Daniel L. Wisecarver

Introduction by Arnold C. Harberger

International Center for Economic Growth

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Panama: The Failure of State Activism

By Daniel L. Wisecarver

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Institute for Contemporary Studies

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PREFACE

The Institute for Contemporary Studies in 1984 published a major study on economic policy and growth, based on twelve case studies of developed and developing countries. Organized and edited by Arnold C. Harberger, the study, entitled *World Economic Growth: Case Studies of Developed and Developing Nations,* was based on an international conference held in Mexico City in April 1983. Responses to the study were so favorable that the Institute decided to develop a general program specializing in research and publications on economic and social issues in countries around the world. The new program has been organized under the name International Center for Economic Growth.

This monograph on Panama, written by Daniel Wisecarver, is one of the Center's first publications. It is also the first part of a country series, edited by Professor Harberger, which will provide the basis for a conference, following up the one in Mexico City, and ultimately for a second volume of *World Economic Growth.* Other studies in the twelve-part series will look at the economies of Bolivia, France, India, the Ivory Coast, and other countries.

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INTRODUCTION

During the period 1959–1969 Panama's growth rate (of real GDP) averaged nearly 9 percent; indeed, there was only a single year (1964) in which it fell below 6 percent. Then from 1969 to 1979 the compound growth rate fell to 4 percent per year, and after a sharp spurt in 1980–82 (incorporating the benefits of the Panama Canal Treaty of 1978) GDP stagnated. In 1985 GDP exceeded its 1982 level by only 3 percent, while population in the interim had grown by 7 percent. The growth rate of real per capita income had moved from being the highest in the Western hemisphere in the 1960s to being actually negative as the economy approached the mid-1980s.

The present paper by Daniel Wisecarver chronicles some of the key events marking the transition from boom to stagnation. It is, on the whole, a sad tale, for which the greatest responsibility falls on unfortunate policy choices within Panama rather than on external events. The change within Panama coincides with the growth of the government sector. From 1959 through 1968, government expenditures (as reported by the IMF in *International Financial Statistics*) hovered around 14–15 percent of GDP. By 1970, however, this percentage was already over 20 percent; by 1975 it was 24 percent; and by 1979, 27 percent. Then, in the wake of the bonanza provided by the Canal Treaty, it jumped to nearly a third in 1982 before falling back to about a quarter in 1984.

I write this introduction as more than a disinterested observer of the Panamanian economy. For something like a dozen years starting in the mid-1960s, I visited Panama at least once a year, serving as a consultant to its planning and budget authorities. I thus was able to observe at first hand some of the events to which Wisecarver refers and to watch as the forces working for better economic policy found themselves increasingly outweighed in the political process by those who would build policy on demagogic promises.

The great economic success of the 1960s was not based on major innovations in economic policy. Quite to the contrary, the policy environment was stable, even unobtrusive. Most of the economy's growth came from the private sector, which, on the whole, thrived. Many flaws existed in the policy fabric of those years, but they were neither pervasive in their scope nor overwhelming in their power. What we saw at that time was a stable government, whose economic policy was in sober and competent hands. This government created and maintained an environment that permitted a rather remarkable spate of economic growth to flow out from the energies of the private sector. Government policy set the stage; the private sector did most of the actual work.

I do not want to mislead readers into thinking that the policy scenario was ideal, or even close to it, in the Panama of the 1960s. I would characterize the policy struggle of those years as being between, on the one hand, a group of policymakers whose vision of their role was to set (and maintain) the stage, and, on the other hand, the "standard" melange of interest-group pressures—industrialists pushing for protection, farmers for cheaper credit, organized labor for minimum wages, etc. In dealing with these pressures, the policy team won some battles and lost some, as seems always to be the case in such circumstances. Policy flaws resulted, but they were not big enough or widespread enough to impede the dramatic growth that characterized the decade.

Things changed in the early and middle 1970s. Whereas the battle earlier had been principally between technocrats and special interest groups, now the battle was being waged between two views of government—one that saw government as providing a framework for a (hopefully) thriving private sector and the other that saw government as being itself the major engine of growth, as the major solver of problems, as the great provider. Economic policy professionals who observed the scene at this time were fully aware of the bankruptcy of this second view of government. Unhappily, it was a view that lent itself to demagoguery and that could accordingly harness much popular sentiment (and political force) in its favor.

Propelled by these forces, representatives of the second view found their way into the government of Panama during the 1970s. The battle was no longer the policy professionals within the government versus the interest groups outside; it was now the policy professionals within the government versus demagogues and populists who were also within the government.

Once again it was a case of the policy professionals winning some and losing some. Two major victories were the Banking Act of 1970 (which made Panama into the major banking and financial center of Latin America) and the oil pipeline across the isthmus (without a doubt the single most productive large investment of the 1970s). A third was the expansion of the Colon Free Zone, which gave rise to a dramatic increase in private-sector activity there. Three major reverses were i) the labor code of 1972 (which imposed great rigidity and inefficiency on the private economy), ii) the unprecedented proliferation of public employment (with the public sector accounting for more than two-thirds of all new jobs over the decade), and iii) the dramatic increase in the indebtedness of the public sector (which might not have been so serious had it been matched by productive assets, but which was devastating given the degree to which public funds were wasted).

Although the three great policy successes of the 1970s were of major magnitude, their positive impact was not sufficient to outweigh the negative forces. Dealing with demagogic promises proved more formidable a task than dealing with the pressures of private interest groups. As a result, the sweeping prosperity of the 1960s was little by little eroded. The reckoning was to a degree postponed by the accumulation of debt and further masked by the Canal Treaty bonanza following 1980. But in the end, as the mid-1980s approached, the stark reality of a stagnant economy was apparent.

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Panama: The Failure of State Activism

Panama, thanks to its singular geographical position, would appear to enjoy unusually favorable conditions for achieving sustained economic development. Its strategic location, highlighted by the Panama Canal and the international trade that passes through it, also historically has exposed the country to the world's cultures, knowledge, and progress. In this latter respect, the pervasive influence (not always unmixed) of the U.S. presence in Panama has been particularly important. Nowhere is this influence more telling than in the country's monetary system, in which the U.S. dollar is the effective medium of exchange; there is no Panamanian central bank, no Panamanian currency (except for fractional coins), and, hence, none of the Latin American malaise of inflation and successive devaluations.

This paper draws heavily on a series of studies undertaken in Panama between 1983 and 1985 and financed by USAID. Unless otherwise indicated, all data reported here, up to date through mid-November 1985, are from official publications (primarily the yearbook *PANAMA EN CIFRAS*) and sources.

With such underlying advantages, it perhaps is not surprising that Panama is the host to a major international banking center, with new and modern structures to accommodate the world's major banks, together with the complementary office and department buildings, hotels, shops, and restaurants. In addition to Canal traffic, Panama's Colon Free Zone offers significant economic and legal advantages for international and, especially, intra-regional transactions. Further, Panama offers highly advantageous legal arrangements for initiating corporations, for insurance brokerage, and for registering foreign ships to operate under the "convenience" of the Panamanian flag. And once again, at the outset of the current decade, the invaluable asset embodied in the country's geographical position was highlighted when a consortium of U.S. companies constructed a cross-isthmus oil pipeline, finally fulfilling one of the government's longer-standing plans.

Beyond all the above factors, Panama never has been included (until perhaps late 1985) by the Western press in its list of Latin American countries afflicted by military dictatorships, even though the country has been under direct and effective military rule ever since late 1968, when the National Guard ousted the previous, democratically elected, civilian president. Moreover, Panama has experienced little of the political turmoil or guerrilla activity all too common in other countries in Central and South America.

With such a list of favorable conditions, it is easy to comprehend the widespread impression that Panama somehow has managed to avoid the economic, financial, and political crises that abound in the area. Of course, some of the political luster rubbed off in September 1985, when the head of the Panamanian National Guard carried out his year-old threat to depose President Nicolas Ardito Barletta. More to the point of this paper, if Panama does nothing to reform past economic policies and thus reverse the negative tendencies observed in almost all aspects of the economy's performance, then the outward appearance of relative economic and financial health will give way to a more realistic appreciation of Panama's true economic difficulties. Inflation is the only economic malady that Panama has not suffered, and this fact is a genuinely structural phenomenon.

This paper will examine Panama's economic performance from the end of the 1960s to the mid-1980s. During the 1960s, Panama enjoyed one of the highest rates of sustained growth in the world, 8 percent per year. However, unsatisfied with the personal and especially regional distribution of economic development and its benefits, the new military government initiated a state-led strategy for development in 1969, a strategy which at first, while centering on private-sector activities for leading the growth process, emphasized centralized, professional planning to guide such activities—through incentives and state-provided infrastructure (physical, administrative, and legal)—toward areas thought to promise more potential for general economic development. Later, as more populist (if not marxist) political elements achieved a dominating influence within the Torrijos government, the planning emphasis shifted to open antagonism against the private sector and in favor of direct and generalized public-sector participation, state controls, regulation, and other mechanisms of market intervention.

The net effect of the combination and sequencing of these largely opposing strategies was a genuine explosion in the size and scope of Panama's governmental sector. And, during the 1970s, with the state having become the leading employer and investor, economic growth fell drastically and has stagnated in recent years; private-sector activity has been in recession (in per capita terms) since 1978, and aggregate growth in this latter period has depended wholly on net external transfers. Employment creation has lagged behind population growth, and although the unemployment rate has been held in check, the artifices used have run their course, and the unemployment problem threatens to explode. To finance its increased role, the state has incurred a staggering foreign debt, even by Latin standards—in 1983, only Costa Rica and Nicaragua had higher debt-to-GDP ratios. Finally, although by 1983 income distribution was apparently no worse than in 1970, it will probably deteriorate with the international-adjustment implications of future negative capital flows.

Recent Macroeconomic Performance: 1978–84

Since the end of 1980, the aggregate national accounts show that Panama's economy has stagnated, with per capita real GDP (in 1984 prices) just about the same at the end of 1984 as in 1980,

$2,036 vs. $2,038.[1] However, a clearer appreciation of the economy's recent productive performance is gained by disaggregating these accounts. In broad, simple terms it is sufficient to consider three components of GDP:

(1) An "autonomous" component, consisting of "Transport via the oil pipeline and other water-transport services" and the "Panama Canal Commission";

(2) An "official" (i.e., governmental) component, which includes "Electricity and Water," "Communications," "Producers of governmental services," and "Import duties"; and

(3) A "private" component, determined as the residual of GDP less components (1) and (2).

The logic, if not the precision, of this simple disaggregation is straightforward. First, the autonomous component's contribution to GDP has been extraordinarily variable and totally independent of the economy's other productive and service activities. Thus, the oil pipeline, which first commenced to generate revenues in 1980, entered into full production only in 1983. In just that year, the pipeline's contribution to GDP increased by $97.3 million (in 1970 prices), while the rest of economic activity fell by 4.8 percent. In contrast, while other economic activity managed to grow by 0.3 percent in 1984, real income generated by the pipeline fell by $30 million. Likewise, although the Panama Canal always has been the country's most outstanding economic (and political) resource, thanks solely to the Torrijos-Carter Canal Treaty of 1978 and the conventions of national product accounting, the Canal's contribution to measured, real GDP, after having remained virtually constant throughout the 1970s, jumped by $99.1 million in 1980, by another $12.9 million in 1981, and $12.3 million in 1982, until the effect of the world recession brought this source back down to its 1980 level in 1983 and 1984.

Both the new Canal treaty and the new oil pipeline have brought added real income to Panama by successfully exploiting its geographical position (a traditional source of Panamanian income). Nevertheless, for the purpose of examining recent economic performance or for projecting future trends, the inclusion of these autonomous increases in GDP would impart a misleadingly optimistic vision of what the country's own labor and capital resources have in fact accomplished during the past few years.

The further disaggregation into official and private-sector activities is interesting and relevant, given the major upsurge of direct state participation in the economy starting in 1969. To appreciate the importance of (if not the reasons behind) this shift in development strategy, it is enough to trace the behavior of central government expenditures (excluding debt service) relative to GDP. (See Table 2 below). In the period immediately prior to vigorous state activism, 1956–68, the annual average of this ratio was 16.3 percent. An initial period of state-led development (1969 through 1978) brought central government expenditures to 21.6 percent of GDP; further spending increases carried them to 24.4 percent of GDP by 1984. The magnitude of the surge in state activity becomes even more impressive once it is recognized that decentralized, public-sector entities not reflected in the above figures but rather still included in the "private" component, also grew vigorously over this same period, especially since 1972.

Table 1 presents the behavior of GDP and its three components in 1978–84, the second period of state activism. Several characteristics should be noted. First, although measured GDP per capita grew at an annual average rate of 2.1 percent, the autonomous component accounted for more than all of this growth. Without the two autonomous bonanzas (i.e., holding canal and pipeline revenues at their 1978 level), real GDP in 1984 would have reached a level of just $1,665.7 million, for an annual average decrease, in per capita terms, of 0.2 percent from 1978 through 1984.

Second, the "official" component grew consistently during this period (2.5 percent per capita) while the "private" component fell by 0.8 percent per capita per year. And third, it must again be emphasized that what here has been called the private component of GDP is really a mixture of the true private sector and an ample variety of state enterprises and other decentralized public-sector entities. Unfortunately, available data do not permit a precise separation of these latter activities, but further details would clearly reinforce the conclusion: Panama's true private sector has been in full recession for at least the past six years.[2]

On a sectoral basis, the same conclusion emerges for the stagnation of Panama's private-sector productive apparatus. In agriculture, for example, total real growth between 1978 and 1984 amounted to only 1.5 percent, i.e., 0.3 percent per year.

Table 1

Gross Domestic Product (GDP) and Its Components

(Millions of 1970 Dollars)

Year	GDP	Δ%	Δ% per capita*	"Autonomous" Sector	Δ%	Δ% per capita*	"Official" Sector	Δ%	Δ% per capita*	"Private" Sector	Δ%	Δ% per capita*
1978	1,450.8	–	–	74.3	–	–	278.1	–	–	1,098.4	–	–
1979	1,516.3	4.5	2.2	76.4	2.8	0.5	294.3	5.8	3.5	1,145.6	4.3	2.0
1980	1,745.8	15.1	10.9	204.8	168.1	163.9	303.0	3.0	−1.2	1,238.0	8.1	3.9
1981	1,818.8	4.2	2.0	220.1	7.5	5.3	328.3	8.3	6.1	1,270.4	2.6	0.4
1982	1,919.6	5.5	3.3	273.7	24.4	22.2	343.8	4.7	2.5	1,302.1	2.5	0.3
1983	1,926.3	0.4	−1.8	342.0	25.0	22.8	364.3	6.0	3.8	1,220.0	−6.3	−8.5
1984	1,902.6	−1.2	−3.4	311.2	−9.0	−11.2	373.5	2.5	0.3	1,217.9	−0.2	−2.4
Annual Average		4.6	2.1	–	27.0	23.8	–	5.0	2.4	–	1.7	−0.8

*Population figures, from the Ministry of Planning and Economic Policy are: 1978: 1,835,100; 1979: 1,878,100; 1980: 1,956,500; 1981: 1,999,600; 1982: 2,043,700; 1983: 2,088,600; 1984: 2,134,200. The data are preliminary for 1982, '83 and '84. The average rate of population growth between 1978 and 1984 was 2.55%; between 1970 and 1978, that rate was 2.66%.

Agriculture has been one of the focal points of state activism, with promotional efforts that include: (1) the direct state production and exportation of sugar, complete with the corresponding investments and significant annual losses; (2) the creation of state enterprises to promote mechanization (ENDEMA) and the adoption of both new products and improved seed varieties (ENASEM); (3) the provision of special credits and other forms of financial assistance through the Agricultural Development Bank, the National Bank of Panama, and the Agricultural Insurance Institute; (4) massive intervention in the marketing of agricultural produce via the Agricultural Marketing Institute, which fixes support prices for products such as rice, beans, corn, and sorghum and has absolute monopoly power over the country's decisions about the imports and exports of agricultural products; (5) research and extension services (IDIAP); and (6) an ample agrarian reform and the creation and development of collective, rural settlements. In spite of all these and other efforts, Panama's per capita agricultural output (including governmental entities) fell at the annual average rate of 2.3 percent from the end of 1978 through the end of 1984.

Similarly, manufacturing (in spite of existing protection and other forms of direct and indirect incentives) declined at the annual average rate of 0.4 percent per capita, while construction (with a massive recession in 1983 and 1984) fell by 3.5 percent per year during 1978–84, in spite of the fact that two major construction projects—the oil pipeline and the Fortuna hydroelectric project—were being carried out.

The contribution of commerce to real GDP has decreased in absolute terms since 1981, and in per capita terms at the average annual rate of 1.5 percent between 1978 and 1984. Transport and storage has fallen at the annual average rate of 3.5 percent. Within this latter sector, the Colon Free Zone has suffered, dropping by 28.1 percent in 1983 and 6.9 percent in 1984. This is one of the few sectors, if not the only one in Panama, in which the decrease in output clearly can be attributed to conditions in the external, world economy.

The only "private" sectors which have grown over this period are Community, Social, and Personal Services (4.0 percent per capita per year) and Financial Establishments, Insurance, Real

Estate, and Services for Firms (0.8 percent per capita per year). Given the emphasis attached to Panama's international banking center, it might be assumed that banking would have appeared as one of the economy's major engines of growth, but at least in terms of the national accounts, this is not the case. All of the growth in this latter sector comes from imputations of value added attributed to real estate, by far its largest component.

In contrast with the above, the Panamanian government has, according to the national accounts, performed admirably. The sector denominated "Producers of governmental services" has grown by 2.3 percent per capita per year since 1978. Even more remarkable is the measured growth of the public utilities—Electricity, Water, and Communications—which together grew by 3.4 percent per capita per year over the period, even though the "private" component of GDP fell from 76 percent of GDP in 1978 to 64 percent in 1984. In light of this latter performance, the growth of the public-sector utilities is either a surprising mystery or a direct reflection of the benefits of being permitted to act as unobstructed monopolists.

What conclusions can be drawn from this brief review of Panama's recent economic performance? First and most obvious is that without the two autonomous transfers conferred by the Torrijos-Carter Canal Treaty and the oil pipeline, real GDP per capita would have been lower in 1984 than it was in 1978. More interestingly, these bonanzas from external sources totally deflate one politically convenient myth, that Panama's current economic difficulties are due largely to external factors associated with the world recession at the end of 1981. It is true that Panama's terms of trade deteriorated by almost 17 percent between 1978 and 1983, a fact that cost the economy a total of approximately \$470 million (in 1970 prices). It is also true that the unprecedented increase in world interest rates obliged the Panamanian government to make *additional* interest payments—relative to what would have been paid had rates maintained their 1975–77 average—which summed to \$178 million between 1978 and 1983. However, from the end of 1979 through the end of 1983, the rest of the world transferred to Panama some \$731 million via the new Canal treaty and the oil pipeline. Therefore, although the world recession clearly did not bring any benefits to Panama, there is no sense in which Panama's internal recession can be attributed to external factors. The algebraic sum of the four external effects considered here comes to a total net benefit of $83 million, slightly more than $13.8 million per year, about 1 percent of 1979 GDP, for the six-year period 1978–1983.[3]

The second conclusion is that the appreciable state efforts to push the economy only managed to offset (or perhaps to mask) the recession in Panama's private sector. This accounting conclusion, which is evident in the disaggregation presented in Table 1, would be reinforced if it were possible to distinguish completely and precisely the private vs. governmental contributions to GDP. However, much of the public-sector "contribution" to growth is simply measured cost; the extent to which these costs have generated valuable output—either current or future—is open to serious doubt. On the other hand, state activism has included the imposition of a series of regulatory, tax, and other disincentives on private-sector activities. Such disincentives, together with any "crowding out" due to direct public-sector participation, go a long way toward explaining the stagnation of Panama's private sector.

In any event, one of the dominant and concrete results of the government's past development strategy is the existence of an enormous and growing external debt. How Panama faces up to this legacy will color its economic development for the foreseeable future.

Panama's Debt and Fiscal Status

In general discussions of the Latin American debt crisis, Panama only rarely has been included (along with Mexico, Brazil, Argentina, and Venezuela) as a serious case. This omission is understandable in light of the total amount of its foreign debt, but in terms of foreign debt relative to GDP, Panama has been a world leader for well over a decade. At the end of 1982, for example, Brazil's *total* foreign debt reached 25.1 percent of its GDP, Venezuela's was 17.8 percent, Argentina's 25.9 percent, and Mexico's 32.7 percent. At the same point in time, the foreign debt of just Panama's public sector was $2.97 billion, 72.2 percent of GDP.[4] In fact, in 1978 Panama had become the world's fourth leading debtor, but even as early as 1973, the public sector alone had distinguished Panama as the world's fourteenth most indebted nation. Perhaps even more worrisome, especially for the short run, is the fact that in 1982 only the Congo paid a larger fraction of GDP than did Panama for gross debt service (interest and principal).

In addition to its foreign debt, which increased to $3.39 billion in 1983 and to $3.64 billion in 1984, Panama's public sector also borrowed internally, leading to a *total* public-sector debt equal to 106 percent of GDP at the end of 1983 and 108.4 percent at the end of 1984. (Annual debt figures appear in Table 3 below).

Origin of the Public Debt. Of course, the mere size of the debt is not, in and of itself, indicative of difficulties. What must be analyzed is the debtor's capacity to meet its obligations to service the debt. To this end, consider first the historical trends in central government expenditures, revenues, and deficits from 1956 through 1984 (Table 2).

One remarkable characteristic of Panama's fiscal history is the fact that, with the exception of 1983, the central government has never registered a surplus, not even before including debt-service expenditures. The net deficit (i.e., excluding interest payments, column (8)) averaged 2.8 percent of GDP from 1956 through 1968, rose to 6.8 percent from 1969 through 1978, and then fell back to 4.4 percent during the last six years. The gross deficit (including interest, column (9)), averaged 3.5 percent, 8.6 percent, and 11.1 percent of GDP in the three respective sub-periods. It reflects how telling were the increases in world interest rates since the mid-1970s. Applied to a continually growing external debt, they far outweighed the important increases in central-government revenues in the last six years, boosting the gross deficit to an unsustainable level and thus representing one of the clearest symptoms of the government's current and genuine financial crisis.

A special case occurred in 1983, when serious effort reduced fiscal spending from 27.9 percent to 21.2 percent of GDP. Notably, the reduction was concentrated in "off-budget" items, which dropped from $348 million in 1982 to $94 million in 1983. Another source of fiscal relief in 1983 came from a reduction in interest payments, $39.8 million less than in 1982. Nevertheless, the experience of 1983 emphatically demonstrates how difficult the task of controlling Panama's chronic fiscal deficit has become. Even

Table 2

Expenditures, Revenues, and Deficits of the Central Government

(Millions of Dollars)

Year	(1) Expenditures (Excluding Debt Service)	(2) Interest Payments	(3) (1)/GDP (%)	(4) (1)+(2) / GDP (%)	(5) Tax Revenues	(6) Non-Tax Revenues	(7) (5)+(6) / GDP (%)	(8) Net Deficit / GDP =(3)−(7) (%)	(9) Gross Deficit / GDP =(4)−(7) (%)
1956	60.9	1.3	18.6	19.0	36.8	11.9	14.9	3.7	4.1
1957	53.2	1.6	14.4	14.9	37.9	12.7	13.7	0.7	1.2
1958	83.4	2.2	22.7	23.2	40.0	12.9	14.4	8.3	8.8
1959	66.6	2.4	17.0	17.6	38.0	13.6	13.1	3.9	4.5
1960	69.8	2.9	16.8	17.5	44.3	13.6	13.9	2.9	3.6
1961	83.7	3.1	18.0	18.7	47.6	14.9	13.5	4.5	5.2
1962	79.4	3.5	15.7	16.4	54.1	12.9	13.3	2.4	3.1
1963	96.2	3.9	17.2	17.9	55.0	14.1	12.3	4.9	5.6
1964	86.8	5.2	14.4	15.3	60.1	15.5	12.6	1.8	2.7
1965	89.4	5.3	13.5	14.4	69.7	16.8	13.1	0.4	1.3
1966	103.4	5.8	14.0	14.8	78.1	22.2	13.6	0.4	1.2
1967	123.7	8.2	15.4	16.5	87.2	25.5	14.1	1.3	2.4
1968	126.5	9.4	14.7	15.8	92.0	27.4	13.9	0.8	1.9
1969	200.9	9.1	21.2	22.2	104.0	29.0	14.1	7.1	8.1
1970	223.1	10.8	21.3	22.4	129.0	31.2	15.3	6.0	7.1

Table 2 (cont'd)

Expenditures, Revenues, and Deficits of the Central Government

(Millions of Dollars)

Year	(1) Expenditures (Excluding Debt Service)	(2) Interest Payments	(3) (1)/GDP (%)	(4) $\frac{(1)+(2)}{GDP}$ (%)	(5) Tax Revenues	(6) Non-Tax Revenues	(7) $\frac{(5)+(6)}{GDP}$ (%)	(8) $\frac{\text{Net Deficit}}{GDP}$ =(3)−(7) (%)	(9) $\frac{\text{Gross Deficit}}{GDP}$ =(4)−(7) (%)
1971	215.7	19.5	18.6	20.3	143.6	37.5	15.7	2.9	4.6
1972	300.0	22.3	23.1	24.8	155.4	42.5	15.2	7.9	9.6
1973	337.2	27.1	22.9	24.8	172.9	53.0	15.3	7.6	9.5
1974	432.3	43.0	23.6	25.9	210.4	54.1	14.4	9.2	11.5
1975	419.4	41.5	21.7	23.8	227.0	64.3	15.1	6.6	8.7
1976	467.7	54.4	23.3	26.1	229.6	59.1	14.4	8.9	11.7
1977	438.2	66.0	20.2	23.2	286.3	68.4	16.3	3.9	6.9
1978	502.6	95.0	20.4	24.3	326.9	69.7	16.1	4.3	8.2
1979	757.8	146.5	26.7	31.9	405.7	79.7	17.1	9.6	14.8
1980	808.6	204.7	23.8	29.9	506.9	175.0	20.1	3.7	9.8
1981	891.2	267.7	23.9	31.1	581.6	194.9	20.8	3.1	10.3
1982	1,147.6	324.8	27.9	35.8	614.6	213.7	20.1	7.8	15.7
1983	890.9	285.0	21.2	28.0	661.7	232.6	21.3	−0.1	6.7
1984	952.5	310.6	22.6	29.9	635.6	233.5	20.6	2.0	9.3

though central-government expenditures were reduced by the equivalent of 7.1 percent of GDP, its gross deficit still reached 6.7 percent of GDP, and the total debt of the the entire public sector increased by another $486.5 million. As if to confirm that the fiscal problem had not even begun to be resolved, the net deficit reappeared in 1984 (2.0 percent of GDP) and the gross deficit increased to 9.3 percent of GDP.

Table 3 shows the annual accumulation of foreign and total debt, both for the central government (since 1956) and for the entire public sector (since 1969), that has followed the continuous public-sector deficit. It is evident that the size of this debt has not been the result of any recent change in external or internal circumstances. Rather, it is the direct result of the deficitary fiscal policy that has been pursued without interruption for at least the past twenty-nine years, especially, with redoubled emphasis, from 1969 to the present. From 1956 through 1984, the total debt of the central government increased (relative to GDP) by a factor of five, from 13.6 percent of GDP to 69.5 percent. And from 1969 through 1984, the total debt of Panama's overall public sector increased from just under 30 percent of GDP to more than 108 percent. As remarkable as the total growth in public debt has been the change in its composition: in 1969 the foreign debt of the public sector was 52 percent of the total, while by 1984 the foreign component had risen to 80 percent. Thus, throughout the past three decades the Panamanian government not only has taken the luxury of going further and further into debt, but increasingly with foreign and commercial creditors

The Use of the Funds Borrowed and Panama's Capacity to Pay. Panama's external debt has become a critical problem because the moment of accounting would appear to have arrived, and no one, neither creditors nor potential donors, has been found to assume the corresponding obligations. Moreover, the state has not successfully acquired sources of income sufficient to comply with its contracted obligations. Compliance therefore requires either a significant and direct reduction in other fiscal expenditures, perhaps combined with the sale of governmental assets, or a cutback in private-sector spending imposed via increased tax collections and other obligatory transfers. To date, the Panamanian

Table 3

Public Debt

(Millions of Dollars)

Year	Central Government (1) External Debt	(2) (1)/GDP (%)	(3) Total Debt	(4) (3)/GDP (%)	Public Sector (5) External Debt	(6) (5)/GDP (%)	(7) Total Debt	(8) (7)/GDP (%)	(9) Change in Total Public-Sector Debt as Fraction of GDP (%)
1956	12.6	3.8	44.6	13.6	–	–	–	–	–
1957	13.9	3.8	45.7	12.4	–	–	–	–	–
1958	28.1	7.7	59.4	16.2	–	–	–	–	–
1959	29.2	7.4	63.6	16.2	–	–	–	–	–
1960	36.4	8.8	72.0	17.4	–	–	–	–	–
1961	39.0	8.4	86.2	18.6	–	–	–	–	–
1962	42.1	8.6	91.5	18.4	–	–	–	–	–
1963	58.0	10.4	110.1	19.7	–	–	–	–	–
1964	58.9	9.8	113.3	18.9	–	–	–	–	–
1965	62.2	9.4	117.7	17.8	–	–	–	–	–
1966	68.3	9.3	124.6	16.9	–	–	–	–	–
1967	71.3	8.9	141.6	17.7	–	–	–	–	–
1968	70.8	8.2	146.1	16.9	–	–	–	–	–
1969	104.8	11.1	220.8	23.4	147.3	15.6	281.6	29.8	–
1970	140.6	13.4	265.8	25.4	190.0	18.2	333.7	31.9	5.0

1971	173.3	15.0	313.1	27.1	240.9	20.8	398.3	34.4	5.6
1972	214.9	16.6	389.3	30.1	338.5	26.1	541.6	41.7	11.0
1973	296.9	20.2	465.8	31.7	446.3	30.3	643.7	43.1	6.9
1974	358.9	19.6	577.6	31.5	522.9	28.5	800.3	43.6	8.5
1975	427.4	22.1	710.2	36.7	644.4	33.5	1,041.3	53.9	12.5
1976	510.2	25.5	843.0	42.1	864.1	43.1	1,414.7	70.6	18.6
1977	614.0	28.3	944.6	43.5	1,259.2	58.0	1,763.3	81.2	16.1
1978	1,025.6	41.7	1,400.4	57.0	1,813.3	73.8	2,371.1	96.5	24.7
1979	1,344.0	47.3	1,748.5	61.6	2,007.6	70.7	2,615.3	92.1	8.4
1980	1,578.6	46.6	2,062.8	60.9	2,210.5	65.2	2,900.2	85.5	8.4
1981	1,764.8	47.4	2,381.3	64.0	2,483.1	66.7	3,405.7	91.5	13.6
1982	2,124.8	51.7	2,771.4	67.4	2,970.2	72.2	3,980.2	96.8	14.0
1983	2,175.1	51.7	2,894.3	68.8	3,391.5	80.6	4,466.7	106.2	11.6
1984	2,263.9	53.7	2,932.0	69.5	3,644.3	86.4	4,573.9	108.4	2.5

government has shown itself unwilling to do the one and incapable of doing the other.

State Investment. The lack of productive capacity sufficient to permit the government to meet its financial obligations is due to a combination of factors. First, the ambitious set of investment projects undertaken during the past fifteen or sixteen years has not turned out to be as profitable as had been hoped. Of course, there are always a certain number of projects which, even though clearly justified in terms of social investment criteria, are never expected to generate monetary returns sufficient to finance them. Common examples include roads and highways, hospitals and health programs, and education (especially primary and secondary). Naturally, Panama, like other countries, has devoted significant amounts of resources to such projects, and a variety of social indicators provide evidence that many of these programs were apparently successful (Table 7). Unfortunately, the Panamanian government's experience with other investments that *were* expected to yield positive net returns has not been a happy one. Perhaps the most notorious example consists of the series of sugar mills constructed during the middle 1970s, since from its initiation in 1973 the "La Victoria" Sugar Corporation (CALV) has produced net profits in only two years; in fact, only three times have annual revenues exceeded even operating costs. Other important examples of state investments that have not turned out to be profitable include the new international airport, the enormous convention center, and the fishing and fish-processing port.

State Consumption. The second factor explaining the state's lack of sufficient productive capacity is the extent to which the government in effect consumed an important fraction—a fraction which has grown over time—of its borrowed funds. Table 4 shows the annual amounts of funds loaned to the government; these amounts, less interest payments, are new net borrowed funds available for state expenditures. Column (3) shows the series of net borrowings from external creditors, while column (6) adds net borrowing from internal sources. This table emphasizes (see especially column (2)) the negative impact that rising world interest rates have had on Panama. In fact, between 1979 and 1984, fully 85

Table 4

External Public Debt

(Millions of Dollars)

Year	(1) Change in external public debt	(2) Interest paid on on external debt**	(3) Net new funds from external creditors (1) − (2)	(4) Change in total public debt	(5) Total interest payments	(6) Net new funds from all creditors (4) − (5)
1969	34.0*	4.9	29.1	74.7*	11.6	63.1
1970	42.7	5.7	37.0	52.1	13.6	38.5
1971	50.9	16.3	34.6	64.6	24.8	39.8
1972	97.6	21.7	75.9	143.3	31.0	112.3
1973	107.8	25.3	82.5	102.0	37.5	64.5
1974	76.6	48.1	28.5	156.6	59.6	97.0
1975	121.5	43.9	77.6	241.0	61.0	180.0
1976	219.7	58.1	161.6	373.4	91.3	282.1
1977	395.1	85.3	309.8	348.6	123.4	225.2
1978	554.1	115.3	438.8	607.8	158.4	449.4
1979	194.3	175.6	18.7	244.2	217.9	26.3
1980	202.9	238.1	−35.2	284.9	284.1	0.8
1981	272.6	274.6	−2.0	505.2	344.5	160.7
1982	487.1	328.6	158.5	574.5	406.8	167.7
1983	421.3	274.0	147.3	486.5	355.0	131.5
1984	252.8	263.1	−10.3	107.2	356.6	−249.4

*Central Government only.

**For the years 1969 through 1977, it is assumed that the decentralized sector paid the same average interest rate as did the Central Government.

percent of new external borrowing was utilized to pay interest on previously contracted foreign debt.

With Panamanian data it is virtually impossible to compile a reasonably precise series on total public-sector consumption expenditures. Table 5, therefore, represents an attempt to capture just a part, albeit a significant part, of state consumption: the public-sector wage bill. The figures presented in column (1) of this table underestimate not only total state consumption but also the total expenditure on public-sector employees, since they do not include social-security contributions, the thirteenth month, or any other type of fringe benefit or payment in kind. Even so, the simple public-sector wage bill has always represented an impor-

Table 5
Public-Sector Wages
(Millions of Dollars)

Year	(1) Public-Sector Wage Bill	(2) Hypothetical Wage Bill at 11% GDP	(3) "Excess" Wage Bill (1) – (2)
1968	94.8	94.8	0.0
1969	102.0	104.0	−2.0
1970	122.7	112.3	10.4
1971	142.3	126.7	15.6
1972	161.2	139.1	22.1
1973	182.7	159.1	23.6
1974	235.1	182.0	53.1
1975	263.5	202.5	61.0
1976	277.5	215.2	62.3
1977	295.5	227.7	67.8
1978	325.0	269.8	55.2
1979	389.9	308.0	81.9
1980	448.7	391.5	57.2
1981	513.4	426.7	86.7
1982	569.3	470.7	98.6
1983	634.1	481.1	153.0
1984	711.8	499.5	212.3

tant fraction of the government's current expenditures, and its rapid growth is enough by itself to account for a goodly share of the overall increase in fiscal consumption.

The growth of the public-sector wage bill between 1968 and 1984 is impressive by itself, 7.5 times in nominal terms, 3.1 times in real (1970 prices) terms. Moreover, the *excess*[5] of this expense in one single year, 1984, relative to what it would have been if the 1968 ratio of such expenditures to GDP had been maintained, is equal to almost 10 percent of all the external debt accumulated by the central government over this same time period. Even more striking is the fact that, through the end of 1984, the simple sum of all the annual amounts by which in the public-sector wage bill exceeded its 1968 relation to GDP, amounts to $1,060.8 million, or about 30 percent of the increase ($3,497.0 million) in these same sixteen years in the public sector's external debt (and close to half the increase in the central-government's foreign debt). Also, the excess of the public-sector wage bill over its 1968 ratio to GDP, represents a growing percentage of public-sector borrowings.[6]

Of course, it will be argued that the purpose of increased expenditures on public employees has been to produce governmental goods and services; if in fact the result was additional production whose value for the economy proved (or will prove) to be at least equal to its cost, then the country has not lost on this account. (On the other hand, anyone who has ever entered any public-sector office, in Panama or elsewhere, realizes that not all of what the national accounts define as contributions to GDP—the wage bill—corresponds to output whose social value is positive.) In any event, after having increased its consumption during these sixteen years by at least the amount mentioned earlier, the Panamanian government found itself facing the corresponding external debt, and from now on this debt and the contracted interest payments must be addressed.

There was an important change in the behavior of the public-sector wage bill, and hence in fiscal consumption, between the two distinct periods of state activism. During the first period, 1969 through 1978, the government brought in $1,317.9 million in net borrowed funds. At the same time, the accumulated sum of "excess" of wages paid, over and above the 1968 ratio to GDP, reached $369.1 million. Thus, in this first decade of state activism, the increase in public-sector consumption represented only by increases in the wage bill amounted to about 30 percent of the funds that the government received in net foreign borrowing.

The record is very different for the second period. From the end of 1978 through the end of 1984, Panama's public sector contracted a total of $1,831.0 million in new foreign loans while a total of $1,554.0 million was paid as interest; net borrowing summed to $277.0 million. Meanwhile, the cumulative "excess" public-sector wage bill, over and above its 1968 ratio to GDP, amounted to $699.7 million. Therefore, net external borrowing in this second sub-period was sufficient to pay for less than half of this cumulative "excess" in the public-sector wage bill.

Returns to State Assets: Non-Tax Revenues. Of course, one way to be able to afford the luxury of a strong bias toward state consumption and non-profitable (at least financially) investment initiatives is to possess other sources of income to finance debt-service obligations. For Panama, one such source, given especially the country's privileged geographic position and the Panama Canal, always has been non-tax revenues received by the central government. Such revenues can usefully, if not precisely, be associated with the returns on the government's portfolio of assets. In these terms, one simplistic debt-policy rule that would prevent the public debt from escaping the instruments of fiscal control would be to limit that debt to a level such that the corresponding annual interest payments not exceed non-tax revenues. Following such a rule would be equivalent to the self-imposed restriction that the state not transform its debt policy into a future policy of tax increases.

Table 6 compares non-tax revenues with total interest payments on the central-government's debt, from 1969 through 1984. The comparison represents another reflection of the route that Panama has persistently followed in arriving at its current financial crisis. Over the period 1969–1977, independently of the fraction of borrowed funds that were dedicated to state consumption or financially unprofitable investments, non-tax revenues were more than sufficient to cover total interest obligations, even though the margin was shrinking continually. It was as if the simplistic rule of debt-management policy were being followed, and in fact, through 1977, there were no outward indications of pending debt problems. However, since 1978 non-tax revenues have fallen well short of total interest payments, in spite of major infusions owing to the new Canal treaty (since 1980) and the oil pipeline (since 1983). In effect, starting in 1978, any semblance of a debt-control rule was discarded, and this fact, together with the growth in state consumption documented earlier, have worked together to generate Panama's debt crisis.

The Influence of World Interest Rates. The preceding discussion of the origin of Panama's debt crisis has given very little emphasis to one factor that has had an enormous impact on financial markets throughout the world, the unprecedented increases in real interest rates, especially in the 1980s. This factor has been ignored not because it has not been important in the Panamanian context. Rather, the public sector's external debt had already

Table 6
Non-Tax Revenues and Interest on Central Government Debt
(Millions of Dollars)

Year	(1) Non-Tax Revenues, Central Government	(2) Total Interest Paid on Central Government Debt	(3) (1) / (2) (%)
1969	29.0	9.1	318.7
1970	31.2	10.8	288.9
1971	37.5	19.5	192.3
1972	42.5	22.3	190.6
1973	53.0	27.1	195.6
1974	54.1	43.0	125.8
1975	64.3	41.5	154.9
1976	59.1	54.4	108.6
1977	68.4	66.0	103.6
1978	69.7	95.0	73.4
1979	79.7	146.5	54.4
1980	175.0	204.7	85.5
1981	194.9	267.7	72.8
1982	213.7	324.8	65.8
1983	232.6	285.0	81.6
1984	233.5	310.6	75.2

reached critical levels in 1978, a full year before Panama paid any noticeable increase in nominal rates and three years before there was any effective increase in real rates paid by the government.[7]

In fact, 1978 was a watershed year for Panama's external debt and fiscal policies. At the end of 1977, after nine years of experience with state activism, the public sector had accumulated an external debt equivalent to "just" 58 percent of GDP. But in spite of having attempted to emphasize productive investments over the entire period, as early as 1975 the economic authorities recognized the possibility of a pending fiscal crisis. In response, a program of fiscal austerity and increased tax revenues was introduced; even *nominal* (non-debt service) central government expenditures were cut in 1975 and 1977, and real spending in 1977 was 14 percent lower than in 1974, then increasing by only 1 percent in 1978. Real tax revenues in 1977 exceeded their 1974 level by 19 percent and increased by another 10 percent in 1978. As a result, the net deficit in 1977 and 1978, while still positive, fell to its lowest level since 1971. Also, since the economy as a whole, and particularly the financial performance of the public sector, was not yielding surpluses sufficient to comply with debt-service commitments, an external loan package was negotiated in 1978, a package which included the refinancing of $465 million of the country's obligations (somewhat more than one-third of the entire external debt as of 1977), in a $300 million package and several smaller contracts. Finally, with the termination of the Torrijos-Carter Canal Treaty negotiations, a major source of general uncertainty had been eliminated and prospects for new injections of funds from the Canal area were bouyant. All of these factors, plus the continually decreasing capability of non-tax revenues to keep up with central government interest payments, should have signaled a generalized rethinking of fiscal strategy for the future. Even with the new treaty and recently negotiated financial relief, the situation quite clearly called for a consolidation/reorganization of state activities, a halt in the growth of public debt (at least as a fraction of GDP), and a corresponding moderation of fiscal expenditures and deficits.

However, instead of accepting any of these implications of economic reality at that moment in the second half of 1978, new authorities—from another newly appointed president on down the line—embarked on major spending programs starting with an "emergency employment" plan. The net effect was that during 1978 the Panamanian government—the central government and the rest of the public sector alike—incurred unprecedented increases in net debt, both external and internal. In 1978, the external debt of the public sector increased by $554.1 million, an increase of 44 percent over its 1977 level. Continuing in 1979 real non-debt service spending increased by 31 percent, tax revenues by only 15 percent. Thus, the state entered the 1979–1984 period with its total debt magnified and proceeded to undertake the program already described of expanded (consumption) expenditures and rising deficits. The stage was thereby set for the surprise of successive increases in world interest rates.

Of course, the surprise did have a negative impact. If instead of the interest rates actually paid from 1979 through 1984, Panama could have applied the average rate of 6.7 percent paid over the 1975–78 period, the government could have saved a total of about

$406 million in the latter period. Such saving would have been significant (almost 10 percent of one year's GDP), but its impact on the public-sector's financial situation should not be exaggerated. It is enough to note that these $406 million, added to the sum of new net funds received from abroad in the same period ($277 million), would have met slightly more than one-half the sum required to pay for just the increase in the wage bill in these years ($1,317.2 million). Thus, for both their timing and the magnitude of their budgetary consequences relative to fiscal consumption, past increases in world interest rates can only be understood as having aggravated Panama's current financial crisis. In no way were they the principal cause.

In summary, Panama's current debt crisis cannot be attributed to any particular set of recent events, but rather is the simple and inevitable outcome of the persistent application of deficitary fiscal policy, initiated as early as 1956, practiced as an explicit strategy for economic development as of 1969, and carried to exaggerated and unsustainable levels of current expenditure from 1978–79 to the present. In fact, the public debt has reached a magnitude such that not even the extraordinary (one year) effort to reduce expenditures in 1983 was sufficient to impede the growth of the debt as a fraction of GDP. As Panamanians now know, resolving the debt crisis will be far more difficult than the simple expediency of changing heads of government or pretending to change systems of government.

The Results of State Activism on the Panamanian Economy

Given the upsurge in state activism that began in 1969, with its wide variety of market interventions and the public debt accumulated along the way, what has been accomplished in terms of economic growth, employment, and income distribution?

With respect to economic growth, a quick and simplistic evaluation is rather unfavorable. From 1956 through 1968, when the central government deficit, net of debt service, averaged 2.8 percent of GDP per year, the average annual rate of growth was 7.3 percent. From 1969 through 1978, with a net deficit of 6.8 percent of GDP per year, the average growth rate fell to 4.6 percent.[8] And from 1979 through 1984, with an average net deficit of 4.4 percent of GDP, the growth rate was 4.6 percent per year, including the autonomous effects of the new Canal treaty and the oil pipeline, and 2.3 percent per year without them. At best, no apparent support for heavy fiscal deficits can be found in these figures.

Sources of Growth: The 1960s and 1970s. There is even less support in the traditional "accounting" analysis of the sources of past economic growth. Available statistics in Panama, especially those for employment and wages, permit the application of this approach only for censal periods, decade to decade. Hence, one can compare the performance of the aggregate economy throughout the 1970s, largely reflecting the outcome of the first sub-period of state activism, with the performance recorded in the 1960s, before the government adopted the interventionist model. The phenomena that one would like to begin to explain are summarized as follows: In the decade of the 1960s, Panama's GDP grew at the average cumulative rate of 8.0 percent per year and employment increased by 3.44 percent per year, this latter rate exceeding both the rate of population growth (2.93 percent) and the growth of the economically active population (2.86 percent per year). In contrast, throughout the 1970s, GDP grew at the annual rate of only 4.8 percent[9] and employment at only 1.83 percent, less than total population (2.60 percent per year) but more than the economically active population (1.63 percent per year). According to the accounting approach, the dramatic reduction in growth rates could be due to a decrease in the rate of productive factor accumulation, a reduction in the rate of incorporation of technological improvements, or a worsening of the efficiency with which productive factors have been utilized.

Over the decade of the 1960s, Panama's stock of physical capital increased by 102 percent, the number of employees increased by 40 percent, while employment corrected for locational and human-capital improvements increased by 61 percent. Everything else constant, just the accumulation of capital and "corrected" labor would have led to GDP growth in the decade of between 78.3 percent (6.0 percent per year) and 82.4 percent (6.2 percent per year), depending on alternative assumptions concerning the functional distribution of income.[10] In fact, GDP increased by 108.6

percent, between 26.2 and 30.3 percentage points more than simple factor accumulation would have predicted. Of this difference, 3.4 points (spread over the entire decade) are attributable to improvements in Panama's terms of trade; the rest is the "residual." That is, in the 1960s Panama's GDP grew by between 2.1 percent and 2.4 percent per year due solely to some mixture of technological progress and improved efficiency in factor utilization.

During the decade of the 1970s, on the other hand, the stock of physical capital increased by 177.3 percent; this increase was by itself almost double the existing stock at the end of the 1960s. Employment, corrected for education and location, increased by 42.2 percent. Thus, everything else constant, factor accumulation in the 1970s would have produced a decade-long increase in GDP of between 92.1 percent and 105.2 percent. In fact, measured GDP grew by only 59.5 percent, and in this decade there is no terms-of-trade adjustment, due to a modification in the methodology for calculating the national accounts. In the 1970s, therefore, Panama achieved the rather unique distinction of having experienced a large and negative residual of between 32.6 and 45.7 percentage points (over the decade).

To explain this latter residual, the possibility of technological retrogression can be discarded. Panama adopts technological change by incorporating imported capital goods, accepting foreign technical assistance, and sending technicians and other professionals abroad for advanced training. Relative to the 1960s, there was no decrease in investment or in imports of capital goods and equipment. In fact, fiscal incentives for industry promoted such imports via special reductions/exemptions of tariffs and quota restrictions. Panama has at least had access, then, to the technological changes that have taken place in the world, and since there is no evidence of worldwide retrogression in this respect, it would not be reasonable to allege that Panama has been singled out for such affliction.

The only apparent explanation for the negative residual—and for the sharply reduced rate of growth in the 1970s—is that the economy has become much less efficient in the utilization of available resources. In simplest terms, in 1980 the economy yielded less output per unit of input than in 1970. The impact of the inefficiency has been notorious. Even in the case of zero technical change, if the economy's increased capital and labor had been utilized with the same efficiency as in the 1960s, GDP in 1980 would have been 20 to 29 percent higher than it was (putting aside the effects of the new Canal Treaty). If, in addition, technical progress and efficiency improvements had maintained the same rate of advance in the 1970s as in the 1960s, 1980's GDP could have been between 32 percent and 46 percent larger than it actually was.

What caused the dramatic drop in aggregate productivity? One external possibility was a relative reduction in world demand for Panama's exports. During the 1960s, exports of goods and services grew at 9.3 percent per year, while in the 1970s that rate fell to 5.3 percent. If the rate of the 1960s had been maintained, GDP in 1980 could have been higher than it was, but only moderately so.[11] Clearly, part of the implied lower growth was due to lower external demand for Panamanian output, but this does not explain all of it. In the 1970s Panama strengthened its import-substitution policies, especially in agriculture but also in industry, thus hampering export development. Moreover, the goods side (especially) of the export sector was subject to the same set of factors (discussed below) that served to reduce general economic efficiency. In any event, even if all of the decrease in export growth were correctly attributable to reduced external demand, this factor would account for at most one-half of the reduction that we do observe over the 1970s in the global productivity of the Panamanian economy.

The Capital/Labor Ratio. The most graphic statistical manifestation of the inefficiency generated by internal factors was the incremental capital/labor ratio in the 1970s, which on average was some five times larger than in the 1960s. Evidently, Panama's investment efforts were excessive and, much more worrisome, the economy's capacity to absorb new employment (1.83 percent per year) fell to just over half its capacity in the previous decade (3.44 percent per year). Consider the simple identity $\Delta L = (\Delta L/\Delta K) \cdot \Delta K$, which relates employment creation to the incremental labor/capital ratio ($\Delta L/\Delta K$) and to new investment (ΔK). The cause of lower employment creation clearly was not insufficient investment, as net investment in the 1970s (24 percent of GDP, on average) was double that of the 1960s. Moreover, with the high incremental capital/labor ratio of the 1970s, a net investment rate of only 12 percent of GDP, as it was in the 1960s, would have carried with it only 42,500 new jobs over the whole decade of the 1970s.

The problem in the 1970s was rather that the capital/labor ratio increased too much, implying that a significant volume of net investment simply was wasted, or had very low productivity. We know of particular cases of large investments falling in this category. The cases of sugar, the airport, the convention center, and the fish-processing plant already have been mentioned, and the list of additional examples is a long and varied one.

The plain truth is that Panama did not lack adequate investment in the 1970s. Funds were available, they were ample, they in fact were utilized and applied in actual, real, physical investment projects. The trouble is that so many of these projects yielded much less fruit than the potential that might have been achieved. Some possible explanations of this failure to maintain productivity are examined below.

Aggregate Investment. To understand the abatement of investment productivity in the 1970s, consider first the time trend of private investment. In the first half of the 1960s, gross private investment averaged 14.1 percent of GDP, 18.5 percent in the second half, 22.5 percent in the first five years of the 1970s, but then fell to 11.9 percent from 1976 through 1979. In addition to incentives given through tax provisions (such as accelerated depreciation), investment in physical capital, as well as the importation of other non-labor inputs, was favored throughout both decades via Panama's import-substitution policies. In fact, at the outset of the 1970s the government instituted a new industrial incentives law (Law 413 plus significant modifications via Law 172, enacted in August 1971), which supposedly further increased protection of domestic industries. It also embarked on a series of programs designed to promote a higher degree of self-sufficiency in agriculture. Nevertheless, most (if not all) of the increase in private investment at the beginning of the decade took the form of new office buildings and housing, a large part of that to accommodate the emergence of Panama's banking center.

Throughout the 1970s, private investment, relative to GDP, in plant, machinery, and equipment continually decreased. Thus, incentives for productive, private-sector investments apparently were dominated by other negative factors. New labor legislation, discussed below, was one of them. Furthermore, it is important to recognize that, whether as an integral component of Panama's state activism or as an open threat (depending on the swings of relative political influence between technicians/planners and populists/marxists within the Torrijos government), there was a substantial political bias against the private sector, as apparent in an extensive agricultural land reform and, later, the expulsion of a group of important businessmen from the country. More generally, the political environment contained (and maintains) significant elements against private property and private-sector activities. On net, these circumstances are consistent with the fact that an increasing portion of (reduced) private investment was dedicated to consumer durables and help to explain, at least qualitatively, the reduced yield on capital and hence lower rates of economic growth.

The topic of protection is of paramount importance for the industrial sector, at least for those currently enjoying protection. The industrial sector advanced continually through 1970: in 1950, industry represented 9.1 percent of GDP; in 1960, 13.1 percent; in 1965, 15.9 percent; and in 1970, 17.2 percent. Then, new industrial incentives and all, in 1975 it fell to 15.4 percent and in 1980 to 13.7 percent. In the 1960s, with the protection that existed, industry was the economy's growth leader, but, while the more protected sectors obviously grew at the highest rates, those sectors with little or no protection also grew more rapidly than did GDP.[12] In the 1970s, in contrast, even with nominally enhanced protection, industry lagged behind GDP.

Protection clearly has not been enough, either to please Panamanian industrialists or to explain the past pattern of industrial development. Aside from all the well-known arguments against protection generally as an instrument for economic growth, protection in Panama appears to have been peculiarly designed to heighten economic and bureaucratic inefficiency. First, until 1982–1984,[13] the dominant measure was import quotas added to a messy set of first, specific import duties, and second, certain *ad valorem* duties. These, plus a complicated set of exemptions, exonerations, and noncompliances (many quotas are systematically exceeded, according to official figures on imports), plus pervasive smuggling opportunities subject only to very selective enforcement controls, make it difficult for both the outside researcher and the potential Panamanian businessman to ascertain even nominal protection levels. Perhaps even worse, legal limits have only rarely and temporarily been placed on the discretion with which public-sector officials are permitted to grant the variety of protectionist measures potentially available, the only stipulation being that protection is to be "adequate," given the country's "necessities." The resultant incentives for graft and corruption are obvious.

With such a system, nominal protection is highly differentiated and variable, even for the same sector, and this variability was what the new industrial incentives law increased. Two separate (and unfortunately not wholly comparable) studies[14] on effective protection found that the average effective rate was about the same, approximately 70 percent, before and after Law 413. But in 1969, effective rates ranged from −8.4 percent to 290 percent, the standard deviation being 69 percentage points.[15] In 1983, the range increased, from −773 percent to 3,528 percent, the standard deviation increasing to 471 percentage points.[16] These rates are not inconsistent with the relative stagnation of industry in the 1970s (and so far in the 1980s), increased economic inefficiency and decreased aggregate economic growth. In the 1960s, with rapid industrial growth, the ratio of value added to total value of industrial production averaged 40 percent. With the sharply reduced growth of the 1970s and the new industrial incentives law, this ratio fell to an annual average of 31.5 percent.[17] The Panamanian economy has not been included in the list of beneficiaries from protectionist policies.

While private-sector investment in the 1970s was decreasing and relatively unproductive, public-sector investment increased substantially—but was also unproductive. In the 1960s public investment averaged 4.1 percent of GDP, one-fifth of the economy's total investment. In the first half of the 1970s it increased to 9.2 percent of GDP, 29 percent of total investment, and in the second half to 12.7 percent of GDP and 52 percent of the total. The composition of that investment changed dramatically as well; capital goods (as opposed to construction), which accounted for 12 percent of total public investment in the 1960s, increased to 35 percent in the 1970s, clearly reflecting state activism in its new role as direct producer of goods and services.

The results have been almost uniformly negative. La Victoria Sugar Corporation accumulated operating losses of more than $65 million from 1973 through 1982; the state cement company had lost a total of $3 million, but only after reaching a market-sharing agreement with the private-sector company and enjoying prohibitive protection against imports; Air Panamá had cumulative operating losses of $20 million from 1978 through 1982; the Civil Aeronautic Board, which did generate profits from 1973 through 1978, has registered pure operating losses since the inauguration of the new international airport; and so on. These and other ventures, all debt financed, have helped to inflate Panama's capital-labor ratio and through the combination of negative returns and positive debt-service obligations to reduce the economy's rate of growth.

Aggregate Employment. The other side of the excessive capital-labor ratio in the 1970s, certainly the more troubling side from the standpoint of future social and political stability, was the sharp decrease in the rate of job creation from 3.44 percent per year in the 1960s to just 1.83 percent in the 1970s. All of the reduction took place in the private sector where employment grew by just 0.7 percent per year, in contrast with direct, public-sector employment which increased by 7.5 percent annually throughout the decade (state employment accounted for fully 70 percent of Panama's total employment growth in the 1970s). Such a drastic change in private employment did not occur autonomously; something caused it.

That "something" was the enactment of a new labor code at the end of 1971. In general terms, the new code increased labor costs and dramatically reduced employers' flexibility to make adjustments in the face of market fluctuations. The new code, among other provisions, expanded the rights of unions and union leaders, increased the number of days for paid absences, eliminated the practical possibility of monetary incentives for productivity, and established a particularly onerous system of job stability. Perhaps even worse, the rights and duties of employees and employers were never clearly detailed. Rather, the determination in all conflicts was left to the discretion of officials in the Ministry of Labor, who have taken it as their duty to protect workers. (Indeed, the labor code explicitly states that in case of doubt the worker's position is the correct one).

Of course, the employer's cost for labor historically had exceeded the worker's base salary. It has been estimated, for example, that in 1960, with social security contributions, paid vacations, holidays, sickleave, etc., the monetary cost of labor exceeded the base wage by 30 percent, and by 1971 this margin gradually had increased to 35 percent. In 1972, the first year of the labor code, this monetary margin jumped to 54 percent and increased gradually to 60 percent in 1980. Thus, the new labor code increased the total cost of labor by about 14 percent in just its first year of existence.

These margins, important by themselves, do not incorporate the impact of what Panamanian businessmen themselves single out as the most negative aspect of the new code: job stability provisions. These provisions increase the cost of firing a worker to such prohibitive levels that the wage bill for a Panamanian firm has come to be treated as an almost completely fixed cost.

Two separate and independent studies have attempted to estimate the monetary equivalent of the cost imposed on the employer by Panama's version of job stability. The first utilized a detailed, microeconomic survey of firms in all sectors subject to labor-code provisions.[18] It was found that on average, for all sectors, employers considered job stability to be the equivalent of an additional cost of 30 percent on top of the total, direct monetary cost of an employee. For industry, the survey indicated that this additional cost amounted to 47 percent. The second study, using econometric methods, concentrated on just the industrial sector and came to the identical conclusion.[19] Using aggregate, official data, it found that industrial entrepreneurs have acted as if job stability regulations were a tax of 45 percent on the total monetary cost of employment.

The new labor code clearly erected formidable disincentives to private-sector employment. If, in index form, the total monetary cost of a worker was 135 in 1971, with the new code in 1972 the total cost jumped to 200—an increase of 48 percent—and from there gradually increased to 208 by 1980. In the industrial sector, the index jumped from 135 to 223, 65 percent in one year. With such disincentives, any mystery about the lack of job creation in the private sector quickly disappears. The implications for economic efficiency are likewise direct. In the econometric study referred to earlier, it was estimated that in the industrial sector, the immediate impact of job security regulations was to reduce overall productivity by 1 percent per year, a total of 11 percent from 1972 through 1980.

Measuring the magnitude of the effect of the code on private-sector employment would require information about the elasticities of demand for and supply of labor in the affected sectors, information that is not available. However, reasonable estimates can be established. First, studies of specific production processes and data on the functional distribution of income are broadly consistent with the hypothesis that Panama's aggregate production function is Cobb-Douglas, with labor's share equal to 0.5. Using this hypothesis, the substitution-effect-only elasticity of demand for labor would be −0.5. On the supply side, in spite of the enormous increase in the cost of labor for employers, existing data on real wages show very little change from 1970 to 1980, which would be consistent with the hypothesis that labor supply to organized sectors is perfectly elastic. As an alternative, it might be supposed that this supply elasticity could be as low as 1.0.

With these parameters and the fact that the new labor code created an *additional* gap of 54 percent between the cost of employment and base salary between 1971 and 1980 (all of which went into the employer's cost if labor supply was perfectly elastic, which is the most likely case), it can be concluded that without these new distortions private-sector employment in 1980 would have been between 18 and 27 percent higher than it was, *for the same level of output that was achieved in 1980*. In other words, without the new labor code there would have been, at the least, between 70,000 and 105,000 more private-sector jobs, and private-sector employment would have grown at annual rates between 2.4 percent and 3.1 percent rather than the 0.7 percent that was registered. These estimates of the negative employment effect of the labor code might appear to be exaggerated but, as will be outlined below, they are not.

Government Policies to Combat Unemployment. Given the above discussion, it is astounding to note that measured, open unemployment fell from 10 percent in 1970 to 8.2 percent in 1980. The explanation for this apparent anomaly lies in the overall employment strategy followed by the state throughout the decade. First, the state directly contracted more than 59,000 employees during the decade, more than doubling public employment in 1970. Nevertheless, the economy's total employment grew at the annual rate of just 1.83 percent, while the population ten-years-old and older grew at 2.96 percent. How, then, did unemployment fall?

The statistical answer is that the economically active population grew at only 1.63 percent per year, because the labor-force participation rate fell by more than six percentage points between 1970 and 1980. It turns out that almost all of this reduction occurred in two age groups: the young, aged ten to twenty-four; and the old, aged fifty-five and over, both of whose participation rates fell by 9.7 percentage points. The rate for the rest of the population was virtually constant, falling less than one point. The explanation for this distribution is very direct. Starting early in the decade, the government embarked on a major schooling program, greatly expanding the coverage of the educational system and retention within the system. And at the other end of the age scale, the government lowered the minimum age for retirement to fifty-five years.

Although these three measures—direct employment, expanded schooling, reduced retirement age—did "control" the unemployment rate, they did so by disguising and postponing, not resolving, the underlying problem of generating productive employment in the economy. To appreciate the magnitude of this problem, it is useful to review population and employment figures. First, recall that while in the decade of the 1960s the economy generated 120,000 new jobs, in the 1970s this figure fell to just 84,000, 59,000 in the public sector and only 25,000 in the private sector. Further, in the latter decade *there was a total of approximately 70,000 potential workers who either did not yet enter the labor force or who left it at an earlier age.* (Thus, the above estimates of the employment effects of the labor code are not unreasonable). For the first four years of the 1980s, if the economically active population grew at *only* the same rate as the general population (given the population's age structure, it undoubtedly grew more rapidly), there would have been approximately 60,000 new entrants to the labor force who were looking for jobs. The state continued to employ an important fraction of them (almost 28,000 between 1980 and 1984), but since private-sector GDP has fallen over these past four years, it is evident that open unemployment must have worsened. And for the future, it has been conservatively estimated that between 1985 and the year 2000, a *minimum* of 25,000 persons per year will enter the labor force seeking remunerative employment. The three policy palliatives that have been relied upon during the past fourteen years, palliatives that appear to have run their course, will quickly prove to be insufficient.

Worse still, these three measures have generated and continue to accumulate important costs, many of which have yet to appear, much less be paid. Clearly, all three have expanded fiscal expenditures and, hence, the public debt, in and of itself a time bomb that appears ready to go off. In addition, each separately contains its own potential time bomb. First, not only is it unfeasible to continue expanding public employment at the rates of recent years, but also any responsible projection of future fiscal realities will conclude that the government must soon become a net "supplier" of labor (i.e., must reduce the number of public jobs), thus adding to the mass of unemployment. Second, thanks to the schooling program, the vast majority of new labor-force entrants in future years will come equipped with more years of education and diplomas than did their predecessors. They also will come with corresponding aspirations as to salary and job satisfaction, but unless there is a substantial change from the economy's past trends they will face the double frustration of difficulty in finding steady employment and wages below expectations. The potential for social unrest is evident. Third, simple projections of promised retirement benefits and legal contributions to the social security system indicate that the system will, under current provisions, be bankrupt before the end of the current decade, independent of any "capital losses" that Panama's social security system may have suffered to date. In short, labor policy in Panama, within the overall context of state activism, already has imposed important costs on the entire economy. Without promptly undertaking genuine, difficult, and fundamental reforms, these costs may well reach exorbitant levels.

The Distribution of Income. One of the most prominent underlying goals of the development strategy of state activism was to improve Panama's network of social services and the distribution of income, to generate mechanisms through which a wider spectrum of the entire population could participate in the benefits of economic development. The outcome to date with respect to these goals is extremely difficult to measure and evaluate. On the one hand, summary data presented in Table 7 are indicative of significant progress in the provision of social services, and hence the accumulation of human capital. Advances in the availability of general health facilities, safe water, and educational attainment have been especially significant. On the other hand,

Table 7
Summary Social Indicators

	Panama		Middle-Income Latin American Countries
	1970	1980	1980
Life expectancy at birth	66	71	65
Infant mortality rate (per 1,000)	49	21	63
Access to safe water (% of pop.)	69	85	65
Access to excreta disposal (% of pop.)	78	89	55
Population per physician	1,580	980	1,776
Population per nurse	550	420	1,012
Population per hospital bed	330	250	477
Primary school enrollment (%)	106	113	105
Secondary school enrollment (%)	39	65	40
Adult literacy rate	78	85	80

preliminary results of an extensive study of critical poverty, near completion in mid-1985,[20] seemed to indicate that Panama's income distribution at least had not deteriorated between 1970 and 1983. Given reasonable hyphotheses as to the monetary equivalent of health, education, and other social programs, that distribution may have improved to a certain extent.

However, prospects even for maintaining progress made in this area are not optimistic due to the fact that, as part of the legacy of sixteen years of state activism, the entire economy must undergo a significant and painful process of international adjustment in the immediate and medium-term future.[21] That adjustment must take place through an increase in Panama's real exchange rate, defined as the ratio of (an index of) the prices of tradable goods and services to that of non-tradables, primarily services and, hence, wages. Given that the vast majority of the prices of traded goods are exogenous to Panama, the only manner in which the real exchange rate can be adjusted is through changes in domestic wages.

All through the past years of successive increases in net external debt, Panama has been loaned sufficient resources to enable the entire economy to increase its expenditures on non-tradable goods, which has led to increases in their prices and in turn to increases in Panamanian wages and successive decreases in the real exchange rate. Now, assuming that the country will be forced to pay more in debt-service obligations than it receives in new loans, the net flow of capital will be reversed, resources available for expenditures on non-tradables will decrease, and, accordingly, their prices must fall to eliminate the excess supply that would otherwise appear. This means, in turn, that nominal wages in Panama must fall (at least relative to their otherwise normal trend), permitting the real exchange rate to rise to the extent necessary to maintain equilibrium in Panama's external accounts. If net capital flows do in fact turn negative, the only alternative to a decrease in wages is an even greater increase in the rate of unemployment. Either or both will directly worsen the distribution of income.

Conclusion

Within the context of economic malaise described above, two separate activities stand out as shining examples of dynamic development throughout the 1970s: the Colon Free Zone and Panama's international banking center. The Colon Free Zone was an important source of investment, employment, exports, and growth throughout the decade, so much so that the public enterprise that manages the Zone earned profits every year from 1973 through 1982, after paying the interest on its debt. The Zone's success was due not only to the sustained demand for its services on the part of neighboring countries, but also to the fact that the state allowed the Zone to grow, granting tax benefits and exemptions and not applying all aspects of the new labor code. The sharp decline that the Free Zone has suffered in the past two or three years is directly and exclusively due to the economic/financial crises that have affected its client countries.

Starting with the new banking law in 1970, this sector increased from one with twenty-three banks and $1 billion in deposits to one of the world's twenty most important centers, with more than 120 banks and deposits of $50 billion in 1982.[22] Throughout the decade, Panama benefited from more employment, more professional training, more internal expenditures (the construction boom in the early 1970s), more tax revenues, and more ample and agile access to financing in world capital markets. Of course, the banking center thrived in part due to Panama's geographical location and its dollar economy, but equally importantly the state permitted banking to grow without erecting regulatory and tax obstacles. Moreover, although bank employees benefit from the job-security provisions of the labor code, no bank-employees union has ever been recognized by the government, and, hence, labor legislation has not been as harmful to this sector as it has to others.

The clear success of these two sectors, along with Panama's traditional ability to take advantage of its geographical position—the Canal, the oil pipeline—and provide a relatively regulation-free setting for certain activities—convenience registration of ships, the formation of corporations—all serve to emphasize even more the futility of the state activism that has been relentlessly applied to the Panamanian economy itself. With this strategy, economic growth fell by half in the 1970s and has effectively stagnated in the 1980s. The rate of employment creation also fell by half, and the subterfuges utilized to achieve even that result have set the stage for a magnified employment crisis in the near future. And finally, as Panama begins to repay the debt bequeathed by this strategy, the distribution of income will, through reduced wages or increased unemployment or both, undoubtedly deteriorate.

Of course, the descriptive analysis presented in this paper glosses over a myriad of explanations behind specific events and policies that have taken place in Panama since 1968. In particular, there has been no attempt to explore the impacts and intricacies of the relative (and alternating) strengths of opposing political/ideological forces, or their global strategies, or their specific goals. Surely, a more detailed exploration of these underlying phenomena would provide a clearer understanding of the evolution of the country's economic policy and development. Nevertheless, as interesting, explanatory, and complex as these topics undoubtedly are, from the standpoint of the Panamanian economy as a whole, the motives and forces that led to the set of policies followed through mid-1985 now matter very little.

What does matter is that the economy is stagnant, its external debt has reached staggering proportions, and the latent unemployment problem is growing under the weight of the country's incapability to generate remunerative employments. The combination of these characteristics has already begun to erode some of the progress achieved in social services. Without an appreciable change in the direction and quality of economic policies in general, the very fabric of the country's social-services network will begin to unravel. In sum, taken as an entire set, the policies of state activism in Panama have failed.

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1. This is as good a point as any to indicate the first of a series of serious statistical discrepancies. In Panama's national accounting procedures, value added by the oil pipeline (as will be seen shortly, a very important component of GDP in recent years) is deflated by a composite index of oil shipping rates, an index whose numerical value is well below that of the GDP deflator and whose validity for calculating the pipeline's real value added is widely questioned. Further, data provided to (or anyway used by) the IMF (1985) includes pipeline value added deflated by the GDP deflator, yielding a contribution to GDP from this source that is more than a third lower than in official publications. With IMF data, the decrease in real GDP between 1982 and 1984 was more pronounced, as was the fall in per capita GDP between 1980 ($2,026) and 1984 ($1,988).

To maintain consistency of sources, in this paper the official Panamanian data will be reported. The reader should be aware that the potential for error is significant.

2. For example, total real revenues of just 8 public enterprises (the Victoria Sugar Corporation, Bayano Cement, the Colon Free Zone company, Contadora Panama, the National Port Authority, the Civil Aeronautics Directorate, Air Panamá, and the Chiriquí Citrics Company) increased (in real terms) by $20.4 million in 1979 and by $34. 3 million in 1980. If just these

increases were excluded from the private component and incorporated into the official, then it would be seen that the latter has grown at the average annual rate of 4.6 percent per capita while the (still partially statized) private component fell at the annual rate of 1.4 percent per capita.

3. Had countries such as Brazil, Chile, and Uruguay experienced similar influences from the world economy in the early 1980s, the topic of economic crisis in Latin America might well never have arisen.

4. At the end of 1982 only 12 countries in the world had foreign-debt to GDP ratios higher than Panama's: Mali, Congo, Yemen (PRD), Zambia, Zaire, Guinea-Bissau, Nicaragua, Costa Rica, Guyana, and Mauritania. (All debt figures, except those from Panama, were taken from World Debt Tables, 1983 84, The World Bank).

5. The word "excess" in this context is not meant to suggest a criterion for reasonable or responsible behavior of the public-sector wage bill; there can be no set criterion in isolation from the rest of any country's economic environment and or its strategy for development.

6. Of course, the benchmark comparison figure of 11 percent is just one arbitrary measure of what public-sector wages might reasonably have been over the period. Another comparison, surely more unreasonable as even a potential criterion, would arise from noting that the sum of the annnual increases in the nominal wage bill, relative to its 1968 level, was $3,857.5 million, more than 110 percent of the increase (also in nominal terms) in the public-sector's foreign debt. However unreasonable this latter comparison might well be, it is a fact that these wage-bill increases were and continue to be a growing portion of fiscal *consumption* expenditures.

7. Nasser Saidi, "Public Debt, Expenditure, and Revenue. Panama 1956 1983: Assessment and Policy Recommendations," Panama's Ministry of Planning and Economic Policy, Economic Policy Studies, 1984.

8. It is necessary to point out another complication faced by users of national accounts data. In 1982, a new methodology for determining GDP was instituted and was applied to recalculate GDP only from 1970 on. Starting in 1982, on the other hand, only the new methodology has been applied. Thus, we have only the old methodology prior to 1970, only the new methodology from 1982 onward and both methodologies for 1970 1981 In this paper, unless otherwise specified, the new methodology is utilized when it is available.

9. For the decade to decade comparison, the effects of the new Canal Treaty on 1980's GDP were eliminated. Much of this and the following sections summarizes the findings of Pedro Pou, "Empleo, Inversion y Crecimiento Economico en Panama durante la decada de los setenta," Panama's Ministry of Planning and Economic Policy, Economic Policy Studies, 1984.

10. The lower limit is obtained by assuming that labor's share of national income was 55 percent, while the upper limit assumes that share was 45 percent.

11. If the additional exports (by maintaining a growth rate of 9.3 percent rather than 5.3 percent per year) could have been generated without detracting from any other component, the 1980 level of GDP would have been 16 percent above that actually achieved. But of course the assumption of no detraction from other components is grossly implausible.

12. See John Panzer, "La evolucion del sector industrial panameño y su relacion con la proteccion," Panama's Ministry of Planning and Economic Policy, Economic Policy Studies, 1984.

13. Most of the quotas were finally eliminated during these years, in part as a result of the World Bank's Structural Adjustment Program (SAP). The World Bank country team was proud of progress made on two fronts First, SAP called for a reduction in fiscal expenditures, which did in fact occur in 1983 (but only relative to the unsustainable level of spending reached in 1982; review Table 2). The other SAP condition was the elimination of quotas, if necessary replacing them with tariffs. Although by mid-1985 information was too scant to permit definitive measurements, preliminary estimates indicated that for those goods whose quotas were

eliminated, the tariffs that replaced them raised nominal protection by, on average, some 70 percent.

14. For an excellent critical comparison and summary, see Andrea Butelmann, "Estudios sobre Políticas Comerciales en Panamá: Resumen y Análisis," Panama's Ministry of Planning and Economic Policy, Economic Policy Studies, 1985.

15. Alan I. Rapaport, "The Protective Policies of Panama: An Empirical Study," Ph.D. dissertation, University of Chicago, 1975.

16. Center for Development Technology, Inc., "La protección efectiva en algunas industrias de la República de Panamá," paper prepared under the World Bank's Technical Assistance Loan to Panama, 1984.

17. Panzer, op. cit.

18. Dean Spinanger, "The Labor Market in Panama: An Analysis of the Employment Impact of the Labor Code," Panama's Ministry of Planning and Economic Policy, Economic Policy Studies, 1984.

19. Andrea Butelmann and Pedro Videla, "El Código de Trabajo y sus Efectos sobre Salarios y Empleo," Panama's Ministry of Planning and Economic Policy, Economic Policy Studies, 1985.

20. This study, financed by the UNDP, was carried out by Professor Gian Sahota of Vanderbilt University.

21. Arnold C. Harberger, "Panama's Fiscal and International Debt Crises: One Problem or Two?" Panama's Ministry of Planning and Economic Policy, Economic Policy Studies, 1984.

22. For a complete and detailed analysis of this sector, see Donald Lessard and Adrian Tschoegl, "Panama's International Banking Center," Panama's Ministry of Planning and Economic Policy, Economic Policy Studies, 1984.