PUERTO RICO:
INSIGHTS INTO ECONOMIC DEVELOPMENT POLICY
Volume I
The Imperative to Settle the Status Question

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ABSTRACT

Insights into economic development are indeed revealed. Puerto Rico shows clearly that economic development is a political process. This volume contains five submissions to the Bipartisan Congressional Task Force on Economic Growth in Puerto Rico. Two emphatically argue the imperative to settle the status question of Puerto Rico. It further includes previous research works by Fernando LeFort titled "Is Puerto Rico Converging to the United States?", J. Tomas Hexner, et. al "Statehood: A Pre-Condition to Economic Growth", and "Puerto Rico and Section 936: A Costly Dependence" by J. Tomas Hexner and Glenn Jenkins. The main reason for Puerto Rico's quite unrecognized slow development and its present financial and economic crisis was the non-resolution of its political status. Puerto Rico diverged rather than converged with the 50 states, and after consideration of the conventional variables, its' not being a state appeared to be the main reason. Two immediate actions are required. First, significant public investment must begin immediately. Second, a level playing field from Washington: Puerto Rico should be treated like any state for all programs (for example, the earned income tax credit). Also Puerto Rico should be included in the enterprise zone legislation. Further, subsidized tax incentives, which are, in essence, corporate welfare, cannot be a prime building block for economic development. The economy needs to be reviewed for missed opportunities such as tourism, and attention should be focused on these developments. Finally, investors need reliable data for their decisions, and that has been sorely lacking.

Key Words: Puerto Rico, Section 936, PROMESA, VAT
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Puerto Rico: Insights into Economic Development
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Introduction

Dr. Hernan Padilla, former mayor of San Juan, Puerto Rico, while assessing Puerto Rico's current economic crisis, echoed the famous words of Supreme Court Justice Potter Stewart: "I know it when I see it." Who could not agree with Dr. Padilla's analytical methodology? An economic debacle: I know it when I see it.

My experience has given me a bird's eye view of the situation in Puerto Rico and a keen understanding of the quite massive mess Puerto Rico presently confronts. Currently, at Queens University I am the Director of the John Deutsch International Program on Investment Appraisal and Risk Analysis where participants learn the nitty gritty of project analysis. I was the Director of the Harvard Law School International Tax Program. In these positions I pride myself on involving people who have been in the trenches, like James Owens, a former Deputy Commissioner of the Internal Revenue Service, so that students begin to understand that tax administration is an integral part of policy formulation. As a Harvard International Institute of Development Fellow I assisted the government of Indonesia in installing a successful VAT. As a consultant to the Puerto Rico Department of the Treasury I favored a sales tax over a VAT, because a VAT was, and remains, inappropriate for Puerto Rico. The lesson: what works in one place may not succeed in another, the way wheat seed for Iowa fails when planted in Nebraska.

My involvement with Puerto Rico began in 1993 when the Puerto Rican Task Force on Tax Reform requested my assessment of the Puerto Rican economy. The prevailing view at that time was that Puerto Rico was a model of economic development. On the contrary, I found the economy to be stagnant and, compared to the 50 states, in sad shape. I studied all the variables in depth and finally concluded that the territorial status of Puerto Rico, a political variable (not a traditional economic variable), was the primary reason for the poor performance.

At that time I requested that Fernando LeFort, a student of Harvard Professor Robert Barro, econometrically analyze Puerto Rico's development. He found that Puerto Rico was not catching up (converging) with even the poorest states of the U.S. and, in fact, diverging. The primary, if not only, explanation was its political status.

As time passed and the issue of Puerto Rico's territorial status ebbed and flowed in the national consciousness, I maintained an interest in the island's economic situation and watched the recent decline with concern, though not necessarily surprise. On June 30, 2016, the "Puerto Rico Oversight, Management, and Economic Stability Act," or "PROMESA," was passed to search for solutions and my interest was seriously reactivated. I examined the situation and essentially found that the more things change the more they stay the same. Puerto Rico's economy now demanded congressional attention and the primary reason was still political status exacerbated, of course, by the Government of Puerto Rico's improbably rigid and irresponsible fiscal and economic policy formulation.

The Bipartisan Congressional Task Force on Economic Growth in Puerto Rico created by PROMESA invited guidance to assist them in jumpstarting Puerto Rico's economy. In preparing my submission it became clear that the economic situation in 2016 presented an excellent case for those who study economic development. What emerges in spades is that political realities cannot be divorced from economic analysis and sustainable growth strategies.

What would change Puerto Rico and what would improve the economic situation?

First, what is most critical is confronting the status issue and understanding how economic development and politics are interrelated and, in fact, inextricable. The status issue must be confronted now. Investigation of how public investment continues is required forthwith. The unlevel field in terms of federal transfers must be acknowledged, and the door needs to be opened for domestic private investment, which is, indeed, the best weapon against poverty. Puerto Rico must take advantage of missed investment opportunities. Finally, given the current debacle investors must know that no exceptions are made in the regulation of the banking system.

My desire in this document is to reinforce the opinion of "I know it when I see it." After perusing the following documents, the reader should come away with the same conclusion.

A. Submission to Congressional Task Force A tool for analyzing Puerto Rico: "I know it when I see it."

By:
Hernan Padilla, MD

Supreme Court Justice Potter Stewart said in a now famous decision: "I know it when I see it." The purpose of my submission to the Congressional Task Force is to show why Justice Stewart's quote is the most appropriate one to describe the situation in Puerto Rico, and why it is incumbent on the Congressional Task Force to recognize the magnitude of the crisis and to respond with boldness.

Expert opinions and mounds of data rationalizing key initiatives designed to undo the fiscal and economic crisis will have flooded the Congressional Task Force. I try to will articulate the solution, the interim steps, the hazards, and the irrationality leading to the current mess.

The members of the Task Force have been elected to represent their constituents. Now they must adopt the residents of Puerto Rico as their constituents. Listen to Puerto Ricans and act on their behalf. The members of the Task Force bear the responsibility of transforming this un-American situation so that the US Citizens who reside in Puerto Rico can act and speak for themselves. The constituents who elected the Task Force members would vote for that transformation, that upholding of American representation.

We are in the 21st century but Puerto Rico remains mired in an economic, political, and human rights tangle. Real economic stagnation was cleverly obscured and has prevailed in Puerto Rico for decades. Statehood is the 21st century solution.

The 2012 vote indicated dissatisfaction with the current status situation and favored statehood, and thus an avenue for alleviating the political labyrinth was opened. Yet nothing more has been done. Congress needs to listen to this voice of self-determination and take action.

This lack of representation is a clear human rights issue. Residents of the island are second-class citizens, and they need only hop on any airline to Salt Lake City to become first class citizens.

Puerto Ricans in the foxholes must obey their commander in chief, but they cannot vote for him. Payroll taxes are deducted, and they confront taxation without representation.

At last, the territory of Puerto Rico has become a problem that will not go away. Politicians and lobbyists of all stripes still cry to put the status issue on hold until the "problem" is dealt with. My submission to the Congressional Task Force is that status is, and has been, the problem, and until Puerto Rico is granted a clear path to statehood the mess will continue and probably worsen.

The term "status neutral" was coined to avoid dealing with the local politics of Puerto Rico. Even the eminent Brookings Institution published a "status neutral" volume on Puerto Rico. "Don't ask; don't tell" is no way to formulate economic policy.

For the US citizens of Puerto Rico statehood is needed for human rights and the political voice that all other US citizens in the 50 states have. Statehood is the only option for sustainable economic growth in the 21st century. Statehood brings certainty, permanence, stability and accountability that are pre-requisites for sustainable economic development. Puerto Rico's current colonial situation precludes their existence.

Sustainable economic growth must be home grown; it cannot be imported, cannot be built on temporary tax gimmicks and cannot rely on the whims of rating agencies.

Until the U.S. Congress welcomes Puerto Rico as the 51st state, the economic and social situation will not change. There are many successful Puerto Rican entrepreneurs, but they are in Orlando or Austin or Holyoke or Baltimore. Local entrepreneurs will not add to the risk of innovation, of starting a business, by investing in a whimsical and over-regulated market. Puerto Rican entrepreneurs have been educated to take their ideas and exploit them on the mainland. Statehood would generate more and longer-term investment.

The economic concept should be clear. The bulk of the fuel for sustainable economic growth must come from domestic investors. Puerto Rico must wake up to the realities of the

21^{st} Century. Puerto Rico has many advantages, and the greatest one is the opportunity of statehood, and that window of opportunity must be captured forthwith.

The members of the Congressional Task Force should not yield to the temptation of temporary relief, because in this case the patient will return in no time flat. The Congressional Task Force must use its unusual power to widen the opening, and it must be cautious not to support initiates that might obstruct the path to statehood.

There will be a transition period before Puerto Rico can exercise the full powers of statehood. First, the membership in the House must be increased before Puerto Rico can cast a vote. Second, Puerto Rico will need to be integrated fully into the domestic internal revenue code. Third, the "special" territorial clauses in legislation will need to be redrafted and then win congressional approval. In addition, a careful scrutiny of the rules and regulations will be necessary so that Puerto Rico can function like a state.

However, the Task Force can advocate that Congress pass legislation which will have an immediate impact. The short run goal of the Task Force: level the playing field. Puerto Rico deserves laws or provisions identical to those of the rest of the United States.

Puerto Rico needs immediate actions. I would recommend 1) qualifying Puerto Rico for the earned income tax credit, 2) providing ample funds for the island's dilapidated infrastructure, and 3) encouraging a focus on, and allocating funds for, tourism. Immediate investment in infrastructure is a must as much for humanitarian as for economic reasons. Americans should not live without water or power. Americans should have job opportunities, and infrastructure investment fits that bill.

Then a 21^{st} century focus on tourism is a must. The beautiful island has great weather and countless non-stop flights. Why has tourism in Hawaii boomed while tourism in Puerto Rico remained dormant? Tourism would provide an excellent opportunity, and Puerto Rico cannot afford to neglect any opportunities. PROMESA's Revitalization Coordinator must be given the funds and expertise to propel Puerto Rico into a tourism winner.

Finally, the Task Force must ensure that the failed policies of the past are not reinstituted. Section 936 of the tax code has fans who profited beyond peanuts and crackerjacks. 936 benefitted lobbyists and some Fortune 500 companies, at an immense cost to the U.S. taxpayer and little to generate either jobs or economic growth for Puerto Rico economy.

Justice Stewart's observation hits the bull's-eye where Puerto Rico is concerned. Even with 936 Puerto Rico did anything but catch up to the 50 states. In the same period without special benefits such as 936 Korea, and even Mainland China, became economic powerhouses. The Puerto Rican strategists, their rigid views, and 20-20 hindsight undercut the emergence of strong Puerto Rican foundations for growth, retarding the expansion of Puerto Rican based business and the development of a skilled labor force.

In conclusion this submission has a simple goal, and that is convincing the Congressional Task Force that statehood now is the only answer. The "status issue" cannot be put on the back burner. The mission of the Task Force is economic growth. The resolution and solution of the status issue would open the door to Puerto Rico's economic growth!

B. Submission to Bipartisan Congressional Task Force on Economic Growth in Puerto Rico

By:
Glenn P. Jenkins,

The Members of the Task Force all have a thorough knowledge of the current financial and economic situation in Puerto Rico. My submission intends to add a historical perspective to this knowledge. The crystal ball of most academic economists is at best foggy. However, I take pride in asserting that in the case of Puerto Rico my analysis was correct in the 1990's and remain correct today.

In the early 1990's the Puerto Rican Department of Treasury requested that I lend my expertise in tax reform and economic growth. I began this assignment with a macro-economic analysis. I had been under the impression that Puerto Rico's economy had been performing well, since, in fact, the popular press often cited Puerto Rico as a model of economic development.

Much to my surprise I found the Puerto Rican economy to be in a shambles. Unemployment was roughly twice that of the mainland, private investment was relatively dormant, and only the public sector was displaying growth. Rather than catching up with the 50 states Puerto Rico's per capita income was falling farther and farther behind.

I dug deeper and produced with two colleagues "Puerto Rican Statehood: a Precondition to Sound Economic Growth" which is attached to the submission and which with all due deference I recommend to the Members and staff of the task force.

In essence, the analysis showed that the post- World War II operation bootstrap plan for development had persisted. Special tax treatment and investment from the mainland were to be the prime drivers of economic growth. The underlying assumption was that Puerto Rico had to catch up to qualify for statehood.

However, the conditions had changed vastly. Puerto Rico no longer had the advantage of low wages. Mainland investors saw Puerto Rico as one of many "foreign investment" opportunities. The investors were not comparing Puerto Rico with Mississippi or Ohio as a location.

In addition, there was still an immense hangover of “new deal” planning and regulation. Puerto Rican entrepreneurs were totally out of the commonwealth economic planning strategy. The focus was on attracting mainland investors with tax gimmicks.

Our study did show that Puerto Rico’s performance had compared well with the other Caribbean and most central and Latin American economies, but I felt that this to be an erroneous measure of performance. Fernando LeFort’s compared Puerto Rico’s performance to the 50 states (See attachment: “Is Puerto Rico Converging to the United States?”). He concluded that Puerto Rico was badly lagging, that not being a state appeared to be the primary explanation, and in 1990’s dollars per capita income would have been roughly $6,000 higher had Puerto Rico been a state.

It was important to analyze whether the special tax incentives had been effective. The article “Puerto Rico and Section 936: A Costly Dependence” (attached) shows the cost and impact of section 936. The only conclusion was that it was corporate welfare in action. The job cost was exorbitant, the job creation small, and the pass-through of profits immense. This article was written prior to the repeal of 936.

I had maintained my interest in Puerto Rico, and I was saddened but not surprised at the need for PROMESA, legislation that provides the framework and promise for change.

Prior to PROMESA there had been one significant change. In 2012 the majority of votes had expressed their dissatisfaction with the current status and opted for statehood. The voters as usual were ahead of the pundits.

However, the strategists still adhere to the status quo and, in fact, the status quo ante. There is still little if any attention to creating a friendly domestic market. The legislation does not permit interference with the call for self-determination, but the policy makers want to put the status issue on hold while the problems are being solved. Indeed, the repeal of 936 is being blamed for the mess, and the reinstitution of 936 is being forwarded as the answer.

As a hands-on economist, albeit an academic, I felt it vital to make this submission. Clearly much now, as in the 1990’s, can be done to improve the situation. However, clearly in this very competitive 21st century a drastic change is necessary.

The uncertainty which arises from Puerto Rico's status must be changed. Local investors/entrepreneurs must feel comfortable in the local market. Outside investors also require the assurance of stability. Statehood was the answer in the 1990's. In the 21st century only statehood will provide the foundation for economic growth.

- Effectiveness of tax collection.
- Substantial improvement in the economy could be accomplished forthwith if the federal government would enact changes that would treat Puerto Rico in the same manner as the states with regard to major social support programs—in particular, the Earned Income Tax Credit, the Child Tax Credit, Medicare, Medicaid, the Supplemental Security Income program, and the Supplemental Nutritional Assistance Program.

C. Is Puerto Rico Converging to the United States? [1]

By:
Fernando LeFort

Abstract

The neoclassical theory of economic growth predicts that the rate at which an economy grows during its transition to the steady-state is proportional to its distance for that steady-state: the further the distance, the faster the growth, and vice versa. Considering that the US is the largest and period Puerto Rico linked itself with the US, and outperformed other economies which had lower, steady-state level of per capita income of the United States.

Three other significant results were:

- The integrating effect of statehood is actually a vital economic, and not just political, variable. It explains Puerto Rico's lack of economic convergence with the US.
- Without statehood, Puerto Rico will never develop sufficient economic strength to converge with the mainland economy. Because of the lack of economic convergence, statehood is, economically, a sink or swim matter.
- The cost of commonwealth is enormous. In 1994, the average Puerto Rican would have been making $6000 more per year, if Puerto Rico had been converging to the per capita income level of Mississippi (the poorest state in the Union).

At the end of the day, the question has always been: What would be the cost of statehood? My analysis concludes that the opposite question should have been asked: What *has* been the cost of commonwealth?

[1]By Fernando Lefort
This paper is based on a chapter of my doctoral dissertation in economics, completed under the supervision of Professor Robert J. Barro at Harvard University in 1996. It is an empirical application on the subject of convergence theory, a tenet of neoclassical growth theory. The economic performance of Puerto Rico can be clearly understood using this well-known economic theory.
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Overview

The main result of this study is that the per capita income of the Puerto Rican economy is not converging towards the per capita income of the United States. In other words, Puerto Rico is not closing the income gap that separates it from the US. Even after controlling for a set of standard determinants of growth variables, Puerto Rico remains well below the convergence frontier traced by the United States.

The motivation behind this study is twofold. First, it seeks to place the achievements of the Puerto Rican economy during the period after World War II in the correct perspective. The economic achievements of Puerto Rico during that time have been studied, and lessons have been drawn for other Latin American and Caribbean economies. The question is, however, should Puerto Rico be compared to those economies or, rather, to the economic performance of the United States within the same period? Puerto Rico is far more closely linked politically, economically, and socially to the US than to any other country, including those in Latin America and the Caribbean, and this high degree of integration between Puerto Rico and the US implies that the steady state level of per capita income of Puerto Rico is most likely closer to that of the US than to that of the economies of other countries in the region.

The neoclassical theory of economic growth predicts that the rate at which an economy grows during its transition to the steady state is proportional to its distance from that steady state -- the further the distance, the faster the growth, and vice versa. Considering that the US is the largest and wealthiest economy in the world, it is not surprising that during the post war period Puerto Rico linked itself with the US and outperformed other economies with lower steady state levels of per capita income. But does this mean Puerto Rico is converging to the US?

The second objective of this study is to investigate and draw conclusions about the effect Puerto Rico's political status has on the island's economy. Several American and Puerto Rican politicians believe that Puerto Rican statehood should be postponed until Puerto Rico reaches a level of per capita income closer to the US. Their thesis assumes that such political change would be easier once Puerto Rico has approached the level of economic development attained by the US. But is this possible for Puerto Rico?

Economically, this position only makes sense if Puerto Rico is in fact converging to the steady state per capita income of the US. If, instead, Puerto Rico is converging to a lower level of per capita income, then the Puerto Rican economy will continue to distance itself from its giant neighbor, and these preconditions for statehood will never be achieved. A regression analysis of this century's economic growth across the states, presented in this paper, reveals that territories (and Puerto Rico is a territory) have grown more slowly than states.

This paper concludes that the benefits of statehood, which include political power, full parity in federal funding and programs, and the psychological lift that attracts capital to politically stable environments, cause states to outperform territories. Thus, any policy leading to statehood will allow Puerto Rico to increase its long-run equilibrium income towards that of the US and will provide Puerto Rico with additional economic growth during the transition to such a higher steady state. By reducing the political uncertainty and building a more permanent economic and political relationship with the US, the change from commonwealth status to statehood would be the way for Puerto Rico to achieve a superior path of economic growth.

In particular, this study shows that: (i) Puerto Rico has been growing at a rate more than 2 percentage points lower than could be expected from an economy with the same initial level of income of Puerto Rico and converging towards the US; (ii) This lack of convergence has meant that Puerto Ricans today have a per capita income $6000 dollars lower than the one they could have got; (iii) The political status effectively explains the economic performance. American territorities have historically grown 2 percentage points faster after they have become states.

A Quick Look at the Convergence Hypothesis

This section offers a quick review of the main implications of the neoclassical theory of growth in terms of the convergence effect.

The neoclassical model of economic growth developed following pioneering work of Solow (1956) and Swan (1956) is mainly characterized by a production function exhibiting diminishing returns to capital. In such economies the rate of return to capital gets smaller as the economy grows wealthier and accumulates more capital. Because of the diminishing returns to capital, the rate of per capita accumulation of capital diminishes as the stock of capital increases. As a consequence, each economy approaches a unique long-run equilibrium or steady state.

Intuitively, there is a point where the new additions to the stock of capital are only enough to account for depreciation and population growth. At that point no net additions of capital are made, and the economy stops growing.

Imagine an analogous infant who will eventually be a 6 foot adult. That is his steady state. In the process (transition) to achieve this adult size, he will grow very fast at the start, slowly converging to a zero growth rate until he reaches 6 feet.

During the transition towards this steady state, other things being equal, the rate of return in the economy and hence the rate of capital accumulation is inversely related to the initial per capita stock of capital. As a consequence, the theory predicts that the further away an economy is from its own steady state in terms of per capita income, the higher the rate of growth for this economy. This is the basis for the concept of convergence.

In the simplest neoclassical growth model, the steady state level of per capita income is determined by the technology available, the rate of population growth, the depreciation rate, and the savings rate. Therefore, only if a group of countries share the same technology (broadly defined to include institutions, political status, capital access, etc.), preferences, and other relevant parameters will their economies be expected to have the same long-term level of per capita income or steady state.

In general, the level of technology can be affected by government policies and regulations that distort the markets and by the degree of integration with other economies with other technologies. The savings rate can be considered to be exogenous or can be endogenously determined by the underlying preference parameters. After completing its transitional dynamics, an economy reaches its long-run level of per capita income when the different per capita variables start growing at the same constant rate of growth given by the rate of exogenous technological progress. At that point, the economy is said to be in steady state, and its level of per capita income is known to be the steady state level.

Consider a group of economies that, because of cultural, political or physical proximity, share the same steady state value of per capita income. The neoclassical model of growth predicts that the countries with lower initial levels of per capita income will have higher rates of per capita income growth. Poorer economies will tend to converge or catch-up to wealthier ones, in per capita terms, if their economies differ only because of initial conditions. Thus, the theory of absolute convergence: of two economies aspiring to the same steady state levels, the economy with the lower, initial level of income will grow faster.

However, even the simplest of the neoclassical growth models, the Solow-Swan model, requires a restatement of this implication if all economies do not share the same steady state. What if different countries have different savings rates, population growth rates, or different technologies? It can be shown that economies with higher steady state levels will grow at a higher rate in per capita terms than those striving toward lower steady states. Hence, the theory of conditional convergence (after the revisions of the convergence hypothesis by Barro and Sala-i-Martin (1992), and Mankiw, Romer and Weil (1992)): of two economies with the same initial levels of income, the economy aspiring to the higher steady state will grow faster.

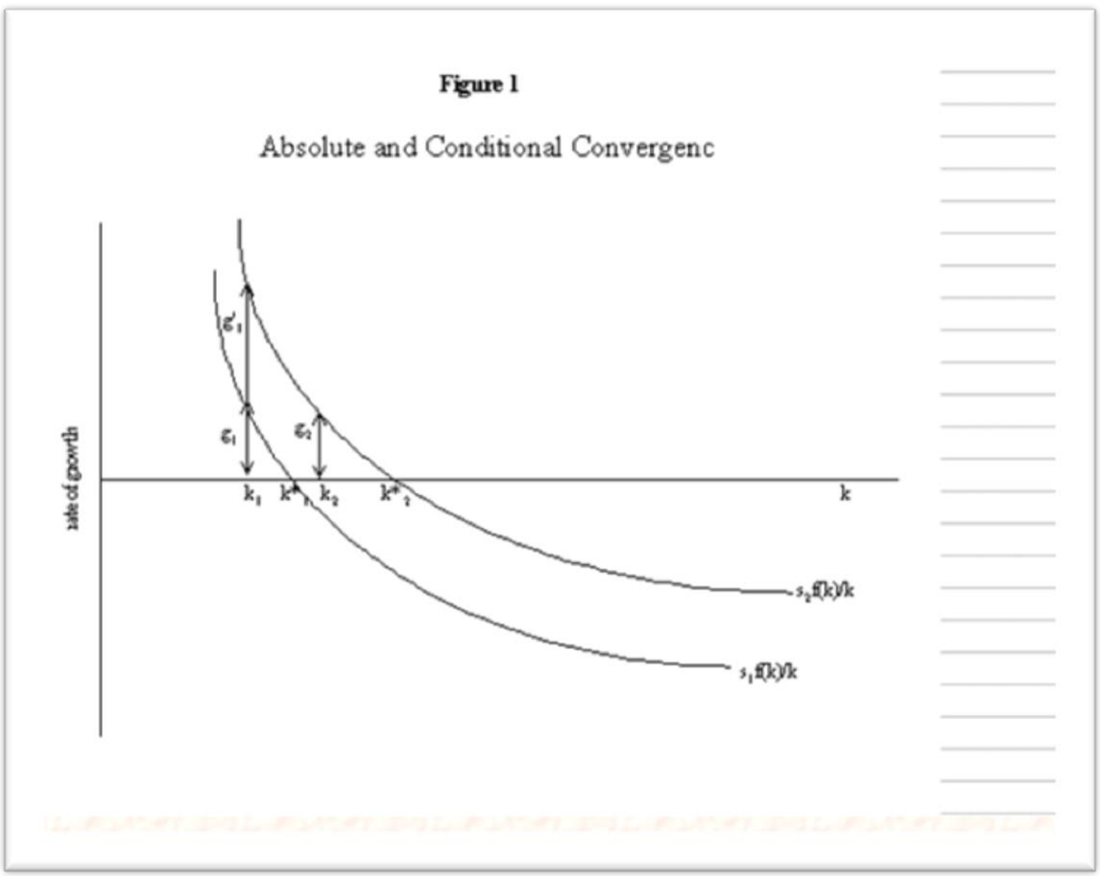


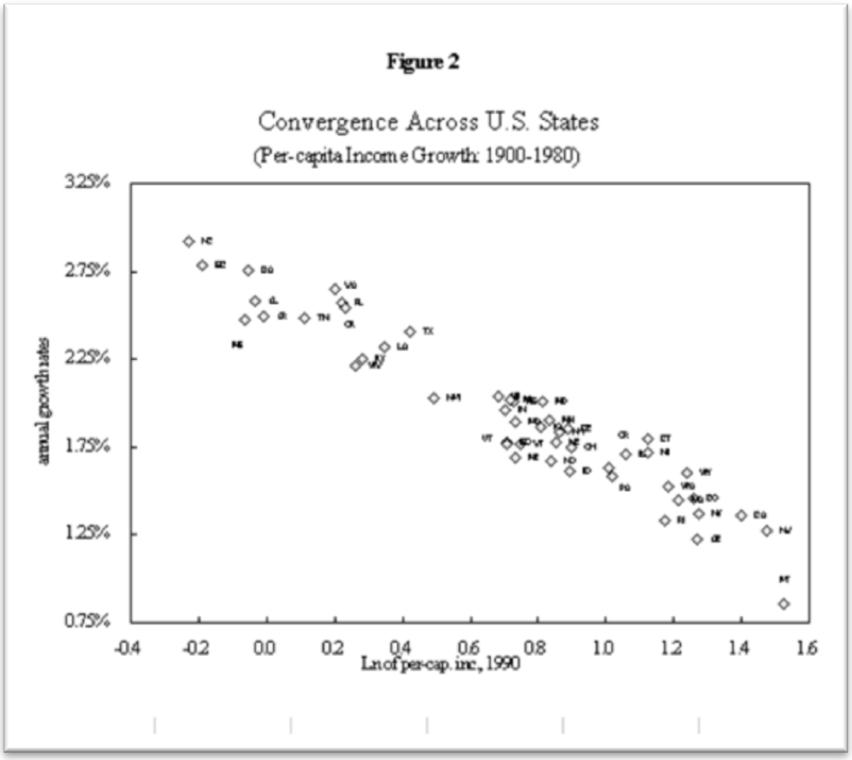
Figure 1 illustrates the difference between these two concepts (1). Consider two economies sharing the same steady state income k2* but with different initial conditions k1 and k2. As the figure clearly shows, the economy with lower initial level of income will grow faster (i.e. g1'>g2, absolute convergence). Consider, instead, two economies with the same initial level of income k1, but with different steady state values, k1* and k2*, respectively. In this case, in spite of the fact that both economies share the same initial level of per-capita income, conditional on their steady states, the economy with the higher steady state level will grow faster (g1'>g1, conditional convergence).

The speed of convergence is an important parameter to be assessed, not only as a theoretical curiosity, but also because of its economic implications. A low speed of convergence implies that countries spend much of the time far away from their steady state. A speed of convergence of 2.5 percent suggests that the average time that an economy spends to cover half of the distance to its steady state is around 30 years. Therefore, medium-term growth rates will be dominated by the transitional dynamics, only marginally affected by changes in the steady state positions. In contrast, high speeds of convergence imply that the economies spend much of the time in the vicinity of their steady state. Therefore, short-term rates of growth are strongly affected by shocks to steady states and by the long-term steady state growth rate.

There have been many attempts to estimate the speed at which economies approach their steady states in the empirical growth literature. Since Romer (1986), there is a consensus on the absence of evidence in favor of the absolute convergence hypothesis at a global level. Regressions using large samples of countries show that rates of growth of per-capita income are usually positively correlated with initial levels. There have been two approaches used to deal with the differences among steady states across countries.

The first one involves restricting the sample of economies to a group that, presumably, is homogenous enough to share a common steady state. In this case, we are measuring local absolute convergence. The second approach has been to deal with a cross section of heterogeneous countries and to control the estimation of the speed of convergence using a set of variables that proxy for the differences in the steady state positions across countries. This is called the global conditional convergence.

Following the local absolute convergence approach, Barro and Sala-i-Martin (1992), in their analysis for the contiguous 48 states, found a speed of convergence of around 2 percent per year. Figure 2 reproduces their well-known graphical evidence of convergence, showing that the poorest states at the beginning of the century (the Carolinas, Mississippi, Georgia and Alabama) have been growing on average twice as fast as wealthier states.



For example, South Carolina, the poorest state, had 22.4 percent of the per capita income of New York in 1929, by 1990 this ratio had become 71.8 percent. Mississippi was the poorest state in 1940. It had 22 percent of the per capita income of Delaware, then the wealthiest state in America. By 1990, Mississippi, still the poorest state, already had 50 percent of the income of the wealthiest state, now Connecticut. In 50 years, Mississippi has been able to reduce by half the distance that separates it from the wealthiest states.

Given the degree of cultural and economic integration among the different states, the convergence effect must be the main reason that Mississippi grew at a rate twice as high, on average, as that of the much wealthier Northeastern states during the last 50 years. Figure 2 is also a useful illustration of the "convergence frontier." The imaginary line connecting North Carolina in the upper left of the figure and California in the lower right corner gives an approximate idea of the position that economies sharing the same convergence rate and steady state level must have. Therefore, the fact that most states are aligned over this frontier gives an idea of the high degree of homogeneity displayed by the continental United States.

Under the conditional convergence approach, differences in steady states across countries are controlled including, among others, the investment ratio to GDP, measures of distortions like government consumption and black market premium, measures of political stability, and, measures of the quality and quantity of human capital.

The main finding of the cross-country empirical growth literature seems to be that there exists a global conditional speed of convergence ranging from the 2 or 3 percent of the Barro estimates to the almost 10 percent recently obtained using dynamic panel techniques. The literature also suggests the existence of local absolute convergence of approximately the same magnitude in several regions.[2]

The implication of these findings is that the speed of convergence has an important impact on the medium-term process of economic growth. Countries or states relatively homogenous in their determinants of the steady state, but differing in their initial conditions, converge towards each other, thereby reducing their initial differences in per capita income. The higher the speed of convergence, the faster the process will be. In a recent paper, Sachs and Werner (1995) point out that a sufficient condition for higher than average growth of poorer countries is that poorer economies follow reasonably efficient economic policies. They find strong evidence of convergence among those countries following open trade policies and with clearly established property rights.

In addition, for a given speed of convergence, increases in the steady state level of per capita income at which an economy is converging will raise the per capita income growth rate during the transition, since the economy will have to cover a longer distance in the same time. For that reason, an economy that is able to increase its long-run steady state per capita income by improving the technology available, increasing the public's confidence in its institutions, reducing market distortions, augmenting the quality of its labor force or opening its economy to a more developed region, will enjoy an increase in its average rate of growth due to the convergence effect.

[2] In a series of regressions using cross-sectional and pooled-panel approaches, the estimates obtained for the speed of convergence have fluctuated between 2.5 and 3 percent per year. A rate of convergence that fluctuates between 5 and 9 percent has been found in studies that apply econometric techniques, which correct for unobservable differences across countries (i.e., individual effects) arising from differences in the technology available.

Evaluating The Performance Of Puerto Rico

In this section, we evaluate the performance of the Puerto Rican economy when compared to the United States and to a sample of Latin American and Caribbean countries. In particular, we are interested in determining whether Puerto Rico is effectively on the convergence frontier traced by the states of the Union. A negative result will indicate that Puerto Rico is not converging towards the US, or in other words, that Puerto Rico is not closing the income gap with the US. An interested reader can find several descriptions of the Puerto Rican economy after World War II in Appendix 1 of this paper.

First, we will provide some graphical evidence in terms of relative measures of output between Puerto Rico, the US, and some Latin American and Caribbean nations. Secondly, we will present the conclusions of growth regressions empirical evidence. Extending the work of Barro and Sala-i-Martin (1992), panel data regressions were performed with a sample consisting of the 48 mainland United States plus Puerto Rico and Hawaii for the period 1940 to 1990. The actual equations and analysis can be found in Appendix 2 of this paper.

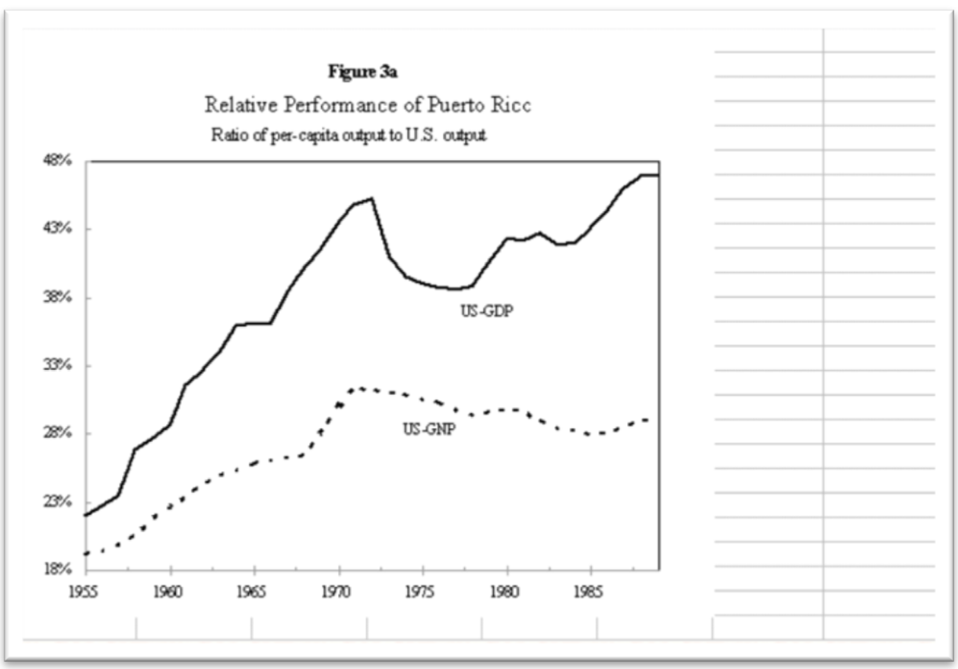
The empirical evidence provided by these regressions shows that during this period, Puerto Rico clearly performed below the predicted growth rate implied by its initial level of per capita income, even after controlling for a standard set of control variables. Puerto Rico is the only economy in the sample showing such a serious under-performance. Interpreting these results in light of neoclassical theory of growth, it is possible to argue that even though Puerto Rico partially narrowed the income gap with the US, it is not converging towards the per capita income of the United States. Finally, I will show some evidence that the political status of the island could well be the main reason for this under-performance.

Graphical Evidence

A first exercise to evaluate the performance of Puerto Rico relative to other economies is to make pair wise comparisons of a measure of output per capita for different economies. I use GDP per capita measured at current international prices for Puerto Rico, the US, and a set of Latin American and Caribbean economies, obtained from the Pen World tables version 5.6.

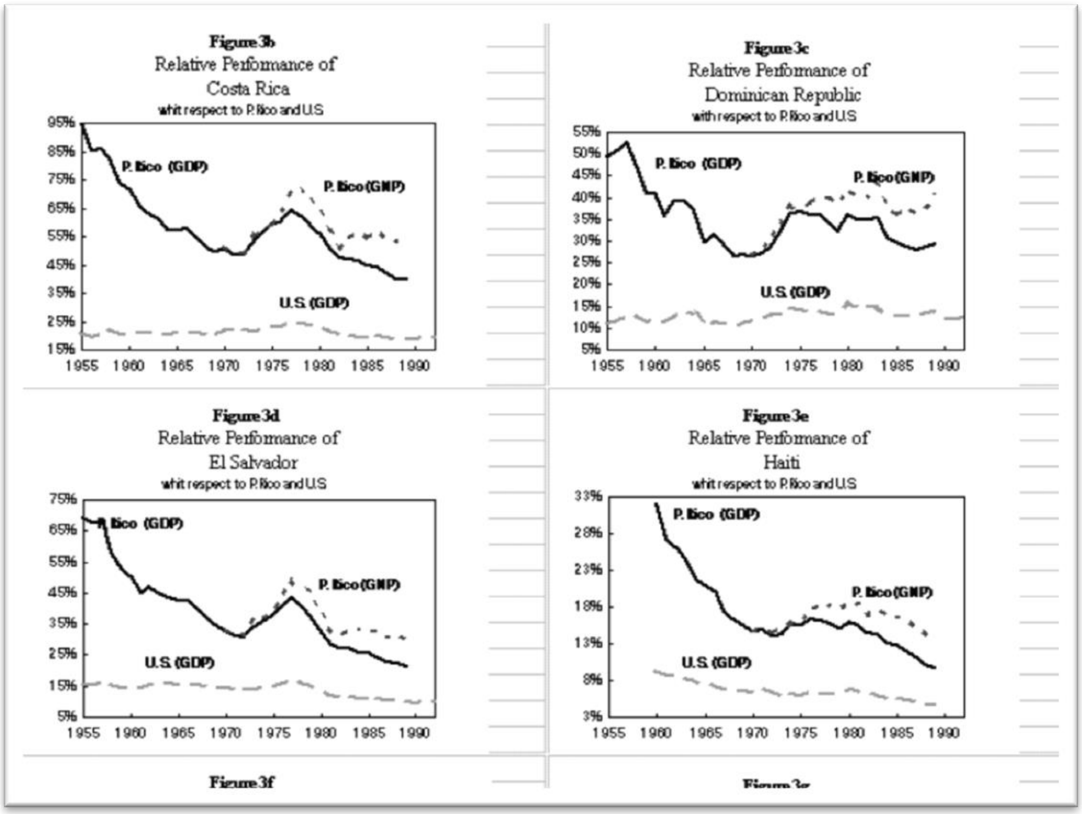
Figure 3a clearly indicates that the Puerto Rican economy grew faster relative to the American economy until 1972. It shows Puerto Rican current per capita GDP and GNP as a percentage of the same measures for the US. Between 1955 and 1972, Puerto Rican per capita GDP moved from 22 percent to 45 percent of American per capita GDP. Per capita GNP follows a similar pattern although less pronounced, increasing from 19 percent to 30 percent. The figure also shows that after 1973, the catch up force has been practically non-existent when comparing GDP's, and it has been clearly reversed in terms of per capita GNP. There is no clear signal that Puerto Rico will reduce the output gap given its present political status.

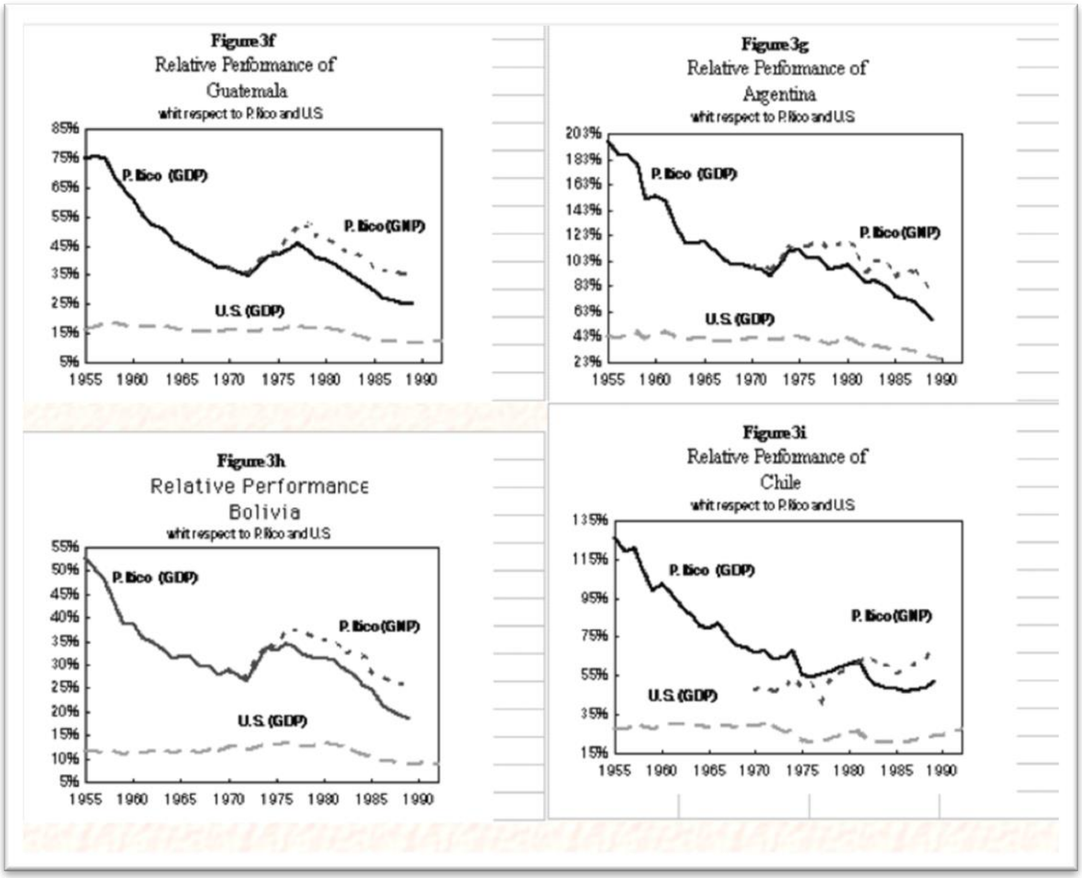
Is this the normal behavior of other economies in Latin America and the Caribbean Basin? Figures 3b to 3i plot relative measures of current output per capita for some Latin American and Caribbean countries relative to the US and Puerto Rico. A quick look at figures 3b-i shows that most economies in the region have under-performed both Puerto Rico and the US.



When compared to other Latin American and Caribbean economies, the performance of the Puerto Rican economy is good in general. All the economies in the sample became poorer compared to Puerto Rico between 1955 and 1973. All of them show a quick recovery relative to Puerto Rico after the oil shock, indicating that it hit the Puerto Rican economy particularly hard. After the oil shock Puerto Rico reassumed the over-performance relative to most economies in the sample, although much less aggressively.

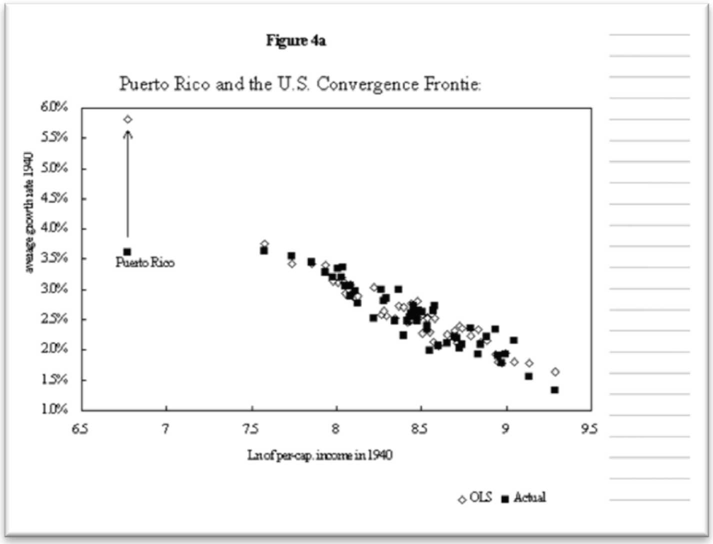
In summary, Puerto Rico showed an outstanding catch-up effect in the early post-WWII period compared to the US, out-performing all other Caribbean and Latin American economies. However, since 1973 Puerto Rico's per capita output growth rate has decreased relative to other economies in the region, and there is no clear indication that it will ever be able to close the income gap with the US.





Panel Data Evidence Conclusions

The results arising from the panel data analysis (the equations for which can be found in Appendix 2) clearly show that Puerto Rico has been growing at a much lower rate than the one implied for a state with its initial income level. To make this point clear, figure 4a shows the actual average annual rates of growth of per capita income for the 49 states included in the sample and Puerto Rico for the 50 year period under study. The data comes from the statistical abstract of the US, and it is net of federal transfers. The figure also plots the predicted rates of growth using the ordinary least squares estimates presented in column 2 of table 1 (see Appendix 2). Because this estimation procedure obtained the lowest convergence rate, it is the most conservative estimate of Puerto Rico's under-performance. The figure clearly shows that Puerto Rico has not been moving along the US convergence frontier.



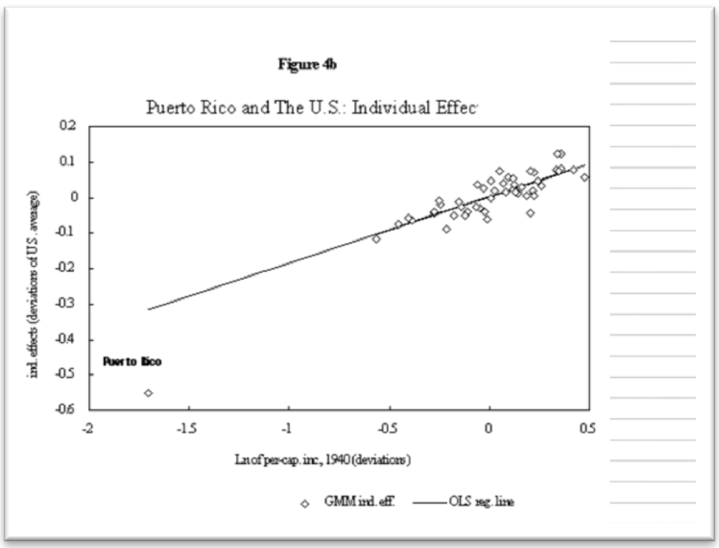


Figure 4b presents more evidence in the same direction. It makes clear that the individual effects obtained for Puerto Rico, in terms of income levels, estimated for the 49 states and Puerto Rico through the GMM regression presented in column 4 of table 1, are well below the regression line. The figure also includes the OLS regression line for individual effects on per capita income and a dummy for Puerto Rico.

No other state economy in the sample shows a deviation comparable to the one shown by Puerto Rico. In spite of the positive correlation between the individual effect and the level of income, the low initial level of per capita income is not enough to explain the large and negative individual effect displayed by the Puerto Rican economy. [3] In summary, during the period from 1940 to 1990 the different states converged towards the steady state level of per capita income at a rate between 2.6 and 6.0 percent per year. Indeed, as figure 8 clearly shows, the absolute convergence frontier is noticeable to the bare eye. In the period under study, the poorer states out-performed the wealthier in proportion to the difference in initial levels of income. Even though the Puerto Rican economy grew faster than almost any other economy in the sample, the evidence indicates that the rate of growth attained was not enough to allow Puerto Rico to converge towards the 49 United States in the sample. Obviously, the greater the true convergence rate operating among the states, the bigger the Puerto Rican under-performance. After controlling for the structural composition of income, and time and location dummies, the under-performance exhibited by the Puerto Rican is almost 3 percentage points per year.

Explaining The Income Gap: Conditional Convergence

The results obtained in the section above show that Puerto Rico is not on the frontier of absolute convergence drawn by the United States. There is a huge gap between the rate at which Puerto Rico has been growing and what we would expect from an economy with the steady state level of income of the US and the initial level of income of Puerto Rico. In this section, I look for an explanation of Puerto Rico's post-WWII economic under performance. The equations and analysis can be found in Appendix 2.

Why is it that Puerto Rico has not been able to grow at this higher predicted rate? The obvious reason is that Puerto Rico does not have the same steady state value of per capita income of the states included in the sample under analysis. Only after controlling for a set of determinants of the long-run level of income we should expect to be capable of explaining Puerto Rico's under-performance. In that case, we could conclude that in order for Puerto Rico to be able to close the income gap with the US, the variables that determine the steady state of the Puerto Rican economy must reach levels equivalent to those attained by the United States.

The results of the equations provide strong evidence that Puerto Rico has been growing at a lower rate than the one expected for an economy with the same steady state income of the US

[3] The evidence provided in table 1 of Appendix 2 and shown in figures 3a and b indicates that Puerto Rico grew at an annual rate between 2.2 and 3.3 percentage points below the one predicted for a state with the initial level of income of Puerto Rico

and with the initial income of Puerto Rico. This result remains largely unchanged after controlling for other determinants of the steady state level of income, such as the percentage of high school graduates in the population, the government's share of income, and the per capita level of federal transfers. The remaining gap between the actual and predicted individual effect for Puerto Rico must be attributed to some other unobservable variable. Differences in technology in a broad sense between Puerto Rico and the mainland US appear as the standard explanation for the gap. The high degree of integration of the Puerto Rican and American economies, however, make it implausible to attribute the gap to differences in the access to particular production techniques or any other purely non-economic factor.

A remaining candidate is the more obvious difference in political institutions. Puerto Rico is the only economy of the sample without the clear and permanent political status of statehood. The uncertainty about the future political status of the island might certainly have hurt Puerto Rico's ability to induce increases in the stock of capital at the rate predicted by the theory for an economy with initial low income and high steady state level of income.

Does Statehood Matter?

As mentioned above, one of the possible causes for the inability of the Puerto Rican economy to converge towards the United States is the unresolved political status of the island. Statehood involves a stable legal system, a definitive institutionality, complete access to the widest market in the world, and the end of the uncertainty faced by any investor in the island with respect to the future rules of the game. Statehood could also imply that Puerto Ricans would be able to determine the nature and increase the extent of federal aid to the island. However, statehood also implies the end of tax incentives and the imposition of federal income taxes on the island's residents.

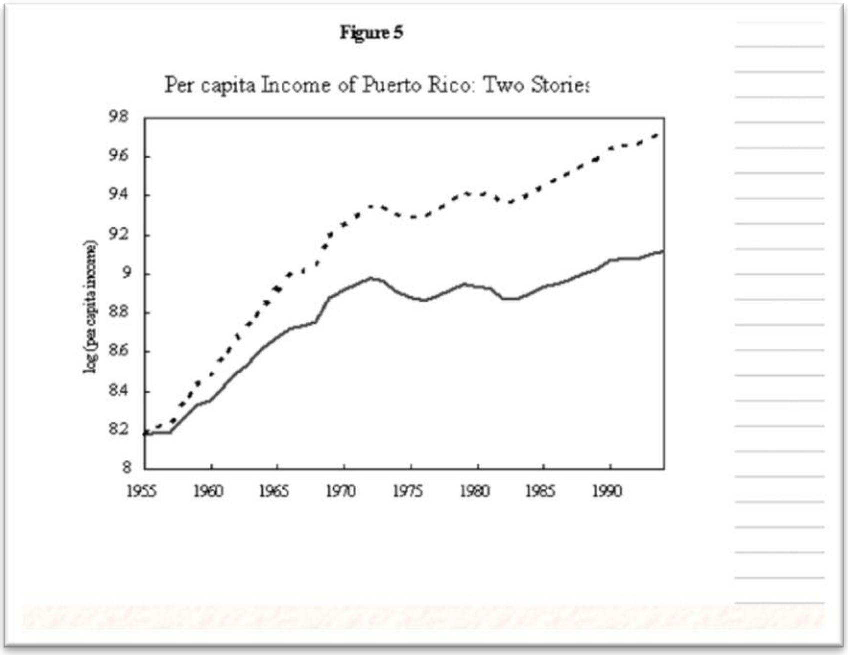
Our hypothesis is that the political status of an economy affects its growth performance. All the economies in the sample previously analyzed, but Puerto Rico, are states, however political status is certainly not the only difference between them and Puerto Rico. In order to disentangle the statehood hypothesis from alternative explanations not already discarded in the section above, I constructed a specific test of the statehood hypothesis. I use per capita income data from 48 states from 1880 to 1940. These series were obtained from Barro and Sala-i-Martin (1992). The idea of the test is the following. Several of the 48 states included in this sample changed their political status from territories to states during the period under study. In particular, North and South Dakota, Montana and Washington became states in 1889. Idaho and Wyoming in 1890, Utah in 1896, Oklahoma in 1907 and New Mexico and Arizona in 1912. I run then a standard growth panel regression using cross-sections 20 years apart including a variable for political status. This variable takes values between zero and one. It is 0 for all those observations for which the economy was a territory. If the economy changed status during the period it takes the proportional value. For instance it is 10/20 for Montana for the period 1880-1900, since Montana became a state in 1890.

I found that the coefficient in the non-statehood variable is large, negative, and significant. Given the initial level of per capita income and the structural composition of their income, the economies of the states have grown on average 2 percentage points faster than those of the territories. Although these results must be interpreted carefully, it is clear they highlight the existence of positive effects of the statehood status for growth.

The Cost of Converging to a Lower Steady State

The empirical evidence of this paper shows that Puerto Rico has been converging to a lower steady state than the United States. A resulting, simple exercise is to compare the actual trajectory of per capita income followed by the Puerto Rican economy to the one it would have reached, had Puerto Rico been converging to the United States.

Assume that Puerto Rico and Mississippi have already reached their steady states. Hence, the difference in per-capita levels of steady state income between the two economies is approximately 9,000 dollars of 1994. Under this assumption, table 4 (Appendix 2) presents some of the resulting per-capita income simulations, using different convergence rates. The table indicates the amount of per capita income that Puerto Ricans have lost for not converging towards the United States. Using the conservative convergence rate of 3.7 percent found in the study, it is possible to show that in 1994, the average Puerto Rican had an income of almost $6,000 less than the one he would have received, had the Puerto Rican economy converged to Mississippi, the poorest state in the Union. Accumulating this loss from 1955 to 1994 implies that each Puerto Rican could have been 110,000 dollars wealthier by 1994. Figure 5 illustrates this scenario comparing the two trajectories of per capita GNP.



Summary and Conclusions

Because of its relationship with the US, Puerto Rico is economically, politically, socially and geographically in a unique position relative to other less developed economies. This study shows that the development strategy pursued by Puerto Rico during the last 50 years has been, at most, only partially successful in exploiting all the economic possibilities arising from that preferred position.

The evidence found in this paper indicates that Puerto Rico is converging to a lower steady state than the one to which the United States is converging -- a shortfall that has meant Puerto Rico has been growing at a rate around 2.5 percentage points lower than the one we could expect from an economy with its initial level of per-capita income and the steady state level of income of the United States. Simple simulations performed using the convergence rates obtained in this paper show that the per capita income level of Puerto Rico could have been almost twice its actual value by 1994, completely closing the income gap with the poorest states, had Puerto Rico been converging towards Mississippi's actual income level since 1955.

The convergence to a lower steady state than the US implies that the income gap will not be closed just by waiting for it to happen. Unless Puerto Rico's steady state level of income increases substantially, the Puerto Rican economy will never be able to close the income gap with the US. In this sense, there is no meaningful economic reason for postponing the decision about statehood for Puerto Rico.

Although growth theory does not provide a recipe for faster growth, it does indicate that if Puerto Rico manages to improve the variables that determine its long-run equilibrium income, the convergence effect guarantees a higher rate of growth during the transition towards the new steady state. Statehood could be able to improve these variables by increasing political stability and thereby increasing the flow of investment from the mainland -- and elsewhere -- in a more natural way than tax incentives ever could.

Several examples demonstrate the positive effects of a cooperative relationship between a less developed economy and a wealthy, developed country or region. Middle-income European economies like Spain in the 60's and Greece, Ireland and Portugal have been profiting from their geographical position for a long time, gradually closing the gap with the wealthiest European economies. The most important political and economic accomplishment of these economies in the last 40 years has been their entry into the European Economic Community by increasing the advantage of the geographical proximity to a wealthier economic region. As shown by Larre and Torres (1991), the combination of market reforms and integration into the EEC have allowed Spain and Portugal to outperform wealthier European countries in the last ten to fifteen years.

All these examples, however, are minor cases of economic cooperation when compared to the potential for Puerto Rico. Were Puerto Rico to become a state, the convergence effect should guarantee Puerto Rico a higher rate of economic growth and its citizens higher income levels. Through the statehood process, Puerto Rico can become an integral part of the largest and wealthiest economy in the world, resolving once and for the question of political uncertainty associated with commonwealth and thereby fully enjoying the economic benefits of the catch-up process.

Appendix 1: The Puerto Rican Economy After World War II

The purpose of this section is to provide a simple description of the economic performance of Puerto Rico during the period after World War II. I will show that the performance of the Puerto Rican economy was solid in terms of growth and other economic indicators at least until the early 1970's. It was during that period that Puerto Rico was able to reduce the output gap with the US and become an industrialized economy, with economic and social indicators comparable to more developed economies.

After World War II, Puerto Rico implemented policies in order to move from an agricultural economy to an industrial one. A first stage of economic reforms from the early 1940's to 1949 focused mainly on a program of land reform, development of infrastructure, and reorganization of institutions. A second stage of economic development reforms by the name "Operation Bootstrap" were set in place from 1945 to 1953. This second phase was designed to increase industrial production by attracting private capital, especially from American investors, through privatization of government owned enterprises and tax incentives.

No major economic reforms were undertaken after 1953. From then on, the Puerto Rican government adapted its policies, especially those regarding tax incentives, in a way to satisfy American investor's needs and keep them coming to the island. In the following 35 years, subsidiaries of American corporations established in Puerto Rico, leading the subsegment income in the contribution of manufacturing to GNP from 15 percent in 1950 to more than 50 percent in 1990. In 1952, the Commonwealth of Puerto Rico was established.

After the oil shock in 1973, the Puerto Rican economy slowed down. The reasons for this are not definitive, but several events may have had an exogenous effect. They include: the application of the minimum wage to Puerto Rico; the failure to adjust fully to the aftermath of the oil shock; and, the shift of tax induced American investment from labor to capital intensive industries. Nevertheless, the United States economy came through the oil shock and resumed its economic growth, so another reason for the Puerto Rican slowdown might be found elsewhere.

Figure A1.1 shows the steep climb of the Puerto Rican economy until 1973 and how it tapers off thereafter. It depicts Puerto Rican real GDP per capita from 1955 to 1994. Puerto Rico has managed to increase its per capita GDP at an average rate of 3.7 percent per year between 1955 and 1994. The growth has not been steady. Until 1972, per capita GDP grew at an average annual rate of 5.9 percent, out-performing most of the other middle-income economies of the world. However, after 1972, the Puerto Rican economy grew at a discrete 2.1 percent per year in per capita terms, with a low 0.4 percent between 1973 and 1983.

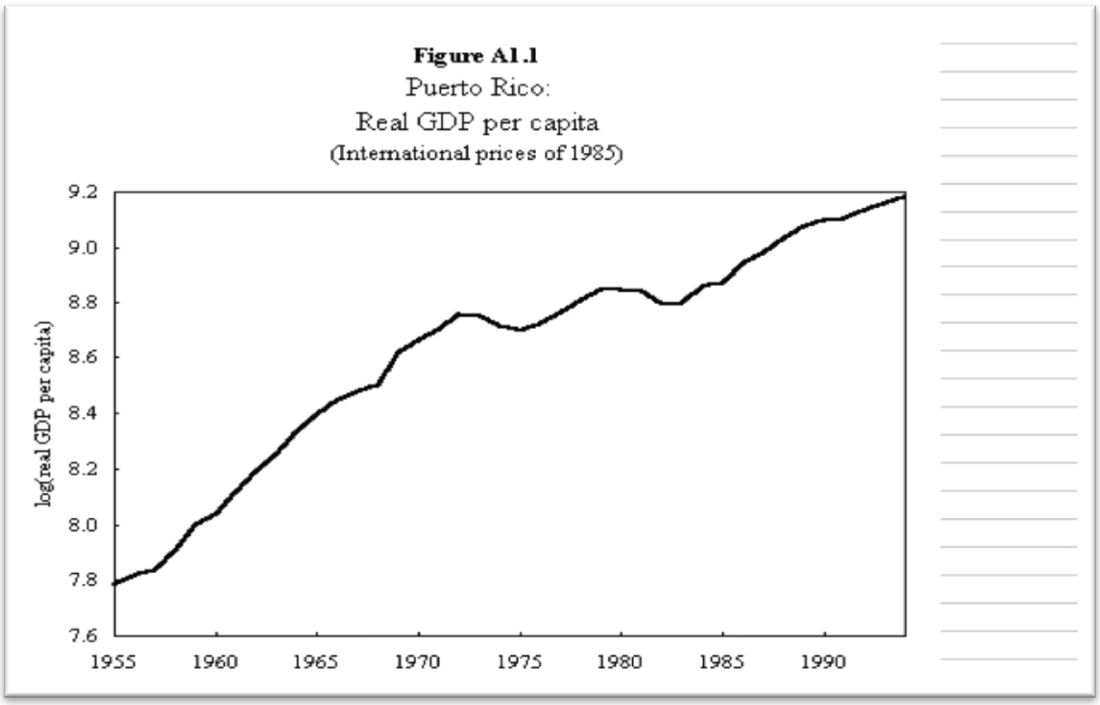


Figure A1.2 shows the effects of "Operation Bootstrap," designed to increase industrial production by attracting capital from external investors. It was believed that after a first stage of intensive use of external sources, domestic capital would follow up, completing the transition towards an industrial economy. Domestic capital never did materialize to a significant degree as successive Puerto Rican governments came to rely increasingly on tax-induced external funding sources.

The figure shows total investment as a share of GDP from 1955 to 1994. The average rate of investment was 29.2 percent between 1955 and 1972. It dropped to 17.0 percent between 1973 and 1983, and further down to 14.3 from 1984 to 1994. The external funds, mainly from the mainland represented 40.7 percent of total sources in 1955, reaching almost 80 percent by 1980. The internal sources of investment have been mainly depreciation reserves and government savings, with negative private savings.

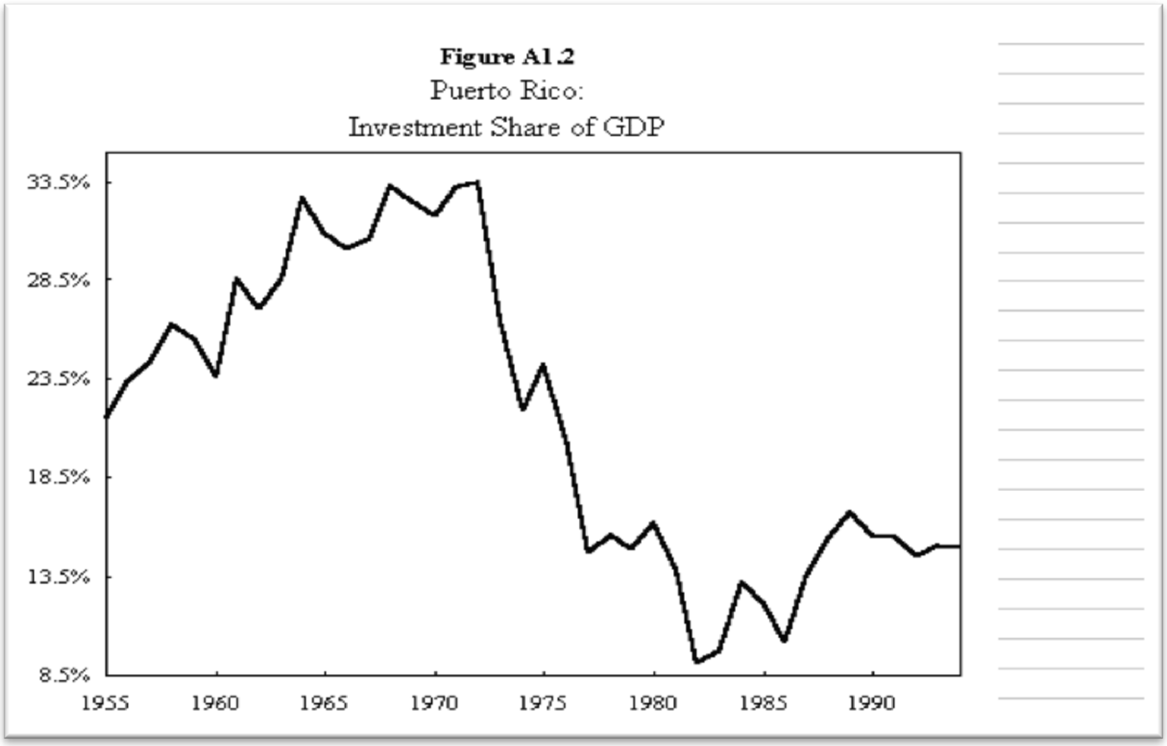
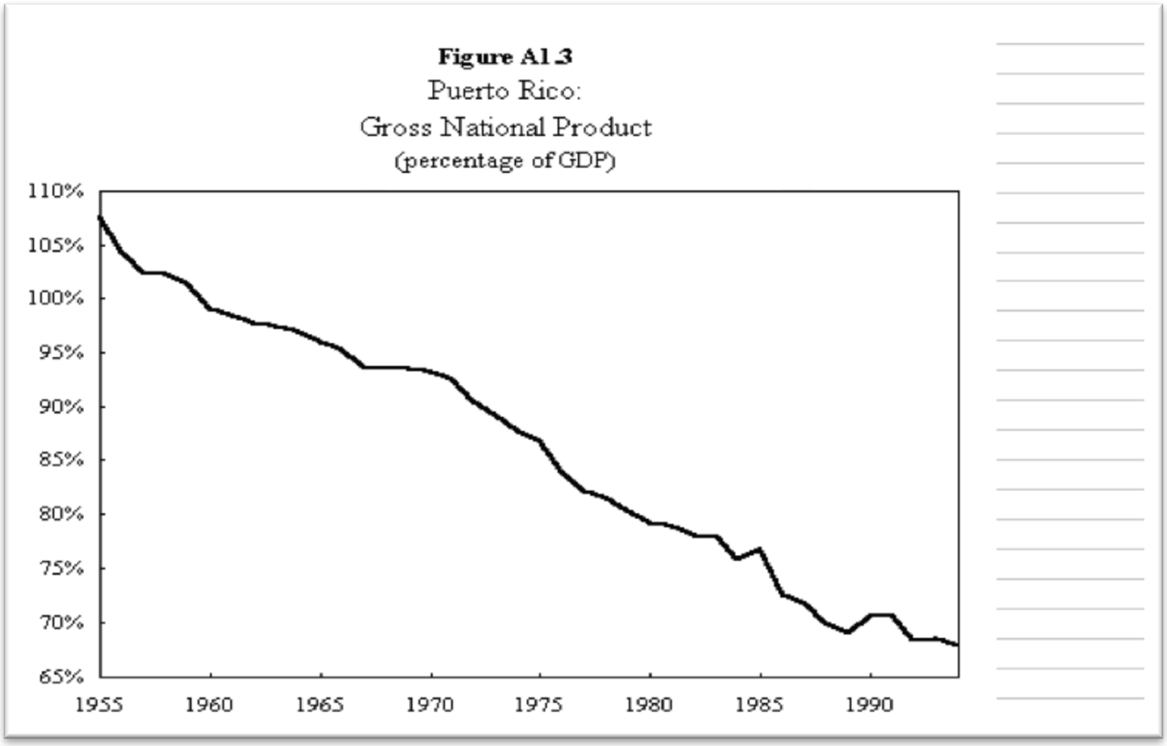
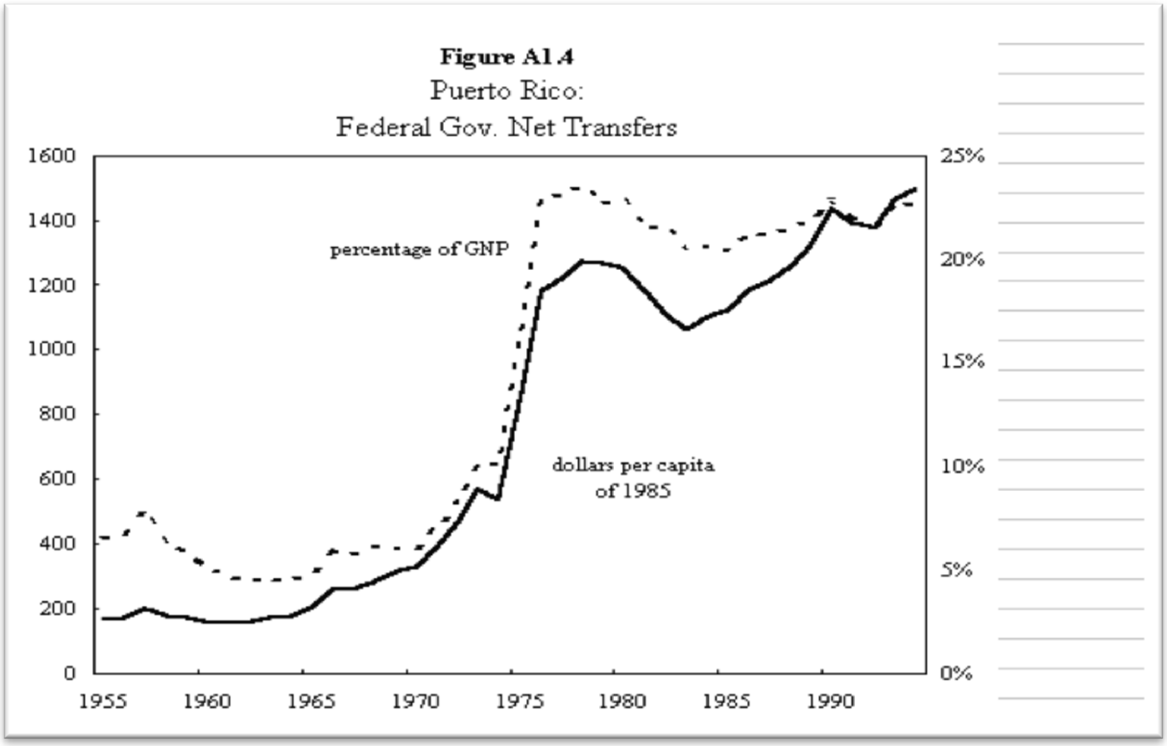


Figure A1.2
Puerto Rico:
Investment Share of GDP

The presence of so many external sources in capital (in the form of repatriated returns to the mainland) is an obvious drain on the Puerto Rican economy. Figure A1.3 shows the significant disparity between GDP and GNP. It shows GNP as a percentage of GDP from 1955 to 1994. The figure shows that the share of output belonging to Puerto Ricans has steadily decreased from more than 100 percent in the early 1950's to less than 70 percent in 1994.

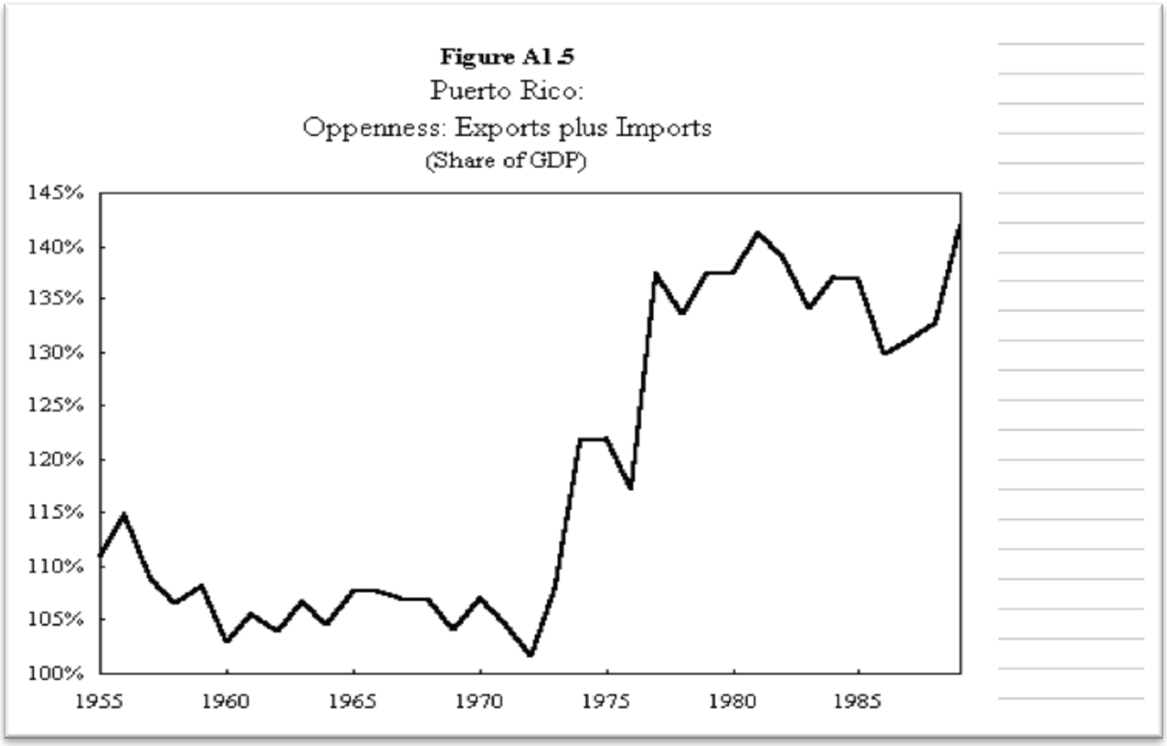


The income effectively received by the Puerto Ricans would have been even smaller had Puerto Rico not received a large amount of transfers from the US federal government. Figure A1.4 shows the amount of net federal transfers, both to individuals and the Puerto Rican government, in per capita dollars in 1985 and as a percentage of per capita GNP. The figure shows that these transfers have amounted, on average, to almost 22 percent of per capita GNP since 1974. Even though Puerto Rico receives fewer federal transfers in per capita terms than any other state, they represent a larger share of per capita income because of the much lower per capita income level of the island.



Economists often blame the disproportionately large amount of transfers for the lack of private savings generated by Puerto Ricans. It has been argued that federal transfers have financed consumption, especially considering that since 1974 direct benefits to individuals (mainly in the form of social security and food stamps) account for more than 70 percent of total federal aid. In fact, by the late 1980's consumption was already over 95 percent of GNP, and by 1990 disposable personal income exceeded GNP.

Another notable characteristic of Puerto Rico is the totally external orientation of the economy. Figure A1.5 shows the concentrations of imports and exports -- what has been argued to be one of the main problems of the Puerto Rican development strategy. By the late 1980's, exports plus imports amounted to almost 140 percent of GDP. This trade is largely concentrated with the US. More than 90 percent of exports are sent to the mainland and almost 70 percent of imports come from the US.



American firms attracted through the tax incentives to the island have constituted themselves in export enclaves with almost no forward or backward linkages with the Puerto Rican economy. These firms would import raw materials, put them together, and export finished products directly to the mainland, building almost no interactions with the local economy.[4]

In addition to the tax incentives offered by "Operation Bootstrap", low wages were a significant incentive for American corporations with operations in the island. Taylor (1957) calculated that wages 25 percent higher than those prevailing by 1953 would have been enough to offset the tax advantages and discourage most of the American firms from moving to the island. Puerto Rican average wages were only 30 percent of American wages by 1955, almost 60 percent by the mid 1980's, and they are 75 percent today. Partially responsible for this increase in relative wages in the island has been the minimum wage legislation. In 1977 the federal minimum wage began to be applied to Puerto Rico, with several exceptions for determined industries. By 1981 almost all the Puerto Rican economy was subject to the federal minimum wage.

[4] See Hexner, Jenkins, Ladd and LaMotte (1993)

Despite this disproportionate minimum wage, there is no evidence that this legislation has had any effect on unemployment. Unemployment rates have always been high in Puerto Rico, ranging from a low of 10.3 percent in 1970 to a high of 23.4 percent in 1983. The average unemployment rate for the postwar period has been 16 percent. This unemployment rate is particularly high if one considers that the participation rate in Puerto Rico has been less than 45 percent since 1980, that unemployed Puerto Ricans have the choice to move to the mainland, and that the government of Puerto Rico has been generating more than 20 percent of total employment since 1980.

Summary

In spite of all the problems that the Puerto Rican development strategy has had, following WWII Puerto Rico was able to move closer, in terms of per capita output, to wealthier and more developed economies. In particular, the Puerto Rican economy did narrow, to some extent, its income gap with the US. This catch-up effect has often been described as a consequence of the beneficial effects achieved by the cooperation between a developed and an underdeveloped economy.

Baumol and Wolf (1994) first elaborated on the catch-up effect by Puerto Rico during the postwar era. They show that labor productivity in Puerto Rico grew from less than 25 percent of the US level in 1950 to 75 percent in 1990. A similar pattern is observed for per capita GDP, although it is less pronounced. They also point out that several social and economic indicators for Puerto Rico demonstrate that the Puerto Rican economy has experienced in many areas development comparable to wealthier economies. They conclude that Puerto Rico's post-WWII history demonstrates how much can be accomplished when a wealthy, developed economy cooperates and interacts with one that is initially less developed.

Using a growth accounting analysis, they found that the existence of an educated labor force was the primary reason for Puerto Rican rapid economic growth during the postwar period, explaining over a third of the increase in per capita GDP. The catch-up effect explains between 16 and 38 percent of the growth, Puerto Rico's investment rate another 16-21 percent, and its trade openness and scientific manpower accounts for much of the remainder.

A neoclassical growth interpretation suggests that substantially increasing Puerto Rico's ability to accumulate physical and human capital (the development strategy initiated after the war) might have moved the economy's long-run expected income toward the US, initiating a process of convergence which explains the relatively long period of high growth rates. Unfortunately, as this study shows, Puerto Rico is no longer converging toward the US and therefore no longer enjoys the positive economic effects of convergence.

Appendix 2: Panel Data Evidence: Equations, Tables and Analysis

2.a Estimation Procedure

The empirical analysis of the economic performance of Puerto Rico is conducted by estimating standard growth regressions, which arise from the following empirical equations. It has been shown elsewhere that the standard Solow-Swan and Ramsey Cass-Koopmans models imply that the average growth between □□□ and □ is given by

$$\frac{\ln y_{it} - \ln y_{it-\tau}}{\tau} = \beta_0 - \beta \ln y_{it-\tau} + X_{it-\tau}\delta + \eta_i + \xi_{t-\tau} + \varepsilon_{it} \qquad (1)$$

where

$$\beta = \frac{1 - e^{-\lambda\tau}}{\tau}$$

□ is the annual rate of convergence, $y_{it-□}$ the per-capita income of economy *i* at time *t*-□, $X_{it-□}$ is a set of explanatory variables controlling for differences in steady states, $□_i$ is an unobservable individual effect, $□_t$ is a time-specific effect, and $□_{it}$ is an error term.

A significantly negative coefficient on lagged per-capita income is consistent with the convergence prediction of the neoclassical model of growth. Ceteris paribus, the further away an economy is to its steady state, the higher will be its rate of growth of per-capita income.

2.b Puerto Rico and the US

The purpose of the following estimations is to assess the central question of the paper. Namely, whether Puerto Rico is converging to the US. If Puerto Rico behaved as an American state, its per capita income would have been converging during the last fifty years towards that of the wealthier states. In that case, the Puerto Rican economy would lay on the convergence frontier traced by the American states as shown in figure 1b, displaying absolute convergence with the US.

Absolute Convergence

I use two different procedures for testing whether Puerto Rico belongs to the American convergence frontier. The simplest one assumes that the 49 American states in the sample share the same technology and institutions and, therefore, no major unobservable differences or individual effects among them. In this case, I can just estimate a simplified version of equation (1) through pooled ordinary least squares including a dummy variable for Puerto Rico. The equation would not include the term □$_i$ and therefore,

$$\frac{\ln y_{it} - \ln y_{it-\tau}}{\tau} = \beta_0 + \beta_1 \ln y_{it-\tau} + \gamma s_{it-\tau} + \alpha DUM_i + \phi f_{t-\tau} + \varepsilon_{it} \qquad (2)$$

Following Barro and Sala-i-Martin (1992) I included in equation (2) as an additional explanatory variable, the variable s_{ito} that proxies for common effects related to the sectoral composition of per-capita income for each state. The inclusion of this variable accounts for sectoral shocks that affect the performance of states with similar income composition in the same direction. As long as the initial level of per-capita income is related to the income composition, the removal of s_{ito} would seriously bias the estimation of the convergence rate. The variable s_{ito} is given by

$$s_{it-\tau} = \sum_{j=1}^{n} w_{ijt-\tau}\left[\ln y_{jt} - \ln y_{jt-\tau}\right]$$

where w_{ijt-}□ is the participation of sector j in state i's personal income, and y_{jto} is the amount of per-capita income originated in sector j at a national level.

A negative significant □ would indicate that Puerto Rico has not been growing at the rate implied by its initial level of per capita income, had Puerto Rico and the 49 states shared the same steady state. It would indicate, therefore, a rejection of the hypothesis that Puerto Rico has behaved like a US state.

In a more general setting one could still argue for the presence of individual effects asserted above, if there are differences in the set of available technologies due, for instance, to morphological differences across states.

The estimation problems arising from the presence of correlated individual effects in equation (1) have been extensively analyzed. [5] . In general, an OLS regression of equation (1) will provide inconsistent estimates of all parameters. In particular, the estimate of □□will be biased

[5] See Caselli, Esquivel and Lefort (1994) for a review of the estimation problems and solutions.

downwards due to the obvious correlation between the lagged per-capita income and the individual effect.

Following Caselli, Esquivel and Lefort (1994), I also perform general method of moments estimation of equation (1). [6] In the case of this regressions, an unusually large and negative individual effect for Puerto Rico would support the hypothesis that Puerto Rico does not behave as a typical U.S. state. Given that the individual effects are likely to be correlated with income, we should require the individual effect for Puerto Rico to be unusually large (in absolute value) after controlling for income.

I estimate different variants of equations (1) and (2) for a panel of five cross-sections, at 10-year intervals, covering the period 1940-1990. The regressions were run using ordinary least squares and general method of moments procedures. In the OLS regressions I also included regional dummies for south, midwest, and west geographical location, and a time dummy for each period. The GMM regressions were run in deviations with respect to the mean. The individual effects obtained in the GMM regressions were run against income levels using OLS.

[6] The procedure consists of eliminating the individual effects by taking differences to equation (1) and instrumenting the right-hand side variables using all their lagged values. In the absence of serial correlation in the error term ϵ_{it} , this estimator provides consistent estimates of the parameters in equation (1). For a more extensive description of the estimator see Arellano and Bond (1992), and Caselli, Esquivel and Lefort (1994)

Table A2.1

Cross - State Regressions for per-capita Income

	OLS	OLS	GMM	GMM
□	0.7684	0.6867	0.0578	0.0546
	(0.0123)	(0.0210)	(0.0022)	(0.0024)
Inc. comp	0.2732	0.5166		0.1684
	(0.0326)	(0.0950)		(0.0563)
DUM loc	yes	yes	no	no
DUM time	no	yes	yes	yes
DUM prico	-0.0221	-0.0331		
	(0.0046)	(0.0047)		
□	0.0263	0.0376	0.0548	0.0605
	(0.0016)	(0.0031)	(0.0038)	(0.0044)
ind. effects:DUM prico				-0.0238
				(0.0048)

The □ estimates are not comparable across estimation procedures.

I use personal per-capita income obtained from the Statistical Abstract of the U.S. that includes data for Puerto Rico from 1940 on. The data is net of federal transfers. Table A2.1 summarizes the results obtained in both sets of regressions. The convergence rate obtained using pooled least squares is 2.63 percent when including only location dummies and 3.76 percent when time dummies are also included. The estimate of □□obtained using the general method of moments procedure is 5.48 percent and 6.05 percent per year respectively. In all cases, the standard errors are small, implying significant coefficients and small confidence intervals with no overlapping regions. The coefficient obtained with the general method of moments estimator is unquestionably larger than the ones obtained via least squares. [7] The coefficient on the structural composition of income variable is always positive and significant.

The coefficient on the dummy variable for Puerto Rico included in the OLS regressions is large, negative and significant. It indicates that Puerto Rico grew during the period 1940-90, on

[7] The difference between both set of estimates is smaller, however, than the one shown by Caselli, Esquivel and Lefort (1994) for a large sample of heterogeneous countries, indicating that the omitted variable bias is less severe for this sample.

average at a rate between 2.2 and 3.3 percentage points lower than that of an economy with the same steady state as the United States, but with the initial per capita income of Puerto Rico. The table also shows the coefficient of a dummy variable for Puerto Rico in the OLS regression of the individual effects on the level of income. Interpreting this coefficient in terms of growth rate under-performance indicates the extraordinarily large and negative individual effect obtained for Puerto Rico accounts for 2.38 percentage points of lower annual growth rate. These results clearly indicate that Puerto Rico does not behave like another state. The Puerto Rico economy has been growing at a much lower rate than the one implied for a state with its initial income level.

2.c Explaining the Income Gap: Conditional Convergence

When an economy does not belong to the convergence frontier, it is because it does not share the same steady state income determinants. Therefore, II include in the above regression a set of standard determinants of growth variables that proxy for steady state conditions. Although the under-performance is somewhat reduced, I still find a large and unexplained growth gap.

I estimate equations 1 and 2 including as explanatory variables beginning of period values of per capita income the state's structural composition of income, and the percentage of the population over 25 years old with complete high school educations or more. I include, in addition, the per capita level of state and local government expenditure, and the per capita level of federal aid received by the state. Table A2.2 presents the results. Controlling for the extra set of variables increases, as expected, the estimated speed of convergence to 3.77 percent and 3.14 in the OLS regressions with and without including time dummies respectively. The speed of convergence reaches 9.51 percentage the GMM regression. The coefficient for the structural composition of income variable is positive and significant in all regressions. The coefficient of the education variable is not significantly different from zero in the OLS regressions, but negative and highly significant in the GMM regressions. The negative sign obtained is consistent with the percentage of the adult population with complete high school educations being a proxy for the initial level of human capital and therefore reflecting initial conditions. The coefficient in government expenditure and aid from the Federal Government are significant and positive in both sets of regressions. Federal aid has a large effect on growth, is especially in the GMM regressions. This is interesting, since the general method of moments estimation procedure takes care of potential problems of endogeneity of the explanatory variables that might certainly arise, especially in the case of this last variable.

Table A2.2

Cross-State Regressions for per-capita Income

	OLS	OLS	GMM
□	0.7302	0.6862	0.0387
	(0.0266)	(0.0243)	(0.0012)
Inc. comp.	0.2481	0.5647	0.2894
	(0.0333)	(0.0958)	(0.0138)
H-S Grad.	0.0033	0.0137	-0.1511
	(0.0086)	(0.0106)	(0.0033)
GOV	0.0270	0.0044	0.0077
	(0.0081)	(0.0074)	(0.0005)
FAID	0.0796	0.0678	0.2274
	(0.0312)	(0.0293)	(0.0046)
DUM loc	yes	no	no
DUM time	no	yes	yes
DUM prico	-0.0335	-0.0324	
	(0.0048)	(0.0048)	
□	0.0314	0.0377	0.0905
	(0.0036)	(0.0035)	(0.0032)
ind. effects: DUM prico			-0.0116
			(0.0035)

The □ estimates are not comparable across estimation procedures.

Table A2.2 also shows that the under-performance of Puerto Rico is still severe. There is almost no change in the OLS estimate of the Puerto Rican dummy: it is 3.24 percent when I include the time dummies. However, the individual effect obtained through the GMM estimation is somewhat smaller. The OLS dummy obtained for Puerto Rico's individual effect indicates that the average rate of growth during the transition path was 1.1 percentage points lower than expected.

Table A2.3

Determining the Effect of Statehood on Growth

	1880-1940
□	0.6923
	(0.0500)
Agric. share	-0.0576
	(0.0001)
non- STATEHOOD	-0.002 (0.0001)
DUM loc	yes
□	0.0184
	(0.0036)

In order to test the hypothesis that the political status of an economy affects its performance in terms of growth, I use per capita income data from 48 states from 1880 to 1940. These series were obtained from Barro and Sala-i-Martin (1992). The idea of the test is the following. Several of the 48 states included in this sample changed their political status from territories to states during the period under study. In particular, North and South Dakota, Montana and Washington became states in 1889. Idaho and Wyoming in 1890, Utah in 1896, Oklahoma in 1907 and New Mexico and Arizona in 1912. I run then a standard growth panel regression using cross-sections 20 years apart including a variable for political status. This variable takes values between zero and one. It is 0 for all those observations for which the economy was a territory. If the economy changed status during the period it takes the proportional value. For instance it is 10/20 for Montana for the period 1880-1900, since Montana became a state in 1890.

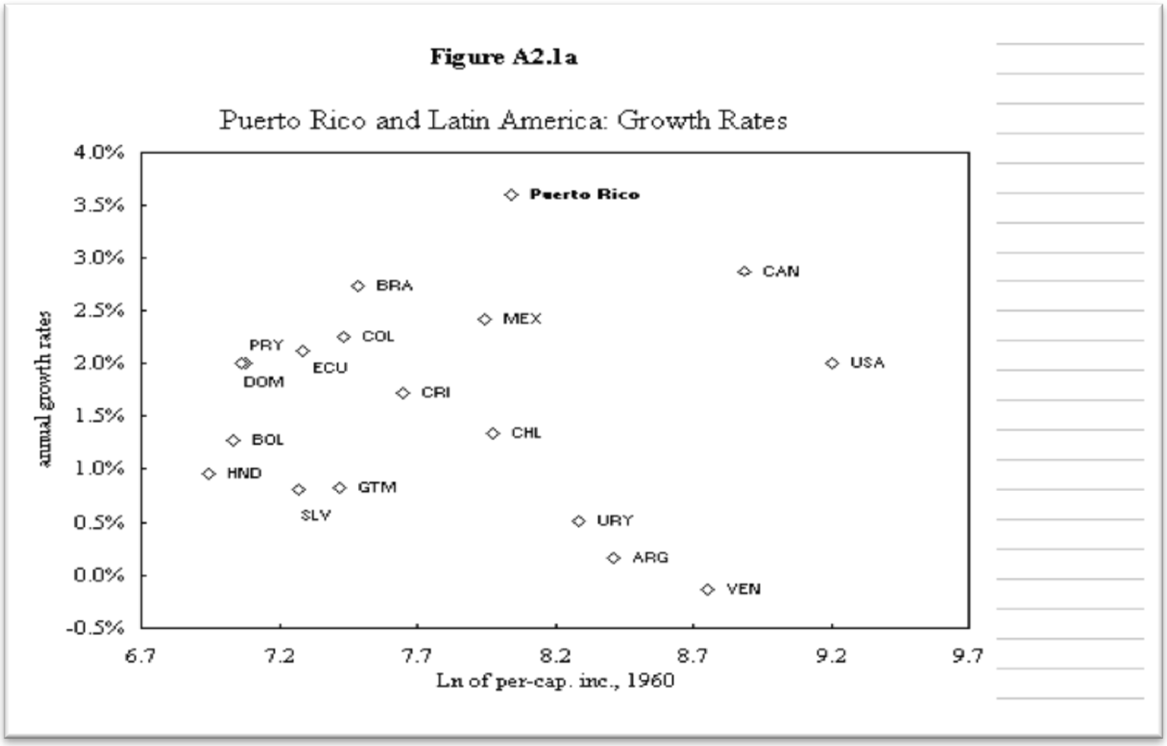
Table A2.3 presents the results of this regression. Following Barro and Sala-i-Martin, I included also the share of income originating in agriculture as a measure of the structural composition of income. I also included dummies for the south, west and mid-west areas. The results are striking. Table A2.3 shows that the coefficient in the non-statehood variable is large, negative, and significant. That is, given its initial level of per capita income and structural composition of their income, the economies of the actual states have grown faster after they became states. Although these results must be interpreted carefully, it is clear that they highlight the existence of positive effects for growth of the statehood status.

2.d Puerto Rico, Latin America And The Caribbean

In spite of the apparent under-performance of the Puerto Rican economy with respect to the US, the post-WWII economic history of Puerto Rico has been used as an example of successful economic development.

In this section I use the recently available data from the Penn World Tables version 5.6. that provide data on GDP at international prices for Puerto Rico allowing the international comparisons to be made. I used the Barro and Lee (1994) sample of 97 countries plus Puerto Rico. Figure A2.1a clearly summarizes the successful Puerto Rican story. I have selected from the sample of 97 countries all the Latin American and Caribbean economies plus USA, Canada, and Puerto Rico. The figure makes clear that Puerto Rico out-performed all the economies with similar or lower per-capita income as of 1960.

In order to identify sources of growth for Puerto Rico, I ran panel regressions built using cross-sections of 98 countries (included Puerto Rico) at five year intervals from 1960 to 1990. I included as explanatory variables some of the most common control variables used in the standard literature on empirical growth. For education I use the percentage of the population over 25 years old with secondary school completed. I also included fertility rates, investment rates, government expenditure ratios, black market premium, and number of revolutions. Table 4 summarizes the results. As before, I ran regressions using a standard OLS procedure and a GMM estimation. The convergence rates are 2.28 percent an 9.49 percent respectively. The estimated coefficients for the education variable are positive and significant, but small. The coefficients on all other variables are reported in Table A2.4 as well. They are similar to those obtained in previous studies.



The results for Puerto Rico and Latin America and the Caribbean are summarized through figure A2.1b. The figure presents individual effects obtained in the determinants of growth GMM regression presented in Table A2.4 column 2, for the sample and period previously described. The figure shows that Puerto Rico does not present a particularly large individual effect. That is, most of Puerto Rico's good performance is explained for the accumulation process through investment, its human capital, its initial position, and other variables. Once we take into consideration those determinants of the economy steady state, there is not much left unexplained. The relatively low individual effect (lower than the one for the U.S.) indicates that most of the relative performance of Puerto Rico, when compared to a broad set of countries, is explained by its relatively high steady state level of per-capita income, which is captured by the control variables included in the regressions.

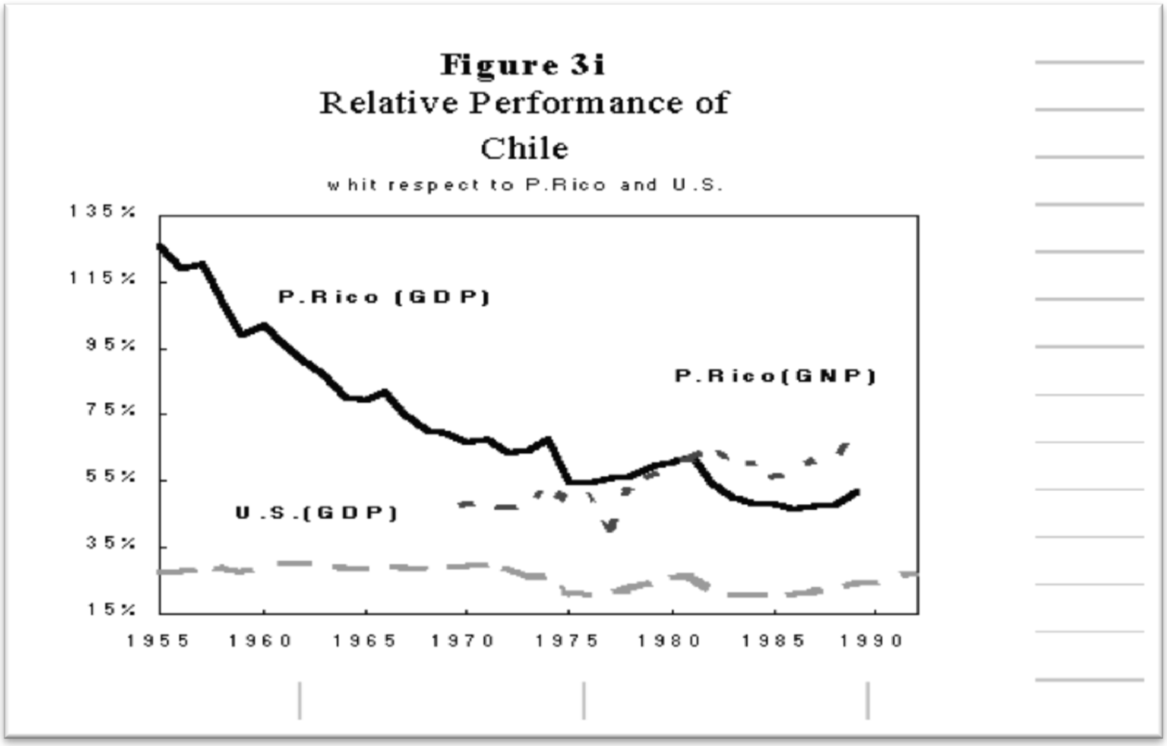


Table A2.4

Cross-Country Regressions of per-capita GDP

	OLS	GMM
□	0.0781	0.0301
	(0.0029)	(0.0086)
educ.	0.0049	0.0154
	(0.0021)	(0.0076)
fertility rate	0.0591	-0.0596
	(0.0141)	(0.0550)
I/GDP	0.1311	0.1334
	(0.0224)	(0.0362)
G/GDP	-0.0481	0.1219
	(0.0198)	(0.1433)
ln (1+BMP)	-0.0231	-0.0348
	(0.0043)	(0.0118)
revolutions	0.0086	0.0064
	(0.0054)	(0.0137)
□	0.0247	0.117
	(0.0037)	(0.0276)

2.e The Cost of Converging to a Lower Steady State

In order to compare the actual trajectory of per capita income followed by the Puerto Rican economy to the one it would have reached had it moved along the US convergence frontier, I use well known results on neoclassical growth theory. The trajectory of income per-effective worker, $\bar{y}$, around the steady state, $\bar{y}^*$, is governed by the following relationship

$$\ln(\bar{y}_t) = e^{-\lambda(t-t_0)}\ln(\bar{y}_{t_0}) + (1-e^{-\lambda(t-t_0)})\ln(\bar{y}^*) \quad (3)$$

This trajectory is a function of the convergence rate □□□A simple transformation of equation (3) allows us to simulate the trajectory of income under different convergence rates and steady state values.

$$\ln(y'_t) = \ln(y_t) + (1-e^{-\lambda t})\left[\ln(\bar{y}'^*) - \ln(\bar{y}^*)\right] \quad (4)$$

Table A2.5

The Cost of Converging to a lower Steady state

	Mississippi		US Average	
Convergence Rate	Income lost in 1994	Total Income lost since 1955	Income lost in 1994	Total Income lost since 1955
2 %	3,777	67,366	6,159	107,335
3.7 %	5,800	110,928	9,864	183,232
6 %	7,143	148,745	12,462	252,363

Equation (4) indicates the increase in per-capita income obtained as a consequence of an increase in the steady state level of per-capita income. [8] Table A2.5 presents simulations of the cost for Puerto Rico of converging to a lower steady-state. The calculations make use of equation 4 to simulate income trajectories under different parameter values.

[8] The results from simulations of equation 4 performed under different scenarios are reported in Table 5.

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D. Statehood: A Pre-Condition to Economic Growth

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Chapter I
Introduction and Executive Summary

Introduction

This report highlights the principal economic issues related to Puerto toward that end. The report's basic theme is that future economic growth for Puerto Rico requires a development strategy that is oriented toward the private sector, that is gimmick free, that deals with the realities and dynamics of the 1990s and the 21st century, and that does not languish on the static rhetoric of industrialization through subsidy and state planning. In our view, statehood is a precondition for this essential development strategy.

We reach this conclusion based on the fundamental economic realities facing the island. Nevertheless, we also recognize that the most important element of the status issue is Puerto Rico's right to self-determination. Puerto Rico, above all, must be allowed to choose for itself the form of its relationship with the United States. Indeed, as we discuss below, resolution of this political question underlies the economic dimensions of Puerto Rico's problems because the uncertainty and political paralysis affiliated with the current situation pose an insuperable obstacle to 'needed reforms. We therefore strongly support legislative efforts in both the U.S. and Puerto Rico that would make a final resolution of this issue possible.

The report begins in Section II by asserting that Puerto Rico can be proud of its past growth but not sanguine about its future unless significant change occurs. We focus attention on the island's outmoded development strategy, identify areas of potential growth and promise, and then highlight the current problems facing Puerto Rico's public sector. As we emphasize throughout the report, Puerto Rico needs to focus on a long term strategy for development; while we sketch the contours of that strategy here (streamlined public sector, investments in infrastructure and education, respect for the environment), the bulk of that project is beyond the scope of this report. In this same section we show that with a well-constructed fiscal framework and a prudent administration of state finances, the State of Puerto Rico could make room for federal taxes without diminishing the quality of public services provided to its citizens. Statehood, we maintain, is both a catalyst and a requirement for these changes.

Section III then focuses attention on section 936 of the Internal Revenue Code, the tax provision (benefiting Puerto Rican subsidiaries of U.S. corporations) that would be eliminated under statehood. Demonstrating that section 936 is an inefficient tool for economic development that has outlived its usefulness, we contend that its phase-out under any political status, including statehood, is desirable. Moreover, its phase-out need not harm the Puerto Rican economy, provided it is replaced with a more compatible economic development strategy that could be financed in part by an appropriately designed statehood grant.

Finally, in Section IV, we suggest a broad legislative framework to provide for the transition for statehood, and address the paramount importance of the timing in designing that strategy. If properly designed, such legislation can be revenue neutral to the U.S. Treasury, fair to the section 936 companies that have invested on the island, and helpful to Puerto Rico's long-term development strategy by providing for a statehood grant. –

Appendix A provides a new perspective on the implications for Puerto Rico of the large increases in welfare programs that would accompany statehood. Appendix B identifies by type the public corporations in Puerto Rico, which we argue are ripe for reform.

Summary of Conclusions

1. Puerto Rico's economy and government require a significant overhaul if the island hopes to compete in the 1990s and 21st century. A new strategy for long-term economic development is essential. Puerto Rico's economy is currently plagued by high unemployment, low labor force participation, and a high rate of migration to the mainland. The economy is also dependent on an outdated development model based on government assistance and tax credits to attract investment; its centerpiece, the section 936 tax credit program, continues to exist only at the will of Congress. The public sector, meanwhile, appears politically paralyzed and incapable of reform.

2. Important real reasons exist for investing and reinvesting in Puerto Rico. These include a marvelous climate, a well-developed financial infrastructure, a trained, inexpensive and productive labor force, and a cultural and geographic background making it a natural conduit to the increasingly important Latin American market. The stability and certainty of statehood is needed to put those forces to work.

3. Puerto Rico's public sector is not satisfying the conditions necessary for sustained growth. We have identified the following problems: excessive growth in government spending and employment, insufficient investment in infrastructure and education, neglect of the natural environment, and an inefficient public corporations sector.

4. Statehood would spur government reform. Residents of Puerto Rico suffer a very high tax burden. The responsibility of full federal taxes will create pressure on the island to make fiscal adjustments in the range of $1 to $1.3 billion. Much of this amount could be generated through such measures as: improving income and excise taxes compliance; privatization and elimination of public corporations, such as the Sugar Corporation; increasing the self-sufficiency of remaining public corporations and imposing upon them the responsibility of making contributions to the central government through different means; and reducing the size of the central government, eliminating and consolidating agencies and programs, and implementing a hiring freeze and gradual personnel reduction.

5. Statehood would result in the eventual elimination of section 936, a subsidy that is inefficient and costly, increasingly ineffective in providing jobs in Puerto Rico, and inconsistent with both U.S. Treasury policy and the island's future long- run growth. Section 936 represents a monumental subsidy by the federal government, with little to show for it: over $2.4 billion in revenues foregone every year, an average annual revenue cost per employee of over $26,000, a revenue cost per dollar of wages paid averaging $1.51 (increasing to $8.61 for the incremental wage benefit). Perhaps most egregiously, it would take the federal government only 1.8 years at the current rate of tax costs to buy back entirely the net investments of section 936 companies in Puerto Rico.

With the shifting mix of 936 companies away from labor intensive manufacturing such as textiles toward industries such as pharmaceuticals and electronics with large manufacturing and marketing intangibles, section 936 increasingly rewards not real investment on the island, but rather the ability of U.S. companies to shift income to Puerto Rico through transfer pricing. Hence, regardless of the status issue, section 936 should be eliminated.

6. Statehood not only requires that section 936 be phased out, but also provides an ideal opportunity to begin more effective development initiatives. A well designed statehood grant could counter any possible adverse short-term economic effects of phasing out section 936 while at the same time providing an environment more conducive to the long-run economic growth of the island. Proper design of the timing of the transitional adjustments and the nature of the statehood grant are necessary to assure that statehood leads to the desired goal of promoting a more effective long run development strategy for the island.

The effectiveness of that statehood grant — as well as Puerto Rico's development prospects — requires that the grant not be co-mingled with normal government funds, as has been implicitly suggested in past legislation.

It should be set up as a trust in the context of an agreed upon development strategy.

7. Statehood implementing legislation, appropriately designed, can achieve budget neutrality, allow for a reasonable transition, and provide for a statehood grant. A properly designed transition package could generate well over $5 billion for the U.S. Treasury in the first 9 years of statehood alone. Thus, even with revenue neutrality for the federal budget, a significant pool of funds could be made available during the transition to Puerto Rican residents to promote economic growth under statehood. The success of the transition period depends on the rapid (but fair) phase-out of section 936, combined with a strategy of introducing federal taxes and federal entitlements together.

8. The effect on work incentives of extending full federal welfare payments to Puerto Rico, as would occur under statehood, depends on the economy's ability to grow and create jobs. By serving as a precondition for the long-term economic growth of the island, statehood would be a

positive force in strengthening the work opportunities for Puerto Ricans. In this sense statehood, with its concomitant political renewal and empowerment, would build the foundation for economic growth and also assure a more adequate safety net of fair social welfare programs.

Chapter II

The Need for Change

Reforming the Development Strategy and the Public Sector

This section addresses the two major problems afflicting Puerto Rico's economy: an outdated and ineffective development strategy; and a public sector in dire need of reform and streamlining. In both cases, we argue that change is required irrespective of the status question if Puerto Rico hopes to grow, develop and compete into the 21st century. At the same time, the requirements of a new development model and a public sector overhaul also demonstrate how the shift to statehood would catalyze these needed reforms. Indeed, we conclude by arguing that these changes are unlikely in the absence of statehood.

Puerto Rico's Outmoded Development Strategy

The Problem with the Status Quo

Puerto Rico's economy is not a case of "if it works, don't fix it." Although the economy experienced strong economic growth during the 1950s and the 1960s as it was transformed from an agricultural to a manufacturing economy, development in recent years has atrophied. Currently the island is experiencing high unemployment (17.5 percent), low labor force participation (45.7 percent), and a high rate of migration to the mainland in search of jobs (hovering around 1 percent per year). Moreover, a 1992 snapshot of Puerto Rico bears a close and uncomfortable resemblance to the stagnation and frustration of many developing countries with the following features: a high degree of centralization, a capital city mentality, a decaying infrastructure, and an apparently bloated public sector, some of which is suitable for privatization. Indeed, nothing has changed since this report was first issued in 1990, except that the people of Puerto Rico rejected a political maneuver that threatened their U.S. citizenship and would have entrenched the status quo.

Unfortunately, Puerto Rico continues to rely on an outdated development model based on government assistance and tax incentives to attract investment. The use of a government agency such as Fomento to facilitate investment, for example, no longer fulfills a productive purpose given the availability of sophisticated financial institutions for such services. Indeed, this approach is inappropriate in today's economic and financial climate, particularly given the budgetary problem is of both the U.S. and Puerto Rican governments.

Future economic growth in Puerto Rico cannot depend on a tax code provision that is as inefficient, expensive and uncertain as section 936. Instead, Puerto Rico should work toward providing the two most important factors in any long-term investment decision: consistency and stability. Yet section 936 — a tax loophole that benefits special interest groups at the expense of the U.S. taxpayer — exists at the caprice of Congress in a period of severe fiscal retrenchment.1 At the same time, Puerto Rico's political status is as indeterminate as the longevity of section 936. That climate of uncertainty undoubtedly acts as a major impediment to future investment. In sum, mere adjustments of the status quo represent a wholly inadequate and insufficient base for Puerto Rico's economic health in both the short and long term.

The Potential for Growth

Sustainable growth in Puerto Rico demands something different. Government's role is to provide a consistent policy setting in a context of stability, not heavy-handed controls and regulations. Successful and sustainable economic growth in both the U.S. and throughout the world has been fueled by the response of the private sector to the forces of the marketplace.

Fortunately, Puerto Rico has the assets needed for such private sector growth. Labor is one such asset: it is highly skilled, productive, plentiful and relatively inexpensive. Its well-developed financial, communication and transportation networks are other valuable resources. A multicultural heritage and strategic location give the island a specific advantage in the service industries in a period of rapid regional economic integration. These attractions, plus an ideal climate and natural environment, have already begun to attract major investments in the island's tourism sector. Under statehood, Puerto Rico would also offer permanent advantages that similar locations competing for investment simply cannot match, including exemption from U.S. tariffs, use of the U.S. dollar, and protection under the U.S. legal system. To realize fully and maintain its competitive advantages, however, statehood is necessary, particularly in light of the trend towards free trade throughout the region.

Statehood as an Alternative

None of these assets depends on an inefficient tax subsidy or congressional generosity. The potential exists for strong economic growth based on stability and private sector initiative. In particular, the tourism, agricultural and services sectors offer significant opportunities for growth if Puerto Rico were to expand its development strategy beyond the distorted policies encouraged by section 936. We believe that statehood, with its emphasis on self-reliance, its resolution of the status issue, and its stability and consistency in tax treatment, is a precondition of such diversified growth. Statehood offers both U.S. and foreign investors a more familiar, recognizable and permanent environment than commonwealth, for example.2 The following section demonstrates that needed reforms of Puerto Rico's public sector are also likely to occur only with the fiscal pressures that would accompany the shift to statehood.

Puerto Rico's Public Sector and the Effects of Statehood

Effective Government: A Precondition for Growth

The ability to attract and retain businesses and investments depends on an effective and unoppressive government in Puerto Rico that meets several basic criteria. These preconditions for sound economic growth include:

- A streamlined and responsive public sector that provides public services efficiently;
- An adequate and well-maintained infrastructure;
- Quality education and human resource development for a literate and skilled work force;
- Resolution of the status issue; and
- A supportive economic climate that reaches beyond traditional cost concerns like taxes and regulation to include environmental and other quality-of-life issues.

In these areas particularly, government policy has a direct impact on economic growth. Recent empirical analyses of relative rates of growth across U.S. states demonstrate that government investment-education and infrastructure, for example, significantly affects economic development. Initial levels of public infrastructure (as well as changes in those levels) were found to have a significant impact on employment growth, private sector output and private investment; each additional $1000 per capita investment in public infrastructure was found to generate a 0.2 percent increase in the average annual rate of a state's employment.3 Similar studies have shown that education levels — the percentage of workers with high school and college degrees — also directly affect economic growth.

State governments in the U.S. have recently begun to recognize and respond creatively to the importance of their role in economic development.4 competing in an increasingly integrated and competitive world economy now requires effective, efficient and competent government helping to create a framework conducive to economic growth.

The Current Situation

Does Puerto Rico's public sector satisfy these conditions? The evidence suggests that the answer is clearly "no." In fact, Puerto Rico's public sector currently faces a multitude of problems and challenges. Continued economic growth requires that they be addressed regardless of the status question. Clearly identifiable problems include the following:

RAPID GROWTH OF PUBLIC SECTOR EMPLOYMENT: A recent budget crisis has highlighted the growing costs of Puerto Rico's public sector, particularly with respect to public employment growth. Between 1975 and 1988 the average annual growth rate in government employment was 2.6 percent, substantially higher than the 1.4 percent growth rate of non-government employment. The government is now the single most important employment sector on the island; in 1988 it employed almost one in four workers. In contrast, government employment in the U.S. in 1988 accounted for 15 percent of total employment (one in six workers).[5]

RAPID GROWTH OF GOVERNMENT EXPENDITURES: Table II-l shows that between 1980 and 1992 for the commonwealth government alone (not including the municipalities), nominal expenditures between 1980 and 1992 grew at an average annual rate of 8.2 percent, compared with 5.7 percent for personal income on the island.[6] Meanwhile, budget problems have plagued the government, evidenced by the use of a variety of budget gimmicks and one time revenue windfalls to balance the budget.[7]

INSUFFICIENT SPENDING ON EDUCATION: In fiscal year 1988, Puerto Rico spent only $1400 per pupil on elementary and secondary education, compared to $1594 per pupil for the lowest state expenditure.[8] Table II-2 shows that education spending accounted for only 18.3 percent of government expenditures in Puerto Rico, compared to 33 percent in the U.S. In 1992 the spending of the general fund alone was $1.2 billion, $1.7 billion with federal funds or 20%. The 1987-88 public high school graduation rate was 63.2 percent, 9.4 percentage points lower than the U.S. average (only two states and the District of Columbia had lower rates).

DECLINE IN INVESTMENT IN INFRASTRUCTURE AND PUBLIC WORKS: Figure A shows that inflation-adjusted government construction (including public enterprises) generally fell between 1975 and 1990, with an upturn only in 1987 and 1988. Government investment in "roads, schools, and other public works" has been even flatter. Figure B demonstrates that these downward

Table 11-1

Commonwealth General Fund Budget Fiscal Years 1980-1992

Fiscal Year	**Budget**	**Increase**	**Percent**
1980	**$1,792.5**		
1985	**2,774.1**	**$981.6**	**54.7**
1986	**2,851.3**	**77.2**	**2.7**
1987	**3,149.9**	**298.6**	**10.4**
1988	**3,390.7**	**240.8**	**7.6**
1989	**3,791.2**	**400.5**	**11.8**
1990	**3,984.9**	**193.7**	**5.1**
1991	**4,038.0**	**53.1**	**1.3**
1992	**4,227.2**	**189.2**	**4.7**

1980 - 1992 Average percentage growth: 8.19
1985 - 1992 Average percentage growth: 6.22
Source: Budget documents, Office of Budget Management, Dr. Luis Montanez, Former Director of the Commonwealth Office of Management and Budget.

Table 11-2

Budget Priority Elementary and Secondary Education Commonwealth General Fund and Federal Funds Fiscal Years 1976, 1980, 1990, 1991 ($ Millions)

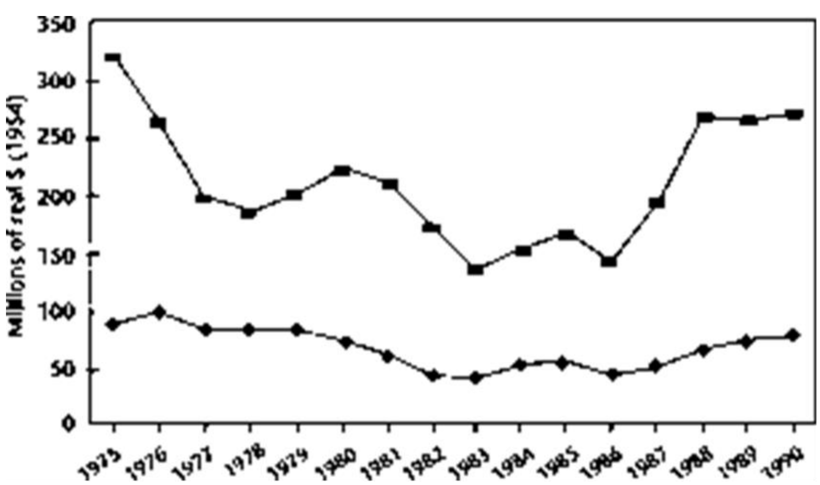
General Fund Only ' General Fund & Federal Funds

Fiscal Year	Total	D.E.	% of Total	Total	D.E.	% of Total
1972	**1130.3**	**320.1**	**28.3**	**1305.3**	**357.4**	**27.4**
1976	**1167.6**	**271.5**	**23.2**	**1550.2**	**367.4**	**23.7**
1980	**1*792.5***	**410.3**	**22.8**	**2732.3**	**661.9**	**24.2**
1985	**2774.1**	**548.8**	**19.8**	**3589.1**	**820.8**	**22.8**
1990	**3938.2**	**738.7**	**18.7**	**4714:9**	**1054.2**	**22.4**
1991	**4036.9**	**736.3**	**18.3**	**4852.5**	**1082.6**	**22.3**

Source: Budget documents, Office of Budget Management (Provided by Dr. Luis Montanez, April 1992)

D.E. = Department of Education

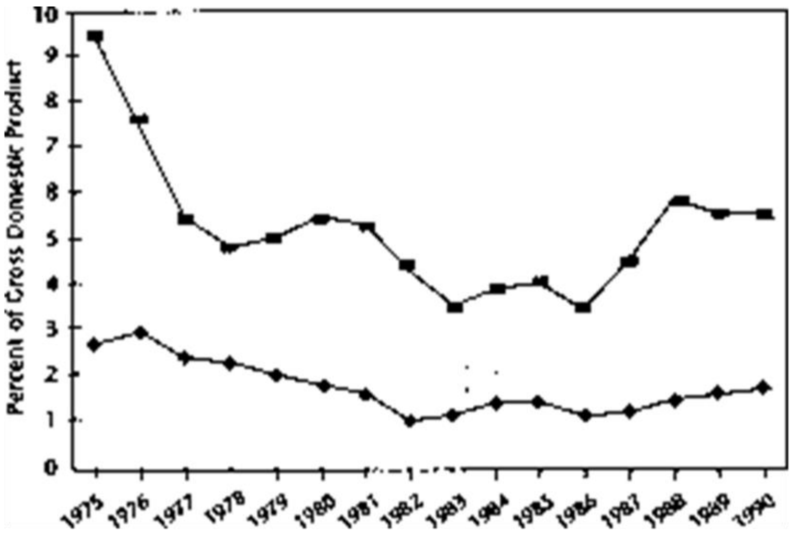
Figure A



Govt Construction Roads, Schools, etc.

Investments in Public Infrastructure

Figure B



Domestic Investment —Public Works

Investments in Public Infrastructure

trends are even more pronounced when investment is compared to the growth of the economy as a whole as measured by gross domestic product. Though the U.S. has also experienced a similar trend, it should be remembered that the less developed infrastructure in Puerto Rico requires investment and cannot afford the neglect like that of the more highly developed mainland.

NEGLECT OF ENVIRONMENTAL AND NATURAL RESOURCE REGULATION: Puerto Rico's 9 Superfund sites on the National Priority List9, with a cleanup bill that could reach $20 million per site, amply demonstrate Puerto Rico's environmental negligence. A recent report by the Natural Resource Defense Council criticized the commonwealth government for its poor resource management, particularly with respect to Puerto Rico's forests and endangered species.10 The report noted some specific lapses, such as the fact that the commonwealth government did not spend any of the $2 million appropriated for conservation land purchases by the legislature in 1988.

AN INEFFECTIVE REVENUE COLLECTIONS PROCESS: A 1987 study on income and excise tax reform in Puerto Rico prepared by Booz, Allen & Hamilton estimated that $1.5 billion in personal income went untaxed in 1984 because of non-filing and under-reporting, and that an additional $ 135 million could be collected annually by improving tax administration, enforcement, and compliance incentives.11Table II-3 shows that under reporting and non-filing were projected to grow rapidly in the absence of revenue reporting. No more recent evidence indicates that anything has changed to improve this situation.

LARGE FISCAL DRAIN ASSOCIATED WITH PUBLIC CORPORATIONS: Public corporations were originally designed to serve governmental and quasi-

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Table 11-3

Distribution of Reportable and Reported Income Projection of 1984 Booz, Allen St Hamilton Analysis, to 1990

($ Millions)

	1984	**1990**
Total Reported Income	**7,300**	**10,200**
Not Reported **Non-Filing**	**1,500**	**2,400**
Under-reporting	**1,000 '**	**2,000**
Total Not Reported	**2,500**	**4,400**
Total Reportable Income	**9,800**	**14,600**
Percent Unreported	**25%**	**30%**

Source: Booz, Allen & Hamilton, "Final Report on the Tax Reform Program," Prepared for the Department of the Treasury, Feb., 1987, Appendix C.

governmental functions with more flexibility in financing and management than agencies of the commonwealth government. But Puerto Rico’s increasing dependence on this form of organization to provide the jobs that its development program fails to produce — there are fifty-four public corporations now[12] — creates several problems. One problem is the-provision of services more suited to the private sector. A more immediate problem is the drain on the general fund. Public corporations which provide typically private services include the Automobile Accidents Compensation Authority and the Maritime Shipping Authority. If these activities were performed in the private sector, not only might they operate more efficiently but also they would generate tax revenue for the government; currently, the government indirectly subsidizes these corporations through tax exemptions.

Though most public corporations were originally designed to be self-supporting through fees and charges, the great majority are heavily subsidized by the commonwealth government. The Sugar Corporation, for example, derived 64 percent of its operating funds from the general fund in the 1990 budget. Direct subsidies are provided through annual legislative appropriations for capitalization, investment, and operations costs. In fiscal year 199192 public corporation appropriations totalled almost $1.3 billion, over 30 percent of the general fund budget.[13]

POOR PERFORMANCE IN SERVICE DELIVERY: A qualitative evaluation of the government's performance in service delivery obviously must rely on more subjective sources. But here again, evidence indicates that Puerto Rico's public sector is lacking in efficiency and responsiveness. For example, the swelling of the public payroll has been criticized as excessive and unnecessary. A 1985 report commissioned by the current governor and prepared by a committee of prominent citizens recommended a vast overhaul of the government's structure on the grounds that the payroll growth was an "ad hoc" response to employment crises on the island and did not represent improved service delivery.[14] The *San Juan Star* has more recently echoed this diagnosis, attributing the growth to the "twin traditions of political patronage and government expansion to reduce unemployment."[15]

Moreover, the increasing size of the public sector also has other indirect costs. An excessively large organization constrains both accountability and responsibility, causing delay and time-consuming red tape. An over-emphasis on functional centralization at all levels has contributed to this problem. Though government services were originally centralized to reduce costs, avoid duplication of responsibility, and take advantage of economies of scale, the 1985 report found that the drawbacks of centralization now outweigh the benefits.[16] The authors argued that the public sector now places a greater emphasis on structure and hierarchy than on service, resulting in a variety of ills ranging from low productivity and high operating costs to slow provision of services.

Desirable Changes

No economy preparing to compete in the twenty-first century can afford to be burdened with the problems noted above. Change is therefore desirable regardless of the status issue. Examples of possible reforms include:

- *Better government hiring practices.* The government should not be the principal employer nor the employer of last resort for a failed job development policy. Rather, its hiring should be closely linked to service levels and based on merit.

- *Enhanced tax collection and compliance.* Efficient revenue-raising is necessary to provide resources for important investments in education and infrastructure and to foster an atmosphere in which public obligations are respected.

- *A restructured tax system.* An increased emphasis should be given to decentralization by devolving more revenue-raising capability back to local governments. Steps have been taken to reorganize the administration of the property tax, but the outcome of this reform remains in the balance as of this writing. Such reforms must be encouraged as a matter of general policy, however.

- A *reorganization of the public corporations sector.* The goal should be to improve accountability and encourage efficiency, and reduce its growth rate.

Change Requires Pressure

These important changes will not occur without the discipline required by statehood. Recent history, political reality, and vested interests indicate that needed reforms are unlikely in the absence of external prodding. Most of the problems discussed here are not new, nor are we the first to identify them. Yet little rehabilitative action has been taken. Witness for example the Commonwealth Administration’s limited response to the reforms advocated in the 1985 report on the government’s structure: virtually none of the recommended changes have been implemented. Nor has significant action been taken on tax reform proposals.

In contrast, statehood would entail certain collateral changes and adjustments that represent natural opportunities for the reform and renewal of political and economic structures. Specifically, statehood would definitively resolve the status question. Mainland residents unfamiliar with the island may underestimate the extent to which Puerto Rican politics revolve around this unsettled problem. One example of its influence is provided by the platforms of the three major political parties there, which hold out their support of statehood, commonwealth, or independence as central defining characteristics. Because this issue has so dominated Puerto Rican politics (often to the detriment of good government), we feel that substantial economic or political reform cannot take place until it is resolved. A more quantifiable change likely to produce reform is the fiscal pressure on the Puerto Rican public sector that would accompany statehood. The following section addresses this issue.

Reform through Statehood: The Fiscal Impact

Under statehood, Puerto Rico's fiscal structure would be affected both by the extension of federal taxes to Puerto Ricans and by full federal funding for entitlement programs.[17] The magnitude of the fiscal pressure on Puerto Rico's public sector that would accompany this change can be determined by comparing Puerto Rico's fiscal structure with that of other U.S. states. Table 11-4 shows the tax burdens—state (or commonwealth) and local tax revenue as a percent of personal income — of Puerto Rico, Mississippi (the lowest income state), and the U.S. as a whole. The table demonstrates that in 1989, Puerto Rico's total tax burden was 5 percentage points higher than both the U.S. average for state and local taxes and the total tax burden in Mississippi.[18] The difference in tax efforts largely reflects Puerto Rico's heavy reliance on the collection of individual and corporate income taxes. Because its residents are not required to pay federal income taxes on Puerto Rican source income, Puerto Rico is able to levy higher rates of income taxation than other states.

With statehood and the imposition of federal taxes, however, Puerto Rico would face pressure to bring its tax burden in line with that of other U.S. states. That pressure would come from individuals seeking relief from higher taxes

Table 11-4

1989 Effective Tax Burdens
(Tax Revenues as a Percentage of Personal Income)

	Puert o Rico	Average state & Local (Total U.S.)	Mississippi	Difference between U.S. Avg. and P.R.	Value of Differenc ($ Billions
Total Taxes	**15.7**	**10.7**	**10.7**	**5.0**	**$0.95**
Income	**9.6**	**2.8**	**1.9**	**6.8**	**1.30**
Sales & Excise	**4.9**	**3.8**	**3.6**	**1.1**	**0.19**
Propert y	**0.8**	**3.3**	**2.6**	**-2.5**	**-0.48**
Tollgate	**0.6**	–	**—**	**0.6**	**0.11**
Other	**0.2**	**0.8**	**2.6**	**-0.6**	**-0.11**
Charges and Miscellaneo	**2.1**	**4.4**	**4.6 '**	**- -2.3**	**-0.43**
Total Own Source Revenue	**17.8**	**15.1**	**17.0**	**3.7**	**$0.70**

Source: U.S. Data: ACIR, "Significant Features of Fiscal Federalism, Volume II," (Washington, D.C.: ACIR, 1991) Table 85 and p. 205. Puerto Rico data: Puerto Rico Planning Board, "Economic Report to the Governor, 1990," Tables A-1 and A-27.

Estimated Local Savings for Entitlement Programs Under Statehood

(Estimates under S.712 Statehood Assumptions)

($ Millions)

		Medicaid[1]	A.F.D.C	SSI[2]	Stamps[3]	Total
1992		**$266**	**$6**	**$0**	**$(30)**	**$227**
1993		**245**	**40**	**$0**	**(30)**	**255**
1994		**225**	**70**	**$0**	**(30)**	**265**
1995		**204**	**70**	**$5**	**(30)**	**249**
	Average, first 4 years					**249**

Source: CBO, "Background Materials on the Costs of the Puerto Rico Status Referendum Act," Prepared for the Senate Finance Committee, November 15, 1989, p. 10.
Note: These figures represent savings to the Puerto Rico Government under statehood through federal replacement of local entitlement programs. Figures based on CBO estimates of program options, benefit levels, and numbers of participants.

as well as from businesses concerned about keeping Puerto Rico's tax burden competitive with other states. Hence the current disparity in tax burdens is one measure of the pressure likely to be placed on Puerto Rico's fiscal structure under statehood. Table II-4 shows that to bring its burden in line, Puerto Rico would need to reduce its tax burden by about 5 percentage points. At 1989 income levels, this translates to $0.95 billion dollars, 28 percent of 1989 commonwealth-source revenues.

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[1] See footnote 25 for a description of this CBO estimate.

[2] This estimate follows assumptions in bill S.712 that Supplemental Security Income (SSI) would not fully replace the Adult Assistance program until 1995.

[3] Replacing Puerto Rico's Nutrition Assistance Program with food stamps would increase local administrative costs for eligibility certification, work programs, and quality control activities. This figure is from a September 6, 1989 CBO cost estimate.

Another measure of the fiscal pressure created by federal taxation under statehood is the additional amount Puerto Rico's individuals and businesses would have to pay. In 1990 testimony .relating to l)ill S.712, the U.S. Treasury Department estimated federal revenues from non-936 corporate income taxes, individual income taxes, and new excise taxes at $1.2 billion in 1994, the first year under S.712 that federal taxes would have been fully imposed. To accommodate those new taxes without increasing the total (i.e. federal, state, and local) tax burden, the commonwealth tax burden would therefore have had to be reduced by $ 1.2 billion by 1994. Under the different transition model adopted by S.244, federal tax obligations would have been phased in over a four year period (after a one year delay); although the federal tax burden would be imposed gradually under this model, the same level of fiscal pressure would eventually obtain.[19]

Both measures indicate an approximate total annual fiscal pressure of $ 1 to $1.2 billion in the first years of statehood.[20] In other words, to avoid the negative effects of high marginal tax rates under statehood, Puerto Rico would need to reduce its tax burden, mainly through cutting income tax revenues.

One additional fiscal pressure caused by statehood would be the loss of tollgate tax revenues. The 5 to 10 percent tax Puerto Rico imposes on repatriated section 936 funds would be eliminated under statehood, since taxation of interstate commerce is unconstitutional. The annual value of this revenue source fluctuates to some degree depending on investment decisions of section 936 companies. However, from 1985 through 1990, average annual tollgate tax revenues were close to $109 million;[21] this average provides a rough estimate of the value of the tollgate tax.

On the other hand, additional federal funds (particularly for entitlement programs) will free up some locally generated funds for other purposes. Using CBO estimates tied to the original assumptions of S.712, Table II-5 shows that as a state, Puerto Rico would save an average of $249 million annually because some locally funded programs would be replaced by federally funded ones. For example, substituting federal Medicaid funds for the local public health program could yield up to $266 million for the commonwealth budget.[22] The food stamp program reduces these gains by an estimated $30 million annually due to increases in local administrative costs.

The bulk of the new federal funds, however, will arrive as additional transfers to individuals, not direct substitutes for commonwealth programs.[23] These funds could provide at most some indirect fiscal relief, since total increased federal funding will exceed new taxes,[24] leading to a stimulation of aggregate demand and an increase in taxable income.

In sum, new federal funding will ease some of the pressure caused by new federal taxation. But on balance, fiscal changes under statehood will still create pressure to reduce commonwealth income taxes. Hence, adjustments and cutbacks in the size and scope of the Puerto Rican public sector will be necessary.

Reform Through Statehood: The Constructive Response

Critics point to the costs and dislocations associated with such pressure. But those concerns are misguided. They fail to account for the weak and, at best, uncertain development prospects associated with the present situation. Given the inadequacies and deficiencies outlined earlier, we believe that future economic growth on the island requires reform and reduction in the public sector that will emphasize a sensible policy framework and a responsive tax administration. In this respect, fiscal pressure associated with statehood represents a useful stimulus for needed change. Moreover, with careful planning, that pressure can be constructively directed toward changes that are both economically desirable and fiscally feasible. (See Table II-6.)

Revenue Impact of Policy Measures

($ Millions)

Policy Measure:	
Substituting Federal Programs for Local Services[1]	$249
Central Government Savings in Personnel through Consolidation and Reduction of Agencies and Programs and Privatization of Services, starting with a Hiring Freeze[2]	$243
Increasing Self-Sufficiency of Public Corporations[3]	$50
Eliminating the Sugar Corporation[3]	$25
Reorganization of Public Corporations Sector, Imposing Taxes, Contributions in lieu of Taxes or Payment of Interest on Contributed Capital[3]	$200
Improving Income Tax Compliance[4]	$440
Improving Excise Taxes Compliance and Administration[5]	$150
Total	$1,357

1 See Table IV for a breakdown of this average figure.
2 Figure represents annual savings in the third year of implementing Reorganization Plan and hiring freeze for the Commonwealth Central Government only, based on the following estimates: a 5 percent annual attrition rate; a central government work force of 160,000 in 1988; and an average cost per employee of- $10,625 in 1988.
3 Public corporations data from Luis S. Montanez, former Director of the Office of Management and Budget. Source: personal correspondence, June 1990, reviewed in March 1992.
4 The Booz, Allen report on Tax Reform, February 1987, estimated that $135 million in additional revenue to the Treasury would result from improved income tax compliance, based on $1.5 billion in unreported taxable income in 1984. Assuming only 50 percent of the projected $4.4 billion of unreported taxable income for 1990, and an effective tax rate of 20 percent, the projection of additional revenues could amount to $440 million.
5 The Booz, Allen Report estimated $83 million additional revenues to the Treasury. Presently the Treasury Department has been unable to implement measures against excise tax evasion, the underground economy and the smuggling of goods. A projection of the above figure to 1990 could be calculated as $150 million.

To minimize any adverse impact on service levels, the public sector will have to become more efficient or tap additional avenue sources. Government employment presents the most promising target for an efficiency drive because its rapid growth has not been related to improved levels of service. Hence, with careful planning the expanding payroll costs might be reduced without damaging the provision of public services. With an attrition rate averaging 5 percent per year and a commonwealth central government payroll numbering 160,000, a hiring freeze could reduce government employment by almost 23,000 employees in three years. At an average government salary of $10,625, by the third year annual savings could reach $243 million. (In the long run, Puerto Rico should consider bringing its ratio of government employment to total employment more into line with the U.S. level.)

Another potential source of efficiency gains and additional revenue is the public corporations sector. An overhaul of this quasi-governmental sector could yield substantial returns through a combination of increased self-sufficiency and privatization. Appendix B-l shows that many public corporations can be classified as “business type” operations, which were originally designed to be self-sufficient through charges and fees. However, a glance at the general fund budget indicates that many of these operations draw heavily from the commonwealth government for capital and operating costs.[25] Several of these corporations provide services more suitably performed in the private sector and are therefore candidates for privatization. These include, for example, the Maritime Shipping Authority and the Farm Credit Corporation.

Other public corporations provide useful and needed public services and are therefore less suitable for full privatization, but could nonetheless become more self-sufficient by increasing fees and charges. Adjusting charges to more accurately reflect costs has a number of related fiscal benefits, such as increasing the public awareness of the true costs of various government services. Citizens are less likely to waste government services if their costs are more directly understood; moreover, a heightened public awareness of costs would increase government accountability. Though these adjustments would require difficult political choices, a streamlined government demands adherence to bottom-line responsibilities. One recent analysis estimated that $50 million from the general fund could be saved annually by increasing the self-sufficiency of the Metropolitan Bus Authority, the Aqueduct and Sewer Authority, and the Farm Services and the Agricultural Development Administrations.[26]

Still other corporations, especially those which provide limited public services, could be eliminated outright. The Sugar Corporation, which in the 1990 budget drew nearly two-thirds of its funds from the general fund, is a., prime candidate: removing this expensive entity from the budget through privatization or dissolution would annually save $25 million in operating expenses (though $90 million in annual debt servicing will have to continue until 1996, when the government’s debt service obligation expires). Moreover, eliminating the Sugar Corporation would benefit Puerto Rico consumers since sugar prices are currently controlled and set at four times the world market price.

Further revenue could be generated by extending a minimum tax liability on the public corporations. Currently, they are exempt from all taxes — an expensive exemption considering that net assets for eleven of the largest public corporations in 1987 reached almost $5 billion.[27] One estimate places the value of possible revenue from a public corporations tax at $200 million annually.[28]

Finally, Puerto Rico could take advantage of the fiscal changes that would accompany statehood by preparing a major tax reform package. The Booz, Allen tax reform study cited earlier demonstrates that improved collection procedures and increased enforcement could raise $135 million annually in revenues currently lost to fraud.[29] Statehood would assist that, effort by bringing the formidable resources of the Internal Revenue Service to bear on under-reporting and non-compliance. Special attention would be paid to the estimated 15 percent of all licensed physicians, accountants, and attorneys who, it is alleged, fail to file income tax returns.[30]

Municipal governments in Puerto Rico currently have very limited powers of taxation and narrow responsibilities for the provision of services. These governments receive only one third of property tax revenues on the island; the remainder is kept by the commonwealth government. Other municipal revenue sources are limited to a very small general business tax (less than 1 percent), a share of contributions in lieu of taxes from the Electric Power and Telephone Authorities, and special collections for maintaining specific local public works. Correspondingly, many services commonly associated with local government in the U.S, such as police and fire protection, are supplied by the commonwealth government in Puerto Rico.

The resulting distance between taxpayers and the government tends to induce frustration in taxpayers who do not see the direct manifestation of their tax dollars in either services or security. Devolving more revenue-raising capacity and service responsibility back to the local governments could increase both accountability and public acceptance of taxes. Hence, the fiscal reforms that are likely to accompany statehood offer an ideal opportunity to decentralize the commonwealth's government. In sum, Table II-6 demonstrates that with careful planning and constructive reforms in the public sector, changes associated with statehood could meet the roughly $1 billion in fiscal pressure that statehood would create.

Conclusion: Statehood as a Precondition for Reform

Puerto Rico not only can afford, but needs statehood. The current investments in both physical and social infrastructure are not occurring at levels necessary to promote long-term growth. In fact, they are lagging. The natural environment, one of Puerto Rico's greatest comparative advantages, is being neglected. Change and action are necessary, and statehood offers a natural opportunity and creates manageable pressure for a wide range of desirable reforms in Puerto Rico's government, In essence, Puerto Rico's present government structure should be replaced with a public sector responsive to its citizens, attractive to investors, and suitable for sustained growth.

Those public sector reforms are required for, and would help generate, a reorientation of Puerto Rico's development strategy. As this Section has repeatedly emphasized, an effective government is a precondition to sustainable growth in the future. Statehood would help move toward that goal; it would also refocus the island's development energies away from an outdated reliance on tax gimmicks and government subsidies, and toward an efficient, productive private sector built on the island's natural advantages. Moreover, as we argue below, [31] one of the most significant development opportunities opened by statehood is the possibility of an appropriately designed "statehood grant." Such a fund, provided to assist Puerto Rico in the" transition to statehood, could be placed in a development trust (out of the government's hands) to provide resources for infrastructure, education, environmental protection and other worthy projects. [32]
A development strategy must be implicit in such a statehood grant. In broad terms the strategy will emphasize the developments of human and physical infrastructure and will underscore those factors which have created economic growth. (It should draw on some of the strategies used successfully in countries such as Malaysia, Singapore, Thailand, and Taiwan.) The following Section more closely analyzes the links between Puerto Rico's economic development and the island's misplaced reliance on section 936.

Endnotes

1 The uncertain future of section 936 is reflected in the Treasury Department's historical (and continued) hostility toward that provision. In addition, recent legislative actions point to the willingness of Congress to limit or eliminate the credit. See, for example, Senator David Pryor's proposed Prescription Drug Cost Containment Act of 1991, which would link section 936 benefits for pharmaceutical companies (the main beneficiaries of section 936) to cost limits on prescription drugs.

2 For a comprehensive treatment of Puerto Rico's economic prospects under statehood, see McKee, "The Economic Consequences of Puerto Rican Statehood," 1990, at Parts II- m.

3 Alicia H. Munnell and Leah M. Cook, "How Does Public Infrastructure Affect Regional Economic Performance?" in *Is There a Shortfall in Public Capital Investment?,* Federal Reserve Bank of Boston Conference Series No. 34 (1991) (Alicia H. Munnell, Ed.).

4 For a detailed look at how certain state governments are responding to this challenge, see Scott R. Fosler, ed., *The New Economic Role of American States: Strategies in a Competitive World Economy* (New York: Oxford University Press, 1988).

5 Government employment figures for Puerto Rico reflect federal, Commonwealth, municipal, and public corporation payrolls. In 1985, U.S. state and local government employment accounted for only 12.8 percent of total civilian employment. (Note: U.S. employment data refer to total civilian employment.) Source: U.S. Treasury Department, "Sixth Report," Table 3.3; U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the U.S., 1991,* Table 658.

6 Puerto Rico Planning Board, *Economic Report to the Governor, 1988,* Tables A-l and A- 2.

7 Examples include the commonwealth administration's 1990 proposal to raise $40 million by delaying a tax reform package that would have lowered income tax rates, borrowing from the Government Employees Retirement Fund, a tax amnesty in 1988, and $132 million in proceeds from the pending sale of the Communications Authority to the Telephone Authority.

8 GAO, "Puerto Rico: Information for Status Deliberations," March 1990, briefing report to the House Subcommittee on Insular and International Affairs, pp. 54 and 66.

9 *Caribbean* Business, June 7, 1990, p.30

10 Natural Resources Defense Council, "Extinction in the Enchanted Isle: Protecting Our Puerto Rican Species," May 1990, p. 57.

11 Booz, Allen & Hamilton, "Final Report on the Tax Reform Program," prepared for the Department of Treasury, Commonwealth of Puerto Rico, February 12, 1987, p. 12. Figures in 1987 dollars. [Hereinafter, "the Booz, Allen report."] .. _

12 Appendix B-l lists the public corporations and classifies them by type.

13 See Appendix B-2, which lists general funds appropriations to public corporations.

14 Committee for the Economic Development of Puerto Rico, "A Study on the Organization and Function of the Executive Branch of the Puerto Rican Government," 1985.

15 San Juan Star, May 6, 1990.

16 For example, a 1987 study by the accounting firm Deloitte, Haskins, and Sells found that the General Services Administration took "several months or more to process a purchase order." (Quoted in the San Juan Star, May 6, 1990.)

17 Puerto Rico's fiscal condition also depends on the response of the economy under statehood: an economic slowdown, for example, would increase fiscal pressure since taxable income would fall. This section, however, is consistent with the overall thesis of this report — that economic growth will continue and eventually increase under statehood.

18 If we include charges and miscellaneous revenue in this calculation, Puerto Rico's total own source revenue burden is only 3.7 percentage points ($0.7 billion) higher than the U.S. average. Several considerations weigh against including charges and miscellaneous revenue in this analysis, however. For example, revenue from charges depends on the services provided by government, nearly half of miscellaneous revenue in the U.S. is from interest earnings, and rents and royalties also account for much of the miscellaneous revenue.

19 Under both S.712 and S.244, federal collections from Puerto Rico would have been returned ("covered-over") to the state government during the transition period. Therefore, although the tax structure would have been affected immediately (as local taxes were reduced and federal taxes were imposed), Puerto Rico's government would not have felt the full fiscal impact of the changes until those cover-overs ended. We argue in Section IV below (on financial flows) that this cover-over approach is counterproductive and undesirable precisely because it delays the pressure needed to reform Puerto Rico's public, sector. See p., below.
20 See also the McKee Report at pp. 127-30 which also arrives at a fiscal pressure figure of "' ' around $1 billion.
21 Puerto Rico Planning Board, Table A-27 (1990).
22 The exact amount depends on the number of program options Puerto Rico chooses.
CBO estimates assumed that Puerto Rico would receive $900 million dollars in new federal Medicaid funds and would be required to pay $184 million in matching funds, a net savings of $266 million over the current $450 million Puerto Rico currently spends on health programs. Congressional Budget Office, "Background Materials on the Costs of the Puerto Rico Status Referendum Act," prepared for the Senate Finance Committee, November 15, 1989. '
23 See Table A-2 in Appendix A (the federal entitlements section) for a breakdown of additional funds by program for 1994.
24 See Section IV below on financial flows, at pages 36 and 37.
25 See Appendix B-2.
26 Montanez, personal correspondence, June 1990.
27 GAO, "Puerto Rico: Information for Status Deliberations," March 1990, Table 6, p. 50

28 Montanez, personal correspondence, June 1990.
29 The Booz, Allen report also advocated a reform of the excise tax, including simplifying the rate structure to improve administration and enforcement and expanding the tax base by reducing confusing and convoluted exemptions. Excise tax reforms were estimated to yield a possible $83 million.
30 Booz, Allen, p. C-6. '
31 See Section IV, at p. . .
32 In keeping with our belief that serious reforms are necessary in Puerto Rico's public sector, we believe it is crucial that such a grant not be provided to subsidize normal government. Unfortunately, past legislative proposals (S.712 and S.244) have provided statehood grants in the form of "cover-overs" to Puerto Rico's Treasury.

Chapter III

Economic Development and Section 936 of the Internal Revenue Code

Central to the discussion of the economic impacts of statehood is Section936 of the Internal Revenue Code. This provision provides highly favorable tax treatment for the income of Puerto Rican subsidiaries of U.S. corporations. The annual cost of Section 936 in 1987 (the latest year for which Treasury Department data are available) was over $2.4 billion; [1] the present value of its cumulative cost from 1973 to 1987 is roughly $480 billion.[2] under statehood, section 936 would be unconstitutional and would have to be phased out.

Proponents of continued commonwealth status argue against statehood on the grounds that eliminating this tax incentive will significantly slow down the island's rate of economic growth, a claim supported by the April 1990 study by the nonpartisan Congressional Budget Office. We reject this argument, however. First, as we explain in detail below, section 936 is a grossly inefficient subsidy to mainland corporations that has outlived its usefulness as a tool for Puerto Rican economic development. Moreover, it has increasingly become a less certain long-term incentive to real investment in Puerto Rico. That uncertainty drastically weakens the effectiveness of section 936 as a foundation for Puerto Rico's long-term development. Regardless of the status issue, then, we argue that section 936 should be eliminated.

In addition, not only does the movement to statehood require the elimination of section 936, but it also provides an ideal opportunity to initiate more appropriate development incentives. A well designed statehood grant[3] could counter any short term adverse economic effects of eliminating section 936 and could also provide an environment more conducive to the long-run economic growth of the island.

The Mechanics of Section 936

Since 1921, the U.S. government has provided some form of tax incentive for certain U.S. companies operating in Puerto Rico. The current form, section 936 of the Internal Revenue Code, grants Puerto Rican subsidiaries of United States corporations an annual tax credit equal to the amount of U.S. federal income tax liability on profits earned in Puerto Rico.[4] The tax credit applies to profits derived from doing business in Puerto Rico and to income earned from reinvesting the profits in activities that the Puerto Rican government has defined by regulation as benefitting the economy.[5]

Corporations are required to elect for section 936 treatment for a period of ten years. To be eligible for the credit, 80 percent of the subsidiary's gross income must be derived from Puerto Rican sources and 75 percent of gross income must be derived from active trade or business on the island.[6] the section 936 tax credit depends on the measured profits of firms operating in Puerto Rico. Firms can show profits in Puerto Rico in two ways. First, firms can earn profits from real investments in plant and equipment in Puerto Rico. Second, through transfer pricing, firms maybe able to increase the amount of accounting profits reported in Puerto Rico without any new physical investment.[7]

Reported profit rates in Puerto Rico relative to the mainland indicate the large role of transfer pricing. In 1983, the reported before-tax annual rate of return on operating assets for corporations participating in the section 936 program was 54.1 percent, more than five times the rate of return for mainland manufacturing operations (10.3 percent), [8] If the true rate of return for section 936 investments in Puerto Rico were this high, firms would have powerful incentives to increase their real investment on the island. Investment should be booming. Unfortunately, it is not.

The large discrepancy in the rates of return between Puerto Rican and mainland firms is largely explained by the fact that income from intangible assets is being transferred to Puerto Rico by U.S. parent corporations. This transfer is mainly through patents from research and product development, and marketing intangibles. In other words, section 936 has allowed corporations to transfer large amounts of income into Puerto Rico through internal pricing policies without forcing them to make the corresponding real investments. Such transfer pricing is most beneficial to industries such as pharmaceuticals and electronics in which firms can develop new products in the United States, where they can deduct the development costs, and then transfer the patent to Puerto Rico to minimize federal tax burdens.

Reduced Effectiveness of Section 936 in Recent Years

While clearly helpful for promoting the growth of Puerto Rico's manufacturing sector in past decades, section 936 has outlived its usefulness. Recent years have witnessed a dramatic change in the composition of section 936 corporations. During the past three decades the share of section 936 activity in labor intensive industries such as textiles has diminished significantly, while the share in capital and technology-intensive electronics and pharmaceuticals has increased commensurately. In 1960, chemicals and machinery made up 22 percent of the net manufacturing income in Puerto; by 1989 that share had increased to over 73 percent.[9] Increasingly a subsidy for capital intensive firms and for those engaging in sophisticated tax planning, section 936 represents a perverse economic development tool for the labor surplus economy of Puerto Rico.

In addition, various proposals to change section 936 have increased the uncertainty associated with investments by section 936 firms and thereby reduced incentives for firms to make them. Since 1976, the Treasury has recommended scaling back section 936 and replacing it with a direct subsidy to labor. More recently, provisions in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and the Tax Reform Act of 1986 (TRA) reduced the advantages of section 936. Recent proposals by the Treasury on transfer pricing would effectively reduce the incentive further.[10] The resulting uncertainty has reduced the effectiveness of section 936 as a long-term incentive to real investments, while maintaining its current revenue cost. Section 936 represents more than merely an issue in the Puerto Rican statehood debate; rather, it poses important questions of sound taxation policy for a deficit- plagued U.S. budget.

High Annual Revenue Costs of Section 936 to the U.S. Treasury

Section 936 is a very costly tax preference to the U.S. Treasury. The last column of Table III-l indicates that in 1987 the annual revenue cost of this tax benefit was $2.4 billion. Moreover, the Treasury Department's Office of Tax Analysis (OTA) estimates the projected growth of section 936 tax costs at 10 percent a year.[11] For 1987, the total value of taxes foregone was the highest for the pharmaceutical industry ($1.3 billion) and lowest for the apparel industry ($35 million).

The value of the taxes foregone annually for all “other” industries was about $503 million.’ With the exception of the instruments and related products industry, which accounted for $ 151 million of this amount, no other industry contributed more than $50 million to the total revenue cost of section 936.[12] These high revenue costs are unacceptable in light of the ineffectiveness of section 936 as a development tool, the issue to which we now turn.[13]

Cost-Ineffectiveness of Section 936 as a Subsidy to Labor

A major purpose of section 936 was to promote investment by U.S. corporations to create jobs in Puerto Rico. In 1987 (the latest year for which disaggregated data are available), section 936 industries employed approximately 101,000 workers, slightly more than half the total number of people employed in manufacturing in Puerto Rico.[14] In terms of total employment in Puerto Rico, section 936 workers represent about 10 percent of the work force.[15] The average annual wage compensation in 1987 for all workers employed in section 936 industries was $17,725. Column 3 of Table III-l shows that compensation was highest in the pharmaceutical industry (with an average wage rate of $26,471) and lowest in the apparel industry (with a wage rate of $10,778).

Whether measured as a subsidy per employee or per dollar of wages paid, the costs of the tax credit are astoundingly high, especially in the pharmaceutical industry. Table III-2 demonstrates those extreme costs. Column 1 indicates the revenue cost per employee, and column 3 shows the revenue cost per dollar of wages paid. The average revenue cost per employee over all the industries was $26,725 in 1987; revenue cost by sector ranged from about $81,000 per employee per year in the pharmaceutical industry to about $2200 in the apparel industry. The high revenue cost per employee in the pharmaceutical industry results from the fact that while that industry received the

Table 111-1

Asset and Payroll Information for Selected Section 936 Industries, 1987

	Net Fixed Assets (Millions)	Number of Employees	Average Wage Comp. Per	Rev. Cost to U.S. Treasury
Pharmaceutical	**$1,748**	**18,384**	**$26,471**	**$1,302**
Electrical and Electronic	**972**	**23,180**	**16,859**	**381**
Apparel	**128**	**17,363**	**10,778**	**35**
Food	**515**	**10,364**	**16,795**	**189**
Other	**1,073**	**31,625**	**' M/ A**	**503**
Total Manufacturing	**4,436**	**100,916**	**17,725**	**2,410**

Source: Unites States Department of the Treasury, "U.S. Possessions Corporations Returns, 1987," Tables 1 and 2.

1 Not fixed assets includes final inventories.

Table III-2

Revenue Cost per Employee, 1987
(Thousands)

	Revenue Cost per Employee	Average Employee Compensation	Revenue Cost per $ Wages Paid	Revenue Cost per $ Incremental Wage Benefit[1]
Pharmaceutical	$81,483	26,471	$3.08	$17.60
Electrical and Electronic Equip	18,981	16,859	1.13	6.43
Apparel	2,246	10,778	0.21	1.19
Food	21,902	16,795	1.30	7.45
All Manufacturing Industries	26,725	17,725	1.51	8.61

Revenue cost per dollar of incremental wage benefit is calculated by dividing the revenue cost per employee by the incremental wage benefit. The incremental wage benefit is calculated by determining the difference between average 936 compensation per sector and the average non-936 employment by sector. Overall 936 wages have averaged 17.5 percent higher than non-936 wages.

largest share of the tax benefits (55.5 percent), it employed only 18.2 percent of the section 936 workers. In contrast, the apparel industry received only 1.4 percent of the tax benefits but employed 17.2 percent of the total section 936 workers.

Because the average revenue cost per employee exceeded $26,000 while the annual wages in 1987 were only about $ 17,700, the revenue cost per dollar of wages paid across all industries was $1.51. In other words, the federal government gave up more than one dollar and fifty cents for each dollar paid in wages to employees of corporations benefitting from the section 936 tax credit. In the pharmaceutical industry, the subsidy per dollar of wages paid was more than double the average, at $3.08 per dollar of wages paid. As already noted, these effective subsidy rates are obviously exorbitant.

But even these high subsidy rates understate the true cost of the tax credit as a job creation device, since most of the workers employed by section 936 industries would have been employed and been earning normal wages from this or other employment elsewhere. Thus, the true amount of the benefits received by labor should be measured by the *additional* wages that workers receive as compared to what they would have earned otherwise.

A comparison of the annual wage compensation of section 936 industries ($17,700) with that of all Puerto Rican production workers ($11,100)[16] shows that section 936 manufacturing employees receive a higher compensation than employees in other manufacturing industries.[17] If that difference is attributed entirely to the effects of section 936, the cost to the U.S.Treasury of section 936 can be expressed as a cost per *incremental* dollar of wage benefits received by the workers.[18] For illustrative purposes, we assume that section 936 has the same differential impact on the wage rates across all sectors; that differential has been estimated at an average of 17.5 percent.[19] Taking all section 936 industries as a whole, column 4 of Table III-2 shows that an incremental dollar of wage benefit paid to workers cost the U.S. Treasury about $8.61.

One final indication of the bankruptcy of section 936 as an incentive to hire labor emerges from outcome data: while manufacturing’s share of Puerto Rico’s gross domestic product increased from 29 to 40 percent between 1975 and 1988, the share of manufacturing income accruing to labor declined precipitously from 48 to 27 percent over the same period.[20]

Section 936 and the Subsidy to Real Investment

The development strategy used to justify a tax preference such as section 936 assumes that promoting investment in manufacturing is a necessary condition for the creation of modern high paying jobs. Through such investment, Puerto Ricans would achieve a higher standard of living. In fact, such investment may or may not be the key to good jobs. But even if the link between investment and high paid jobs were clear, section 936 could be criticized as a grossly inefficient way to promote such real investment.

To evaluate the degree to which section 936 has been a cost effective incentive for real investment in Puerto Rico, we compare the revenue cost of section 936 with the dollar amount of net assets in these industries as of 1983. Column 1 of Table III-l shows that by 1987, the investments of manufacturing firms that received section 936 income tax treatment reached a net asset level of over $4.4 billion.[21] (Of this amount, $1.7 billion (39 percent) was owned by the pharmaceutical industry.) The comparison with section 936's revenue cost is made by calculating the number of years that it would take to pay back the investment costs using only the tax savings received via the section 936 tax credit. These estimates are shown in Table III-3, column 1.

For all the industries combined, it would take only 1.8 years for the value of tax resources to be equal to the total amount of net assets cumulated by these corporations up to 1987. In the pharmaceutical industry it would only take 1.3 years of the tax saving to pay for the industry's total capital stock in Puerto Rico. Although the conclusion may seem bizarre, these figures suggest that it would have been less costly for the U.S. Treasury to buy the plants and equipment and give them to these corporations rather than to give them this annual tax break.

Table III-3

Cost of Section 936 per Dollar of Capital, 1987

	Number of Years for Revenue Cost to Equal Net Assets 0)	**Subsidy Rate as a Percentage of the Annual Cost of Capital (2)**
Pharmaceutical	**1.3**	**372%**
Electrical and Electronic Equip	**2.6**	**196**
Apparel	**3.7**	**137**
Food	**2.7**	**183**
Total	**1.8**	**271**

Source: Unites States Department of the Treasury, "U.S. Possessions Corporations Returns, 1987," Tables 1 and *2.*

Another way of evaluating the section 936 tax credit is to compare its annual revenue cost with the annual capital cost of these corporations. By definition, the annual cost of capital is equal to the rate of depreciation of the assets plus the real cost of financing them (the rate of interest). An upward- biased estimate of this real cost of capital in Puerto Rico would be 20 percent a year. By using this high estimate, we are biasing downward our estimates of the rate of subsidy provided to capital that are reported in Table III-3, col. 2.

In 1987, the average estimated subsidy rate was 271 percent of the annual cost of capital for section 936 finns, meaning that the subsidy rate of all industries benefiting from the tax credit was over twice as high as the real annual cost of capital. The subsidy rate was highest in the pharmaceutical' industry (372 percent) and lowest (137 percent) in the apparel industry.

Summary

Whether the section 936 tax credit is viewed as a device to promote employment or as a subsidy to capital, the revenue costs are excessive for the results obtained. The annual revenue costs to the U.S. Treasury of maintaining the section 936 Program are extremely high compared to the employment and wage benefits the tax credit produces in Puerto Rico. Overall, the annual revenue cost per worker ($26,725) in 1987 was 51 percent higher than the annual compensation received by these workers, yielding a subsidy cost of $1.51 per dollar of wages paid. Moreover, we estimate that the cost to the Treasury for every *incremental* dollar of wage benefit given to workers was about $4. These extremely high rates demonstrate the cost-ineffectiveness of section 936 as a subsidy to labor.

In the past, tax incentives were an important factor in promoting economic development in Puerto Rico. But section 936 is no longer a cost effective way to attract real investment to the island. The annual subsidy rate for all industries benefiting from the tax credit is currently more than twice the cost of financing the capital used. Because the section 936 tax credit is a function of profits, firms are less interested in making real fixed investments in Puerto Rico than in reducing their tax liabilities by transferring income from their U.S. parent companies to their

Puerto Rican subsidiaries. Through this transfer of income, these firms increase the reported amounts of profit on the island that qualify for the tax credit.

Section 936 is now primarily a transfer of income to the U.S. parent corporations and not an effective way to move investment onto the island. In other words, the section 936 tax credit serves more as a subsidy to tax planning than as a subsidy for the employment of capital and labor in Puerto Rico that would promote economic development. The economic development of Puerto Rico should be promoted. The present situation of high unemployment and the necessity to migrate to the U.S. to find jobs is unacceptable. To be effective, such promotional policies must be focused upon employment and creation of real investment opportunities.

Countering the Short-Term Economic Impact of Eliminating 936

Despite the inefficiency of section 936 as a subsidy for labor and capital, its phase-out under statehood presumably could have some adverse short run effects on the Puerto Rican economy that need to be immediately counteracted. As emphasized throughout this report, the move to statehood provides an ideal opportunity to initiate more appropriate development incentives for the long term development of the island. Moreover, as discussed in the next section, a carefully designed statehood grant that is invested in the physical and human infrastructure of Puerto Rico would help counter any short-run adverse economic effects of eliminating section 936 tax preferences.

Endnotes

1 See J. Bradford, U.S. Department of Treasury, “U.S. Possessions Corporations Returns, 1987” p. 52.

2 See Treasury Department, Sixth Report, Table 4-11. Figures for 1984 and 1986 were Imputed by taking the mean between available data for 1985 and 1987. The discount rate used was 8 percent.

3 The statehood grant is discussed below in Section IV, at p. 38.

4 Section 936 also applies to U.S. corporations operating in the same circumstances in the Commonwealth of the Northern Marianas, the Federated States of Micronesia, the Marshall Islands, American Samoa, Guam and the Virgin Islands.

5 The amount of the credit is determined as follows:

$$\text{TAX CREDIT} = \frac{\text{TAXABLE BUSINESS AND INVESTMENT INCOME FROM SOURCES IN PUERTO RICO}}{\text{WORLD WIDE TAXABLE INCOME OF PUERTO RICAN SUBSIDIARY}} * \text{US FEDERAL TAX}$$

6 For a detailed analysis of the operation of Section 936 and other tax incentives in Puerto Rico, see Richard J. Boles, “Tax Incentives for Doing Business in Puerto Rico,” *International Lawyer* (22): 121-42 (1988).

7 The existence of the Section 936 credit has placed tremendous administrative burdens on the U.S. Treasury as a result of Section 482 of the Internal Revenue Code, which authorizes the Secretary of the Treasury to allocate income, deductions, and other tax items among related taxpayers to prevent evasion of taxes. For a further discussion of this issue, see Nancy Kaufman, “Puerto Rico’s Possessions Corporations: Do the TEFRA Amendments Go Too Far?”, *Wisconsin Law Review* (1984): 531-66.

8 U.S. Department of the Treasury, “Sixth Report,” p. 36.

9 April 1990 CBO Report, Table 3.

10 See, for example, U.S. Treasury Department, Office of Tax Analysis, “A Study of Intercompany Pricing,” October 18, 1988.

11 Philip Morrison, Testimony Before the Committee on Finance, United States Senate, Washington, D.C., April 26, 1990, p. 2.

12 The source for all 1987 data on section 936 costs is U.S. Department of Treasury, “U.S. Possessions Corporations, 1987,” Tables 1 and 2.

13 If section 936 were eliminated, the U.S. Treasury would not gain all of the current revenue cost of the provision. The 936 corporations would be expected to minimize their taxes by moving some of their operations to tax havens or undertake other tax minimization techniques. However, the Treasury Department has estimated that the net gain in tax revenues to the U.S. from the elimination of section 936 would be nearly 80 per cent of the credit that would otherwise be given under the present provision. See Philip Morrison, Testimony Before the Committee on Finance, United States Senate, Washington, D.C. 1990, p.10.

14 Column 2 of Table III-l provides a breakdown by sector of section 936 employment data. ‘

15 The source for 1987 section 936 employment data is U.S. Department of Treasury, “U.S. Possessions Corporations, 1987,” Table 2.

16 See J. Bradford, U.S. Department of Treasury, “U.S. Possessions Corporations Returns, 1987,” p. 53 (citing U.S. Department of Commerce, Bureau of the Census, *1987 Census of Outlying Areas: Puerto Rico*, July 1990).

17 U.S. Department of the Treasury, “The Operation and Effect of Possessions Corporation System of Taxation,” Fifth Report (draft), May 1985, Table 4-5.

18 It appears that the employees of section 936 companies possess higher skills. To the degree that they do, their higher wages should not be attributed entirely to the impact of section 936; our analysis therefore presents the benefits of section 936 in their most favorable light.

19 See U.S. Department of the Treasury, “The Operation and Effect of Possessions Corporation System of Taxation,” Fifth Report (draft), May 1985, at Table 4-5.

20 Puerto Rico Planning Board, “Economic Report to the Governor,” Tables 9 and 11 (1988).

Net asset data for 1987 comes from U.S. Department of the Treasury, “U.S. Possessions Corporations Returns, 1987,” Table 1. Total investments include inventories.

Chapter IV

Designing a Transition:

Fiscal Flows Related to Statehood

Introduction: Basic Transition Principles

This section focuses on the importance and sensitivity of the short-run financial flows and the critical role of timing in the transitional adjustments package. Fiscal concerns have obfuscated much of the political debate in the U.S. and Puerto Rico about statehood. Mainland residents are concerned about their own tax burdens, budget deficits, and social problems; Puerto Rico residents, meanwhile, need the opportunity for economic growth but fear the potential impact of losing section 936. Thus, while we reassert the centrality of Puerto Rico's fundamental right to choose its own destiny, we also recognize that in practice, fiscal flows represent an important component of the statehood debate.

Any implementing legislation for statehood should satisfy four central conditions: (1) the transition period should be specifically designed to achieve U.S. budget neutrality; (2) section 936 should be phased out quickly, but with due deference to those companies whose investment policies relied on the tax credit; (3) the phase-in of full funding for federal entitlement programs should occur simultaneously with the introduction of full federal tax responsibilities on the island; and (4) the federal government should provide a "statehood grant" in the form of a trust fund for economic development, but this trust fund should not be used to subsidize the operations of the already oversized Puerto Rico public sector.[1]

These principles apply regardless of *the form* of the transition chosen. That is, they apply whether the transition period follows the entry of Puerto Rico into statehood (as favored by early versions of S.712) or precedes the actual achievement of statehood (as adopted by the most recent legislative formulations in S.244). The Senate Finance Committee's recommendation that statehood should follow a five year economic transition period in order to avoid conflicts with the Uniformity Clause[2] has sparked a fairly heated constitutional debate.[3] The Finance Committee's approach has been- contested by the Justice Department, which argues that a post-statehood transition period would be constitutional.[4] In any case, a choice between these options reflects legal and political considerations beyond the scope of this report. Our concerns apply mainly to the relationship between the phase-in of entitlements and new federal taxes during the transition period.

Benefits and Costs

This section addresses the fiscal concerns surrounding the statehood question by analyzing the two issues at the heart of the matter: whether Puerto Rican statehood will impose costs on the federal budget, and whether statehood will provide the resources necessary for economic growth in Puerto Rico.

Impact of Statehood on the U.S. Treasury

Relative to commonwealth status, statehood has four potential impacts on the federal budget. First, the federal government will spend more on health and welfare programs in Puerto Rico. Second, U.S. corporate subsidiaries in Puerto Rico operating under section 936 will pay federal taxes. Third, Puerto Rico residents and businesses will have to pay federal corporate income, personal income, and excise taxes from which they were exempt under commonwealth status. Fourth, as it has done historically for most other new states, the federal government may choose to smooth the transition under statehood by providing some form of statehood grant.

Estimated impacts on the budget of each of these components have been provided to accompany the proposed transition approaches in both S.712[5] and S.244.[6] These estimates depend on two factors: (1) assumptions about how firms, people, and the economy will change their behavior in response to statehood, and (2) policy decisions about the phase-in of the various components of the change and of the form of the statehood grant. Although we will make some minor comments about the behavioral assumptions, in general we believe it makes sense to accept the official estimates as a first approximation of the impacts. This acceptance makes it possible to focus on the central issues: the timing of the transitional adjustments under statehood and the size and nature of the statehood grant.

The timing of the financial flows in the transitional adjustments under statehood greatly affects statehood's short run impact on the federal budget. In the first version of this report we criticized the Energy Committee's 1990 S.712 proposal for immediately extending federal entitlements to Puerto Rico but delaying federal taxation for two years. By extending the entitlement programs immediately while delaying the imposition of taxes, S.712's phase- in program frontloaded the federal costs. We believe such frontloading is undesirable and inappropriate. It is incongruous with the atmosphere of mainland budget problems and program cutbacks. Furthermore, the extension of the entitlement programs should not be seen as a "welfare windfall," which might encourage abuse and dependence, but rather should reflect a collateral assumption of the responsibilities inherent in a federal system.

We therefore recommend that the expenditure and revenue sides of the transition be made consistent with each other to achieve financial and political harmony and provide the appropriate setting for vigorous economic growth. The most recent bill, S.244, adopted this balanced approach: it would have phased in federal tax responsibilities and gradually increased funding for federal entitlement programs over a five year transition period. We agree with this framework and strongly urge future statehood implementing legislation to emulate S.244's phased model.

Although we have argued that section 936 should be eliminated as rapidly as possible,[7] we also support the five year phase-out of 936 adopted in both S.712 and S.244. This transition period may be justified to insulate Puerto Rico against possible short term disruptions in the economy associated with the move to statehood. In addition, fair treatment of section 936 firms demands that they have time to make their investment decisions with full knowledge of changes in tax laws.

Based on these balanced transition assumptions, and not counting any special statehood grants, the shift to statehood from commonwealth status would have a beneficial effect on the U.S. Treasury almost immediately. In particular, the shift to statehood would reduce the present value of net federal outlays over a period between 1993 and 2001 by $5.6 billion.[8] Moreover, the savings realized by the phase-out of section 936 would continue indefinitely; those savings should be compared to the continuing drain on federal resources that commonwealth status represents.

Table IV documents this conclusion and also shows the effects by year, using data provided by the U.S. Departments of Health and Human Services, Agriculture, and Treasury in testimony on bill S.244.[9] The table shows an early net outflow from the federal treasury as the phase-out of section 936 and the imposition of federal taxes in Puerto Rico initially provide insufficient revenue to offset the higher costs of entitlements. But by the second year, the situation is reversed and for that year and subsequent years, additional tax revenues more than offset the higher costs of full entitlements.[10] Taken together in present value terms, the overall impact, of the immediate move to statehood is thus to *reduce* pressure on the federal budget.

Thus, with the reasonable transition plan and economic assumptions adopted in S.244 and discussed here, Puerto Rican statehood would free up federal budgetary resources relative to the continuing drain posed by commonwealth status.

Table IV

Financial Benefits and Costs of Statehood Relative to Commencement.
No Statehood Grants
(Assumes Eligibility and Benefit Standards Conforming to Mainland U.S.)
($ Millions)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
From Perspective of U.S. Treasury										
Entitlements										
Aid to Families with Dependent Ch	30	70	70	70	70	70	5	5	5	
Aged, Blind, and Disabled (SSI)	0	40	340	705	1145	1245	1330	1415	1505	
Medicaid	51	151	301	501	701	1001	1351	1751	2251	
Foster Care	0	3	3	3	4	4	4	4	4	
Food Stamps	0	113	250	338	1380	1433	1487	1544	1603	
Increased Outlays	81	377	964	1617	3300	3T53	4177	4719	5368	
Increase in Revenue	0	724	1881	3118	4708	5544	5971	6436	6942	
Section 936		471	1275	2110	2977	3519	3854	4222	4626	
Personal Tax (Net of EIC)		106	226	372	533	595	625	656	689	
Corporate Tax		63	175	298	432	503	528	554	582	
Excise Taxes		84	205	338	484	540	567	596	625	
Rum Taxes					161	217	219	221	223	
Tariffs					121	170	178	187	197	

Table IV (continued)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Net Outlays	81	-347	-917	-1501	-1408	-1791	-1794	-1717	-1574	
Present Value of Net Outlays (10% discount rate)	67	-261	-626	-932	-795	-919	-837	-728	-607	-5638
From Perspective of Puerto Rico										
Net Inflow to Puerto Rico	81	124	358	609	1569	1728	2060	2505	3052	
Present Value of Net Inflow	67	93	245	378	886	887	961	1062	1177	5755

1 These figures represent the best estimates available at the time of publication relating to the provisions of S.244. Revenue data from February 7, 1991 from memorandum Kenneth Gideon, Department of Treasury, to Senate Committee on Energy and Natural Resources. Federal entitlement data are from the Departments of Agriculture and Health and Human Resources, in Hearings before the Senate Committee on Energy and Natural Resources on S.244, 102nd Cong., Ist Sess., at 229 (January 30 and February 7, 1991).

2 These revenue figures represent increased revenues resulting from the phase-out of section 936 the phase-in of personal, corporate and excise taxes, and rum taxes and tariff collections that were previously covered over to Puerto Rico. Revenue figures do not include the potential costs of any statehood grants or cover overs to Puerto Rico; our assumptions therefore differ from the provisions of S.244. Table IV and our accompanying analysis differs from our first report (and other proposed Legislation) in that we include as revenue the gains from customs tariffs and run taxes previously returned to the Puerto Rico treasury. The treatment of these provisions during the transition period is open to debate, but at a minimum they can be considered as funds of these provisions during the transition period is open to debate, but at a minimum they can be considered as funds available for a statehood grant.

Source: Hearings before the Committee on Energy and Natural Resources, 102nd Congress, Ist Sess., on S.244, January 30 and February 7, 1990.

We remind the reader, however, that these estimates exclude the costs of any special statehood grants that Congress may choose to provide to Puerto Rico. Past proposed legislation has provided for such special assistance in the form of a cover-over (that is, a transfer to the Puerto Rico Treasury) of federal taxes paid by Puerto Rico residents for a limited period of time. Because we feel that this cover-over approach provides a wholly inadequate base for sustained economic growth, we treat the "statehood grant" issue separately below. The analysis in this section sets, the stage for that discussion by clarifying that even within the constraint of federal budget neutrality, substantial federal revenue would be available for a special statehood grant to Puerto Rico should Congress deem that desirable. However, before turning to the design of such a pool of funds, we look at the net financial flow from the perspective of Puerto Rico.

Impact of Statehood on the Net Flow of Funds to Puerto Rico

At the same time that statehood imposes no additional costs on the U.S. Treasury, it substantially increases the flow of funds to Puerto Rico. The explanation for this apparent paradox lies in the source of funds. Much of the additional tax revenue received by the federal government would come neither from mainland taxpayers nor from Puerto Rico residents, but rather from the mainland corporate parents of the section 936 corporations which still enjoy a lucrative tax shelter there.

The bottom panel of Table IV documents the magnitude of the increased flow of funds to Puerto Rico. The big inflow reflects the expansion of the entitlement programs, only part of which in each year is offset by higher taxes paid by individuals and firms on the island. The magnitudes are large. By the year 2001, the net inflow is estimated to be $3 billion dollars and the present value (in 1992) of the total additional inflow through the year 2001 is $5.75 billion.

The observation that the net inflow of funds under statehood to Puerto Rico is positive and large should dispel the fear that statehood would require Puerto Rico residents to contribute more to the Federal Treasury than they would receive in financial benefits. No other state either is or should be required to meet that condition in a federal system of government. The very essence of federalism is that all citizens of the country, regardless of their state of residence, are entitled to full and equal benefits of federal programs in return for federal taxes that are uniformly applied across the country.

Statehood Grant

The Need for a Statehood Grant

In terms of net financial flow, statehood is clearly beneficial for Puerto Rico. However, these financial flows require further analysis. One needs to consider as well their economic effects as documented most fully and carefully in an April 1990 report by the Congressional Budget Office (CBO). The CBO concluded that on the one hand Puerto Rico's economy will be stimulated by the increased aggregate demand associated with the large net inflow of funds, but that on the other the economy will be significantly disrupted by the reduced investment occasioned by the elimination of the section 936 tax provisions. The net effect, argues the CBO, will be a reduction in the rate of growth of the Puerto Rico economy relative to what would occur with the continuation of commonwealth status. In particular the CBO speculates that, absent any counter measures to offset the adverse effects on investment of the elimination of section 936,[11] the growth rate of real (inflation adjusted) gross national product (GNP) might be 1 to 2 percentage points lower than under commonwealth status. If this lower growth rate were to occur it would translate into a reduction of 10 to 15 percent in the level of Puerto Rico's GNP in the year 2000 relative to the baseline prediction for that year. This presumptive disruption of the Puerto Rico economy provides a strong argument for a statehood grant (or "development endowment") that addresses the needed boost for economic development.

Historical Basis for the Statehood Grant

Every state that has entered the Union since 1803 has received some form of statehood grant. During the nineteenth century, Congress typically favored land grants, but then and later also provided assistance in the form of transfers of valuable natural resources, partial exemption from certain federal taxes, special statutory treatment, and special monetary aid.

Hawaii and Alaska provide recent examples of special statutory treatment. Alaska was allowed to use foreign vessels in trade relations with other states, while Hawaii benefitted from a special provision that allowed American vessels engaged in foreign trade to keep their subsidy even when calling upon Hawaiian ports.[12]

Originally, Congress typically provided monetary aid indirectly such as through provisions for the sale of public lands and the operation of government mines as in Alaska. However, in 1907 Oklahoma was given a direct grant of $5 million for public schools in the impoverished Indian Territory; and other monetary grants have been given since.[13] In summary, Congress has recognized the desirability of enacting special assistance measures for new states and has shown remarkable flexibility in tailoring the statehood grants to the particular needs of the state.

Treatment of Statehood Grant in Past Legislation

Both S.712 and S.244 provided for the return of federal revenue collections to Puerto Rico during the statehood transition period that in effect functioned as “statehood grants” — that is, the legislation would have made special statutory allowances to help Puerto Rico in its transition to statehood. The first version of S.712 would have turned over to the Puerto Rico Treasury all the proceeds from the federal tax on individuals and corporations for 2 years (1994 and 1995), as well as the revenue from federal excise taxes for the first six years of statehood. We calculated the present value (in 1991) of that statehood grant at $2.6 billion.[14] S.244 would have similarly returned the increased revenues resulting from the phase-out of section 936 and the phase-in of personal, corporate, and excise taxes for 3 years (from 1994 to 1997), to the extent that those revenues were not needed to cover additional entitlement costs. In either case, then, a significant contribution to the Puerto Rican government during the statehood transition period was contemplated by legislators formulating previous proposals.

This approach to the statehood grant requires modification based on two considerations. First, the cover-over approach may reduce incentives for the island’s public sector to adjust to statehood. And second, the statehood grant should be used to offset more directly any economic disruptions that may accompany the elimination of section 936 and to help Puerto Rico restructure its economy to move into the twenty-first century.

As we noted above in Section II, fiscal pressure associated with statehood offers a natural opportunity for needed reforms in the way Puerto Rico’s government operates. The imposition of federal taxes would create pressure to reduce Puerto Rico's income tax revenues by roughly $ 1 billion, forcing the public sector to streamline, increase efficiency, and enact reforms necessary for sustained economic growth.

Under the cover-over approach, however, the driving pressure for that change would be delayed. We see no reason for this delay and question whether Puerto Rico's government—particularly given its past performance (as discussed in Section II) — is the most appropriate beneficiary of the statehood grant implicit in past legislation. While a period of adjustment is clearly necessary, it is likely that the gap between the referendum and the beginning of the transition period will provide time to prepare for the change.[15] Even if some cover-over is deemed desirable to ease the government's adjustment under statehood, it should at most be partial and should be made consistent with policies emphasizing private-sector fueled economic growth and the need for public sector reform.

Our Recommendation: The Statehood Grant as Leverage for Economic Growth

The second and more compelling argument for creative thinking about the statehood grant is the need to help Puerto Rico restructure its economy to provide growth in private, not public, jobs. As discussed throughout this report, the elimination of tax gimmicks such as section 936 is in the long-run interest of the Puerto Rico economy. Even with this tax provision, unemployment has been high. The elimination of section 936 simply focuses attention on the need to develop new approaches to economic development and some basic structural problems in the Puerto Rico economy which need to be corrected.

In this light, we draw these conclusions: First, some portion of the $5.6 billion that statehood would yield for the U.S. Treasury over its first ten years should be considered an endowment for Puerto Rico's future growth and prosperity. (In subsequent years, those savings should also be recognized as a federal windfall as compared to the continuing drain posed by common-wealth status.) Second, the cover-over approach detailed in previous legislation does not satisfy these conditions and is inconsistent with private-sector oriented economic reforms taking place in the U.S. and throughout the world. Third, the priorities, philosophy and administration of this endowment should be carefully designed to respond to Puerto Rico's long-term development needs. In general the endowment should assist Puerto Rico to abandon tax breaks and other temporary subsidies in favor of investment in its physical and social infrastructure and protection of its natural resources.

Endnotes

1 Some of these principles, such as revenue neutrality and a gradual transition period, were incorporated into the Senate's recent transition proposals, first in S.712 and then in its successor, S.244. Both of these bills also contained provisions for a statehood grant, but in the form of a cover-over of federal income and excise taxes collected during the transition period to the Puerto Rico Treasury. For reasons articulated below, we continue to oppose such an approach.

2 The Uniformity Clause requires that "all Duties, Imposts and Excises...be uniform throughout the United States." U.S. Const, art I, §8, cl. 1. Proponents of a delayed entry into statehood believe that this approach would allow Puerto Rico time to phase out its favored tax status and achieve tax uniformity before being subjected to the limits imposed by the Uniformity Clause. .

3 See Philip Joseph Deutch, "Note: The Uniformity Clause and Puerto Rican Statehood," 43 *Stanford Law Review* 685 (1991).

4 See Statement of Dick Thornburgh, Attorney General, February 7, 1991, in Hearings ' Before the Committee on Energy and Natural Resources on S.244 (To Provide for a Referendum on The Political Status of Puerto Rico). '

5 See, for example, April 1990 CBO Report.

6 See Hearings before the Committee on Energy and Natural Resources, 102nd Congress, first session, on S.244, January 30 and February 7, p. 229.

7 See Section III, above.

8 As discussed below, this figure is derived from estimates provided during hearings on S.244. While the numbers may not be exact, they are the best estimates available, and at the very least demonstrate the order of magnitude of savings associated with statehood.

9 See Hearings before the Committee on Energy and Natural Resources, 102nd Congress, 1st Sess., on S.244, January 30 and February 7, p. 229. Our table differs from the assumptions implicit in bill S.244 in that we include as federal revenue the value of personal, corporate, excise, and section 936 taxes (as well as rum taxes and tariff collections) that under S.244 would be returned to Puerto Rico as a "cover-over" statehood grant between 1994 and 1997. We also assume that eligibility and benefit standards for government entitlements will conform to mainland levels; in this respect our estimates of the savings in net outlays are therefore, more conservative than the assumptions of S.244 (which assumed limits on Puerto Rican benefits).

10 Table IV and our accompanying analysis differs from our first report (and otherproposed legislation) in that we include as revenue the gains from customs tariffs and rum taxes previously returned to the Puerto Rico treasury. The treatment of these provisions during the transition period is open to debate, but at a minimum they can be considered as funds available for a statehood grant.

11 As we noted above in Section II, the CBO assumption that no offsetting benefits would accompany the shift to statehood is open to question. Statehood would provide stability and recognition that would attract investment to offset possible dislocations associated with the loss of section 936. See the McKee Report, p. 42-47.

12 Grupo De Investigadores Puertorriquenos, *Breakthrough From Colonialism: An Interdisciplinary Study of Statehood,* (Santo Domingo, Dominican Republic: University ofPuerto Rico: 1984), p. 1155.

13 *Id.,* pp. 1153-54.

14 See p. 12 of the September 1990 version of this report.

15 Both S.712 and S.244, for example, provided a period of delay (of two years and at least one year, respectively) before starting the phase-in provisions of the transition period.

Chapter V

Conclusion

In sum, we have argued throughout this report that Puerto Rico faces some hard choices in the near future. The report confronts critical areas in need of attention and reform in Puerto Rico's economy: the need to restructure and streamline the island's bloated and ineffective public sector; the need to repeal the inefficient and outdated section 936 tax credit; and the need to refocus the obsolete development strategy away from government subsidies and centralized decision-making, and toward private sector market-oriented policies.

In particular, we emphasize in Section III that the section 936 tax credit cannot stand as the cornerstone of Puerto Rico's hopes for development. Section 936 is constantly threatened with repeal in the U.S., where the Treasury Department is particularly hostile to it due to the excessive subsidy rates and revenue costs we detail in Section III. Furthermore, the investment decisions critical to Puerto Rico's future will not be based on tax gimmickry and government incentives. Instead, investors will seek a stable, productive, and efficient environment for their location decisions.

These points represent concerns that must be addressed irrespective of the status question. The report concludes, however, that action on these issues is unlikely in the absence of statehood. In particular, the needed reforms of the bloated public sector will not occur without the major adjustments occasioned by a shift to statehood, since there is virtually no political incentive to make such changes. This fact of life applies regardless of the political party in charge under the Commonwealth status. In addition, continued Commonwealth status represents a long-term, growing drain on mainland fiscal resources, whereas statehood would eventually alleviate those pressures. This expense cannot be overlooked in a period of severe federal budget deficits.

Yet the report demonstrates that statehood offers a viable and cost- effective alternative. A shift to statehood would not only occasion a critical - though manageable — streamlining of the public sector, but it would also produce significant revenue gains to the U.S. Treasury as compared with commonwealth (on the order of $5 billion over the first nine years). At the same time, statehood would create a net inflow of federal funds into Puerto Rico. The source for these funds would not be U.S. mainland taxpayers, though, but rather the corporate parents of section

936 companies that could no longer take advantage of the lucrative tax benefits currently available on the island.

In the final analysis, then, statehood presents a welcome opportunity for change. Indeed, given the bleak future of Puerto Rico unless significant reforms are soon implemented, statehood is a precondition for those reforms, which are essential to sound economic growth in the near and foreseeable future.

Appendix A-1

Federal Entitlement Programs and Economic Development

Introduction

Statehood would involve the extension of full federal entitlement programs to Puerto Rico. For many of these programs, Puerto Rico is already treated as if it were a state. But federal spending on several of the larger programs — notably food stamps, Aid to Families with Dependent Children (AFDC), and Medicaid — is capped under commonwealth. This section examines the effect that extending these programs will have on the economic development of the island.[1]

Critics claim that expanding federal entitlement programs in a distressed economy will have an adverse effect on labor market behavior by increasing economic dependency and reducing incentives to find work. Proponents of statehood, in contrast, downplay these potential hazards. They point to the stimulation of aggregate demand associated with the inflow of federal funds and draw attention to the national trend toward linking government benefits with work or training programs. Moreover, they point Out that additional federal funds will help alleviate the worst symptoms of Puerto Rico's chronic poverty (the 1980 census identified 62.4 percent of the population with an income level below federal poverty guidelines).

While neither set of arguments is without merit, both miss the main point. The real issue is not what increased entitlements will do to stimulate demand or reduce work effort, but rather how Puerto Rico can grow and generate jobs. Without more jobs and sustained economic growth, residents of Puerto Rico will continue to be poor, to be dependent on welfare, and to migrate to the mainland to find work, regardless of the structure or scope of federal entitlement programs. Hence, the central question is the one discussed throughout this report: can Puerto Rico develop and maintain an economic strategy that will generate growth through productive jobs? In our view, statehood is a precondition to a productive development strategy. Statehood erects the foundation for economic growth, assures a more adequate safety net of fair social welfare programs, and should reduce the need for such social insurance.

Changes in Benefits

Table A-l documents 1989 per capita federal expenditures for Puerto Rico, Mississippi, and the U.S. states. The table shows that Puerto Rico receives equal treatment under many programs, notably social security[2], unemployment insurance and child nutrition. However, federal restrictions on other programs — Medicaid, Medicare, and Supplemental Security Income(SSI) in particular — are reflected in relatively low per capita expenditures in Puerto Rico, despite a per capita income roughly half that of Mississippi (the state with the lowest per capita income). Statehood would lift these restrictions and put Puerto Rico on an equal footing with other U.S. citizens living on the mainland.

Probable changes (which are difficult to estimate with precision due to uncertainties in benefit levels and numbers of participants) are highlighted below; increases in federal funding by program are summarized in Table A- **2:**[3]

FOOD STAMPS: In 1983, the Food Stamp Program in Puerto Rico was replaced by a block grant for a Nutrition Assistance Program (N.A.P.), which reduced the availability of federal funds and limited benefits and eligibility. Though recent average monthly benefits under N.A.P. ($48) appear similar to those on the mainland ($50), Puerto Rico's intense poverty and higher cost of living[4] mean that federal caps such as a lower maximum monthly allotment have a direct impact on the program's reach. Under statehood, Puerto Rico would again qualify for the Food Stamp Program, resulting in an additional $1.38 billion in funding in 1997 the first year of full eligibility under S.244.[5]

SSI: Supplemental Security Income, which is fully federal funded, would replace the jointly funded Adult Assistance program for the aged, blind and disabled. (SSI replaced Adult Assistance in the federal system in 1974.) Federal funding would increase $1,145 billion in 1997, the first year under S.244 that SSI would fully apply.

AFDC: Under statehood, Puerto Rico's AFDC program, because of its relatively low payment standards, would not be significantly affected: lifting the federal spending cap (currently $82 million) and increasing the federal match rate from 75 percent to 83 percent would increase federal outlays only $70 million in 1997.

Table A-1

Federal Expenditures by State and Territory — 1989 $ Per Capita

	Puerto Rico	Mississippi	U.S. States3
Grants to State and Local Governments —Total	490.61	513.76	466.35
Medicaid	22.80	158.87	138.68
A.F.D.C.	30.34	28.09	44.55
Social Services Block Grant	3.98	12.44	10.73
Child Nutrition Programs	34.64	44.11	17.08
Compensatory Education Aid	42.99	28.46	16.07
EPA Wastewater Trtmnt. Consl	. 9.32	7.79	9.28
Community Development	35.06	12.55	11.37
Housing Assistance	50.44	30.73	33.16
Job Training Partnership Act	28.40	14.18	11.76
State Employment Services	5.58	9.05	9.68
Highway Trust Fund	18.61'	42.11	52.51
Urban Mass Transit Aid	7.27	2.11	14.14
Other	201.18	123.27	97.34
Nutrition and Food Stampsb Food Stamps	0.00	144.08	53.07
Nutrition Assistance Grant	273.60	0.00	0.00
Direct Payments to Individuals—Total	970.85	1744.66	1 778.79
Medicare	100.80	332.75	379.16
S.S.I.	0.00	107.27	45.87
Social Security	597.13	836.73	905.57
Student Loan Subsidies	4.72	6.58	8.52
Pell Grants	76.28	26.03	18.76
Veterans Benefits	84.78	96.63	63.69
Federal Retirement	47.64	. 189.75 ,	202.36
Other	59.50	148.91	154.86

Source: U.S. Department of Commerce, Bureau of the Census, "Federal Expenditures by State for Fiscal Year 1989," (Washington, D.C.: C.P.O., 1990), Tables 2 and 4.

a. Category includes only U.S. States; derived from source by subtracting funds for territories and undistributed appropriations.

b. In Puerto Rico, the food stamp program is administered as the Nutrition Assistance Program in the form of a block grant to the Commonwealth government. Food stamp figures for the states include both grants to individuals and grants to governments for administration

Table A-2

Estimated Federal Outlays in Puerto Rico For Certain Entitlement Programs Under S.244 in 1997[1]

	$ Billions	**Percentage of Increase**
Baseline Outlays[2]	**1.40**	
Increases Under Statehood:	**3.30**	**100.0**
Which might affect labor		
Food Stamps	**1.40**	**42.4**
AFDC	**.07**	**2.1**
Unlikely to affect labor		
Medicaid	**.70**	**21.2**
S.S.I.	**1.10**	**33.3**

Source: Hearings before the Committee on Energy and Natural Resources, 102nd congress, 1st Sess., on S.244, January 30 and February 7, 1990, p. 229.

1 1997 is the first year under S.244 for which full federal funding would apply.
2 Baseline outlays for these programs include projected federal expenditures under current law and increases associated with the commonwealth option under S.244.

HEALTH CARE: A $701 million increase in federal Medicaid funding in 1997 would replace much of the island's public health program. Puerto Rico could reduce its expertise from $450 million to the $184 million required by Medicaid grant matching stipulations.

In all, then, statehood would result in an additional $3.3 billion of federal funds for the food stamp, AFDC, Medicaid, and SSI programs; under the commonwealth option of S.244, this spending would be limited to $1.5 billion.

The Labor Market Response

Some observers worry that the massive infusion of these new federal funds will have a detrimental effect on Puerto Rico's labor market. As noted earlier, we consider these concerns to be secondary to the broader issue of economic development, which is the underlying question in any study of welfare and its effects. Nevertheless, this section briefly addresses some of those concerns.

The fundamental dilemma inherent in all welfare programs is that the expansion of entitlement programs necessarily entails some labor market disincentives: "Because welfare programs are means-tested, they discourage work, since the more you work, the less assistance you receive. Moreover, any effort to increase benefits to combat poverty more effectively will only further decrease the incentives for recipients to take low-paying jobs and work."[6] In Puerto Rico's case, however, two mitigating factors must be considered.-

One factor is that the labor market behavior argument is largely immaterial for the majority of the additional federal funds. Most new funding (54.5 percent) would come in programs that have little or no effect on work-related decisions, such as SSI and Medicaid. SSI, for example, provides aid to the blind, aged and disabled — individuals for the most part already removed from the work force. Table A-2 shows that of the $3.3 billion total projected increase in Federal outlays for 1997, only $1.5 million (46.5 percent of the increase) are of the type significantly related to labor-marked behavior, namely AFDC and food stamps.

The other factor is the trend linking federal benefits with programs designed to facilitate the movement of welfare recipients into work through mandatory training, job search, and "workfare" programs. In such programs, government agencies provide services to help welfare beneficiaries find and keep jobs; in exchange, recipients are required to fulfill certain training or job search obligations. This trend recently gained political and legislative expression in the passage of the Family Support Act of 1988, which (among other things) required states to tie AFDC benefits to participation in work-related programs. Incentives to leave the welfare rolls, such as child care and a one year continuation of Medicaid benefits, would be implemented under statehood, but not under continued commonwealth.

The food stamp program has had a similar requirement in effect since 1987. The Food Stamp Employment and Training Program requires that states provide employment and training services for food stamp recipients, who (unless exempt from the requirements) must participate in programs designed to move them into private sector employment. Program areas include job search, job search training, educational classes, and work experience. Under statehood, Puerto Rico would be required to meet the same program guidelines as other states.

Hence, an increase in those funds linked to labor market behavior — AFDC and food stamps — would be accompanied by federal program obligations designed to minimize their adverse impact. How effective, then, are these programs at mitigating welfare's adverse impacts?

Studies to determine the effectiveness of "workhands welfare" programs have been inconclusive for the most part, generally suffering from a lack of sufficient data over time.[7] A recent study of seven representative employment initiatives in the U.S. by the Manpower Demonstration Research Corporation (MDRC), however, showed that despite the limited scope of these early experiments, such programs in most cases "led to a notable substitution of earnings for welfare and proved cost-effective, suggesting that the success can be repeated on a larger scale."[8] But the MDRC study also found exceptions to this rule: West Virginia's employment program, for example, did not lead to increased employment and earnings, mainly because of the state's high unemployment and rural character.

Other program evaluations have echoed MDRC's findings. A Food Stamp jobs demonstration program conducted in the early 1980's, for example, also found that such programs led to a reduction in government food stamp payments and an increase in participants' income.[9] But a clear difference emerged between early programs, implemented in 1981 during a deep recession, and later programs operating during the economic growth of 1984. The final report on the demonstration project concluded that employment opportunities and economic stability play a crucial role in determining the effectiveness of job search programs.

While "work and welfare" programs are clearly no panacea, particularly for Puerto Rico's labor surplus economy, they still represent an important trend. Furthermore, these programs may also provide significant intangible returns, such as expressing community values that favor participation and work if possible.

Conclusion

In general, the "work and welfare" debate merely reinforces the importance of our original assertion. That is, job creation and a strong labor market are the most important factors in the entitlements equation. Aside from their role in addressing the needs of Puerto Rico's poor and their possible stimulation of the economy due to an increased demand for goods and services[10], the federal entitlement programs are largely a secondary issue in the status debate. All projections about the impact of expanded entitlements hinge on the economy's ability to grow and create jobs.

Endnotes

1 The financial and fiscal impacts of increased federal funding are dealt with in the main body of the report. See Sections II and IV, above.

2 The lower per capita social security payments in Puerto Rico reflect the lower level of earnings on the island.

3 Cost estimates are from the November 15,1989 testimony of the Congressional Budget Office before the Senate Finance Committee. Benefit levels are from: U.S. Department of Health and Human Services, Social Security Administration, "Social Security Bulletin: Annual Statistical Supplement, 1989," (Washington D.C.: GPO, 1990); and GAO, "Puerto Rico: Information for Status Deliberations," briefing, report to the House Subcommittee on Insular and International Affairs, March 1990.

4 Recent estimates put Puerto Rico's cost of living at 12 percent higher than the mainland average. Puerto Rico Department of Social Services, "State Plan of Operation for the Administration of the Nutrition Assistance Program of the Commonwealth of Puerto Rico, Fiscal Year 1989-90," p.7.

5 Data on additional entitlement programs comes from the Departments of Health and Human Services and Agriculture in testimony on S. 244. See Hearings before the

Committee on Energy and Natural Resources on S.244,102nd Cong., 1st Sess. (Jan. 30 and Feb. 7, 1991), p. 229.

6 Judith M. Gueron, "Work and Welfare: Lessons on Employment Programs," *Journal of Economic Perspectives*, 4 (Winter): 1990.

7 An evaluation of the Food Stamp Employment and Training Program is currently under preparation; the interim report on the program came to no conclusions about the ability of the program to cut welfare costs, increase employment and decrease dependency. (Abt Associates, Inc., "Report to Congress on Program Implementation," December, 1988. Prepared for U.S. Department of Agriculture, Food and Nutrition Service.)

8 Gueron 1990, p.94.

9 U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis and Evaluation, "Food Stamp Work Registration and Job Search Demonstration, Final Report," July, 1986.

10 Determining the extent to which aggregate demand will be stimulated depends largely on broad assumptions about economic performance. See the April 1990 CBO report for one such model

Appendix B–1

Type I *Business type operations; supposed to be self-sufficient; obtain most or all revenue from charges for services or products.*	***Public Corporations, by Type*** Puerto Rico Telephone Authority Communications Authority - Ports Authority Electric Power Authority Aqueducts and Sewer Authority Automobile Accidents Compensation Authority Cooperative Deposits Insurance Corporation Government Development Bank Shipping Authority Housing Bank and Finance Agency Economic Development Bank Land Authority Land Administration Infrastructure Financing Authority Industrial, Medical, and Environmental Control Financing Authority Caribbean Basin Financing Corporation

In general, the "work and welfare" debate merely reinforces the importance of our original assertion. That is, job creation and a strong labor market are the most important factors in the entitlements equation. Aside from their role in addressing the needs of Puerto Rico's poor and

Appendix B-2

Commonwealth General Fund Appropriations to Public Corporations Fiscal Year 1991-92

($ Millions)

1.	University of Puerto Rico	322.8
2.	Musical Arts Corporation	6.4
3.	Institute of Puerto Rican Culture	9.3
4.	Fine Arts Center Corporation	1.3
5.	Cardiovascular Center Corporation	6.5
6.	Aqueduct and Sewer Authority	41.6
7.	Solid Waste Management Authority	1.8
8.	Housing Bank	38.7
9.	Farm Credit Corporation	5.3
10.	Rural Development Corporation	2.7
11.	Land Authority	2.7
12.	Sugar Corporation	102.3
13.	Economic Development Bank	8.0
14.	Infrastructure Financing Authority	40.0
15.	Tourism Company	18.2
16.	Metropolitan Bus Authority	27.2
17.	Maritime Authority	10.0
18.	Public Broadcasting Corporation	3.1
19.	Farm Services Administration	25.1
20.	Agricultural Development Administration	57.2
21.	Industrial Development Company	15.5
22.	Health Facilities and Services Administration	513.8
23.	Right to Work Administration	32.3
24.	Others	2.0
TOTAL		1,293.8
General Fund Budget, Total		4,227.2
Appropriations to Public Corporations Percent of Total Budget		30.6

Appendix C

Employment Multipliers and the Effectiveness of Section 936

The estimates appearing in Table 11-1 were computed by the U.S. department of the Treasury. Among other estimate of $18,523, the lowest available cost estimate is $6,221 per employee.[1] This estimate is based on 1982 data and considers the effects of employment multipliers and the proposed reduction in the U.S. corporate tax rate from 46 to 33 percent.

When estimating the opportunity cost per job of section 936, it is misleading to use employment multipliers. To the degree that such secondary effects are created by section 936 investments, these effects will also be present if alternative measures are taken to promote investment. Furthermore, the impact of section 936 industries on the Puerto Rican economy through their use of intermediate inputs is minimal because most of these items are imported. The increase in the demand for services in Puerto Rico as a result of the purchases made by employees of section 936 companies is also reduced because the companies are so capital intensive.

The magnitude of the multipliers is also questionable. With an employment multiplier of about 1.5 as is implied by these Studies, for every public sector job created a further expansion of employment of 1.5 jobs would occur. Considering only the impact of the public sector and section 936 firms on the economy, such a multiplier would have resulted in the creation of more additional jobs than there are people available in the labor force on the Island. Given the Island's observed high unemployment rates, obviously, such an employment multiplier is not realistic.

If the above estimate of $6,211 cost per job is recomputed taking out the effect of employment multipliers, but incorporating the 1986 tax rate reduction, the cost per job becomes $15,808. In that year, average employee compensation was $ 14,210. Therefore, even under the most conservative cost estimates, the annual cost of creating a job through the section-936 tax incentive is greater than what the job pays in wages.

Endnote

1 This estimate was produced by Robert R. Nathan Associates, Inc., Consulting Econo¬mists for the Puerto Rico-U.S.A. Foundation. Robert R. Nathan Associates, Inc., “An Assessment of the Administration’s Proposal to Substitute a Wage Credit for Section 936”, (Washington, D.C.,June 1985).

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E. "Puerto Rico and Section 936: A Costly Dependence"

By:
J. Tomas Hexner and Glenn Jenkins

Puerto Rico and Section 936: A Costly Dependence

I. Introduction

For over 70 years, U.S. corporations have been granted tax incentives to operate in U.S. territorial possessions, most notably in Puerto Rico.[4] The purpose in so benefiting what have become known as "possessions corporations" is to attract U.S. capital to these developing territories, with the goal of creating jobs.[5]

At the outset, this approach— as expressed first in section 262 of the Revenue Act of 1921, and ultimately in section 936 of the Internal Revenue Code—was successful. In Puerto Rico during the 1950s and 1960s, it spurred the island's industrialization, infrastructure development, and the attendant growth in employment and gross national product (GNP). By the mid-1970s, however, the job-creation benefits of section 936 took a backseat to the tax planning that brought great financial gain to only a few U.S. companies, substantial cost to the U.S. Treasury, and a competitive disadvantage to "native" Puerto Rican enterprises.

This problem persists in large part because section 936 can have an immense impact on after-tax U.S. profits: possessions corporations receive full credit against U.S. taxes owed on the net income earned in a possession, regardless of whether that income is generated by the use of tangible property and labor within the possession or is attributable to the use of intangible property transferred to the possession corporation. Companies have been quick to see the benefit in transferring intangible assets and their related income streams to their possessions-based operations. Therefore, to the extent that corporations are able to claim tax credits for income sourced in the possessions that has been generated by properties temporarily located there but for which no real investments have been made, the cost of section 936 to the U.S. Treasury has been wholly unrelated to the intended development benefits that underlay adoption of section 936 in the first instance.

[4]These territorial possessions now include Puerto Rico, the U.S. Virgin Islands, the Commonwealth of the Northern Marianas, the Federated States of Micronesia, the Marshall Islands, American Samoa, and Guam. The Philippines was considered a U.S. possession until 1946, when it was given its independence.

[5]A possessions corporation is a U.S. corporation, which is commonly the subsidiary of a U.S. parent corporation doing business in a U.S. territorial possession, and which otherwise qualifies for the special tax credit afforded to such corporations Tinder section 936 of the Internal Revenue Code (IRC).

Some analysts, considering the section 936 problem solely from the perspective of the revenue loss caused by the artificial transfers of intangible assets to possessions corporations, have sought remedies by Unking section 936 with section 482 of the code. Other analysts, considering the 936 problem solely from the perspective of the lack of real, development-based investments in the possessions, have sought remedies in credit limitations based on measures of real investments in the possessions themselves. Recent additions to the Internal Revenue Code reflect solutions from both perspectives.

This paper argues that neither solution offers much hope of real success, and that the current mix of solutions, although well intended, most likely will have a serious negative impact on "native" possession enterprises and the revenues these enterprises contribute to possession treasuries.
It is time to admit that the attractiveness of section 936 as a tax scheme has come too far outweigh its role as an employment- producing incentive. The companies benefiting most from the credit have been capital-intensive firms such as pharmaceutical companies. Those benefiting least have been labor-intensive industries such as apparel manufacturers.

For example, in Puerto Rico during the 1980s, the pharmaceutical industry received about 50 percent of the total tax benefits from section 936 while providing only 15-18 percent of the section 936 jobs. In 1989, the latest year for which aggregate data are available, this translated into the pharmaceutical industry receiving $1.2 billion of all section 936 credits, while employing only about 18,000 of the 106,000 workers in section 936 firms. The average cost to the U.S. Treasury for each Puerto Rican job in the pharmaceutical industry that year was $66,081, while the average compensation was $30,447. Thus, for each dollar of employee compensation, pharmaceuticals received $2.17 in tax benefits from the U.S. Treasury.[6]

The total cost of the section 936 tax credit to the U.S. Treasury in 1989 was approximately $2.5 billion.[7] The present value of its cumulative cost during 1973-89 is approximately $52 billion.[8] The Treasury Department's Office of Tax Analysis projected that the costs of section 936, were

[6]J. Bradford, "U.S. Possessions Corporations Returns, 1989," U.S. Department of the Treasury, Office of Tax Analysis, p. 103.
Id.
[8]U.S. Department of the Treasury,
"The Operations and Effect of the Possessions Corporation System of Taxation, Sixth Report," 1989, Table 4-11. Figures for 1984 and 1986 were imputed by taking the mean between available data for 1985 and 1987. The discount rate used was 8 percent.

it not revised, would continue rising at some 10 percent annually,[9] while the Congressional Budget Office calculated that the incentive scheme would bring losses of $15 billion in potential tax revenues during 1993-97.[10] [11]

These conditions made section 936 a logical target for deficit- reduction legislation in President Clinton's 1993 budget. The revised section 936 provisions restructure and reduce the tax credit effective December 31, 1993. In particular, Congress has legislated a connection between the tax credit and employment and investment growth in the possessions.

Although reform is desirable, this paper argues on a historical basis that section 936 should not merely be fixed, and indeed, that it cannot be fixed. Our contention is that section 936 has:
essentially operated as a costly tax benefit to a few corporations;

• resulted, through links with the Caribbean Basin Initiative, in substantial gains for possessions corporations with little corresponding boost in regional exports;

• created a tax-subsidy-oriented development strategy, which for the past 20 years has been a principal cause of stagnation in the Puerto Rican economy; and

• has generated, understandably, a powerful lobbying effort to perpetuate the 936 corporate financial benefits by delivering the message that the Puerto Rican economy would falter without the investment stimulus of 936.

- We find further that the revisions to section 936, as provided in President Clinton's 1993 budget, do not address these shortcomings. Moreover, like earlier attempts to fix the tax benefit, they promise a result that is inferior to the possibilities of abandoning the policy entirely.

Section II of this article reviews the historical background of section 936, and section III examines its mechanics and looks at the technical aspects of related legislation. In particular, this article explores the relationship between section 936 and regulations issued to limit transfer pricing abuses. Section IV analyzes the impact of section 936 on Puerto Rico. Section V explores the legal relationship between section 936 and the Caribbean Basin Initiative—an act that will

[9] P. Morrison, 'Testimony before the Committee on Finance, United States Senate," April 26,1990, p. 2.

[10] U.S. General Accounting Office, "Pharmaceutical Industry: Tax Benefits of Operating in Puerto Rico," Briefing Report to the Chairman, Special Committee on Aging, U.S. Senate, May 1992, p. 1.

[11] See J.T. Hexner, G. Jenkins, H.F. Ladd, and K_R. LaMotte, Puerto Rican Statehood: A Precondition to Sound Economic Growth, November 1993. This report shows that section 936 acts as an unsustainable crutch in the Puerto Rican economy and, in so doing, creates significant market distortions, thereby impeding the economic development of the island.

prolong the tax incentive. Section VI outlines the elements of the most recent attempts to reform the tax credit. Section VII concludes that section 936 cannot and should not be fixed because, as a development strategy, it is expensive and ineffective—expensive to U.S. taxpayers and ineffective in stimulating the growth of the Puerto Rican economy.

II. The Legislative History of Section 936

A. Background

Since the Revenue Act of 1921 (with its section 262, the predecessor of section 936), the U.S. government has provided a tax incentive for U.S. corporations operating in its territorial possessions.[12] The original goal was to help American corporations compete with foreign firms in the Philippines.[13]

Section 262 exempted qualified U.S. corporations from taxes on all income derived from sources outside the United States. To qualify, a corporation had to derive 80 percent or more of its gross income from its operations in U.S. possessions, and 50 percent or more of its gross income from active trade or business in the possessions.[14] These gross income tests had to be met on an aggregate basis for the year of the exemption and for the two preceding tax years if the corporation had conducted a trade or business in a possession during that period.

Under the 1921 act, dividends paid by the possessions corporation to corporate shareholders were fully taxable. In the Revenue Act of 1935, however, this policy was abandoned. Moreover, amounts received upon liquidation were made tax-exempt.[15]

In 1948, by coupling these U.S. tax incentives with various local tax incentives, Puerto Rico initiated a more aggressive program to attract major capital investment. This program, known as

[12]Revenue Act of 1921, ch. 136, section 262,42 Stat. 227,314.

[13]The vast majority of section 936 companies conduct business in Puerto Rico. In 1987, nearly 97 percent of all U.S. possessions corporations operated in Puerto Rico and over 99 percent of the total section 936 credit was claimed by companies with operations in Puerto Rico. See J. Bradford, "U.S. Possessions Corporations Returns," p. 51. Consequently, this article will focus on the operation of section 936 in Puerto Rico.

[14]U.S. Department of the Treasury, "Sixth Report," p. 5.

[15]Revenue Act of 1935, ch. 829, sec. 112(b) (6), 49 Stat. 1014, 1020.

"Operation Bootstrap,"[16] attracted a surge of U.S. corporations, particularly in labor-intensive industries. From 1948 to 1972, Puerto Rico's real GNP grew at an average annual rate of 6 percent (compared to a rate of 3.7 percent for the United States).[17] At the same time, the island's economy shifted from its traditional agricultural base to manufacturing, where employment increased from 55,000 in 1950 to 142,000 in 1972.[18] Indeed, the program was so successful that during the 1950s and 1960s, Puerto Rico was dubbed the "economic miracle" of the Caribbean.[19]

After this boom, however, the Puerto Rican economy stagnated. And while the section 936 lobby has attempted to maintain and disseminate the historical boom illusion, the annual rate of physical investment declined by nearly 30 percent between 1973 and 1978, from $1.5 billion to $1.1 billion.[20] In the next five years, from 1978 to 1983, new physical investment fell another 35 percent, from $1.1 billion to $0.7 billion.[21] Private investment in plant and equipment also fell steadily from 10.3 percent of GNP in 1973 to 4.6 percent in 1983.[22]

By the mid-1970s, the possessions tax benefit began to be criticized as an insufficient stimulus for employment-producing investments in Puerto Rico and the other possessions. Later, during the 1980s, other criticism emerged to the effect that, because the tax incentive provided that liquidation receipts were tax- exempt, possessions corporations were accumulating and investing earnings in the Eurodollar market and other foreign markets for long periods before liquidating and repatriating these earnings tax-free to the United States.[23] By the mid-1980s, opponents of the tax benefit further argued that its cost in foregone tax revenue contradicted deficit-reduction efforts by the U.S. Treasury.[24]

Those favoring a continuation of the tax exemption countered that the incentives were needed to offset the costs of federally imposed requirements in the possessions. U.S. law, for example, set

[16]The Operation Bootstrap program was conceived by Puerto Rican Governor Luis Munoz Marin and promised U.S. corporations "cheap labor, exemptions from island taxes for up to 25 years (along with total exemption from U.S. federal corporate and private income taxes), and assistance in the building of plants." Tansill, "Puerto Rico: Independence or Statehood?" Revista del Colegio de Abogados de Puerto Rico 41 (1980): 93.

[17]U.S. Department of the Treasury, "Sixth Report," pp. 17,19.

[18]Id,, p. 17.

[19]*Id.*

[11] Id., p. 24.

[21]*Id.*

[22]Id. p. 17.

[23]Id., p. 7.

[24]Id,, p. 6.

minimum wages and mandated the use of U.S. flag vessels to transport goods to the mainland. This was said to disadvantage Puerto Rico, and other U.S. possessions generally, in competition with other developing countries for U.S. investment.[25]

Congress responded to the early criticisms by creating a new section 936 of the Internal Revenue Code in the Tax Reform Act of 1976.[26] Congress stated that it sought to . . . assist the U.S. possessions in obtaining employment- producing investments by U.S. corporations, while at the same time encouraging those corporations to bring back to the United States the earnings from these investments to the extent they cannot be reinvested productively in the possession.[27]

The essence of the 1976 legislation remained intact and continued to apply until December 31, 1993. Its unsatisfactory performance, with respect to the goals of Congress, is, however, broadly apparent. The benefit to much- needed employment in Puerto Rico continues to be low (the unemployment rate in Puerto Rico is now 18.1 percent) relative to its mounting cost ($2.5 billion in 1989) to the U.S. Treasury. This result has occurred because the legislation supported (and continued to support until December 31, 1993) possessions corporations and their affiliates in the exploitation of transfer pricing.

A. Combating Transfer Pricing Abuses

Before 1982, there were no explicit statutory guidelines on transfer pricing.[28] This statutory silence provided possessions corporations with tacit permission to minimize their tax liability by shifting the taxable income attributable to property transferred from U.S. affiliates. A U.S. pharmaceutical company, for example, might develop a patentable drug in its U.S. laboratory and receive deductions on its U.S. federal income tax obligations for the research and development costs it incurred. The company would then transfer the patent to its wholly owned possessions

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[25] *Id.*

[26] See generally U.S. House of Representatives, "Report of the Committee on Ways and Means, U.S. House of Representatives, on H.R. 10612," Report No. 94658, November 12, 1975; and U.S. Senate, "Report of the Committee on Finance, U.S. Senate, on H.R. 10612," Report No. 94938, June 10, 1976.

[27] U.S. House of Representatives, "Report on H.R. 10612," p. 255; and U.S. Senate, "Report on H.R. 10612," p. 279.

[28] U.S. Department of the Treasury, "Sixth Report," p. 8. U.S. corporations operating in the possessions usually show profits in two ways. First, they earn profits from real investment in plant and equipment in Puerto Rico. Second, they are sometimes able to increase the amount of accounting profits reported in the possessions without any new physical investment by allocating to a possessions corporation income from intangibles (such as patents, trademarks, and trade names) that had typically been developed and paid for by an affiliated U.S. corporation and subsequently were transferred to the possessions corporation at a transfer price that does not reflect the market cost or the costs of development.

corporation, which would produce the patented drug and would claim the resulting income as possession-source income. As a result, the corporate group would owe little or no income tax, either in the United States or in Puerto Rico, for producing this drug.[29]

Congress and the Treasury have repeatedly reacted to this problem but have met with limited success. Congress enacted the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), which added a new section 936(h) to the Internal Revenue Code to ensure that a sufficient percentage of income generated by such transferred intangibles would be allocated to the U.S. parent.[30] [31] Section 936(h) was revised again in 1986 to coordinate with section 482 provisions, which address transfer pricing in general. And, as recently as January 1993, Congress once again revised the regulations when it issued new temporary section 482 regulations, which refer to section 936(h).

B. Section 936

Eligibility and Links to Investment and Employment

Congress has undertaken a parallel effort to tighten the eligibility requirements for the tax exemption. It has repeatedly revised the gross income test (the minimum percentage of a section 936 firm's income that must be earned from the active conduct of trade or business in the possessions to qualify for the tax credit). Revisions to section 936 in 1976 set the minimum at 50 percent— the same figure required under the antecedent legislation. The 1982 revision increased the minimum to 65 percent, and in 1986 it was raised again to 75 percent.[28] Hence, a section 936 firm may now derive no more than 25 percent of its gross income from passive investments.

Stipulations in the Clinton administration budget adopted in 1993 represent the most recent attempt to make section 936 "work." These provisions, which came into effect on December 31,

[29]Id.; see also U.S. General Accounting Office, "Pharmaceutical Industry," p. 2.
The U.S. Treasury took the opposite position, however, and argued that income obtained from drug sales in these transactions should be allocated to the U.S. parent and was subject to federal taxation. This issue resulted in lengthy litigation. See, for example, Eli Lilly and Co. v. Comm'r., 84 T.C. 996 (1985) and G.D. Searle & Co. v. Comm'r., 88 T.C. 252 (1987).
[30]U.S. Department of the Treasury,
"Sixth Report," p. 8.

1993, aim to reduce the tax credit while strengthening its link to investment, employment, and wage growth in the possessions.

The following sections evaluate the specifics of the evolving section 936 legislation and related provisions.

III. The Mechanics of Section 936 and Related Legislation

A. The Section 936 Tax Credit

Section 936 grants to subsidiaries of U.S. corporations operating in the possessions a tax credit[32] equal to the U.S. federal income tax liability from such operations.[33] This credit is based on the taxable income derived from: (1) trade or business within the possession,[34] (2) the sale or exchange of substantially all of the assets used by the subsidiary in this trade or business,[35] and (3) "qualified possession source investment income, (QPSII)" (i.e., passive income resulting from investment in the possessions of the exempted profits).[36]

The credit is available to any U.S. corporation that during the three years prior to the close of the tax year (or for such part of such period immediately preceding the close of the tax year as may be applicable) earned 80 percent or more of its gross income from possession sources,[37] and earned 75 percent or more of its gross income from the active conduct of trade or business within the possessions.[38]

The 1986 act also expanded the range of types of investment income that qualify for the tax exemption. Income from deposits in Puerto Rican financial institutions that are used to finance development projects in Caribbean Basin Initiative countries now qualify.

[29]The dollar amount of the section 936 credit is determined as follows:
Tax Credit = Taxable Business and
Investment Income
From Sources Within Puerto RicoWorldwide Taxable Income of Possessions Corporation x
U.S. Tax

[32]See R. J. Boles, "Tax Incentives for Doing Business in Puerto Rico," International Lawyer 22, no. 1 (Spring 1988): 123, which explains the basis for this calculation.

[33]IRC section 936(a) (1) (1989).

[34]IRC section 936(a) (l)(A)(i).

[35]IRC section 936(a)(l)(A)(ii).

[36]IRC section 936(a)(1)(B). The operation of the qualified possession-source investment income provision of section 936 will be discussed in Section V.

[37]IRC section 936(a)(2)(A).

[38]IRC section 936(a)(2)(B).

U.S. parent corporations are eligible for a dividends-received deduction on dividends received from a possessions corporation.[39] If the possessions corporation is a wholly owned subsidiary—as most of them are—the deduction equals 100 percent of the dividend.[40] Such a possessions corporation can therefore repatriate to its U.S. parent, free of any U.S. federal income tax liability, its income earned in the possessions. Possessions governments may, however, impose their own taxes on earnings of the possessions corporations. This can include, as is the case for Puerto Rico, a tollgate tax on the repatriated earnings.[41]

Gross income received on the mainland by a possessions corporation is only considered possession-source income if it is derived from trade or business with unaffiliated parties.[42] If a U.S. corporation deposits payments into a bank account on the mainland of a possessions corporation subsidiary as payment for goods manufactured by that subsidiary in Puerto Rico, the payment will not be considered possession-source income of the subsidiary.[43] The subsidiary must receive payment in Puerto Rico for goods and services in order for the payment to be considered possession-source income that qualifies for the section 936 tax credit.[44]

A possessions corporation may not join in a consolidated return with its parent or any affiliated corporations, even in a year in which it fails to satisfy either the 80-percent possessions-source test or the 75-percent active trade or business test.[45] Hence, operating losses incurred by a possessions corporation may not offset the taxable income of the parent or an affiliated corporation. This means that a subsidiary engaged in trade or business in a possession ordinarily will not elect to file under section 936 until it is no longer incurring start-up losses.[46]

The section 936 tax credit is not available for use against the environmental tax,[47] the tax on accumulated earnings,[48] the personal holding company tax,[49] or taxes arising out of recoveries of

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[39]IRC section 243(b)(1)(C).

[40]U.S. Department of the Treasury, “Sixth Report,” p. 7.

“Puerto Rican tax laws applicable to U.S. possessions corporations are discussed in the next part of this section.

[42]IRC section 936(b).

[43]*Pacific Basin Mfg. & Trade Co. v. Comm’r.,* 716 F.2d 638 (9th Cir. 1983); Rev. Rul. 79-168,1979-2 C.B. 283.

[44]Nevertheless, the standard foreign tax credit may be claimed for foreign taxes paid or accrued on income that does not qualify for the section 936 credit. See U.S. Department of the Treasury, “Sixth Report,” p. 7.

[45]R.J. Boles, “Tax Incentives,” p. 125.

[46]To the extent that any losses prior to electing section 936 status have been used beneficially to offset the U.S.-source income of an affiliated group, the possessions corporation will ultimately be required to “recapture” such losses by treating them as U.S.-source income under the overall foreign loss recapture rules of IRC section 904(f).

FfiIRC section 936(a) (3) (A); IRC section 59A.

[48]IRC section 936(a)(3)(B); IRC section 531.

foreign expropriation losses.[50] For purposes of the accumulated earnings tax, the accumulated taxable income of a possessions corporation does not include taxable income eligible for the section 936 credit.[51] The credit is also unavailable to a corporation for any tax year in which that corporation is a domestic international sales corporation (DISC) or former DISC,[52] or for any tax year in which it owns stock in a DISC or former DISC,[53] or in a foreign sales corporation (FSC) or former FSC.[54]

A possessions corporation may elect to use section 936 by filing Treasury Form 5712. For the first tax year in which a possessions corporation applies for the section 936 credit, the form must be submitted on or before the date on which the federal income tax return is filed.[55] An election to use the credit may not be revoked for a period of 10 years without consent from the secretary of the Treasury.[56]

B. Complementary Puerto

Rican Tax Incentives

In addition to the tax credit provided under section 936, the Puerto Rican government has, since 1948, provided its own complementary tax incentives for manufacturing and other specified business activities. Puerto Rico currently grants partial exemptions (of 90 percent) from income tax and other taxes to approved businesses for specified periods of time, usually from 10 to 25 years.[57] A business is generally eligible for an exemption if it is producing on a commercial scale in Puerto Rico a “designated service unit”[58] or a manufactured product not produced in Puerto Rico before January 1,1947.[59]

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[49]IRC section 936(a)(3)(C); IRC section 541.
[50]IRC section 936(a)(3)(D); IRC section 1351.
[51]IRC section 936(g).
[52]IRC section 936(0(1).
[53]IRC section 936(f)(2)(A).
[54]IRC section 936(f)(2)(B).
[55]IRC section 936(e)(1); R.J. Boles, ‘Tax Incentives,” p. 123.
[56]IRC section 936(e)(2).
^Puerto Rico Tax Incentives Act, section 3,13 L.P.R.A. section 256b(a) (Supp. 1988) (approved Jan. 24,1987).
[58]13 L.P.RA. section 255a(d)(4). The term “designated service unit” applies to certain service production activities such as distribution, investment banking, public relations, publicity, consulting, and computer services.
[59]13 L.P.RA. section 256a(d)(l).

Companies that meet that criterion are entitled to a 90-percent income tax exemption, for a period that varies according to the level of business activity in the area where the business is located:[60]

Location	Duration of Exemption
High Development Zone	10 years
Intermediate Development Zone	15 years
Low Development Zone	20 years
Vieques or Culebra	25 years

Qualified manufacturers also receive partial exemptions (up to 90 percent) from property taxes on the personal or real property that generates the exempted income. Moreover, a manufacturing company with gross income of less than $500,000 in any year and with average employment that year of at least 15 persons receives a 100-percent deduction of its first $100,000 of income. A 60-percent exemption from municipal license (gross receipts) taxes is also granted. Businesses that qualify for these exemptions are subject to a special surcharge equal to the lesser of 0.075 percent of sales or 0.5 percent of net income if their income is in excess of $100,000 in a tax year.[61]

A tollgate tax of up to 10 percent may be imposed on earnings repatriated to the United States or to a foreign country. The rate depends on the amount and the length of time that these earnings were invested in Puerto Rico prior to their repatriation. Holding earnings in certain designated investments in Puerto Rico (such as Puerto Rican bonds, bank savings certificates, participation in construction loans, or investment in the company's own additional plant and equipment) for five or more years will decrease the tollgate tax rate by 1 percentage point for each year that the investment is maintained. Thus, earnings invested in these instruments for six years will result in a 4-percent tollgate tax rate when the earnings

[60]13 L.P.RA. section 256(b)(d).
“13 L.P.RA section 256b(a).

are repatriated. If

Example No. 1

XYZ Corporation

Hypothetical Subsidiary Operation in the U.S. and Puerto Rico

Pharmaceutical Industry

	Manufacturing United States	Plant Location Puerto Rico
Sales	$150,000,000	$150,000,000
Income Before Taxes	50,000,000	50,000,000
Effective Corporate Tax Rate	35%	4.5%
Income Taxes	17,500,000	2,228,750
Special Surtax Rate	—	0.075%
Special Surtaxes	0	112,500
Tollgate Tax[1]	0	4,765,875
Net Income After Tax	32,500,000	42,892,875
Tax Savings[2]	0	10,392,875

[1]The 10-percent tailgate tax applied assumes immediate repatriation of earnings.
^ax savings is the difference in potential income tax obligations between the U.S. and Puerto Rico. In this example, the tax savings equal $17.5 million minus $7.11 million.

the amount invested is at least 50 percent of the income of the exempted business for a given year, then all of that year's earnings will qualify for the reduced tollgate tax rate. The 50 percent (or less) of net income not invested can be repatriated immediately at the reduced rate. At the end of the investment period, the invested funds also can be repatriated at the reduced rate.[62]

Example No. 1 illustrates how these rules operate.[63] It shows that if located in Puerto Rico, 90 percent of the income of the subsidiary of XYZ company would be exempt from local income taxes. The remaining 10 percent would be taxed at a rate of 45 percent. Also, the 0.075-percent surtax on sales and the tollgate tax on repatriated earnings would apply. Consequently, the tax would be $2,250,000 (10 percent of the $50,000,000 in income taxed at a rate of 45 percent) less $21,250.[64]

[62]13 L.P.R.A. section 256c(b).
[63]Based on examples given by the U.S. Department of the Treasury, Internal Revenue Service, in C.F.R.
[64] See R.J. Boles, "Tax Incentives," Appendix B, p. 142, which explains the basis for this calculation.

This amounts to a total of $7.11 million owed to the government of Puerto Rico on income of $50 million, compared to an estimated $17.5 million that would be owed on similar income derived from mainland operations. The effective tax rate for this company thus is only 14.22 percent (the sum of $7.11 million in income tax, surtax, and tollgate tax divided by $50 million in income), compared to the 35-percent maximum corporate tax rate the corporation would face on similar operations in the United States. As this example shows, a U.S. company that operates in Puerto Rico under section 936 stands to reap a substantial increase in net after-tax profits through the drastic reduction in tax liability available on the island.

C. Section 936

Since 1982, the Tax Equity and Fiscal Responsibility Act (TEFRA) has provided statutory rules for the allocation to a possessions corporation of income from intangibles that were developed or purchased by its affiliated corporations. The act is one in a series of attempts by the U.S. Congress to stem transfer pricing abuse.

TEFRA added a new section 936(h) to the Internal Revenue Code. This section provides that income from intangible property that is not owned by a possessions corporation is not eligible for the section 936 tax credit. Rather, it is generally taxable to the U.S. shareholders of the possessions corporation. TEFRA provides further that a possessions corporation and its affiliates may elect out of this general rule under either a "cost-sharing" option or a "50/50 profit-split" option.[65]

These two options provide methods by which a possessions corporation may claim an appropriate portion of the income from intangible property that is transferred from its affiliates. If the possessions corporation does not elect either method, it must compute its income from intangible property based on a reasonable profit on the costs that are attributable to such income.[66]

[65] IRC section 936(h)(5).
[66] R.J. Boles, "Tax Incentives," p. 129.

The cost-sharing and profit- split options apply only to “possession products,” products produced wholly or partially by a possessions corporation.[67] The possessions corporation must elect to treat all products in the same product area (defined by reference to three-digit classification using the Standard Industrial Classification (SIC) code) in a like manner.[68] If a corporation elects one of these options, it may, however, make a different election for export and domestic sales.[69] To be eligible to use either the cost-sharing or profit-split option, a possessions corporation must have a “significant business presence” with respect to a particular product in a possession. This requires meeting one of two tests:

25-Percent Value Added Test: The possessions corporation must show that it incurred production costs[70] with respect to the product that are not less than 25 percent of the difference of (1) gross receipts from sales or other disposition of the product to unrelated parties by the possessions corporation or its affiliates less (2) direct costs of materials purchased by the possessions corporation or its affiliates from unrelated parties in connection with the manufacture of that product.[71]

65-Percent Labor Test: Alternatively, the possessions corporation must show that it incurred at least 65 percent of the total direct labor costs[72] of the possessions corporation and its affiliates in producing the product or service dining the tax year. The 65 percent refers to compensation for labor services performed in the possession.[73]

Start-up operations of new 936 corporations and new possession products of existing 936 corporations can meet the “significant business presence” requirement by satisfying a lower

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[67]The regulations under IRC section 936(h) provide a flexible definition of the term “possession product.” The term includes any item of property that is the result of a production process, including components and so-called “end-product forms.” End-product forms are products that are treated as not including certain other components for purposes of meeting the business-presence test and for the computation of the amount of income derived from the possession product.

[68]IRC section 936(h)(5)(C).

[69]IRC section 936(h)(5).

[70]For purposes of the value added test, the term “production costs” has the same meaning as in 26 C.F.R. section 1.471-11(b) except that the term does not include direct material costs and interest. Thus, production costs include direct labor costs and fixed and variable indirect production costs (other than interest). Fixed indirect production costs may include, among other costs, rent, and property taxes on buildings and machinery incident to and necessary for manufacturing operations and processes. Variable indirect production costs may include, among other costs, indirect materials, factory janitorial supplies, and utilities. See 26 C.F.R. section 1.471-ll(b).

[71]IRC section 936(h)(5)(B).

[72]Direct labor costs include the cost of labor that can be identified or associated with particular units or groups of units of a specific product. The elements of direct labor include such items as basic compensation, overtime pay, vacation and holiday pay, sick leave pay, shift differential, payroll taxes, and payments to a supplemental unemployment benefit plan paid or incurred on behalf of employees engaged in direct labor. IRC section 936(h)(5)(B).

73IRC section 936(h)(5)(B).

threshold of value added or labor cost than the percentages referred above. For such operations, a transition period is provided, as follows:

	Year 1	Year 2	Year 3
Value Added Test	10%	15%	20%
Labor Test	35%	45%	55%

1. The Cost-Sharing Option

Under the cost-sharing option, a possessions corporation is required to make a payment to its U.S. parent for 110 percent of its share of the cost (if any) of product-area research that is paid or accrued by the affiliated group during the tax year.[74] "Product area research" costs include research, development, and experimental costs, losses, expenses, and other related deductions, including amounts paid for the use of, or right to use, a patent, invention, formula, process, design, pattern, or know-how (or the amount paid for the acquisition of any of these) that are allocable to the same product area as that in which the possessions corporation conducts its activities. Also included is a pro rata portion of any costs, expenses, and other deductions that cannot definitely be ad- located to a particular product area.[75]

The payment required of the possessions corporation is therefore 110 percent of a portion of the year's research expenditures of the affiliated group in the product area in which the possession product falls.[76] This portion is defined as the ratio of (1) third-party sales of the possession product made by the affiliated group to (2) third- party sales of all products in the product area made by the affiliated group.[77] The cost-sharing payment is determined separately for each product by using the following formula:

Sales to Unrelated Persons

of Possession Product

Total Sales of Products

in 3-digit SIC Code

x

[74]IRC section 936(h)(5)(C)(i)(I).

[75]IRC section 482 is to be applied if no intangible property is related to a product produced in whole or in part by a possessions corporation (discussed in Section VI).

[76]IRC section 936(h)(5)(C).

[77]U.S. Department of the Treasury, "Sixth Report," p. 10.

Example No. 2

XYZ is a possessions corporation engaged in the manufacture and sale of four products (A, B, C, and D), all of which are classified under the same three-digit SIC code. XYZ sells its production to a U.S. affiliate, P, which resells it to unrelated parties in the United States. P's third-party sales of each of these products produced in whole or in part by XYZ are $2,000,000 per product, or a total of $8,000,000 for A, B, C, and D. P's other sales of products in the same SIC code are $8,000,000. The worldwide product-area research of the affiliated group is $500,000. XYZ must compute its cost-sharing amount for each individual product A, B, C, and D as follows:

Sales to Unrelated Persons
Of Possession Product x 110% of Worldwide = Cost-Sharing Total Sales of Products
ProductAreaResearch Payment
in 3-digit SIC Code

$2,000,000 x $550,000 = $68,750
$16,000,000

110% of Worldwide Product-

Area Research

Cost-Sharing Payment

A possessions corporation may credit its payments under cost sharing arrangements with unrelated persons against its share of the cost of product area research paid or accrued by the affiliated group. On the other hand, amounts paid to, or on behalf of, related persons and amounts paid under any sharing agreements with related persons may not be credited against the possessions corporation's cost-sharing payment for the tax year.[78]

Accordingly, a Possessions Corporation electing the cost-sharing payment method is treated as the owner of the manufacturing intangibles (but not marketing intangibles) associated with the possession product.[79]

By virtue of a 1986 amendment to section 936(h)(5), the payment made under any cost-sharing option cannot be less than what would be required under section 367(d) or section 482 of the Internal Revenue Code if the electing corporation were a foreign corporation.[80] Section 367(d) and section 482 provisions essentially authorize the IRS to reallocate gross income and

[78]Treas . reg. section 1.936-6.

[79]IRC section 936(h) distinguishes between these forms of intangible property. "Manufacturing intangibles" refers to any patent, invention, formula, process, design, or know-how. "Marketing intangibles" includes any intangible property defined in IRC section 936(h)(3)(B), if it is used in marketing a product. Therefore, a determination must be made under the cost-sharing option as to what portion of the final sales price of the possession product constitutes a return to manufacturing intangibles (and is therefore tax-exempt income to the possessions corporation) and what portion is a return to marketing intangibles (and is therefore taxable income to the affiliates that perform the marketing). Regulations under IRC section 482 are applied to make this determination.

[80]IRC section 936(h)(5)(c)(i)(I).

deductions between affiliated businesses. Such a reallocation is performed when the IRS, following specific guidelines, questions transfer prices and determines that a reallocation is required to stem tax evasion or to reflect income clearly.

Example Nos. 2 and 3 show how to determine the amount of the cost-sharing payment. They are based on examples given by the Treasury Department.[81]

Example No. 2 shows that the amount of the cost-sharing payment would be $68,750. If, however, XYZ also received $10,000 in royalty income from an unrelated person for the licensing of certain manufacturing intangible property rights, the amount of the product area research ($500,000) would be reduced by that amount, to $490,000.

Example No. 3 shows that a payment by the possessions corporation to an unrelated party under a cost-sharing arrangement will serve to reduce the cost sharing payment, in this case by 31.36 percent.[82]

2. The 50150Profit-Split Method

If, for any product, the possessions corporation elects the profit- split method, it must also have manufactured that product in the possessions. In the case of Puerto Rico, this requirement is met if:

(1) the product has been substantially transformed by the possessions corporation in Puerto Rico; (2) the operations conducted by the possessions corporation in connection with the product are substantial in nature and generally are considered to constitute manufacture or production; or (3) the conversion costs incurred by the possessions corporation in Puerto Rico (including direct labor, factory burden, and testing of components) account for 20 percent or more of the total cost of goods sold by the possessions corporation. In this context, packaging, labeling, and minor assembly operations are not deemed to constitute the manufacture or production of product.[83]

Under the profit-split option,

50 percent of the combined taxable income of the possessions corporation and its U.S. affiliates, as derived from "covered sales" of the possession product, is allocated to the possessions

[81] Treas. reg. section 1.936-6.

[82] In neither example may the payment be less than the payment that would be required under IRC sections 367(d) or section 482 if the electing corporation were a foreign corporation.

[83] R. J. Boles, "Tax Incentives," p. 130.

corporation.[84] The remainder of the combined taxable income is generally allocated to U.S. affiliates.

Example No. 3

The facts are the same as Example No. 2 except XYZ manufactures product D under a license from an unrelated person. XYZ pays the unrelated party an annual license fee of $25,000. Consequently, the worldwide product-area research amount increases to $525,000.

Example No. 4

XYZ, a possessions corporation, manufactures 200 units of possession pro¬duct S. XYZ sells 100 units of S to an unrelated person in an arm's length transaction for $10 per unit. XYZ sells the remaining 100 units to its U.S. affiliate, A, which leases the 100 units to unrelated persons. The combined taxable income for the 200 units of S is determined as follows:

Sales	
1. Total sales by XYZ to unrelated persons (100 x $10)	$1,000
2. Total deemed sales by A to unrelated persons (100 x $10)	1,000
3. Total gross receipts	$2,000
Total Costs	
4. Total expenses[1]	$1,200
Combined Taxable Income and Allocation of Income Attributable to the 200 Units of S	
5. Combined taxable income (line 3 minus line 4)	$800
6. Share of combined taxable income apportioned to XYZ (50% of line 5)	400
7. Share of combined taxable income apportioned to A (line 5 minus line 6)	400

[1]Research, development, and experimental costs are the higher of (1) the research and development allocation under section 861 or (2) 120 percent of total research costs multiplied by the ratio of sales by the possessions corporation to total sales.

For purposes of computing the combined taxable income from the possession product, all direct and indirect expenses relating to the product are taken into account, including income attributable to both manufacturing and marketing intangibles associated with the product. The combined taxable income is computed separately for each product produced, or type of service rendered, by the possessions corporation in the possession.

Example No. 4 shows how to determine the combined taxable income under the profit-split method. It is based on a Treasury Department example.[85] The combined taxable income in

[84]"Covered sales" are sales by members of the affiliated group (other than foreign affiliates) to foreign affiliates or to unrelated persons. See Treas. reg. section 1.936-6.

[85]Treas. reg. section 1.936-6(l)(b), Q&A 11. On January 11,1994, the IRS proposed controversial regulations under section 936(h) that amend the rules under the profit-split method for determining combined taxable income attributable to a possessions product that is a component product or an end-product form. For a summary of the proposed regulations (IL-068- 92), see 8 Tax Notes Int'l 226 (January 24, 1994). For coverage of an IRS public hearing on the proposed regulations, see 9 Tax Notes Int'l 129 (July 18, 1994).

Example No. 4 ($800) is the total gross receipts from the possession product ($2,000) minus the total expenses attributable to the development and production of this product ($1,200). The income from the subsequent leasing of the 100 units by A to unrelated persons is attributed entirely to A.

IV. The Economic Impact of Section 936 on Puerto Rico

A. The Broad Economic Trends

The special tax credit afforded to U.S. corporations operating in the possessions clearly was helpful in promoting Puerto Rican economic growth in the 1950s and the 1960s. During this period, the credit was instrumental in transforming Puerto Rico from an agricultural economy to one primarily based on manufacturing. Puerto Rico became the "economic miracle" of the Caribbean, as real GNP per capita rose at an average annual rate of over 5 percent, compared to an annual rate of 2.2 percent for the United States during the same period.[86]

Since the mid-1970s, however, the section 936 tax incentives have proved to be both ineffective and inefficient as a vehicle for sustained economic growth. Consistent with this conclusion are three telling concerns. First, both employment and new physical investment in Puerto Rico have stagnated. Second, the composition of section 936 production has declined in labor intensity and has become increasingly capital-intensive. Third, the total cost of the tax credit to the U.S. Treasury has increased substantially. Collectively, these trends indicate that the limited benefit of the incentive to the Puerto Rican employee is increasingly unjustifiable in relation to the tax revenues foregone by the deficit- plagued U.S. Treasury.

Manufacturing employment in Puerto Rico virtually stagnated during 1970-86, and total non-government employment remained steady or declined throughout 1974-83.[87] The island is currently experiencing very high unemployment (18.1 percent), low labor-force participation (45.7 percent), and a high rate of migration to the mainland in search of jobs.[88] Similarly, during the past two decades, aggregate physical investment in Puerto Rico has remained stagnant. The annual rate of investment declined sharply during the 1970s and early 1980s, and total fixed annual investment is only now approaching the levels of the early 1970s.[89]

[86] U.S. Department of the Treasury, "Sixth Report," p. 19.

[M] *Id.*

88National Bureau of Labor Statistics, by phone, August 1993. This rate of migration is currently hovering around 1 percent per year. See J.T. Hexner et al., Puerto Rican Statehood, p. 5.

[S6] Id., pp. 25-26.

The change in the composition of section 936 corporations parallels this trend and is equally dramatic. Specifically, the share of section 936 activity during the past three decades in such labor-intensive industries as textiles has diminished significantly, while the share in capital- and technology-intensive industries such as pharmaceuticals has increased commensurately. In 1960, for example, chemicals and machinery, two view technology-intensive industries, made up 22 percent of the net manufacturing income in Puerto Rico; by 1989, that share had increased to over 73 percent.[90] Clearly, capital-intensive firms—rather than the labor-intensive industries that section 936 was designed to attract—have made the most use of the provision.

The part of the section 936 tax incentive that goes toward wages could be the most meaningful contribution of external capital to the economic health of Puerto Rico. With the high level of capital intensity, the ratio of wages and salaries to the total value added of section 936 firms is low. One indicator of this is the ratio of proprietors' income (profits, interest, etc.) to total value added for section 936 firms. In 1991, this figure was 92.3 percent for the pharmaceutical industry and 81.2 percent for the electrical machinery industry. These two industries collectively account for over 60 percent of the entire section 936 credit. Therefore, for those corporations that benefit from the majority of the incentive, wages, and salaries accounted for less than 20 percent of the total value added.

In light of stagnant employment and investment on the island and the declining labor intensity of section 936 industries, the concern, therefore, is the increasing cost-ineffectiveness of section 936. In 1989, the average revenue cost of the tax credit per employee in a section 936 corporation was $22,375. Before-tax annual wages for the year were, however, only $20,540. Hence, the federal government paid approximately $1.08 for each dollar paid to employees of section 936 corporations. Section 936 is also ineffective with respect to its low impact on physical investment, as measured by total assets of section 936 corporations per dollar of foregone tax revenues. In 1989, the total assets of section 936 manufacturing firms amounted to $5.9 billion. Given the $2.5 billion tax revenue cost of the program in that year, it would take less than 2.5 years for the value of foregone tax resources to equal net assets. Put simply, raw cost-effectiveness would have supported buying the section 936 manufacturing plant and equipment and literally giving it away to the corporations to operate, rather than prolonging the tax credit.

[90] U.S. Congressional Budget Office, "Potential Economic Impacts of Changes in Puerto Rico's Status under S.712," report prepared for the U.S. Senate Committee on Finance, April 1990, Table 3.

The problems with section 936 are most evident in the pharmaceutical industry. For the period 1980-90, the amount of estimated income exempt from taxes for 26 pharmaceutical firms examined by the General Accounting Office (GAO) totaled about $24.7 billion.[91] This translates into an estimated total tax savings of about $10.1 billion in 1990 dollars for the Puerto Rican operations of these firms.[92] In 1989, however, the total assets of the pharmaceutical industry in Puerto Rico were only $2.53 billion. Perhaps the strongest indicator of the profitability of the Puerto Rican operations of these pharmaceutical firms is that 17 of the 21 most-prescribed drugs in the United States were authorized for manufacture in Puerto Rico.[93] One senator has stated that the GAO document "undeniably demonstrates that the American government has given the pharmaceutical industry a blank check to pillage the federal Treasury through the section 936 tax credit."[94]

c. The Relationship Between Section 936 and Transfer Pricing Abuse: The Results of the TEFRA Amendments

The cost-ineffectiveness of section 936 generally testifies to the ineffectiveness of the TEFRA amendments. These amendments were supposed to limit substantially the amount of profits a possessions corporation could claim as tax-free earnings from the transfer of intangible assets. The facts show that this goal has not been met.

Indeed, the data since 1982, the year in which the amendments were promulgated, show the continued role of transfer pricing in artificially increasing the profit rates of the possessions corporations. For example, in 1983, the reported before-tax annual rate of return on operating assets for manufacturing corporations participating in the section 936 program was 54.1 percent, more than five times the rate of return for mainland manufacturing operations (10.3 percent).[95] If the true rate of return for section 936 investments in Puerto Rico were this high, firms would have strong incentives to increase their real investment on the island, and investment would be booming.

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[91] U.S. General Accounting Office, "Pharmaceutical Industry," p. 21.
[m] *Id.*
[93] *Id., p.* 6.
94Richardson, "Pryor Blasts Drug Company Tax Breaks With GAO Ammunition," 4 Tax Notes Int'l 1093 (May 25,1992).
[95] U.S. Department of the Treasury, "Sixth Report," p. 36.

This has not been the case, however.[104] In 1988, for example, total fixed investment in Puerto Rico was about 20 percent of GNP, compared to 25 percent in the 1966-73 period. What this suggests is that the TEFRA amendments are not blocking the transfer by corporations of large amounts of income into Puerto Rico, the Puerto Rican source generation of which is attributable to factors that are unrelated to real investments in Puerto Rico. Yet, the section 936 lobby was able to convince the Reagan administration to continue to rely on the section 936 tax subsidy as a development tool for the Caribbean Basin.

IV. Section 936 and the Caribbean Basin Initiative

A. Targeting Section 936 at the Broader Goals of Regional Development

The Caribbean Basin Initiative (CBI) was introduced by the Reagan administration in 1983 to allow qualified Caribbean countries to trade on more favorable terms with the United States.[105] This should have worked to increase exports to the United States from CBI countries. The Tax Reform Act of 1986 served to integrate section 936 with this development initiative. Prior to the 1986 act, section 936 allowed the active income earned by a possessions corporation to be invested tax-free in certain eligible activities in Puerto Rico and other U.S. possessions.[106] The income earned from these investments is referred to as "qualified possession source investment income" or QPSII. The 1986 act expanded the area in which investments could be made to include the U.S. Virgin Islands and qualified CBI countries, as long as the investments were made through qualified financial institutions.[107] The income generated by such investment qualifies as QPSII and is exempt from U.S. tax. A similar exemption from Puerto Rican tax applies under Puerto Rican law.[108]

The 1986 act imposes a number of requirements regarding when earnings of section 936 firms will qualify for investment in a CBI country or possession. The first requirement is that investments can only be made in qualified Caribbean Basin countries as designated under the

104Hexner et al., Puerto Rican Statehood, for a discussion of why section 936 is incompatible with Puerto Rico's sustainable economic development and why statehood presents a much more efficient vehicle for continued growth.

105The Caribbean Basin Initiative is the common name of the Caribbean Basin Economic Recovery Act, Pub. L. No. 98-67, 97 Stat. 384 (1983) (codified as amended in scattered sections of 19 U.S.C. and 26 U.S.C.). Under the act, qualified countries receive a reduction or elimination of tariffs on certain products, along with access to relatively low interest rate loans, provided with certain section 936 funds.

106IRC section 936(d)(2).

"IRC section 936(d)(2)(B) and 936(d)(4).

10813 L.P.R.A section 256a(2)(j)(A).

Caribbean Economic Recovery Act of 1983.[109] Twenty-three countries have thus far qualified and are so designated.[110] To be eligible for these tax-exempt investments, CBI- qualified countries are required to enter into a Tax Information Exchange Agreement (TIEA) with the United States.[111] The purpose of the TIEA is to allow the United States and CBI governments to share tax and other information that could lead to the arrest of drug traffickers, tax evaders, and other criminals.[112]

Another requirement for these investments is that they be in “active business assets” or “development projects.”[113] The Senate Finance Committee report that accompanied the CBI amendment to section 936 defines these as follows:

A development project generally means an infrastructure investment, such as a road or water treatment facility, that directly supports industrial development. Active business assets generally means plant, equipment, and inventory associated with a manufacturing operation.[114]

Treasury Department regulations further define these terms so that qualified investment is generally permitted in tangible property used in a trade or business in qualified CBI countries, including reasonable incidental expenditures (such as installation costs).[115]

A section 936 company cannot receive a tax exemption if it invests funds directly in an otherwise-qualified CBI project. Instead, the section 936 company must invest through a “qualified financial institution.”[116] The Government Development Bank for Puerto Rico and the Puerto Rico Economic Development Bank are both defined as qualified financial institutions. Other than those two, a financial institution in Puerto Rico may qualify if it is: (1) a “banking, financing, or similar business” that is “organized under the laws of the Commonwealth of Puerto Rico or is the Puerto Rican branch” of such a business and is an eligible depository

109IRC section 936(d)(4).

“Those countries and possessions are Antigua and Barbuda, Aruba, the Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Montserrat, Netherlands Antilles, Panama, St. Kitts and Nevis, St.
Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. Nicaragua has requested designation, and the U.S. is currently reviewing that request.

111IRC section 936(d)(4)(B).

112Flax-Davidson, “Tax-Exempt Investment for the Caribbean Basin Initiative Region,” International Lawyer 25, no. 4 (Winter 1991): 1025.

113IRC section 936(d)(4)(A)(i).

114U.S. Senate, Committee on Finance, Tax Reform Act of 1986, S. Rep. No. 313, 99th Cong., 2d Sess. 384 (1986).

115“Requirements for Investments to Qualify under Section 936(d)(4) as Investments in Qualified Caribbean Basin Countries,” Treas. Reg. section 1.936-10(c)(4),
(5) (May 10, 1991).

116IRC section 936(d)(4)(A).

institution for investments from section 936 firms, as qualified by the commissioner of financial institutions under Puerto Rican regulations;

(2) "such other entity as may be determined by the commissioner"; or (3) a "single-purpose entity" established in Puerto Rico as an eligible institution solely to invest funds from section 936 firms in qualified CBI assets.[117]

All lending of these funds to a qualified CBI recipient must be approved by the commissioner of financial institutions for Puerto Rico.[118] Additionally, the recipient of CBI funds must open its books to the United States and Puerto Rican governments to assure that the funds are being used in accordance with the law.[119] A1990 congressional amendment to section 936 requires the government of Puerto Rico to ensure that at least $100 million is invested annually in qualified CBI investments.[120]

B. Evaluation of the CBI: A
Weak Justification for
Prolonging Section 936

Even among those who acknowledge the transfer pricing abuses of section 936 firms, there are proponents who justify the continued extension of section 936 benefits because of the tax credit's role in the CBI program. They argue that the elimination or any reduction in the section 936 tax credit would proportionately damage the CBI because of the close integration of the two programs. It has been asserted, for example, that at least $500 million of qualified funds have been appropriately invested under this program, creating close to 20,000jobs in the CBI countries and more than 2,500 jobs in Puerto Rico.[121] These statistics have been used to support the claim that the program is functioning as intended and that section 936 should remain untouched.

Other evidence, however, suggests that the CBI program has been unsuccessful. The Latin American and Caribbean Economic Commission reported an average 17.2-percent reduction

117Treas. Reg. section 1.936-10(c)(3).

118IRC section 936(d)(4)(A)(ii).

119IRC section 936(d)(4)(C)(iii).

120See IRC section 936(d)(4)(D) (West Supp. 1991) (effective for calendar years after 1989); H.R. 1594,101st Cong., 2d Sess., 136 Cong. Reg. H5887, H5896 (daily ed. July 30,1990).

121Price Waterhouse, "Section 936 Report, Volume 1: Benefits and Costs of Section 936," prepared for Puerto Rico, U.S.A. Foundation, May 1991, Table IV.B. See also R.J. Sierra Jr., "Funding Caribbean Basin Initiative Activities with Section 936 Funds," International Tax Journal (Spring 1992): 57-58.

in per capita gross domestic product during the 1980s.[122] Latin America and the Caribbean also experienced a 0.8-percent decrease in real gross national product in 1990, and record loans in that year added to their already staggering foreign debts.[123] Thus, in relative terms, the very nations the CBI was intended to support have been steadily losing ground.[124] The claim of positive long-run development impact from the $500 million of CBI funds purported to have been allocated and the 20,000 jobs created in the CBI countries is dubious at best.

Despite the preferential treatment offered to CBI countries under the program, there has been a constant decline in the value of U.S. imports from these countries. U.S. imports from CBI countries reached an all-time high in 1983, the year in which the program was enacted.[125] Between 1983 and 1986, however, exports from the CBI countries to the United States declined by a total of 31 percent.[126] By contrast, the level of U.S. exports to these countries has remained steady.[127] According to the U.S. International Trade Commission:

In 1986, for the first time in a number of years, the United States had a small surplus with the Caribbean countries collectively, making the basin one of the few areas in the world with which no U.S. trade deficit was recorded. This was the result of a significant decline in U.S. imports from the Caribbean Basin, from $9.0 billion in 1983 to $6.2 billion in 1986, while U.S. exports to the area remained approximately the same, fluctuating around $6.0 billion.[128]

Also, in 1986, U.S. imports from CBI countries represented only 1.7 percent of the total U.S. imports, while U.S. exports to these countries represented 3 percent of the total U.S. export market.[129]

Recent data suggest a continuation of these trends. In 1990, U.S. imports from CBI countries were approximately $1.4 billion less than in 1983.[130] This constitutes a 2.1-percent annual rate of reduction in the amount of imports and a 16-percent gross decline.[131]

Indeed, the CBI might be judged as a program of phantom benefits and phantom results.

Over 93 percent of the exports generated from Caribbean countries designated under this pro-

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nl"Mexico, Central American Countries Plan Free Trade Agreement to Be Reached by 1996," Inti. Trade Rep. (BNA) 8, no. 3 (Jan. 16,1991): 87.

123"Latin American Economies Register Decline of 0.8 Percent in 1990, IDB Report Shows," Inti. Trade Rep. (BNA) 8, no. 15 (Apr. 10,1991): 554.

124J.C. Malloy, "The Caribbean Basin Initiative: A Proposal To Attract Corporate Investment and Technological Infusion via an Inter-American Protection for Intellectual Property," University of Miami InterAmerican Law Review 23, No. 1 (1991): 184.

125U.S. International Trade Commission, "Annual Report on the Impact of the Economic Recovery Act on U.S. Industries and Consumers, Second Report 1986," September 1987, p. 6.

usId., p. 8.

127/cf.,p. 1.

128*Id.*

129*Id.*

130U.S. Department of Commerce, Guidebook: Caribbean Basin Initiative (1991), p. 55.

131*Id.*

gram already entered the United States duty-free prior to the enactment of the CBI.[132] In addition, the elimination of already low U.S. tariffs (generally ranging from 5 to 7 percent) on Caribbean industrial products does not make these products significantly more competitive in the U.S. market.[133] Moreover, the CBI excludes from its list of qualified products a number of items produced by the most labor-intensive industries, including apparel and leather goods.

What the CBI program has successfully done, however, is expand the scope of political leverage for section 936 companies by broadening the scope of their potential investment. As dollars have been invested in more CBI countries, section 936 companies have gained increasing clout with these countries and enlisted their help in lobbying against the curtailment of the tax credit. Nevertheless, because of the lack of real benefits from the CBI and because the actual amount of imports from the CBI countries has been steadily decreasing, while U.S. exports have remained steady, the continued existence of the section 936 tax credit cannot be justified by linking it to the CBI program.

V. Further Reforms Affecting Section 936

A. Effects of Section 482

Regulations on Section 936

Section 482 of the Treasury regulations provides most of the guidelines concerning the proper allocation of income in a transfer pricing transaction. On July 1, 1994, final regulations were issued under section 482 that contain provisions that alter the manner in which transfer prices for intangible property will be reviewed by the IRS and that specifically coordinate with the transfer pricing requirements of section 936. The final section 482 regulations provide for greater taxpayer flexibility, at the cost of more stringent documentation requirements.[134] The IRS anticipates that this will diminish the number of disputes between the IRS and taxpayers. Some practitioners contend, however, that the policy, in its move toward greater flexibility, imposes an unmanageable administrative burden on the IRS.

The regulations reaffirm the applicability of the arm's length standard and continue to emphasize analysis that relies on the structure and circumstances of the individual transaction. However, added flexibility now comes via the applicability of a range of acceptable arm's length results as opposed to a single arm's length price. Also, consistent with the reality of varying market conditions and transaction circumstances, there is now no strict priority of

132T.L. Raleigh, "The U.S. Caribbean Basin Initiative," International Business Lawyer 15, no. 3 (March 1987): 137.
133*Id.*
134J. Turro, "U.S. Releases Final Transfer Pricing Regulations Under Section 482," 9 Tax Notes Int'l 79 (July 11, 1994).

pricing methods. Instead, the accuracy of the pricing method, with respect to the case in question, decides its appropriateness. In another move towards taxpayer flexibility, the prices actually charged in controlled transactions need not reflect the arm's length price that must be reported on the income tax return. Where reported price differs from the price actually charged, compensating adjustments are made to reflect the disparity.[135] Finally, the standards that must be met before transactions are considered comparable have been relaxed. Under all pricing methods, a reasonable number of adjustments are permitted where transactions are not exactly comparable.

With regard to possessions corporations, section 482 regulations provide that when a controlled taxpayer has elected for cost-sharing under section 936(h), the amount of the cost-sharing payment that is required under this section will not be less than the payment that would be required under the section 482 regulations (if the electing taxpayer were a foreign corporation). Also, the 936 corporation must apply the section 482 pricing methods for intangibles before giving effect to the provisions that treat the 936 corporation as the owner of this property.

One reviewer of the tax changes makes the following claim:

It is almost impossible using the arm's length method of section 482 of the Internal Revenue Code to determine accurately the tax obligations of multinational corporations dealing only in tangible goods; it is impossible to do so when these corporations are earning money from intangibles. ... In short, the IRS's section 482 enforcement efforts are unworkable because the system is too complex, cumbersome and expensive to catch all but the most blatant tax evaders.[136]

This claim is troubling given the findings of a 1993 Ernst & Young study, which estimated that the government's transfer pricing initiatives would collect less than 10 percent of Treasury Department projections.[137]

In effect, the complexity of the section 482 regulations has the potential to render them unadministerable. Indeed, the true price of taxpayer flexibility is that the circumstances of transfer pricing arrangements will gain in subjectivity and will increasingly call for judgment on a case-by-case basis. Accordingly, cases involving highly differentiated products, for which benchmark arm's length transactions are not easily identified (more often true of

135Reg. section 1.482-l(e)(2).

12aLobel, Banta, and Gueron, 'Barclays: A Test of the Administration's Willingness To Collect Taxes from Multinational Corporations," Tax Notes, June 28, 1993, p.1841.

[137]*Id.*

intangibles), will rely on extensive cost, pricing, and market data—often from unwilling competitors.

In practical terms, then, the auditing requirements of the policy leave the short-staffed IRS at a disadvantage compared to the multinational corporations with their batteries of highly paid lawyers, accountants, and economists.

B. Further Limitations on the Section 936 Tax Credit

As a result of concerns about transfer pricing abuse by pharmaceutical and other capital-intensive firms and because of the low levels of employment-producing investments made by section 936 firms, section 936 has been increasingly opposed by the U.S. Treasury Department and members of Congress. Indeed, on December 31,1993, legislation designed to curb transfer pricing abuses and increase levels of investment in employment-producing activities, enacted as part of the Omnibus Budget Reconciliation Act of 1993, came into effect.[138]

Under the new legislation, the section 936 credit will be calculated in a manner consistent to that used prior to December 31, 1993.[139] However, the amount of the credit will then be limited in one of two ways,[140] with the choice of method left to the taxpayer.

Example No. 5

XYZ is a possessions corporation operating in the 1998 tax year with an active business income from possession-based operations of $900,000. QPSII is $100,000. With no section 936 tax credit, U.S. tax liability on this income would amount to $315,000 and $35,000, respectively. The corporation's section 936 credit would be limited to $161,000 (40 percent of $315,000 plus a full credit on the QPSII tax liability).

Further, XYZ incurred $60,000 in possession taxes. A partial deduction of possession income tax is permitted. This is calculated as the total in possession income tax ($60,000) multiplied by the ratio of (a) total U.S. income tax liability with no section 936 credit less the amount of the credit ($350,000 - $161,000 = $189,000) to (b) the total U.S. income tax liability with no section 936 credit ($350,000). The deduction in this ease would be $32,400 ($60,000 x $189,000/$350,000). This reduces total taxable income to $967,600. Hence, the pre-section-936-credit tax liability is $338,660, and the post-credit liability is $177,660 ($338,660 - $161,000).

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[138]See H.R. 2264,103rd Congress, 1st Sess.

139Under the new legislation, there is a new separate foreign tax credit limitation category for computing the alternative minimum tax (AMT) foreign tax credit.

The new category includes the portion of dividends received from a possessions corporation for which the dividends-received deduction is generally disallowed, and thus is included in alternative minimum taxable income.

140In a measure to support Puerto Rican tax revenues, given the credit limitations, the revised legislation temporarily increases the cover-over of rum excise taxes to Puerto Rico and the Virgin Islands from $10.50 to $11.30 per proof gallon. The increased cover-over rate applies through 1998.

The first, the percentage limitation, limits the credit by a statutorily defined percentage (that decreases in future years) of the section 936 credit allowable under present law. The second alternative, the economic activity limitation, links the limitation on the credit to a composite of factors that serve as proxy for the firm's level of economic activity in the possessions. All affiliated[141] possessions corporations are required to choose the same credit- limitation alternative.[142]

1. The Percentage Limitation

Under the percentage limitation, the section 936 credit allowed to a possessions corporation against U.S. tax on business income for a tax year is limited to a specific percentage of the credit that would be permitted under the laws prior to the 1993 revision. A five-year transition rule governs the phase-in. The percentages are:[143]

Start of Tax Year	**Percentage Limitation**
1994	60
1995	55
1996	50
1997	45
1998, and thereafter	40

141The consolidated return rules are used to determine whether a possessions corporation is part of an affiliated group. However, stock owned by attribution under the rules of IRC section 1563 is treated as if it were owned directly, and the exclusions from the definition of "includible corporation" listed in IRC section 1504(b) are disregarded.

142Should a possessions corporation that employs the percentage limitation become a member of a group that uses the economic activity limitation, then the first corporation will be deemed to have revoked its election to use the percentage limitation. The Treasury secretary is authorized to develop regulations to treat two or more possessions corporations as members of the same affiliated group in order to prevent avoidance of the consistency rule.

taxable income is computed in accordance with the pre-December 31,1993 rules for------------------------------------ determining the taxable income of a possessions corporation.

Example No. 6

XYZ is a possessions corporation that elects to use the economic-activity limitation. XYZ does not choose the profit-split method for computing its income from intangibles. Wage and fringe benefit expenses for XYZ total $180,000 ($150,000 in qualified possession wages and $30,000 in employee health, accident, and life insurance plans). XYZ's depreciation deductions amount to $50,000 for short-life tangible property, $30,000 for medium-life tangible property, and $20,000 for long-life tangibles. XYZ has $1,000,000 of taxable income for the year.[1] Nine hundred thousand of this is income from active business operations. Of the remaining $100,000, $50,000 is QPSII and $50,000 is other taxable income. Sixty thousand dollars is paid in possession income taxes.

Under the laws in effect through the end of 1993 (assuming no deduction for possession income taxes), the section 936 credit amounts to $332,500 (35% of $950,000 in total income less other taxable income). U.S. tax liability equals $17,500 (35% of $50,000 in other taxable income).

The revised section 936 law does not change the credit attributable to QPSII. Thus, $17,500 (35% of $50,000 in QPSII) of the present law credit is not subject to the economic activity limitation. The remainder, $315,000 is, however, subject to the limitation.

A taxpayer that utilizes the percentage limitation is permitted a deduction for a portion of its possession income taxes paid or accrued during the tax year. The portion of the taxes so deductible is the portion that is allocable to the corporation's taxable income, the U.S. tax on which is not offset by the section 936 credit as a result of the limitation.

The operation of the percentage limitation is shown in Example No. 5. As the example shows, the limitation clearly reduces the section 936 credit over time. However, a firm's choice to use this alternative will be a function of the magnitude of its potential credit in relation to the credit available under the economic activity limitation. This, of course, will be determined by the firm's capacity to claim credit from the expansion of new labor-intensive activities, as well as activities that purport to be so.

2. The Economic Activity Limitation

The sum of three proxy measures for economic activity in the possessions serves as an upper limit for the tax credit allowed to a possessions corporation for a tax year. The credit against U.S. tax on the possessions corporation's business income may not exceed the sum of the following components:[1]

- 60 percent of qualified compensation;
- the applicable percentages of depreciation deductions on qualified tangible property claimed for regular tax purposes by the corporation; and
- a portion of the possession income taxes incurred during a given year, if the corporation does not elect the profit-split method to allocate income from intangibles.

U.S. tax liability, therefore, is computed by subtracting the sum of the above three components from the amount of precredit U.S.

Qualified Compensation

Qualified possession wages amount to $150,000. Potentially, $25,000 in fringe benefit expenses ($150,000/$180,000 x $30,000) could have been included in the credit limitation base. The 15% limitation on fringe benefits applies, however, limiting the allocable amount to $22,500 (15% of $150,000). Total qualified compensation thus amounts to $172,500 ($150,000 + $22,500), 60 percent of which is $103,500.

Depreciation Deductions

The depreciation component of the credit limitation is the sum of (1) 15% of the $50,000 depreciation allowance on short-life property, (2) 40% of the $30,000 depreciation allowance on medium-life property, and (3) 65% of the $20,000 depreciation allowance on long-life property, for a total of $32,500.

Possession Income Taxes

None of the $60,000 of possession income taxes (a 6% effective rate) is disqualified from the credit limitation base by virtue of the maximum 9% effective tax rate provision. However, only the portion of the $60,000 that is allocated to non-sheltered income may be included in the credit limitation base.

This portion is a function of the ratio of the increase in tax as a result of the compensation and depreciation limitations, and the tax that would be paid in the absence of the section 936 tax credit.
In the absence of the compensation and depreciation limitations, XYZ's U.S. tax liability would be $17,500. With the limitations, it would amount to $350,000 (35% of $1,000,000) less (1) $136,000 ($103,500 + $32,500), the active business section of the 936 credit and (2) the QPSII credit of $17,500. That is, $196,500. Hence, the increase in tax liability is $179,000 ($196,500 - $17,500).
With no section 936 credit, the U.S. income tax liability would amount to $350,000 (35% of $1,000,000).
The amount of possession income taxes which may be included in the credit limitation base is therefore $30,686 [($179,000/$350,000) x $60,000].
Total Economic Activity Limitation
The total limitation on the active business credit is therefore $166,686 (that is, $103,500 for compensation, plus $32,500 for depreciation, plus $30,686 for possession income taxes) compared to $315,000 under the regulations before revision. The full credit of $17,500 on QPSII is also granted. The corporation's net U.S. tax liability is therefore $165,814 ($350,000 - $166,688-$17,500).

tax that, under general circumstances, would be owed.

a. Qualified Compensation

The first component of the economic activity limitation is 60 percent of qualified compensation. Qualified compensation is the sum of:[144] (1) the aggregate amount of the possessions corporation's qualified possessions wages for the tax year[145] and (2) allocable employee fringe benefit expenses for the tax year.[146] Qualified possessions wages are defined as wages paid or incurred by the possessions corporation during the tax year to any employee for services performed in a possession.[147] However, such services must be performed while the principal place of employment of the employee is within that possession.

b. Depreciation Deductions

The second component is the sum of the following applicable percentages of allowable depreciation deductions:[148]

(1) 15 percent of the depreciation deductions allowable to shortlife qualified tangible property;

(2) 40 percent of the depreciation deductions allowable to medium-life qualified tangible property; and

(3) 65 percent of the depreciation deductions allowable to long-life qualified tangible property.[149]

c. Possession Income Taxes

144ffiC section 936(a)(4)(A)(i).

145Wages for this purpose include those defined under the Federal Unemployment Tax Act (FUTA). In computing the credit limitation for a tax year, the cumulative amount of wages for each employee may

The final component of the economic activity limitation is a portion of the income taxes paid or incurred to a possession by corporations that do not elect the profit-split method.[150] Possession income taxes paid in excess of a 9-percent effective rate of tax are not included.[151] Moreover, only the portion of taxes that satisfies this effective rate requirement and that is allocable to nonsheltered income is included.[152]

The operation of the economic activity limitation is shown in Example No. 6.

d. *Election To Treat Affiliated Corporations as One Corporation*

For purposes of computing the economic activity limitation, an affiliated group of corporations may elect to treat all affiliated possessions corporations as one corporation. For a group so electing, the available consolidated credit amount is to be allocated among the possessions corporations of the group under rules prescribed by the Treasury secretary. Any election to consolidate applies to the tax year for which such election is made and to all succeeding tax years unless revoked with the consent of the Treasury secretary.

e. *Analysis of the Economic Activity Limitation*

In concept, over the course of five years, section 936 credits will be effectively linked to growth in employment wages and tangible investment. From a practical standpoint, however, the policy is less promising.

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not exceed 85 percent of the maximum earnings subject to tax under the Old Age Survivors and Disability Insurance (OASDI) portion of social security (currently $57,600). Rules for making appropriate adjustments to this limit for part-time employees and employees whose principal place of employment is not within a possession for the entire tax year are to be made by the Treasury secretary. The bill does not include as qualified possession wages amounts paid to employees who are assigned by the employer to perform services for another person, unless the principal trade or business of the employer is to make employees available for temporary periods to other persons in exchange for compensation.

[136]Fringe benefits may include: (1) employer contributions under a stock bonus, pension, profit sharing, or annuity plan;
(2) employer-provided coverage under any accident or health plan for employees; and
(3) the cost of life or disability insurance provided to employees. Fringe benefit expenses do not include any amount that is treated as wages. Allocable employee fringe benefit expenses are equal to a fraction of the aggregate amount that is consistent with the conditions listed above. The numerator of this fraction is the aggregate amount of the possessions corporation's qualified possessions wages (as defined above). The denominator is the aggregate amount of compensation (wages and benefits) paid or incurred during the tax year. Fringe benefit expenses may not, however, exceed 15 percent of the aggregate amount of qualified possession wages for that year.

[137]IRC section 936(i)(l)(A).

[138]IRC section 936(a)(4)(A)(ii).

[139]The terms of IRC section 168 apply to the definition and classification of depreciable tangible property.

[140]Possessions corporations that utilize the profit-split method may deduct a portion of their possession income taxes paid or accrued during the tax year. This portion is the part of U.S. taxable income, the U.S. tax on which is not offset by the revised section 936 credit.

[141]IRC section 936(i)(3)(A)(ii).

[142]The portion of possession income taxes allocated to nonsheltered income is determined by computing the ratio of two hypothetical U.S. tax amounts that are computed under the assumption that no credit or deduction is allowed for possession income taxes. This ratio is then multiplied by the taxable income of the corporation as computed under the assumptions that no credit or deduction is allowed for possession income taxes and that all other deductions are allowed as under present law. The numerator of the above ratio is the U.S. tax liability of the possessions corporation that would arise under the bill by virtue of the economic activity limitation determined without any credit or deduction for possession income taxes. The denominator is the U.S. tax liability of the possessions corporation that would be imposed on the income (computed under existing section 936 rules) of the corporation without any credit or deduction for possession income taxes.

The correlation between tax avoidance and development strategies based on complex tax incentive schemes is well established. Indeed, the compounding negative results of repeated efforts by Congress to patch the loopholes of section 936 verify this correlation.

The revisions to section 936 made by the Omnibus Budget Reconciliation Act of 1993 significantly increase administrative complexity and auditing. This, in turn, enhances the potential for tax avoidance by presenting new opportunities for tax manipulation of corporation expenses and transfers to maximize tax benefits under section 936. Payroll padding, for example, is certain to replace transfer pricing as a means of increasing the credit to 936 firms in the absence of substantive real growth in employment and investment.

In addition, since December 31, 1993, Puerto Rican firms, which pay a 42-percent income tax rate, are being forced into unfair competition with firms from the mainland. Mainland firms will benefit not only from Puerto Rican tax incentives but also from the tax credits that subsidize 60 percent of wages in section 936 firms and significant percentages of depreciation on tangible investment. Payroll and employment expansion under the revision will not be market-based and will be unsustainable in the absence of the tax credit. Accordingly, the tax credit will foster a dependence not just on the part of U.S. multinationals, but also by Puerto Rican workers, whose livelihoods will increasingly be directly dependent on revenues foregone by the U.S. Treasuiy.

VTL Conclusion

History should have taught us the following lessons:

Section 936. If a tax credit is offered based on the amount of possessions-source income a corporation generates, then methods will be found to transfer income streams from the mainland to the possession. The income streams most easily transferred will be those related to intangible assets. These assets represent little or no real investment to the possession.

Section 482 and the TEFRA Amendments. Both the TEFRA amendments and the IRS's track record in enforcing section 482 indicate that almost nothing can be done to stop intangible income transfers in either a useful development time frame (482 cases take more than 10 years to resolve), or in any but the most egregious of violations.

The Caribbean Basin Initiative. Reinvestment of section 936 profits flows readily into profit- maximizing and risk-minimizing, rather than development-maximizing, uses.

Under the current state of the law, if these lessons have been learned, the future holds the following for the possessions:

(1) If section 936 remains, nothing can or will be done to stop the diversion of income derived from intangibles to possessions corporations.

(2) Unless a possessions corporation determines that it will be unlikely to secure new intangible assets in the future (a proposition very unlikely in the pharmaceutical industry), the new percentage limitations on the section 936 credit will not be elected.

(3) Possessions corporations will have plans drawn up targeting pre-existing possessions-based labor-intensive businesses for mergers. Premium targets will have low risks but high balance- sheet (wage and tangible property) attributes. These targets will not necessarily be those best suited to the long-term economic development of the possession. Similar to the CBI, these plans will be investment plans to "buy and hold," not development plans to "buy and further develop" local industries.

(4) Very quickly after income starts to flow to a possessions intangible, the possessions corporation will implement its acquisition strategy. The possessions corporation will aggressively strive to maximize the elements of the three-factor economic activity limitation formula.

(5) Development officials in the possessions should see ownership changes in the assets base in two steps. Initially, properties that the possessions corporations had leased will be purchased, and delivery, cleaning, or security- type subcontractors will be absorbed as in-house departments. Secondly, because neither the Internal Revenue Code nor regulations have any requirements linking the wages paid or the tangible property owned by the possessions corporation to the income stream that actually generates the credit, a more wide-ranging absorption of possession-based assets and wage-paying businesses will be observed.

(6) The possessions economy will stagnate. Each target absorbed will dilute the pool of possessions-based entrepreneurial talent. Each business not absorbed will struggle at a competitive disadvantage against possessions owned competitors. Section 936 will function as its mirror opposite. In the extreme instance, section 936 will subsidize the dismantling of the Puerto Rican entrepreneurial system and the local tax base it represents.

In summary, section 936 has ceased to be an efficient means of attaining employment-producing investments in Puerto Rico and other U.S. possessions. While the initial rationale for the credit was the creation of jobs and the stimulation of economic activity in the possessions, the outcome has been far different. Firms with intangible assets now take advantage of transfer pricing laws to maximize profits without making the investments that would create sustainable growth in Puerto Rico.

The fundamental questions then are: First, can the long record of disappointment be ended? Second, can the legislation provided in the 1993 budget transform section 936 into an instrument of public benefit, rather than of private profit? We conclude that the costs of section 936 will continue to outweigh its benefits.