

A SUMMARY OF MACROECONOMIC PERFORMANCE AND LABOR MARKET
BEHAVIOR IN NICARAGUA 1979-1998

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The last 18 years of Nicaragua's economic history has been one of transition from disequilibrium to stabilization to reform, and, finally, to adjustment. During this time, there has not been a clear direction for either macroeconomic performance or labor market behavior. In this article, presenting the economy in transition through periods of structural changes is done to show the complexity of isolating the impact of economic performance on labor market transitions.

In presenting this situation, one possibility would be to isolate the performance level of a particular economy, and then observe the performance of the labor market during a given time period. Doing so could help to answer the question of the extent to which labor market transitions are influenced by the general economic performance. However, once the structural changes at both the macroeconomic level and the market level were taken into account, one would find a contradictory situation. In such a situation, improvements in economic performance are not

necessarily associated with an improvement in labor market performance, and vice versa. That is, such phenomenon might be the consequence of the overriding effect that structural changes might bring to counteract the positive association that one normally expects between economic performance and labor market behavior. This seems to be the case in analyzing the experience of Nicaragua between 1981 and 1988.

Using 1980 as a benchmark, Nicaragua's economy can be broken down, or characterized, into six phases, as listed below:

- 1.) The radical social and economic remodeling phase, from 1979 to 1981;
- 2.) The transition to a war economy, from 1982 to 1983;
- 3.) The macroeconomic disequilibrium, from 1984 to 1987;
- 4.) The beginning of stabilization, from 1988 to 1990;
- 5.) Consolidating stabilization, from 1990 to 1994; and
- 6.) The phase of full structural adjustment, from 1994 to 1998.

Phase I: The Radical Social and Economic Remodeling,
1979 to 1981

The first phase was characterized by a fairly expansionary and re-distributive economic and social policy, with structural transformations in property rights. This phase was also a period of revolutionary change. An armed revolt had overthrown 40 years of a cruel dictatorship, and started a period of hopes and illusions. During this period, there were three important economic and social events, which are listed below:

- 1.) The nationalization of foreign trade, natural resources, and the financial system;
- 2.) The formation of "the people's property area," which was organized on the expropriation of properties owned by Somoza and his collaborators, all of which were converted into new state-owned enterprises. These actions facilitated the creation of a mixed economy with three major types of ownership, either state, private, or mixed; and
- 3.) The declaration of war against illiteracy through a formidable effort of young people who organized themselves as an army and went

into every region of the country to teach young and old how to read and write.

The government had two objectives in this phase. The first objective was to reconstruct the productive apparatus that was in shambles after the revolutionary war against the Somoza regime. The second objective was to recover the level of activity achieved in 1978 and secure a greater level of social equity. Thus, the grave scarcity of basic commodities in 1979 would be overcome and the unemployment rate reduced. To achieve such objectives, the government focused public investment efforts towards the construction of productive and social infrastructure; however, as a result, fiscal outlays grew significantly.

The effect of the expansionary fiscal policy helped economic recovery by increasing aggregate demand, which in turn, was enhanced with massive foreign assistance received by Nicaragua upon the overthrow of the Somoza regime. Thus, external resources financed not only public investment but an increase in private consumption as well.

During this period, the fiscal deficit rose from an average of 5.1 percent of GDP in the five years before the revolution to about nine percent in 1980 and 1981. Domestic credit increased by 58.4 percent during this

period as well. As a result, money supply rose 26.3 and 28 percent, respectively. During this time there was no threat to price stability due to the compensating effects of huge inflows of external resources in those years. Table 2 contains the historical three-year trend of specific macroeconomic variables in Phase I.

Table 2

Macroeconomic Indicators of Phase I

| Concepts | 1979 | 1980 | 1981 |
|-----------------------------------|-------|--------|--------|
| % Change in Real GDP | -26.5 | 4.6 | 5.4 |
| Inflation (%) | 70.3 | 24.8 | 23.2 |
| M1/GDP | 24.2 | 21.3 | 23.2 |
| M1 Growth (nominal) | - | 26.3 | 28.0 |
| Credit/GDP | 74.3 | 82.1 | 86.6 |
| Nominal Credit Growth | | 58.4 | 24.2 |
| Fiscal Deficit/GDP | 8.9 | 9.0 | 8.9 |
| External inflows in US\$ millions | 360.5 | 676.5 | 802.5 |
| Credits | 271.7 | 528.7 | 728.7 |
| Donations | 88.8 | 147.8 | 73.8 |
| Current Account in US\$ millions | 291.8 | -411.4 | -591.6 |
| Exports | 615.9 | 450.4 | 508.2 |

Table 2, continued

| Macroeconomic Indicators of Phase I | | | |
|---|-------|-------|-------|
| Concepts | 1979 | 1980 | 1981 |
| Imports | 388.7 | 802.9 | 922.4 |
| Unemployment as % of Labor Force | 24.6 | 14.0 | 10.5 |
| Informal Sector Share as % of Total Employment | 43.6 | NA | 32.0 |

Sources: Central Bank of Nicaragua, Prealc, UNDP, 1980-1998.

Because of the expansion in public consumption, aggregate demand increased substantially; therefore, GDP grew about five percent per year, as shown in Table 2. Open unemployment fell from 24.6 percent to less than 10.5 in 1981. The importance of the informal sector (as a percent of total employment) dropped from 43.6 percent in 1979 to 32 percent in 1981, while public sector employment grew from 39,000 employees in 1979 to more than 54,116 employees in 1981 (MIPLAN, 1981).

Phase II: The Transition to a War Economy, 1982 to 1983

During the first phase, induced disturbances were created by the new government pursuing ambitious and expensive socioeconomic goals. These goals were a major redistribution of property and income flows, a redirection

of state spending towards social ends and changes in management of the state apparatus and public enterprise. In the meantime, the real exchange rate was increasingly overvalued.

Autonomous disturbances and policy initiatives, plus a growing military threat from opponents to the Sandinista government all reduced untied capital inflows. These changes pointed to an end of an "economic honeymoon," and the beginnings of harsh social and economic times.

The promotion of a contra army organized and financed by the Reagan Administration in the U.S. to fight Nicaragua's new government was a signal to local business leaders and entrepreneurs that they should leave the country and look for investment opportunities elsewhere. The new contra forces pinpointed economic and infrastructure targets in their military activities, thereby increasing hostilities between the U.S. and Nicaragua. In turn, access to multilateral financing and access for exports to traditional markets became very difficult.

During this period, GDP and exports both fell, all of which were reinforced by declining world prices of basic commodities. GDP fell 0.8 percent in 1982, recovered in 1983, and fell again the following year. From 1984 on, GDP

declined for the next 10 years, although open unemployment dropped from eight percent to five percent in 1984, and the informal sector remained at a level of 33 percent of total employment (PREALC, 1984). During this phase, inflation was still stable, but with a fixed nominal exchange rate, a strong real appreciation of the local currency resulted. Perceptible overvaluation plus the political uncertainty fed into speculation, which gave rise to an explosive black market in foreign exchange. Increasing fiscal imbalances started to show up despite of the fact that the ratio of tax to GDP exceeded one third of total GDP.

The reduction in capital inflows did not stop the government from maintaining its free health and educational systems; it did not want the lack of private investment to stop the implementation of its development strategy. In addition, there were greater defense expenditures needed to cope with the threat of military confrontation, which meant that military expenditures grew to not less than 20 percent of the overall annual budget. Under such circumstances, the government was forced to finance its deficit through credit from the Central Bank.

Monetary imbalances set in, originated by the financing of the fiscal deficit described above and due to an expansive credit policy addressed to maintain the

weakening private sector, via compensatory subsidies, all of which set the stage for financial disequilibrium. On the other hand, the military service was implemented and thousands of young Nicaraguans were drafted. Together with increased governmental and party bureaucracy, these changes allowed unemployment rates to drop, even when the general performance of the economy was rapidly deteriorating. Table 3 displays specific macroeconomic indicators during Phase II.

Table 3

The Phase of Transition to a War Economy

| Concept | 1982 | 1983 | 1984 |
|-----------------------------|-------|-------|-------|
| Real GDP % | -0.8 | 4.6 | -1.6 |
| Inflation Rate % | 18.4 | 37.2 | 50.2 |
| M1/GDP | 24.4 | 34.7 | 46.4 |
| M1 Nominal growth | 22.1 | 64.7 | 83.1 |
| Credit/GDP | 92.4 | 117.5 | 120.1 |
| Real Interest Rate | NA | NA | NA |
| Lending | -6.6 | -13.0 | -15.8 |
| Borrowing | -13.0 | -16.7 | -19.5 |
| Exchange Loss as %of GDP | 5.0 | 17.5 | 26.6 |
| Investment/ GDP | 20.2 | 21.0 | 21.6 |

Table 3, continued

| The Phase of Transition to a War Economy | | | |
|--|------|------|------|
| Concept | 1982 | 1983 | 1984 |
| Unemployment Rate | 8.0 | 7.0 | 5.0 |
| Informal Sector share as a % of Total Employment | 33.0 | 33 | 33 |

Source: Central Bank of Nicaragua, Prealc, UNDP, 1980-1998.

Phase III: Macroeconomic Disequilibrium, 1984 to 1987

The third phase triggered one the most spectacular hyperinflationary processes of recent times, comparable only to those observed in European inflation after World Wars I and II, and in Bolivia. During this phase, GDP steadily dropped. Inflation began accelerating rapidly from an annual rate of 334 percent in 1985 to 1,347 percent in 1987. The value of exports dropped from a peak of US\$429 million in 1983 to US\$299 million in 1987. At the same time, unemployment continued to fall to almost 3.2 percent of the labor force by 1985, but increased to 5.8 percent at the end of 1987. The importance of the informal sector grew to over 40 percent of total employment (Nicaraguan Country Economic Memorandum, World Bank, 1994).

Black and parallel markets continued to develop, fiscal deficits increased, credit expansion distorted

relative prices, and commodity production was limited by scarce foreign exchange and destruction from the war. It could be argued that the increase in the informal sector in this period was caused not only because of the rigidities of the formal sector to expand in a war economy, but because the hyperinflation made informality, the black markets, and other market distortions more profitable than working in the formal sector. The profitability in these markets was so considerable that the informal sector gave rise to the emergence of a new wealthy social class, called the "apron bourgeois," which was basically merchants and operators in the informal market.

Nonetheless, the impact of the demand pressures on prices was slow to appear. Inflation began to accelerate only in 1985; average monthly inflation was 2.7, 3.4, and 13 percent in 1983, 1984, and 1985, respectively (INEC, 1985). The lag in the inflationary response to money creation may be explained by intense efforts at price control; yet, the official measure of inflation in 1983 and 1984 was not reliable. One can instead take the rise of the exchange rate in the black market as a proxy. This indicator rose from 70 Cordobas at the end of 1983 to nearly 500 Cordobas by the end of 1984 (SPP, 1985). Table 4 contains macroeconomic indicators during Phase III.

Table 4

Macroeconomic Disequilibrium

| Concepts | 1985 | 1986 | 1987 |
|--|--------|--------|---------|
| Real GDP growth | -4.1 | -1.0 | -0.7 |
| Inflation rate annual (%) | 334.3 | 747.5 | 1,347.2 |
| Monthly Inflation Rate | 13.0 | 19.5 | 24.9 |
| M1/GDP | 50.6 | 47.4 | 52.1 |
| Nominal M1 growth | 179.4 | 253.4 | 580.6 |
| Real Interest Rate Lending | -63.1 | -83.9 | -87.2 |
| Borrowing | -64.6 | -84.8 | -88.2 |
| Exchange Losses/GDP | 15.4 | 9.6 | 6.5 |
| Fiscal Deficit/GDP | 22.3 | 17.2 | 16.8 |
| Deficit Financing (%) | 100.0 | 100.0 | 100.0 |
| Internal | 96.9 | 91.4 | 97.2 |
| External | 0.5 | -0.1 | -0.4 |
| Grants | 2.6 | 8.6 | 3.4 |
| Unemployment as % of Labor Force | 3.2 | 4.7 | 5.8 |
| Informal Sector as % of Total Employment | 35.0 | 37.0 | 40.0 |
| Current Account in US Millions | -857.1 | -788.3 | -719.9 |
| Exports | 301.5 | 244.2 | 299.9 |
| Imports | 878.2 | 782.0 | 837.9 |

Sources: Central Bank of Nicaragua, Prealc, UNDP, 1980-1998.

The macroeconomic disequilibrium continued to deepen as inflation accelerated, the external constraints tightened, and the war intensified. The government started to implement stabilization programs in 1985, 1986, and 1987 but they were not successful. The common denominator in these unsuccessful efforts was that they were either too weak or delayed (given the magnitude of the disequilibrium) and sometimes inconsistent.

Beside the economic factors, one cannot overlook the political, financial, and military factors that existed at that time. The contra-military effort received increasing support from the U.S. government. The U.S. government approved \$27 million in 1985 as military aid to the contras; in total, U.S. aid to the contras reached over \$100 million since 1982.

In May 1985, the U.S. government imposed a commercial embargo on Nicaragua, which had severe effects on its economy. The U.S. had been the traditional and natural market for a large proportion of Nicaragua's exports, and had supplied large amounts of inputs, spare parts, capital and consumption goods, and technology, whose substitution required very high costs. Consequently, imports and foreign resources came increasingly from socialist countries, creating problems of costs and foreign exchange

liquidity. In fact, a large portion of the foreign trade was carried out in barter terms. Table 5 contains information on inflows of external funds to Nicaragua up to the end of Phase III.

Table 5

| External Inflows of Funds to Nicaragua | | | | |
|--|-------|-------|-------|-------|
| Concept | 1979 | 1980 | 1981 | 1982 |
| Loans | 271.7 | 528.7 | 728.7 | 498.9 |
| US\$ mill | | | | |
| Multilateral Source US\$ mill | 78.4 | 32.5 | 11.9 | 18.8 |
| USA US\$ mill | - | 13.7 | - | - |
| Non-Socialist Source US\$ mill | 193.3 | 462.8 | 696.7 | 435 |
| Socialist Source US\$ mill | - | 19.3 | 20.1 | 45.1 |
| Grants US\$ mill | 88.8 | 147.8 | 73.8 | 98.8 |
| Multilateral Source US\$ mill | 10.5 | 16.9 | 12 | 14.7 |
| Non-Socialist Source US\$ mill | 70.8 | 82.5 | 10.2 | 20.9 |
| Socialist Source US\$ mill | 7.5 | 48.4 | 51.6 | 63.2 |

Table 5, Continued

| External Inflows of Funds to Nicaragua | | | | | |
|--|-------|-------|-------|-------|-------|
| Concept | 1983 | 1984 | 1985 | 1986 | 1987 |
| Loans | 437.8 | 628.3 | 724.5 | 201.2 | 229.2 |
| US\$ mill | | | | | |
| Multilateral Source | 15.0 | - | - | - | - |
| US\$ mill | | | | | |
| USA Source | - | - | - | - | - |
| US\$ mill | | | | | |
| Non-Socialist Source | 384.3 | 549.8 | 637.5 | 128.7 | 147.8 |
| US\$ mill | | | | | |
| Socialist Source | 38.5 | 78.5 | 87.0 | 72.5 | 81.4 |
| US\$ mill | | | | | |
| Grants | 181.2 | 144.3 | 272.1 | 316.7 | 155.6 |
| US\$ mill | | | | | |
| Multilateral Source | 6.9 | 12.2 | 4.8 | 10.4 | 16.8 |
| US\$ mill | | | | | |
| Non-Socialist Source | 94.3 | 60 | 83.5 | 229.7 | 87.6 |
| US\$ mill | | | | | |
| Socialist Source | 80 | 72.1 | 88.3 | 76.6 | 51.2 |
| US\$ mill | | | | | |

Sources: SPP and Central Bank Indicators, 1988.

Phase IV: The Beginnings of Stabilization, 1988 to 1990

At the beginning of 1988, the economic situation was quite critical and unsustainable; the economy was trapped

in an inflationary spiral of inflation-devaluation-inflation. GDP had fallen steadily since 1984. The gap between the official and black market exchange rate at the beginning of January 1988 had reached over 68,000 percent. In February 1988, the government started to implement a renewed effort of stabilization, which included among other things the elimination of the multiple exchange rate system, the change of currency denomination from 1,000 old Cordobas per one new Cordoba. A huge devaluation followed of over 14,186 percent of the official exchange rate from C\$ 70 old Cordobas per dollar to C\$ 10 new ones per dollar. Nominal wages increased by 500 percent, thus creating an inconsistency between the target of increased real wages and real devaluation simultaneously. Full liberalization of domestic prices and a very large layoff program of public employees were other inconsistencies introduced. Table 6 contains macroeconomic indicators during Phase IV.

Table 6

| The Beginnings of Stabilization: 1988-1990 | | | |
|--|--------|----------|---------|
| Concepts | 1987 | 1988 | 1989 |
| Real GDP growth | -0.7 | -12.4 | -1.7 |
| Inflation rate annual (%) | 1347.2 | 33,603.0 | 1,689.0 |

Table 6,Continued

| The Beginnings of Stabilization: 1988-1990 | | | |
|--|--------|----------|---------|
| Inflation rate monthly | 24.9 | 62.4 | 27.2 |
| Real Wage 100=1980 | 6.8 | 4.1 | 5.1 |
| M1 growth Nominal | 580.6 | 11,035.0 | 1,771.0 |
| Real Interest rate Lending | -87.2 | -33.6 | -5.2 |
| Borrowing | -88.2 | -21.1 | 4 |
| Credit Growth | 405.6 | 16,842.0 | 3,314.0 |
| Fiscal Deficit/GDP | 16.7 | 25.5 | 20.2 |
| Current Account in US million | -719.9 | -822.9 | -538.7 |
| Exports | 299.9 | 232.7 | 310.7 |
| Imports | 837.9 | 716.6 | 547.3 |
| Unemployment % | 5.8 | 6.0 | 8.4 |
| Informal Sector as % of Total Employment | 44.0 | 46.0 | 47.6 |

Source: Central Bank of Nicaragua, Principales Indicadores 1986-1991, Esdenic, 1985.

The reform package initiated by the Nicaraguan government highlighted expenditure cuts along with some tax increases. However, the measures used to reduce the fiscal deficit failed. The budget deficit increased from 16.5 percent as a percent of GDP in 1987 to 25.5 percent in

1988. This was due to the adjustment of wages in the public sector, along with an increase of expenditures caused by the effects of Hurricane Joan that hit Nicaraguan towns in 1988, as well as increases in spending on higher-priced imports.

Of the four major targets established as objectives in this phase, only two were attained. The elimination of exchange losses of the Central Bank due to the unification of exchange rates was the first target reached, and the second was price liberalization. However, GDP fell even more, unemployment rose 8.4 percent in 1989, (World Bank, 1994) and the informal sector's share of total employment rose as the profitability of operating in the black market continued to grow. The improvement in economic performance could have been better, but there was a lack of financial discipline. Furthermore, real interest rates for lending were still negative, while real interest rates for borrowing became positive. This combination, along with the write off of debts to the productive sector, implied massive subsidies, which in turn, fueled inflationary pressures

Phase V: Consolidating Stabilization, 1990 to 1994

Besides the fiscal, monetary, and inflationary complications of the 1980s, there were also supply side constraints that made the whole experience a very difficult one. With huge trade deficits, Nicaragua could not avoid accumulating an external debt of more than seven times its GDP by the beginning of 1990 (Central Bank, 1990).

Among the supply side constraints, there were chronic shortages of foreign exchange, trade distortions induced by the embargo, source-and- use tying of bilateral foreign aid, destruction and deterioration of the capital stock of the country, multiple effects of the war, and labor market shortages. Labor supply problems included the forced diversion of prime-age workers into military service; rural to urban migration caused by destruction in the countryside and the chance to make speculative gains in parallel market activities in the cities; flight of skilled workers abroad; and the impact of real wage reductions on incentives to work in the formal sector of the economy.

With free elections in 1990, a new government took office, the U.S. trade embargo was suspended, and the contra war ended. With the Sandinista candidate losing the elections, a new president was sworn in, and the U.S. government reestablished full diplomatic and economic

relations with Nicaragua. Bilateral donors, as well as multilateral organizations such as the International Monetary Fund (IMF), the World Bank (WB), and the Interamerican Development Bank (IDB) provided badly needed financial assistance to close some of the major economic gaps that would be necessary to contain the inflationary pressure built up until then.

Once financial assistance started to flow into Nicaragua, the inflation rate dropped from 13,500 percent in 1990, to 900 percent at the end of 1991; from 1992 to 1994, the annual inflation rate averaged about 12 percent. Unemployment climbed to almost 20.3 percent of the active labor force and the informal sector share rose to almost 65.1 in 1994 (FIDEG, 1994). The growth in informal activities was associated with several factors: a drastic reduction in government jobs; the privatization of state enterprises, resulting, in turn, in layoffs of thousands of workers in the formal sector; a dramatic reduction of the armed forces; and the reintegration of more than 12,000 contra combatants into the civil society. All these factors created an excess supply of labor that had no other choice but to turn to the informal sector for employment opportunities.

There was nothing ingenious about the new government's stabilization plan that ended hyperinflation. This plan was the product of the same kind of shock therapy, with the same regressive implications that had been applied earlier by the previous government. What did make an enormous difference -- and caused the new program to work in terms of stopping the hyperinflationary process -- was the end of the war and the large foreign exchange bonanza orchestrated by the U.S.

To put it in other words, the considerable reduction in the inflation rate was the consequence of two factors. On one hand, the fiscal deficit dropped from 20.2 percent of GDP at the end of 1990 to about 13 percent of GDP at the end of 1994. On the other hand, there was an increase in the flow of financial assistance to Nicaragua, provided by the international community at large, in the form of credits and give outs, which averaged about U.S. \$450 million per year from 1990 to 1998 (Ministry of Foreign Cooperation, 1997).

It is important to reiterate that this program was free from the destructive influence of war. The new government had successfully achieved the demobilization of the contras, thus improving the conditions to stop hyperinflation. However, economic performance continued to

worsen throughout the next three years of this phase. Although there were improvements in the behavior of the inflation, current account deficits remained high. During this phase, GDP remained stagnant, but in 1994 grew a little for the first time in 10 years. Private savings continued to be highly negative and private investment failed to recover, while public investment continued to increase mostly financed by foreign assistance. Table 7 contains specific macroeconomic indicators during Phase V.

Table 7

Economic Indicators, 1990-1993

| Indicator | 1990 | 1991 | 1992 | 1993 |
|---|--------|--------|--------|--------|
| GDP Growth % | -0.3 | -0.4 | 0.0 | -0.5 |
| Inflation Rate % | 13,590 | 965.6 | 3.5 | 19.5 |
| Gross Investment (% of GDP) | 19.3 | 20.2 | 19.3 | 17.5 |
| Fiscal Deficit (% of GDP) | -20.2 | -9.6 | -10.1 | -13.0 |
| Real Wage 1980=100 | 9.9 | 6.8 | 7.4 | |
| M1/GDP | 12.5 | 9.7 | 9.1 | |
| M1 Growth (%) | 4994.9 | 858.1 | 17.5 | 8.7 |
| Current Account Deficit, Millions of US\$ | -385.2 | -534.2 | -834.0 | -644.3 |

Table 7, Continued

| Economic Indicators, 1990-1993 | | | | |
|---------------------------------|-------|-------|-------|-------|
| Indicator | 1990 | 1991 | 1992 | 1993 |
| Exports, Millions of US\$ | 332.1 | 268.1 | 223.1 | 267.0 |
| Imports, Millions of US\$ | 569.7 | 688.0 | 771.0 | 659.4 |
| Unemployment Rate | 11.1 | 14.0 | 19.94 | 23.1 |

Source: Central Bank of Nicaragua. Mitrab, and FIDEG.

In conclusion, by the end of Phase V, hyperinflation had stopped, resulting from a combination of economic policy along with large inflows of cash from the international community. However, Nicaragua's economy continued to show features to be worried about. It became evident that Nicaragua's problems were much more deeply rooted than just mere inflation. Policies and institutions were in significant need of a change to create the basis for sustainable growth. In particular, the precarious stability during this phase was mainly sustained by a large loss in international reserves, rapid growth in the informal labor market, and a strong increase in the level of open unemployment; the question then was what Nicaragua would do if international financial assistance started to fall. By this time, Nicaragua faced not a choice between

adjusting or not adjusting, but rather the problem was how to adjust.

Phase VI: Full Structural Adjustment, 1994 to Present

In May 1994, a three-year Enhanced Structural Adjustment Facility (ESAF) agreement was signed with the IMF. The ESAF was complemented by two Economic Recovery Credits from IDA, a Public Sector Utility Reform Loan from the IDB, co-financing from Japan, and additional support from other donor countries. The IMF had set up a list of pre-conditions that the Nicaraguan government had to meet. These pre-conditions included adjustments in tariffs, public services pricing, taxes, employment reductions in the public sector, and the privatization of the telecommunications company. Furthermore, the Nicaraguan government committed itself to a tight budget constraint on public enterprises to force their adjustment. Property rights needed to be restored and their enforcement upgraded to create the conditions for the development of the private sector. Table 8 contains specific macroeconomic indicators during Phase VI.

Table 8

Economic Indicators, 1994-1998

| Indicator | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|-------|-------|-------|---------|-------|
| GDP Growth % | 3.3 | 4.3 | 4.7 | 5.1 | 3.5 |
| Inflation Rate % | 12.4 | 11.1 | 12.1 | 12 | 18.0 |
| Net Foreign Reserves Million of US\$ | 74.2 | 65.2 | 144.5 | 144.2 | 138.5 |
| Fiscal Deficit (% of GDP) | -12.5 | -11.2 | -14.2 | -7.3 | -8.0 |
| Current Account Deficit As % of GDP | -48.7 | -39.7 | -35.7 | -40.3 | -44.0 |
| Exports Million of US\$ | 360 | 526 | 669 | 703 | 603 |
| Imports Million of US\$ | 784 | 897 | 1,049 | 1,371.4 | 1,400 |
| Unemployed as % of Labor Force | 20.3 | 15.9 | 15.7 | 15.1 | 13.2 |
| Informal Sector as Percentage of Total Employment | 65.1 | | 64.0 | | 66.2 |

Source: Central Bank of Nicaragua. Mitrab, and FIDEG.

During the period from 1994 to 1998, real GDP grew an average of 3.6 percent annually, following more than a decade of stagnation. Unemployment, which had risen to 23.1 percent in 1993, started to decline in 1994 and continued to decline from 1994 to 1998. At the same time, however, the informal sector continued to grow to more than 66.2 percent of total employment by the end of 1998 (FIDEG, 1998).

In conclusion, in this article, a description of the six economic phases through which Nicaragua has moved in the last 18 years was presented. The data collected have shown the complexity of attempting to establish the level of association that exists between macroeconomic performance and labor market performance when considerable structural changes are present. This is because their effects counterbalance the normal effects that one usually expects in positively associating performance and employment, or alternatively, associating economic performance with reduction in the level of unemployment. It is also possible to examine the cross-sectional data for the various years between 1980 and 1998, as is shown in Figure 3 below. Various simple regression models were estimated and plotted as in Figure 4; however, with the existing data, the meaning of such a linear regression

would be questionable in light of the structural changes that took place during the period under consideration.

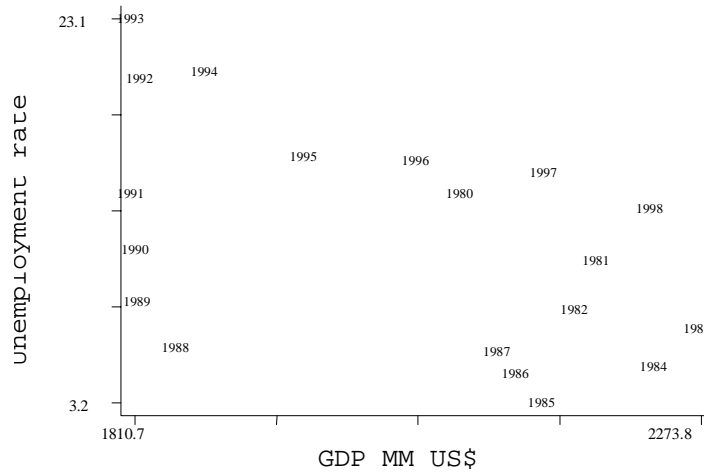


Figure 3. Raw Data: Unemployment and GDP

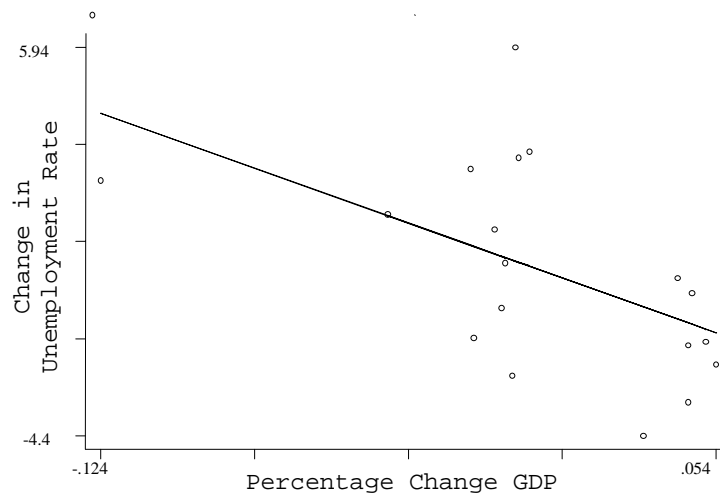


Figure 4. Regression: Change in Unemployment and Percentage Change in GDP

Nevertheless, the regression of Figure 4 seems to suggest that Okun's Law, exposted in macroeconomic text

books, as the inverse relation between change in unemployment to the growth rate of GDP would seem to hold.

Fitting a line like in Figure 4 yields the expected negative sign of the coefficient of -3.88, with standard error of (1.161), a significant "t" value at more than 95% confidence and an Adjusted R-squared of 0.38. With no other information at hand, at least, it can be concluded that there would not be grounds for rejecting the existence of such inverse relation between change in unemployment and percentage change in GDP, no matter how controversial the issue of fitting such regression may seem at this point.