private sector proved difficult and in fact led, rather early in the process, to violent confrontations (Vilas 1987). At a purely economic level, the private sector resented excessive state intervention in their businesses and government predilection for public-sector enterprises. More important, however, the exclusion of the bourgeoisie from political power and the practice of intermittent political confiscations generated a general sense of insecurity about property rights.

The inadequate functioning of state enterprises and confrontations with the private sector may explain the failure of economic activity to recover rapidly in the years following the revolution. A partial recovery was, nonetheless, experienced, based on an expansionary demand policy and an ample supply of external financing (Fitzgerald 1989). By 1981, central government expenditure, as a share of GDP, had doubled with respect to levels typical before the revolution. The initial fiscal expansion included many social programs—which induced a rapid improvement in key social indicators[4]—but also defense and general bureaucratic expenditures. A large part of this expansion was financed by rising taxes. The resulting deficit, of some 9% of GDP, was, nonetheless, reasonable in the short run, given the ample supply of external financing (table 10.2).

In fact, other domestic macroeconomic indicators were not particularly troublesome. As a result of the disruption of the domestic distribution network during the last stage of the revolutionary uprising, inflation peaked at 70% in 1979. As supplies stabilized, this price surge was followed by moderate inflation in the early 1980s—some 20% a year (see table 10.1). Domestic liquidity ratios increased with respect to those typical before the revolution,[5] but were stable (table 10.2). finally, nominal wages increased, but there was no attempt to raise them in real terms (see table 10.1 and n. 3 above). This required, in fact, a significant political effort by the Sandinistas to control labor demands (Vilas 1987). The policy strategy adopted by the government thus implied that workers would receive increasing real income through government services—a "social wage", as it was called—but would contribute, through wage restraint, to the recovery of economic activity.

The core external sector indicators moved, however, in the wrong direction. Neither traditional nor nontraditional exports ever reached prerevolutionary levels (table 10.3). The reduction of exports as combined in the early years with a deterioration of the terms of trade. On the other hand, the revolutionary government inherited a clearly overvalued cordoba and a rate of inflation clearly incompatible with a fixed exchange rate. There was no attempt to correct such imbalances. A steady real appreciation of the cordoba then ensued. It was accompanied by a strong depreciation of the black market rate (fig. 10.2

4. Life expectancy at birth increased from 56.3 years in 1975–80 to 62.3 years in 1985–90, as child mortality fell from 9.3% to 6.2%. At the same time, the illiteracy rate fell from 42.5% in 1970 (and a similar figure just before the revolution) to 13.0% in 1985 (see CEPAL 1988a, pp. 13, 45, 50).

5. Estimated on the basis of end-of-year monetary aggregates, the ratio M1/GDP increased from 13.1% in 1974–1978 to 22.6% in 1980, whereas M2/GDP increased from 20.7 to 30.5% (see IMF, *International Financial Statistics*). The methodology used in table 10.2 puts such liquidity indicators at 20.9% and 33.0% in 1980.

Table 10.2 **Fiscal and Monetary Indicators (% of GDP at current prices)**

	1974–78	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Central government accounts:												
Current income[a]	12.5	14.0	22.2	24.4	25.7	31.2	35.2	32.3	32.4	27.7	20.6	18.9
Total expenditure	17.7	21.2	31.2	33.3	38.1	52.9	58.7	54.8	49.6	44.2	46.4	21.4
Deficit	−5.2	−7.2	−9.0	−8.9	−12.4	−21.7	−23.5	−22.5	−17.2	−16.5	−25.8	−2.5
Central government expenditure[b]				34.5	39.2	61.0	59.7	55.6	50.0	44.3	46.4	19.6
Social services				10.2	9.5	11.4	13.0	12.1	11.9	10.9	11.2	4.8
Infrastructure and production				7.6	10.1	24.7	16.9	9.5	6.7	4.8	4.9	2.1
Defense				7.6	7.4	11.0	12.4	17.6	18.5	18.1	18.5	8.0
Public administration				9.1	12.2	14.0	17.4	16.5	12.9	10.5	11.7	4.6
Consolidated public sector deficit (IMF)[c]						−25.1	−26.6	−25.0	−21.0	−21.7	−31.3	−10.2
Public-sector enterprises, excluding utilities						−10.7	−5.3	−13.1	−11.2	−10.1	−6.7	−10.1
Unpaid foreign interest						−4.1	−4.4	−5.3	−5.8	−4.6	−6.8	−5.7
Monetary stocks as proportion of GDP:[d]												
Means of payment			20.9	20.0	21.8	27.2	36.4	36.8	35.0	28.2	16.6	7.5
Quasi money			12.1	12.5	11.9	12.7	15.4	10.4	5.9	3.6	1.2	1.1

Sources: Ministry of Finance, SPP, IMF, and Central Bank.
[a]Excludes foreign transfers.
[b]Total expenditure according to these figures is apparently based on budgets and, thus, does not coincide with expenditure according to the central government accounts.
[c]Excludes unpaid foreign interest and deficit of public sector enterprises (excluding utilities).
[d]Average monthly ratio between aggregate and annual GDP.

Table 10.3 **External Sector Indicators (Millions of dollars unless otherwise indicated)**

	1974	1975	1976	1977	1978	1979	1980	1981
Exports:								
Traditional[a]	236.8	240.8	370.6	449.5	459.4	449.0	354.1	418.5
Nontraditional	144.1	134.3	168.3	187.3	186.6	117.6	91.0	95.3
Total	380.9	375.2	538.9	636.8	646.0	566.6	445.1	513.8
Real exports of goods and services (1977 = 100)	92.2	99.0	102.9	100.0	109.0	124.8	74.1	85.1
Import coefficient	30.6	22.7	22.1	27.5	22.6	24.9	43.3	39.3
Current account balance:								
Global	−257.2	−185.0	−39.3	−181.9	−24.9	180.2	−430.1	−590.6
Excluding unpaid interest							−397.8	−504.
External debt (ECLAC)[c]	456.0	598.0	655.0	864.0	961.0	1136.0	1825.0	2566.0
External resources contracted						363.2	678.7	803.0
% from socialist countries						1.8	25.6	23.0
Terms of trade (ECLAC, 1980 = 100)	109.9	92.0	113.5	129.8	118.1	107.0	100.0	90.2
Real exchange rate (1980 = 100)[d]								
Official							100.0	85.2
Black							100.0	139.7
Ratios:								
Black/official rate							1.73	2.85
Parallel/official rate								

(continued)

Table 10.3 **(continued)**

	1982	1983	1984	1985	1986	1987	1988	1989
Exports:								
Traditional[a]	339.5	387.8	355.0	268.5	217.9	254.9	201.3	232.0
Nontraditional	69.1	64.1	57.4	36.6	39.3	40.1	34.4	47.1[b]
Total	408.6	451.9	412.4	305.1	257.2	295.0	235.7	279.1[b]
Real exports of goods and services (1977 = 100)	78.3	83.8	66.4	58.6	48.3	47.2	41.5	56.3
Import coefficient	28.8	32.2	32.3	33.8	29.2	30.5	32.3	28.2
Current account balance:								
Global	−491.6	−507.4	−596.8	−725.7	−687.8	−679.1	−594.9	−455.3
Excluding unpaid interest	−448.4	−353.6	−378.8	−500.1	−461.5	−450.7	−359.8	−249.7
External debt (ECLAC)[c]	3139.0	3788.0	4362.0	4936.0	5760.0	6270.0	7220.0	7570.0
External resources contracted	597.7	619.2	772.5	1196.6	517.9	386.3	801.6	
% from socialist countries	48.1	50.6	77.3	89.3	75.0	69.2	65.3	
Terms of trade (ECLAC, 1980 = 100)	85.1	82.0	102.8	94.0	99.4	95.6	94.6	87.0
Real exchange rate (1980 = 100)[d]								
Official	74.1	63.7	48.8	52.1	35.3	9.8	69.4	105.2
Black	236.9	443.8	753.8	819.2	631.2	556.7	202.1	81.9
Ratios								
Black/official rate	5.54	12.29	27.58	27.43	32.83	177.14	4.61	1.28
Parallel/official rate					19.61	93.93	3.44	1.22

[a]Coffee, cotton, sugar, meat, shellfish, bananas, sesame seeds, molasses and gold.
[b]Excluding re-exports.
[c]Excludes interest arrears and some short-term debt.
[d]Using GDP deflator.

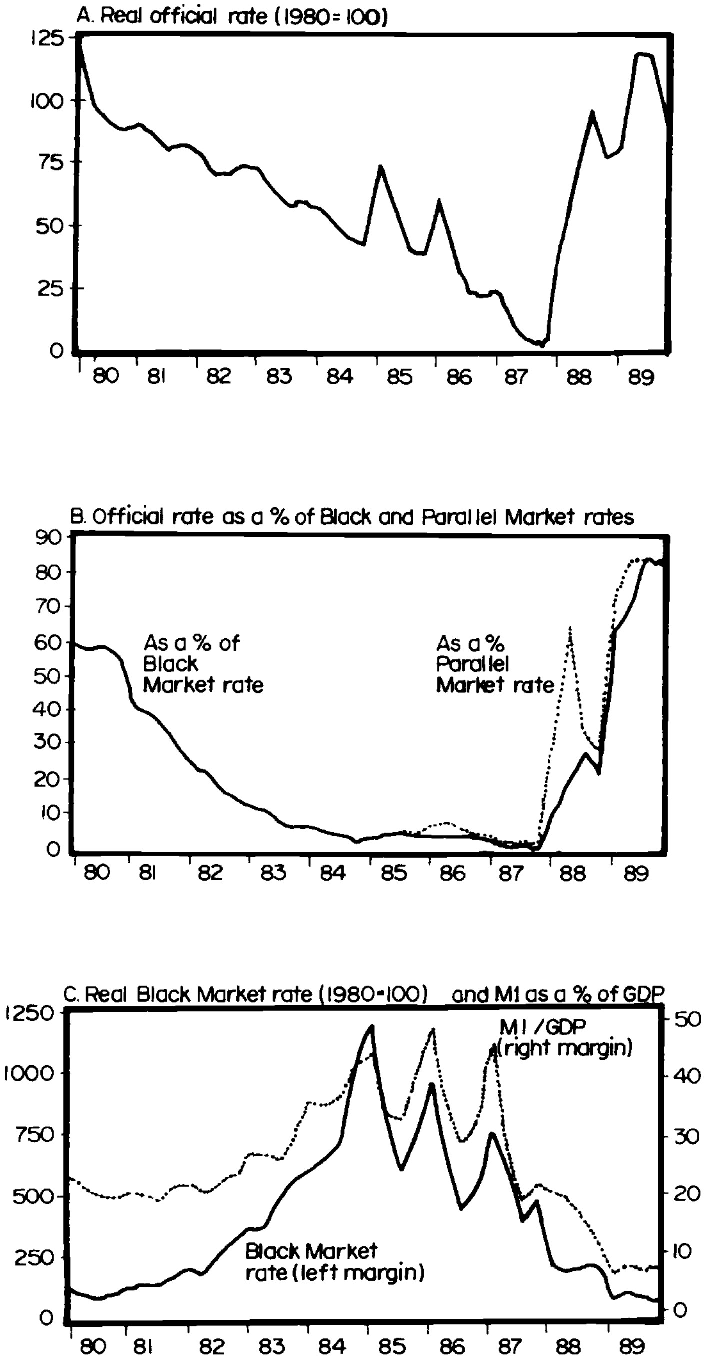

Fig. 10.2 Exchange rate policy, 1980–89

and table 10.3). The political climate generated by growing confrontations between the Sandinistas and the private sector accentuated this trend.

Although strong import and exchange controls became a central feature of external sector management during the first years of the revolutionary government, the former were not particularly harsh. Indeed, the import coefficient reached a historical peak in 1980 and 1981 (table 10.3). Growing external imbalances generated by record imports and weakening exports were financed by record capital inflows. Thus, as outstanding debts were renegotiated, the country had ample access to new financing. Resources came from multilateral agencies and bilateral sources, both in the developed countries (including the United States) and the Third World (Mexico in particular), and only secondarily from socialist countries (see Stahler-Sholk 1987; Arana et al. 1987; and table 10.3). The result of this strategy was, of course, the rapid growth of the external debt. By 1981, the debt had already reached extremely critical levels (table 10.3).

10.4 War Economy and Macroeconomic Disequilibria, 1982–87

10.4.1 General Features of Macroeconomic Management[6]

The expansionary demand policy adopted during the first years of the revolutionary government could be defended on the grounds that the access to external financing should be used to ensure a fast turnaround of economic activity and an equally rapid improvement in key social indicators. On the other hand, as we have seen, the macroeconomic package typical of the first years revealed some prudence on behalf of the government, as reflected in its wage and tax policies. Nonetheless, by itself, external disequilibria would have called for a significant policy shift as early as 1981.

The government did not grasp the urgent need for action. Indeed, the systematic lag in the adoption of the stabilization policies and the partial nature of such efforts once they were adopted became central features of Sandinista macroeconomic management early in the postrevolutionary period. "Voluntarism" and economic ideologies go a long way to explain some of these features—particularly the strong preference for intricate government intervention rather than traditional orthodox macroeconomic management. However, political dynamics played an equally important role.

As one would expect, the government was unwilling to give up what it thought to be the essential goals of the revolution or to adopt policies that it thought would affect the economic recovery and, even more, risk military

6. For a more extensive analysis of this period, see Arana et al. (1987), Fitzgerald (1989), Gibson (1987b), IMF (1988), Medal (1988), Pizarro (1987), Taylor et al. (1989), and the World Bank (1986). Stahler-Sholk et al. (1989) presents also a very useful chronology, which would be extensively used below.

defeat. Nonetheless, the political process worked in peculiar directions. Understandably, defense and social expenditure became the most inflexible components of the budget. Paradoxically, however, the government was, at the end, more willing to sacrifice real wages and capital accumulation than to reduce the massive subsidies to the productive sector. Its strong political control of the labor movement and public-sector enterprises and, on the contrary, its feeble relations with the private sector and the need to guarantee the support of the peasants in the Contra war, go a long way to explain this paradox.

Although the first signs of government concern for the balance of payments—the adoption of export-promotion policies—came as early as 1982; the "populist" dynamics of expenditure policies were in full swing up to 1984. By then, domestic disequilibria had reached clearly explosive levels. Forced by the circumstances, the government adopted the first important stabilization measures in 1985, including cuts in nondefense expenditure, readjustment of government-regulated prices, and devaluation. This was followed by similar steps in the subsequent years. However, the inconsistency of the stabilization packages implemented from 1985 to 1987 enhanced macroeconomic disequilibria. Particularly, rising inflation eroded the tax base, and attempts to repress inflation and defend exporters against official exchange rate overvaluation led to massive relative price distortions and booming black markets. As a consequence of these imbalances, the government was finally forced to adopt more drastic stabilization measures in 1988 and 1989.

On top of the dynamics generated by "populist" expenditure policies and inconsistent macroeconomic management, the revolutionary government also had to face during this period the destabilizing impact of the Contra war and the U.S. anti-Sandinista campaign. The war had additional demand effects, as it forced a further expansion of government expenditure. However, the war and the U.S. campaign had also significant supply effects (Fitzgerald 1987; Gibson 1987b). Aside from the destruction of resources and production generated by the war, it created multiple labor shortages associated with the diversion of young workers into military service, rural-urban migration, scarcity of labor in some crucial (particularly coffee-producing) regions, and the flight of skilled workers abroad. On the other hand, the 1985 U.S. embargo forced an inefficient substitution of trading partners. Finally, the suspension of direct U.S. aid soon after Reagan was inaugurated in 1981 and the American veto on multilateral lending in the following years, forced the country to rely increasingly on inflexible bilateral assistance from socialist countries (table 10.3; see also Stahler-Shock 1987).

10.4.2 Fiscal and Monetary Disequilibria and the First Stabilization Efforts

As a reflection of policy decisions and defense needs, central government expenditure continued to increase rapidly after 1981, peaking at 58.7% in

1984.[7] As table 10.2 indicates, the most dynamic element from 1982 to 1984 was the expenditure in infrastructure and production (largely investment outlays). However, all components of central government expenditure continued to increase at rapid rates. Efforts to raise government revenues were successful, and by 1984 the country had one of the highest tax rates of Latin America. Nonetheless, the growth of expenditure clearly outstripped the tax effort. In the same year, the central government deficit reached 23.5% of GDP—26.6% for the consolidated public-sector deficit, according to a partial estimate using IMF data.[8]

Growing pressures generated by macroeconomic disequilibria and the Contra war led the government to undertake significant expenditures cuts starting in 1985. However, the war forced a further increase in defense expenditure, which peaked over 18% of GDP in 1986–88. Thus, the government was forced to concentrate cuts in civil expenditure. From 1984 to 1987, expenditure on infrastructure and production fell to very modest levels, and foreign interest payments were all but suspended, as the expansion of public administration costs earlier in the decade was reversed. Expenditure in social services was maintained, however, at historically peak levels.

Overall, central government expenditure was reduced from 58.7% to 44.1% of GDP from 1984 to 1987. Noninterest civil expenditure fell even more, by some 18% of GDP, but remained slightly above 1980–81 levels. Unfortunately, most of the expenditure cuts were defeated by the adverse Olivera-Tanzi effect on government revenues.[9] Thus, the central government deficit remained at 16.5% of GDP in 1987. As we will see shortly, other major components of the public-sector deficit, particularly Central Bank losses, were even more inflexible. Thus, the overall public-sector deficit never fell below 20% of GDP, even if unpaid interests on the external debt and the deficit of several public-sector enterprises are excluded.

The monetary impact of deficit financing was dramatic. However, up to 1984, the economy absorbed it through an impressive increase in liquidity,

7. As pointed out in note *b* of table 10.2, total expenditure according to central government accounts does not coincide with data on destination of expenditure by ministries, which is used to make up the breakdown shown in the second part of the same table. The former figures are used in the text when referring to total spending.

8. We have excluded from this figure both unpaid foreign interest and deficit estimates for the "rest of the public sector." The former are unlikely to ever be paid. The latter have been estimated by the IMF on the basis of domestic lending, which is a poor approach in a highly inflationary economy. The estimates of central bank losses in recent years are also subject to controversy.

9. This was the dominant element in the erosion of tax revenues in 1984–87 and through 1988. Given a month's lag in the collection of tax and other current incomes (a lag that seems to have been reached by the end of this period), the 1984 share of current government income in GDP would have fallen to 29.1% in 1987 and 22.4% in 1988 as a result of faster inflation. Thus, additional effects on government income, such as domestic recession, had a secondary role in the erosion of the tax base. They may be important, however, as an explanation of the recent stabilization of the tax rate at fairly low levels.

with only a modest acceleration of inflation (see tables 10.1 and 10.2). Although the lack of an inflationary tradition goes a long way to explain this result, it was also supported by a fixed exchange rate and strong price controls. The importance of these latter factors is supported by the significant role played by explicit adjustments in the official exchange rate and other controlled prices in the inflationary dynamics after 1985 (see below).

Oddly enough, the demand for money grew faster than that for term deposits up to 1984 (table 10.2). Several factors may explain this result. First of all, nominal interest rates were hardly readjusted with inflation up to late 1988.[10] With rising inflation, this meant that term deposits became a close, *though illiquid,* substitute for money. In a more orthodox pattern, excess domestic liquidity was reflected in the increasing demand for black market dollars, as the evolution of the relevant real exchange rate indicates (fig. 10.2, part C). The demand for dollars was enhanced by political instability and the growing overvaluation of the official exchange rate (fig. 10.2, part A, and table 10.3). The role of political factors may explain why devaluation in the black market overshot the rapid increase in liquidity levels and monetary aggregates actually collapsed in terms of (black) dollars (table 10.3).

By 1984 the official exchange rate was only a minimal fraction of the black market rate (table 10.3 and fig. 10.2, part B). This finally convinced the government to devalue the official rate from 10 to 28 cordobas per dollar in February 1985. As we have seen, the devaluation was accompanied by some austerity measures in the fiscal area. The need for fiscal austerity also led the government to massively readjust controlled prices (basic consumer goods and gasoline) at the same time.

In an attempt to regulate the wage structure, the government decreed in 1984 a complete wage scale (SNOTS), to which, theoretically, public and private firms were to abide. As a result of the price adjustments adopted in the first months of 1985, the government then attempted to defend them against inflation, and thus adjusted the scale three times from February to May 1985, increasing the average wage by 146%. The adjustment was slightly higher than inflation during these months, but not enough to compensate for the fall in real wages in previous years. Nonetheless, returning to its otherwise "unpopulist" wage policy, this attempt to index wages was soon abandoned. In the following months and years, wage policy was ineffective and in fact did not seriously try to avert the collapse in real wages that accompanied the explosive inflationary dynamics (table 10.1). Under these conditions, and with the increased demand for labor generated by growing black markets, incentives to work in the "formal" sector (including the government) were reduced.

10. The most important increase in interest rates took place in early 1986. Most lending rates were then established in the 20%–30% range. The highest rate (for loans to commercial firms) was then placed at 45% a year (Medal 1988, table 32).

The result of this process was a general fall in labor productivity, high labor rotation, and growing payments in kind.[11]

10.4.3 The Outburst of Inflationary Pressures

The stabilization package adopted in early 1985 clearly induced a "regime" change: from an "atypical" excess liquidity/low domestic inflation/rapidly rising black-official exchange rate differentials, to a more "classical" flight against the currency and explosive inflationary effects of monetary expansion. The former regime was undoubtedly one of "repressed inflation" (cum foreign exchange speculation). The "fundamentals" were thus bound to prevail at some point. However, in the *transition* from one regime to the other, the *explicit* pricing decisions adopted by the government in the first months of 1985 played the crucial role. In fact, as figure 10.3 shows, the first dramatic acceleration of inflation in the postrevolutionary period came as the direct effect of these policy decisions.

After this turning point, the price-monetary dynamics became explosive. The average monthly inflation rate constantly accelerated until it reached hyperinflation in 1989 (table 10.1). Under these conditions, price controls became totally ineffective and only led to widening differentials between the legal and the free markets for goods subject to regulation.[12] The monetary fuel was provided by the budget deficit, but also by the losses of the Central Bank in foreign exchange transactions and the need to finance most of the nominal expansion in domestic credit through money creation. The latter was made necessary by the decision to fix nominal interest rates at artificially low levels. Moreover, as the official exchange rate was only devaluated once more during the period under analysis (in February 1986, when the official rate was devalued to 70 cordobas per dollar), the costs of dollar-denominated domestic debts (foreign trade financing) were also kept at very modest levels.

Accelerating inflation was accompanied by a great variability in monthly rates. Moreover, as figure 10.3 indicates, rather than the stepwise acceleration typical of "inertial" inflationary processes, it adopted a neat cyclical pattern. The length of the cycle was annual from 1985 to 1987. Hyperinflation was basically associated with the dramatic shortening in the length of the cycle to some four to five months in 1989. What is more interesting, *some* turning points, *but not the intensity of the cycles*, were associated with explicit deci-

11. In 1986 labor rotation in the central government was 50%. As a result, 44% of government employees in 1987 had one year or less in service (Secreteria de Planification y Presupuesto 1989). For payments in kind in the government, see n. 18 below. In mid-1989, some private entrepreneurs informed the SIDA Mission that the costs of different payments in kind were three times the costs of the nominal wage bill.

12. In May 1989, just before the major liberalization of domestic prices (see sec. 10.5), the ratio of black market to official market prices was the following for some important consumer goods: rice 5.5, kidney beans 5.2, soap 12.7, detergent 16.6, and toilet paper 2.4 (Secreteria de Planification y Presupuesto 1988b).

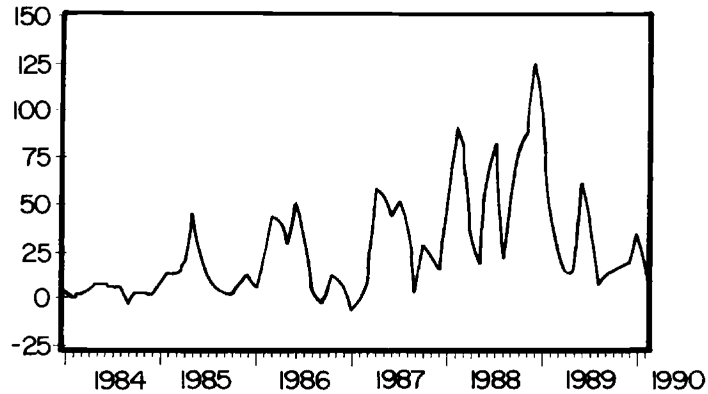

Fig. 10.3 Monthly inflation rate, 1984–90

sions to correct basic pricing imbalances: February 1985, the same month in 1986 and, as we will see below, February and June 1988.

As traditional monetary theory predicts, accelerating inflation was accompanied by falling demand for domestic liquid assets. For reasons that have already been mentioned, the demand for term deposits declined ahead of that for money. The latter remained, in fact, surprisingly high even at fairly advanced stages of the hyperinflationary process (table 10.2). The strong underdevelopment of the domestic financial market goes a long way to explain this result. Finally, despite the gross and increasing overvaluation of the official exchange rate (fig. 10.2, part A) and the dramatic widening in black/official rate differentials (table 10.3 and fig. 10.2, part B), falling liquidity was accompanied by an appreciation of the real black market rate (fig. 10.2, part C). Some policy measures may have supported the process, particularly the creation of a "grey" (parallel) foreign exchange market in 1985,[13] where foreign remittances and a fraction of export earnings could be legally sold. Massive U.S. aid to the Contras may have also supported this paradoxical outcome.

The parallel market was actually part of a more general multiple exchange rate regime. Since 1982, this regime became increasingly complex, reflecting the decision to defend exporters against the growing overvaluation of the cordoba. It included two basic mechanisms: exporters were authorized to keep part of the foreign exchange earned, and domestic support prices for export crops were fixed at levels higher than those compatible with prevailing international prices and the official exchange rate. The basic difference between the two systems was the mechanism by which the implicit "export incentive"

13. As part of the package of February 1985, foreign exchange houses were allowed to operate, under the regulation (and, in fact, ownership) of the Central Bank. The first and most important of the two existing houses, NECSA, started to operate in June of that year. BICSA started to so in August 1988.

was financed. In the first case, it was paid by importers of goods and services who bought the foreign exchange in the parallel market. In the second, it was financed by the Central Bank.

As table 10.4 indicates, both mechanisms were quite effective in raising the average exchange rate for exports significantly above the official rate (to almost 100 times greater by January 1988). The latter was increasingly relevant only for a few exports (mainly from state enterprises) and most imports. Under these conditions, the government had to rely on direct import controls to ration import demand. As most imports were sold by parastatals, the massive subsidy implicit in the grossly overvalued official rate was, to a large extent, passed on to the final user, subject, in any case, to significant resource misallocation, rationing, and growing secondary black markets. Late in the process (June 1987), the government adopted a surcharge for most imports (the *tasa de estabilización monetaria,* or TEM) to finance the foreign exchange losses of the Central Bank. By January 1988, this mechanism had raised the average import rate significantly above the official rate; still, the average export rate was almost 13 times higher than that applicable to imports.

Given the features of the multiple rate system, the collapse of exports that took place through most of this period (table 10.3) was only partly associated to exchange rate policies. A myriad of factors, affecting both the domestic supply and the external demand, account for the collapse of exports: the effects of war in some areas of the country; lack of confidence by the private sector; stronger incentives (price and, particularly, credit) given to food crops; inefficiencies of state enterprises; the exodus of skilled labor and other labor-supply shortages; and the collapse of the CACM, which was decisive for nontraditional exports. These same factors were responsible for the decline in economic activity since 1984 (table 10.1), as production for the domestic market continued to grow at moderate rates up to 1987 (1.2% a year in the period 1984–87).

Although imports fell with respect to the early postrevolutionary peak, they remained at historically high levels. In any case, the country was able to finance its record external deficits, despite skyrocketing debt ratios and the interruption of capital flows (table 10.3). Three sources were basically used to finance the deficits: mounting payments arrears, bilateral assistance from socialist countries, and prefinancing of export crops.

10.5 1988 Stabilization and Hyperinflation[14]

By early 1988, economic conditions were critical. The most transparent to all economic observers were the massive distortions associated with the mul-

14. For a more extensive analysis of the 1988 and 1989 stabilization packages, see Arana (1990), Ocampo and Taylor (1990), and Taylor et al. (1989).

Table 10.4 **Differential Exchange Rates, 1980 through January 1988**

	1980	1981	1982	1983	1984	1985	1986	1987	January 1988
Official market	10.00	10.00	10.00	10.00	10.00	28.00	70.00	70	70
Black market	17.33	28.47	55.40	122.90	275.80	716.70	2,183.30	12,400	40,000
Exports:									
Coffee	7.18	8.40	9.79	16.82	25.25	110.15	179.89	1,611	18,400
Cotton	11.79	11.19	12.28	12.50	12.50	144.30	733.32	2,118	10,509
Sesame seeds	5.59	6.96	8.35	7.73	13.58	64.09	177.70	2,209	7,158
Bananas	10.00	10.00	10.00	10.00	10.00	28.00	70.00	2,021	5,053
Meat	10.00	10.00	12.00	12.00	12.00	28.00	70.00	70	70
Shellfish	10.00	10.00	10.00	10.00	10.00	28.00	70.00	70	70
Other agricultural	10.00	10.00	12.40	12.40	12.40	28.00	70.00	3,415	10,035
Manufacturing	10.00	10.00	13.20	13.20	13.30	28.00	70.00	2,021	5,053
Average export rate[a]	8.89	9.64	10.64	13.15	16.03	106.12	267.63	1,978	6,840
Imports:									
Oil and derivatives								70	70
Subject to TEM[b]								306	269
Financed in the parallel market								7,856	21,000
Average import rate[a]	10.00	10.00	10.00	10.00	10.00	28.00	70.00	191	536
Average exchange rate	9.70	9.90	10.18	10.89	11.45	42.72	101.78	516	1,920
Ratios:									
Average export/import rate	0.89	0.96	1.06	1.32	1.60	3.79	3.82	10.36	12.76
Average export/official rate	0.89	0.96	1.06	1.32	1.60	3.79	3.82	28.26	97.71
Average import/official rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.73	7.66

Source: Central Bank.
[a]Goods and services.
[b]Monetary stabilization rate.

tiple exchange rate system (table 10.4). However, this was only a manifestation of generalized macroeconomic disequilibria. Monetary and fiscal imbalances were already reflected in extremely high inflation rates—an average monthly rate of 24.9% in 1987 (see table 10.1)—which had led to the virtual collapse of price controls. External deficits had also resulted in near generalized moratoria on the foreign debt. Finally, the country had already experienced a substantial fall in GDP per capita and an even stronger contraction of real wages and private consumption per head. This dramatic deterioration in economic conditions were combined by clear signs that the Contras were in disarray, that the war was losing intensity, and that peace talks among Central American presidents were being successful, as reflected in the Esquipulas I Accord of August 1987.

These conditions were the background to the two massive stabilization packages implemented in February and June 1988. The goals of these programs were multiple and ambitious (Secretaria de Planificacion y Presupuesto 1988a). They included (1) the realignment of relative prices; (2) a reduction of inflation rates by austere fiscal and monetary policies; it was stated early in the year that the central government deficit would be reduced to 10% of GDP in 1988 and eliminated altogether by 1990; (3) reversing the deterioration of the formal sector of the economy generated by price controls and falling real wages; and (4) reconstituting the normal economic functions of the wage payments system. Wage policy aside—which was explicitly conceived as a *supply-side* policy—the objectives and instruments of the stabilization plan were fairly orthodox, as the IMF (1988) acknowledged later in the year.

Although these stabilization packages were more ambitious than any previous effort, they tended to reproduce patterns that had been common to macroeconomic policy since 1984. Particularly, the different goals were not pursued with the same vigor, nor were the packages globally consistent. Emphasis was placed on relative price realignment. This fact was reflected in the outcomes of the programs, as we will see below. On the contrary, fiscal and monetary policies were not made consistent with the inflation targets. Also, as in 1985, the attempt to defend or even increase real wages was soon abandoned, giving way to a different policy later in the year.

The February package included five major provisions. The first was a monetary reform, by which 1,000 old monetary units were converted into one new cordoba. This reform included the demonetization of some 20% of existing liquid assets, which had, attached to it, explicit political goals.[15] The monetary reform was accompanied by the consolidation of all explicit and implicit exchange rates into two legal rates: 10 new cordobas in the "official" and

15. The short period necessary to make the conversion in the banks (three days) was planned to leave the Contra with a sizable stock of useless bills. It was also determined that households converting more than 10 million old cordobas had to leave their money in deposit at the banks for 12–14 months. This was aimed at speculators and black market arbitrageurs holding sizable amounts of cash.

10.25 in the "parallel" market. In relation to January levels (table 10.4), this implied that the official and average import rates were multiplied by 143 and 19, respectively, and the average export rate was devalued by 46%. However, the new legal rates were set significantly below the black market rate. Third, the government decreed significant increases in controlled prices. This was accompanied by a 675% increase in the average SNOTS wage level. Finally, it announced a 10% cut in central government expenditure.

The major successes of this package were associated with exchange rate policies: the official rate was massively devalued in real terms, as the black market rate appreciated and exchange rate differentials narrowed (fig. 10.2, parts A and C). Nonetheless, the official rate remained clearly overvalued, and no mechanism was adopted to avert its further real appreciation (only two minor devaluations of one new cordoba per dollar each were adopted in April and May).

The major weaknesses of the February package were related, however, to fiscal and, particularly, monetary policies. The initial cut in central government expenditure was clearly insufficient to reach the target deficit, as the Olivera-Tanzi effect was eroding the tax base at a fairly rapid rate (see n. 9 above). On the other hand, the maximum domestic lending rate was kept at 45% *a year*, and the government decided that the devaluation of the official rate would not be passed on to dollar-denominated liabilities. Under prevailing conditions, these decisions were equivalent to a generalized debt forgiveness. They also implied that the Central Bank would continue to incur in massive losses in foreign exchange transactions and that any *nominal* increase of domestic credit would have to be financed by money creation.

The mix of massive exchange rate, price and wage adjustments, and weak demand policies initiated a new inflationary cycle, more intense than those experienced in previous years (fig. 10.3). Under these conditions, price controls were totally ineffective and real wages soon fell below 1987 levels (see table 10.1 and table 10.6 below). The government then abandoned any attempt to arrest the fall in real wages.

The June package liberalized most prices and wages, decreed massive increases in those prices that remained under the government's control (particularly gasoline), and deepened the exchange rate reforms but did little to make the global stabilization policy more consistent. The official exchange rate was then devalued by 700%, and the parallel/black market differential considerably narrowed. In the following months, the parallel and, since late August, the official rate were devalued more frequently (the latter five times between 31 August 1988 and 4 January 1989). As a result, the overvaluation of the official rate was considerably reduced. Although the black/official exchange rate differential remained substantial, it narrowed considerably with respect to previous years.

Nonetheless, fiscal policy was not significantly affected by the June decisions. There was also no attempt to control the growth of credit. However, two important reforms in monetary policy took place in June. First, the government did not assume the exchange rate risks on dollar-denominated domestic debts. Given devaluation policy, this decision considerably raised the costs of such debts, if contracted after February.[16] Second, authorities decided to index domestic interest rates. However, the "indexing rule" used was imperfect, particularly in the first few months.[17] Thus, from mid-June to mid-September, the maximum effective lending interest rate was set at 14.9% a month. Beginning in mid-September, the rule was improved. Still, in the last months of the year, interest rates ran significantly below inflation levels (see table 10.5).

In June, government wages were adjusted by 30%. Given massive price increases accumulated since February (790%), this was an extremely moderate rise. They were adjusted more frequently after September (monthly, except in December) but at a level systematically below inflation rates. To compensate for this fact, government employees were granted a food subsidy (AFA) in August.[18]

The series of maxidevaluations and massive adjustments in regulated prices, together with the inability of the authorities to control the major sources of monetary growth were the fundamental sources of the 1988 hyperinflation. As figure 10.3 indicates, the economy underwent three distinct price cycles between January 1988 and the first moths of 1989. The first two of them were clearly unleashed by the adjustment programs of February and June. The third was more closely associated with the effects of Hurricane Joan, which hit the country in October, generating losses estimated by ECLAC at $840 million (CEPAL 1988b). The third cycle was the most intense. In total, the inflation rate ran close to 100% a month between September 1988 and January 1989.

Overall, the monthly inflation rate was 64.5% between December 1987 and January 1989. It was led by public-regulated prices (public utilities and transportation), which increased by more than 80% a month during this period. Following a classical pattern, this process was accompanied by rapid demonetization. By January 1989, M1 as a share of GDP had fallen to 6.5% (table 10.5). On the other hand, reductions in aggregate demand, relative price changes induced by the adjustment programs (real devaluation and wage cuts, in particular), and supply shocks (the hurricane and electric supply failures during the first semester) led to a 10.9% fall in GDP. This was accompanied by a renewed deterioration of exports and the balance of payments.

16. For a debt contracted just after the February devaluation and paid in mid-January 1989, the monthly interest rate was 61.9%, somewhat below inflation (63.7% a month in the same period). However, the closer the debt was contracted before the June devaluation, the higher the implicit interest rate. Thus, a liability contracted just before that devaluation and paid in January 1989 had a monthly cost of 107.7%, or 19.3% in real terms.

17. An annual interest rate was determined by *adding up* the monthly inflation rates.

18. The subsidy took the form of the right to buy a basket of basic food products (10 lbs. of rice, 10 lbs. of beans, and 5 lbs. of sugar) paying between 5% and 10% of their nominal wages.

Table 10.5 **1989 Adjustment Program**

	1988		1989					
	Average	Last Quarter	January	February	March	April	May	June
Fiscal/monetary connection (% of GDP):								
Central government deficit[a]	24.9	21.6	2.7	6.4	4.1	1.9	−.8	−6.9
Monetary emission—Deficit	6.6	3.5	2.9	.4	5.7	6.4	9.4	13.8
Total monetary emission	31.5	25.1	5.6	6.8	9.7	8.2	8.7	6.8
Monetary aggregates (% of GDP):								
Means of payments	16.6	11.6	6.5	5.7	7.4	8.5	8.8	6.9
Quasi money	1.2	.5	.4	.6	.9	1.0	1.2	.8
Real exchange rate (1980 = 100):								
Official	69.4	77.5	68.4	70.4	93.3	105.6	102.6	135.4
Black	202.1	213.2	109.7	67.4	58.9	68.5	73.0	124.2
Differentials:								
Black/official rate	361.3	375.5	177.5	59.6	9.1	10.6	22.9	58.5
Parallel/official rate	243.5	257.8	128.8	41.3	2.9	3.1	9.0	32.6
Monthly inflation (CPI)	65.7	97.7	91.8	45.8	20.1	12.6	15.5	62.2
Nominal monthly interest rates:								
Lending: agriculture		38.3	50.5	56.0	52.4	22.0	14.0	14.0
Lending: industry		35.8	50.8	58.0	54.0	26.0	15.0	18.0
Lending: commerce		44.4	80.4	86.3	68.9	28.0	19.0	20.0
Term deposits (3ms)		42.4	63.1	55.1	51.6	23.6	16.0	28.9

(continued)

Table 10.5 (continued)

	1989						1990	
	July	August	September	October	November	December	January	February
Fiscal/monetary connection (% of GDP):								
Central government deficit[a]	1.4	−4.0	−2.6	1.6	.6	.8	−3.1	3.4
Monetary emission—Deficit	8.3	8.0	8.6	4.9	11.1	14.8	13.2	10.1
Total monetary emission	9.7	4.0	6.0	6.5	11.7	15.6	10.0	13.5
Monetary aggregates (% of GDP):								
Means of payments	6.9	7.7	7.9	7.8	7.9	8.4	8.3	8.5
Quasi money	.8	1.1	1.4	1.5	1.3	1.5	1.5	1.4
Real exchange rate (1980 = 100):								
Official	126.2	118.2	111.7	103.5	103.5	104.1	104.7	94.0
Black	87.7	83.4	73.3	65.3	82.7	80.3	90.4	86.3
Differentials:								
Black/official rate	20.2	22.0	13.5	9.1	38.1	33.5	33.2	49.5
Parallel/official rate	25.0	22.0	13.5	7.7	29.2	24.4	19.2	22.2
Monthly inflation (CPI)	32.3	7.7	11.9	14.4	16.2	19.2	34.2	11.4
Nominal monthly interest rates:								
Lending: agriculture	14.9	15.0	14.1	10.0	10.0	13.0	15.0	13.0
Lending: industry	18.0	18.0	14.4	10.0	10.0	13.0	15.0	13.0
Lending: commerce	20.0	20.0	17.3	13.0	13.0	17.0	19.0	15.0
Term deposits (3ms)	33.8	27.2	24.0	19.6	23.4	26.0	21.1	16.0

Sources: SPP, Central Bank, and INEC.
[a]Negative sign indicates fiscal surplus. Excludes foreign transfers in 1988.

10.6 The 1989 Adjustment Program

If massive relative price distortions associated with the multiple exchange rates and price controls were the dominant economic feature of Nicaragua in January 1988, hyperinflation had taken over that place one year later. The urgent need for action was reflected in the rapid pace of demonetization and the generalized lack of confidence in government policies. Moreover, the authorities had few instruments to handle the explosive price dynamics. Price controls had collapsed in mid-1988 after several years during which they became increasingly ineffective. The official exchange rate was still overvalued and too distant from the parallel and black market rates to be used as an anti-inflationary weapon. Finally, scarce foreign exchange placed severe restrictions on any attempt to fix the exchange rate or liberalize imports.

Under these conditions, the government correctly understood that a very orthodox policy was called for, combining fiscal and monetary austerity with additional relative price adjustments. The package adopted by the authorities in January included six major provisions. First of all, central government expenditure was massively cut to reach an expected deficit of 5.6% of GDP (Ministerio de Finanzas 1989). In practice, expenditure was cut even further by transferring to the ministries in the first months of the year less resources than were demanded according to budget allocations.[19] An essential element of fiscal austerity was a significant cut in public-sector employment (*compactación*).

Second, the government adopted a restrictive credit policy, accompanied by active interest rate management. The authorities aimed at keeping positive real returns on term deposits and real costs for all (or most) types of credit. Third, a system of gradual devaluation was adopted in late January. In practice, this led to small or medium-size devaluations some three times a month. This was accompanied by important readjustment of real regulated prices in the first months of the year. On the other hand, as in 1988, the authorities stated the objective of arresting further deterioration of real wages in the public sector.

In the speech in which President Ortega made public the new program, he also announced willingness to establish new rules of the game for the private sector; as a first step in that direction, he informed that expropriations would cease.[20] Finally, the government adopted a financial programming system coordinated by the Planning Secretariat (SPP) and significantly improved the data base for short-term macroeconomic analysis.

In terms of some of its major targets, the stabilization program was initially

19. Transfers were cut by 33% in January, 25% in February, 20% in March, and 18% in April. See Secretaria de Planificacion y Presupuesto, *Síntesis evaluativa de las principales variables económicas de abril 1989 y programación de mayo 1989*, May 1989, p. 6 (similar documents will be quoted hereafter as *Síntesis evaluativa*).

20. See "Esfuerzo nacional por la Paz y la Reconstrucción," *Barricada* (31 January 1989, pp. 3–4).

very successful. Inflation rates fell rapidly (fig. 10.3). Actually, by March, the CPI increased by 8%, excluding public utilities and transportation. This implies, in turn, that the government was effective in increasing real regulated prices. On the other hand, the government was quite successful in devaluing the official exchange rate in real terms and in stabilizing the parallel and black markets. By March, differentials between the different foreign exchange markets had been reduced to less than 10%.

In the face of falling inflation rates, demonetization ceased in February (table 10.5). The demand for term deposits also increased since that month, but remained fairly low by historical standards. The government cut and maintained central government expenditure at low levels. Indeed, as table 10.2 indicates, such expenditure stabilized around 20%–23% of GDP, less than half the average 1988 level. Starting in June, the government actually ran fiscal surpluses in a few months. Finally, the fall in real wages was also arrested (table 10.6).

The major initial cost of stabilization was a strong recession. In the first quarter of the year, industrial production fell by 17% with respect to the same period in the previous year. However, it started to recover in the second quarter (table 10.6). Cattle production for the domestic market was also severely hurt. On the contrary, with a few exceptions (cotton), exportables experienced a boom. Other inward-oriented sectors (e.g., agricultural foodstuffs and electrical energy) were either stagnant or experienced some recovery.[21]

Employment effects were significant. By June, central government employment had fallen by 14.3% with respect to the same month in 1988—11,000 employees, approximately (Secretaria de Planificacion y Presupuesta 1989). Interestingly enough, there were also a significant number of unfilled vacancies in the central government, as the way budget allocations were transferred to the different ministries actually encouraged this phenomenon.[22] In the same month, 16,500 civil employees, including those in public-sector enterprises, had been affected by *compactación*. This figure had increased to 17,000 by October.[23] This was equivalent to 2% of the labor force of the country. Managua household surveys reflected this massive reduction of public-sector employment. However, they indicated that it did not lead to increased open unemployment (which remain surprisingly low, at 5%–6% of the labor force) but to growing informality (rising proportion of self-employment and workers in very small enterprises) and longer unemployment spells.[24]

The major problems faced by the stabilization program in the first months of the year were both related to monetary policy. Aside from the central government, other domestic agents were subject to a credit crunch (table 10.6).

21. *Síntesis evaluativa* (June 1989. and succeeding months).
22. The wage costs of vacant positions were transferred by the Ministry of Finance. The different ministries used them to selectively increase wages of existing employees.
23. *Síntesis evaluativa* (August 1989, p. 21: December 1989. p. 23).
24. *Síntesis evaluativa* (September 1989. App. 2).

Table 10.6 **Additional Quarterly Indicators, 1988–89**

	1988				1989				1990
	I	II	III	IV	I	II	III	IV	I
Domestic credit (millions of 1980 cordobas)[a]									
Short term	879.1	1,040.0	1,128.5	697.9	110.6	219.2	204.3	227.4	187.1
Long term	87.0	125.4	141.0	144.1	28.6	29.2	21.7	26.3	35.3
Trading companies	302.0	44.4	63.1	163.6	322.4	257.0	134.5	185.2	381.7
Total	1,268.1	1,209.8	1,332.6	1,005.6	461.6	505.4	360.6	438.9	604.1
Transactions in the foreign exchange houses (thousand dollars, monthly average):									
Purchases	1,344.5	604.5	1,782.1	1,452.4	4,824.1	5,955.2	11,989.8	13,221.0	12,654.7
Sales	1,171.0	715.5	1,689.4	1,627.1	4,459.0	5,062.0	9,093.6	17,176.7	12,787.2
Real wage (1985 = 100):									
With GDP deflator	94.8	55.4	26.5	25.4	30.2	36.5	33.2	38.5	41.9[b]
With CPI	28.0	16.0	7.8	7.9	10.0	12.7	12.1	14.8	16.7[b]
Manufacturing production (billions of May 1989 cordobas)	134.9	123.7	127.8	124.6	103.7	119.7	113.3	111.1	125.6

Sources: Central Bank, Ministry of Labor, and MEIC.
[a]Using GDP deflator as the price index.
[b]January and February.

The most important exception was found in the government trading companies, which, at the same time, continued to receive massively subsidized credit. The profits made by these companies by the joint effect of credit subsidies and real devaluation were transferred to the producers of export crops (particularly coffee and cotton) by periodic resettlement of accounts (*reliquidaciones*), fueling the money supply.

Interest rate policy became also a major source of complications. Nominal rates were raised effective 15 February. In the face of rapidly falling inflation, ex post real rates were extremely high from February to April (table 10.5). Pure backward indexation rules and significant lags in decisions—rates were adjusted only once a month—and information contributed to the same phenomenon. Some of these problems were eventually solved: "forward" indexation criteria were introduced in April and weekly readjustments in June. However, the political opposition to high interest rates led the government, in a meeting with agricultural producers on 17 and 18 April, to agree to stabilize lending rates, to establish ceilings on lending rates and new subsidized long-term rates, and to grant a mix of debt forgiveness and debt restructuring at low interest rates for foodstuffs and cotton producers. Starting in May, these agreements led the government to fix some and, in June, *all* lending rates *below* deposit rates (table 10.5).

More generally, the authorities were unable to control sources of monetary growth different to the central government (see "Monetary Emission—Deficit" in table 10.5). From March to May, this led to a sizable expansion of liquidity. Monetary expansion was reflected in moderately rising inflation rates in May and, particularly, in a speculatory wave in the foreign exchange market. The latter process was interpreted in some parts of the government as a sign that the official rate was still overvalued and that a maxidevaluation was called for. These sectors were apparently successful in restricting the official supply of dollars to the parallel market. Expectations of devaluation then became generalized and were reflected in massive speculation in the parallel and black markets. The authorities then decided to "follow the market" and devalued the official rate by 111% on June 12.

This devaluation was soon reflected in massive inflation, which rapidly eroded most of its real effects (see table 10.5). It also initiated a new "stop-go" cycle, not unlike that experienced during the first semester. Inflation came down fairly rapidly, reaching 8% in August. This was initially accompanied by a dramatic fall in liquidity. However, as the government was unable to control all sources of monetary expansion, liquidity and inflation started to pick up. Once more, this was reflected in speculation in the foreign exchange market in November. This time, the government maintained the system of gradual devaluation of the official rate, thus averting major foreign exchange speculation and a new inflationary shock. However, it also kept liquidity at high levels. Aside from this basic change in policy reactions, there were also two important changes with respect to the inflation cycle early in the year.

First, the negative interest rate margins widened (table 10.5). Second, the size of the parallel market doubled (table 10.6). This was equivalent, in fact, to an unplanned import liberalization.

Overall, the 1989 stabilization program was less contractionary and more effective in terms of the inflation and exchange rate targets than its 1988 predecessor. However, its inconsistency and fragility were apparent to many economic observers (see, e.g., Fishlow et al. 1990). First of all, it was clear that the cut in central government expenditure could not be indefinitely maintained. On the other hand, as we have seen, monetary and interest rate policies remained a source of considerable difficulties. The sensibility of the foreign exchange market continued to be a major source of instability. This reflected, in turn, the inability of the government to raise an adequate supply of liquid foreign aid. Indexation increased in 1989 to levels, which are incompatible with permanent reductions in the inflation rate. Finally, although the room for private initiative considerably widened, no major advance was made in terms of designing stable rules of the game for the private sector.

The February 1990 elections changed the course of macroeconomic events. Attempts to maintain previous stabilization efforts ceased altogether. By April, strong increases in government wages were reflected again in high fiscal deficits, rapid growth in the money supply and an imminent new wave of hyperinflation. Moreover, the official and parallel exchange rates were grossly overvalued and regulated domestic prices were considerably repressed. Massive macroeconomic disequilibria induced by these policy decisions forced the Chamorro administration, inaugurated on 25 April 1990, to undertake, once more, massive adjustment efforts. This time, however, they faced a strong labor union resistance. This, as well as other events at the outset of the new administration clearly indicate that the February elections had done so far little to overcome the political paralysis that affects the relations between the Sandinistas and the powerful private interests of Nicaragua.

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Comment   Ann Helwege

Jose Antonio Ocampo's essay is rich in detail about economic policies pursued by the Sandinista regime. It also makes available data that has been virtually inaccessible to those outside the Nicaraguan government.

The paper presents the economy as one in a chronic state of disequilibrium. Ocampo describes a series of short-run policies aimed shoring up the economy, all of which ultimately failed. The paper is thorough and meticulous in its description of these policies. My main recommendation would be to highlight fundamental reasons for the instability and the failure of stabilization efforts, and to set these apart from less significant specific policies.

What Went Wrong?

At the risk of being a bit repetitive, let me emphasize arguments that Eliana Cardoso and I made earlier (see chap. 3, in this volume). The Sandinistas do not represent a classic case of populism. Urban wage earners lost throughout the regime's tenure. Real wages fell every year after 1981 and even 1979–81 wages were below prerevolution wages. Unlike classic populists who served employed workers, the Sandinista's redistributive efforts were directed toward the poor in the form of literacy campaigns, health programs, and agrarian reform. Although the regime meets Dornbusch and Edwards' criteria for "economic populism," namely, it ran large deficits leading to hyperinflation,

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it does not share populist characteristics common to Perón, Vargas, and Velasco.

There are several underlying reasons for the economic crisis that developed under the Sandinistas.

From the start, socialist rhetoric and threats to expropriate property created uncertainty for private producers, who were expected to generate the bulk of output. This uncertainty made early consolidation of the economy difficult.

Second, overvaluation meant that investment was not only risky, but unprofitable.

Third, world prices of cotton and coffee slumped. Uncertainty about property rights, overvaluation, the U.S. embargo, and low world prices made export production unattractive. Neither cotton nor coffee production ever recovered its prerevolution level.

Fourth, the large government deficit played a significant role in generating hyperinflation once Contra activity began. Before then, massive foreign aid financed social spending and kept inflationary pressure under control. With the onset of the war, the deficit soared to 30% of GDP in 1983 and stayed in the 15%–25% range thereafter. Foreign donors lost interest, and the printing press took over as a major means of finance.

The war made a bad situation unmanageable. It forced the government to devote half its budget to the military; it exacerbated labor shortages and destroyed infrastructure; and it diverted foreign exchange toward weapons, forcing industry and agriculture to struggle along without imported parts and fertilizers. It also made a mockery of Sandinista intentions to redistribute income. Not only were social programs ultimately cut, but generous subsidies were given to large agricultural producers in the hope of maintaining exports to finance the war. By 1986, private consumption had fallen to only one-third of its prerevolution level.

Parenthetically, I would add that it is a mistake to emphasize the role of bad weather in the development of the economic crisis. Agricultural output was depressed throughout the 1980s. FAO data show that even the best harvest, that of 1982, fell 20% below that of 1978. Although the agrarian nature of the Nicaraguan economy makes it unusually vulnerable to climatic shocks, the factors described above are more important in explaining a decade of agricultural stagnation.

A massive stabilization effort was implemented in 1988. On a technical level, its failure can be attributed to the fact that the devaluations did not keep up with inflation, impressive as they were in nominal terms. Moreover, the fiscal deficit remained excessive for reasons pointed out by Ocampo, including the effect of inflation on the tax base. New attempts at stabilization in 1989 also collapsed.

At a more basic level, the failure of stabilization programs can be attributed to the inability of the Sandinistas to reduce uncertainty and to establish clear rules of the game. Having challenged property rights, they could not restore the confidence of private producers. Expropriation of a major sugar mill in July 1988 did not help. Compounding the uncertainty about property rights was concern that defense expenditures would continue to create fiscal imbalances.

Whither the Future of Socialism in Latin America?

I have argued elsewhere that the Allende regime faced problems that were quite different from those faced by the Sandinistas.[1] In contrast to Nicaraguans, Chileans were more urbanized, better educated, and enjoyed a markedly higher standard of living. Allende's challenge was to maintain industrial output to satisfy a large, politically powerful middle class. The agrarian nature of the Nicaraguan economy and the simple lifestyle of its people enabled the Sandinistas to build a constituency through land reform and basic social services. Nonetheless, both Allende and the Sandinistas challenged property rights while depending on a market economy.

Oscar Lange argued in 1938:

> A socialist government really intent upon socialism has to decide to carry out its socialization program at one stroke or to give it up altogether. The very coming into power of such a government must cause a financial panic and economic collapse. Therefore, the socialist government must either guarantee the immunity of private property and private enterprise in order to enable the capitalist economy to function normally, in doing which it gives up its socialist aims, or it must go through with its socialization programs with maximum speed. Any hesitation, vacillation and indecision would provoke the inevitable economic catastrophe. Socialism is not an economic policy for the timid.[2]

The problem with massive expropriation is that a fully centralized economy is hard to manage and tends to lead to stagnation in poor countries. The Cubans have succeeded because of Soviet aid; neither Nicaragua nor Chile received enough aid to follow Cuba's path.

Is socialism in Latin America due for a requiem? Yes. The Soviets are no longer interested in supporting revolutions abroad. Two failures have tarnished the model's appeal regionally. It is possible that a socialist regime will again take power, in Peru or El Salvador, for example, but it is unlikely that it can succeed in meeting popular expectations.

The demise of socialism need not mark the end of serious efforts to redis-

1. A. Helwege, "Three Socialist Experiences in Latin America: Surviving U.S. Economic Pressure" (*Bulletin of Latin American Research* 8, no. 2 [1989]: 211–34). Also, see Helwege, "Is There any Hope for Nicaragua?" (*Challenge* [November/December, 1989]: 22–28).

2. See D. Morowitz, "Economic Lessons from Some Small Developing Countries" (World Development 8 [1980]: 337–69) for Lange quote. The original statement is found in O. Lange and F. Taylor, *On the Economic Theory of Socialism* (Minneapolis: University of Minnesota Press, 1938), p. 354.

tribute income. Income distribution in Latin America remains very inequitable relative to the rest of the world. Capitalist growth requires clear rules of the game and secure property rights, but there is no evidence that growth depends on continued inequity.

Lessons for the Region

The Nicaraguan experience with unsuccessful stabilization efforts provides useful lessons for nonsocialist regimes.

First, the rules of the game with respect to private property need to be clear whether or not the government is socialist. By freezing bank assets, the Collor administration has created a major credibility problem for investors in Brazil. It takes years to regain the trust that is lost with one such freeze. The Mexicans learned this in 1982. Rudiger Dornbusch likens the move to wife beating: once done, the relationship is irrevocably changed, whether or not the beating occurs again.

One can make this argument somewhat more general. Having once let an economy spin out of control, it is difficult for a regime to regain public confidence. For this reason, a change in regime (not necessarily a coup) may be important for stabilization to succeed.

Second, for all the ease with which economists prescribe stabilization measures, they are remarkably difficult to implement. If austerity were as easy as swallowing a bitter pill, we would see more of it today. Political pressure prevents cuts in government programs, and tax compliance is hard to enforce. We need more work by political scientists to understand how one builds a consensus to support stabilization. Karen Remmer's work comparing the effectiveness of democratic and authoritarian regimes in stabilizing economies offers a useful starting point.[3]

A third lesson is that devaluations do not jumpstart an economy. They are effective in reducing external imbalances by cutting imports. They do not generate growth unless they are accompanied by renewed confidence in economic stability. In theory, devaluations stimulate the production of tradable goods. Together with high interest rates, they also encourage the return of flight capital. To do so effectively, however, investor trust is essential. No firm will expand its productive capacity if it expects continued instability and potential expropriation of assets. Devaluations may be the Latin American equivalent of "pushing on a string."

What Does the Future Hold for Nicaragua?

U.S. intervention and the Contra war have caused enduring damage. Most Nicaraguan professionals emigrated and are now unlikely to give up the new

3. K. Remmer, "Democracy and Economic Crisis: The Latin American Experience" (*World Politics* [April 1990]: 315–35).

lives they built in the United States. The war damaged a capital base that was weak to begin with: what industry existed in the 1970s depended on the Central American Common Market, which dissolved with regional hostilities. There is now very little industrial capacity in place. Furthermore, political polarization as a result of the Contra war leaves open the possibility of continued civil war. The new government will find it very difficult to attract investors.

Nicaragua is a poor agrarian society, made poorer by events of the past decade. Having shown that the Sandinistas could not match the strength of U.S. pressure, it remains for the United States to prove, through generous aid, whether the Nicaraguans have gained anything by crying uncle.

Comment Arnold C. Harberger

It is hard for me to comment critically, maybe not even objectively, on the work of José Antonio Ocampo. For it is not an exaggeration to say that probably close to half of what I know about the Nicaraguan economy I learned from him (either through his writings or through contact with him in professional meetings and working sessions). My experience in other countries had led me to believe that populism on the political scene had bad economics as its handmaiden. In this I do not mean to equate populism with left-of-center politics—not by a long shot. Left-of-center governments have, in fact, run some quite good economic policies in recent years (Spain under Gonzalez, France under Mitterand, New Zealand under Lange, Australia under Hawke), but they have done so by trying to be consistent, to face reality, to live within budget constraints, to reduce economic distortions. In my opinion, left-wing governments, when they have succeeded in their economic policies, have done so precisely by eschewing populism.

Nothing in the Nicaragua story, as told by Ocampo, leads me to change the opinion expressed above. In the background we have the fact that prior to the Sandinista revolution, Nicaragua shared with other Central American countries the phenomenal economic boom of 1960–77. Indeed, Nicaragua tripled its GDP between 1959 and 1977, catching up to Guatemala and El Salvador and narrowing Costa Rica's lead in terms of per capita income. The boom did not bring an equally rapid improvement in social indicators, however, and undoubtedly the seeds of a successful revolution were sown by the Somoza family itself, in the virtually unbridled avarice with which it sought an ever-expanding control over the economic as well as the political arena.

Perhaps because of the professional nature of the forum in which his paper was presented, Ocampo does not dwell on the vast numbers of sheer blunders

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(at the microeconomic level) that underlay the patchwork quilt of economic policy put together by the Sandinistas. To be sure, he mentions the extensive nationalization, the agrarian reform, the rapid expansion of the public sector, and the widespread use of price controls. But in the main he focuses on the macroeconomic side. Fiscal deficits, monetary expansion, artificially low interest rates, Central Bank losses, exchange-rate maladjustments, import controls, and multiple exchange rates—these are the items that are grist for his mill. Ocampo does not overlook the mistakes implicit in the elements just listed, but the main message that comes through—at least to this reader—is one of surprise of how "traditional" were the measures taken to stabilize the economy, once the goal of stabilization was taken seriously. He mentions the dramatic reductions of government spending, the conscious efforts to raise the average real exchange rate facing exporters, and the freeing of many prices in June of 1988. He points out, too, the halving of government expenditure by 1989, the reduction of public employment, the application of a restrictive credit policy, the use of active interest rate management and the adoption of a sort of crawling-peg exchange rate system. All these are familiar components of "standard" Latin American stabilization.

This helps explain why a reaction of surprise is triggered in a professional audience. Why surprise? Because amid the jungle of policy mistakes there appears clear evidence that at least *some* voices were striving to bring about more rational economic policies. First, partial measures (starting in 1985), then more full-blown stabilization efforts (in 1988 and 1989) represent the fruits of their strivings. Central government expenditure reached its peak in 1984, at close to 60 percent of GDP, which was reduced to 44 percent by 1987 and to below 30 percent in 1989. An inflation which peaked at over 60 percent per month in 1988 was cut to some 27 percent per month in 1989. In the process, real wages were drastically reduced. By 1987 they were less than half their pre-revolutionary level; the stabilization programs led to still further drastic cuts.

Is this populism? To me, it certainly looks and tastes like something else. Yet a single visit to Nicaragua is enough to convince anyone with an economist's eye to see that the economy is in a shambles.

I do not have the basis (in either study of or experience with the Nicaraguan economy) to make sense out of the conflicting signals. What is clear to me is that the voices of reason did not prevail sufficiently, that vast uncorrected mistakes were still present in economic policy up through the passage of power from the Sandinistas to their loosely linked opposition, which presently controls the government.

What I would like to do now is concentrate on just one area—bank credit to the productive sector of the economy—in which I have had the occasion to work a bit, and to study the available data. Fortunately, this area is pregnant with lessons, both for economists and for policymakers.

We start with the story of the 1960s and 1970s. During this period, bank credit to the private sector was abundant, by normal LDC standards. The year-end data from *International Financial Statistics* show that at no point in these two decades did private-sector credit fall short of M2. How did such an unusual relationship prevail for so long a time? Through a pattern in which the banking system borrowed abroad (and from some domestic sources) to finance loans well beyond the level dictated solely by its deposits. How large in absolute magnitude were these loans to the private sector? The answer is, simply huge. Starting from about 15 percent of GDP in 1960, they grew to some 25 percent of GDP by 1970, and reached over 50 percent of GDP by 1980. This was all, so far as I can see, genuine financial intermediation. The savings of some were being transferred to others, who put those savings to productive use, and who paid for the right to do so.

The story changed swiftly. By 1984, the strictly *private* sector had loans equal to about 15 percent; by 1985 that went below 10, and from 1987 to 1989 below 1 percent of GDP. If we include credit to the so-called APP (nationalized productive) sector along with the strictly private sector, we find such credit at some 35 percent of GDP in 1984, some 15 percent in 1985, going down to less than 3 percent in 1987, and less than 2 percent in 1989.

It is clear that whatever the economic function that bank credit to the productive sector was performing, that function was incredibly eroded over the decade of the 1980s. With credit so scarce, one would think it would come to carry a huge price, in real terms. But no, the actual story is just the reverse. Instead of carrying a positive price, it carried a hugely negative one. And instead of functioning as a vehicle for financial intermediation, bank credit to the private (productive) sector was permuted into a mechanism of transfer payments.

How does such a mechanism work? Imagine an economy in which bank loans are made for a term of six months, at zero nominal interest, and in which prices double every quarter. Let new loans be issued each quarter in the amount of 2 percent of GDP. By next quarter they amount to 1 percent, and by the end of the following quarter they are worth only .5 percent of GDP and are paid off. Each quarterly "cohort" of bank loan recipients gets 2 percent of GDP in credit, and pays off something like .5 percent of GDP six months later. Total outstanding credit follows a sawtooth pattern going down from 3 percent of GDP at the beginning of each quarter (after the maturing loans have been paid off and the new ones extended,) down to 1.5 percent of GDP at the end of each quarter (before the maturing loans are paid off and before the new ones are extended).

The above example shows how, with a very low *ratio* of bank loans to GDP, substantial transfers can nonetheless be effectuated using the machinery of bank loans at vastly negative real interest rates. This is basically what Nicaragua's bank credit system has been doing over the past several years. The figures are not as neat as those of the example, but they can be found by simply taking each quarter's (or month's or week's) "gross lending" minus "interest plus amortization," deflating the resulting figure by the average price level of that period, and adding up the results for a year, to be then compared with that year's GDP in real terms.

The whole phenomenon of transfers via the credit mechanism deserves to be studied with care, its history chronicled, its causes sought. In the meantime let me note that what little evidence I have seen suggests a gross transfer of close to 4 percent of GDP being effectuated through the credit machinery in 1989, with about two-thirds of that sum going to what in the statistics are called "productive loan" borrowers (private sector plus APP), and the rest going to state marketing enterprises.

This vast deterioration of Nicaragua's credit system, and its conversion (I would say *per*version) into a mechanism of haphazard transfers must have some explanation, but explaining it does not signify defending it. I find it hard to imagine that a professional economist would want to try to defend it, or even know how to begin such an attempt. Certainly, Ocampo offers no defense for it, but neither does he explain such a tremendous deviation from solid economics and even from straight common sense, existing side by side with the nonpopulist, rationalizing efforts pointed out by Ocampo and cited earlier in this comment.

I certainly do not think that the rationalizing efforts cited by Ocampo are the cause (or the explanation) of the sorry state of the Nicaraguan economy today. To the contrary, I see in those efforts the professional hand of economists. But in the story of bank credit I find no professional touch at all. The new makers of economic policy in Nicaragua are essentially going to have to build a new system of bank (or financiera) credit from scratch. And if one seeks reasons in the realm of economic policy for the dismal performance of the Nicaraguan economy during the Sandinista years, one must, I think, look also for the causes of the other major mistakes, which, added to the monetary and credit debacle, created the problems that Ocampo's reformers in the post-1985 period were bravely struggling to surmount.

In my opinion, the Nicaraguan economy got to where it is through a series of policy blunders, of which the bank credit episode is just one example, simply the best example I know. It is gratifying to know that there were countercurrents of economic rationality during that period. But it is important to realize that the countercurrents were no more than just that (the counterculture to *Sandinismo,* as it were). The main currents were what swept the Nicaraguan economy into its present dismal situation. Whether those currents can be tagged with the label of populism I do not know and would not venture to guess. But that they can be accurately tagged with the label of bad economics I have not the slightest doubt.