The economic trajectory of Puerto Rico since WWII

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PROFOUND ECONOMIC TRANSFORMATIONS
have transpired in the last half of the twentieth century in Puerto Rico. An intensification in the use of resources across sectors created links, which, in turn, accelerated economic growth. However, the development clashed with already well-defined economic policies and goals. This paper will review the contested outcomes. Since mid-century, the strategy for economic development of the Island has been foreign capital investment by means of tax exemption. From 1947 until 1973, the policy enjoyed success as measured by the foreign capital invested. Since 1974, the economy of Puerto Rico has stagnated, and many consider the stagnation mismanaged. Nevertheless, almost everyone agrees that Puerto Rico now finds itself in a situation where renewed economic growth will be difficult to achieve. In response to that challenge, the literature is reviewed, elucidating how the origins of the current stagnation derive from events that began a half century ago.

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Although the literature often covers the same ground, many works explain distinctly the causes and effects of the stagnation yet reach distinct conclusions about future prospects of the economy. For example, Curet attributes the disappointing level of development to the failure to achieve adequate levels of employment, a persistent drop in investment, and an excessive increase in public debt. He emphasizes the role of intervention and its derivative impact on the managerial decisions of the public sector. Dietz complements Curet’s position by giving equal importance to the external forces that have influenced the economy of the Island. Drawing heavily on his previous published works, he posits several conjectures regarding economic growth and the so-called “new economy,” never shying away from discussing the political status of the Island vis-à-vis the United States. For Dietz, the vehicle for growth is less dependency and a sustainable development anchored in human capital accumulation and judicious investments of financial capital.

The capstone to this extensive and varied literature is a publication by CEPAL in 2004 about the globalization and development of Puerto Rico, prior to the new twenty-first century. Given the stature of CEPAL in policy circles, their analysis is likely to penetrate the public sphere and enter into the political debate.

Considering the literature as a whole, a key insight from CEPAL is “connectivity of the agendas of economic development of Puerto Rico.” The concept of connectivity is an attempt to synthesize the principal contributions to the debate since 1990 concerning public policy recommendations. However, the question of status and the implications that CEPAL and Odishelidze and Laffer address are prominent. The political implications are well known: no voting rights for its representative in the U.S. Congress and no electoral college for the presidential elections. Nevertheless, Odishelidze and Laffer argue that the economic implications of Puerto Rico’s political status are little publicized: a burden estimated at USD 22 billion to U.S. taxpayers. The burden owes to the tax exemption granted to
corporations whose profits originate in Puerto Rico. Paradoxically, the tax relief has not translated into any notable benefits for the people of Puerto Rico. For these reasons, the presented books urges that the Island government adopt a model of development that diminishes its dependence on the United States.

**Stagnation, growth, and political-institutional variables in economic development**

Puerto Rico has been a nonincorporated territory of the United States since 1898. Despite the ensuing economic transformation of Puerto Rico, the word “colony” still describes the politics and economics of the Island. Nevertheless, since the drafting of the Commonwealth Constitution in 1952, the Island has enjoyed substantial investments from the United States, which has generated significant changes (political, economic, and international). Over this time period, the Popular Democratic Party (PPD by its Spanish acronym) has driven the development strategy of the Island to the point where social and economic problems are given priority over resolution of political status. The policy goal became economic growth but without the earlier measures of import substitution.

The relationship with the United States significantly influenced the role of the Island government as a promoter of economic activity through pre-established policies; the economic peak of 1947–1974 can be largely attributed to that influence. Nevertheless, beginning in 1975, significant changes were occurring in both the political and economic spheres. Some were the consequence of trends in the world economy at the end of Bretton Woods in 1973; others were affected by the unique economic, political, and legal relationship of the United States. Despite best efforts to jump start the economy with the Law Section 936 in 1976, Puerto Rico had become submerged in a protracted stagnation.

As shown in Graph 1, by the middle of the 1970s, the economy of Puerto Rico (its GNP) oscillates around an equilibrium level of activity. Moreover, it is worth pointing out that the equilibrium path, rather than showing any trend toward sustainable development, shows signs of deterioration. For the years 1975, 1982, 1983, and 2002, the economy contracted; for the years 1991 and 1992, the growth was virtually zero.

**Graph 1. Growth Rate of Real GNP in Puerto Rico, 1970–2005**

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Curet analyzes in detail the process of stagnation in the first six chapters of his book and concludes that Puerto Rico has reached a point where sharp economic expansion will be difficult to achieve. According to the economic model, the Island has not been able to promote an adequate level of employment for the growing population as there exists a large discrepancy between GDP and GNP, an excessive growth of public debt, a drop in the capital investment in the Island and a significant deterioration in the capacity of the bureaucracy to manage and initiate economic development.

Nevertheless, to decipher the determinants of economic growth and its effects, Curet performs a multiple regression analysis of a production function in which the variables are expressed in terms of growth rates at constant prices.

Two regressions are carried out. The first corresponds to the period of economic boom (1947–1974) and the second to stagnation (1975–2000). The first equation (1947–1974) includes as a dependent variable the rate of annual growth of GDP and independent variables: the internal investment of fixed capital, the employment in the private sector and tourism in terms of the average number of total visitors.

The second model (1975–2000) utilizes growth in the annual GDP as the dependent variable, and fixed capital investment, export income, private sector employment, and federal remittances to individuals, as the independent variables.

From the regression analysis, the economic factors that contributed toward economic growth were: employment, capital investment, exports income, tourism, and direct remittances to individuals. Nevertheless, what varied was the relative importance of these variables: employment was greater in the second than the first period and became the most important variable. Tourism, in contrast, had been the most important variable in the first period.

The thesis is that these variables constitute, in conjunction, an empirical expression of the economic model that has served as a guide to promote economic development on the Island. Nevertheless, it is mentioned that the model does not include variables that explain the industrial climate and the confidence in the capacity and support of the government, the economic integration with the United States, and the tax-exempt status for foreign investment. For Curet, this set of incommensurable variables defines the long-run tendency of growth and is also important in the determination of the annual fluctuations in the GDP. Therefore, to complement this explanation of the development process for the second half of the twentieth century, one must also consider a political and institutional analysis, which is the principal objective of the book.

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For this, Curet studies the administrative and organizational nature and the policy of governmental structure in the determination of the historic trajectory of the Puerto Rican economy. According to Curet, since the middle of the twentieth century, the government of Puerto Rico has assumed functions that usually correspond to the private sector while also directing efforts to attract capital, principally from the U.S., for re-location to the Island. Therefore, the private
sector depended on the ability of the government to expand its infrastructure in keeping with the capital investment strategy and resolve social problems in an effective way.

The upshot is that organizational, administrative, and public policies are fundamental in the dynamic of the local economy. Nevertheless, in distinction to the administrations in the '60s and '70s, widespread distrust of the government exists inasmuch as those in power from 1975 to 2000 have broken the continuity of public policy with respect to economic development and have significantly undermined the professionalism of the bureaucracy. According to this author, the previous governments have not been able to recruit, in general terms, trained professionals capable of exercising the function of leadership and administration of the programs and organism of the central government. The positions of trust, in major part, are granted for political reasons and not for ability and the desire to contribute to the public good. In addition, adding to the current friction among the political parties, a very adverse atmosphere has been created for the economy.

A contentious climate, both inter- and intraparty, characterizes the last three administrations (1950–2000). Corruption is linked to the evolution of economic activity in Puerto Rico.

The greatest source of corruption lies in the approval of decisions, favors, help, permits, exemptions, and supply contract and project development of large economic interests, which sponsor legal firms and professional services. (2004: 307).

Endogenous growth and human capital
Dietz begins much of his book in a vein similar to Curet, surveying how the Puerto Rican economy evolved over the last half of the twentieth century. In the last section, regression models are presented with the purpose of explaining the engines of growth. Drawing on this empirical evidence, the end of the book lays the foundations for a “New Economy” and proposals for the economic future of the Island.

The first, an empirical model developed by William Baumol and Edward Wolf in 1996, is grounded in the theory of endogenous growth. The dependent variable is the annual growth in the Gross Domestic Product (GDP), and the independent variables are the ratio of GDP per capita in Puerto Rico and the United States, the average investment as a percentage of GDP, a proxy for human capital, and measures of openness to the world economy and population growth. What distinguishes the Baumol and Wolf model from that of Curet are the variables of openness and human capital and the period chosen (1950 to 1990).

According to the results, the level of education and the accumulation of human capital constitute the major contribution to GDP. The second major contribution is the investment of physical capital, followed by the level of openness. Such determination accords with the theory of endogenous growth in which the engine is greater efficiency derived from the accumulation of human capital coupled with the assimilation of technology and the appropriate level of physical capital investment.

The other model cited by Dietz is that from the World Bank in 1993. It is also based on the theory of endogenous growth with definitions similar to that of Baumol and Wolf. Nevertheless, the World Bank model studies the period 1960–1985. Given the results the following exercise was performed:

...the World Bank coefficients applied to the actual values of the independent variables for Puerto Rico will be compared with the achieved economic growth rate to determine how well Puerto Rican economy performed relative to the World Bank's predictions. ...if it is found that the predicted growth rate exceeds the actual growth rates, this will suggest that some barriers to economic growth were operating that prevented the economy from reaching the expected level of economy growth from the given inputs based on their average productivity in other economies. If, on the other hand, the predicted growth rate is below the actual growth rate, this will suggest that the Puerto Rican economy's growth has been more robust than expected from the available inputs, and this would provide some evidence to validate the development path the Puerto Rican State followed (2003, 133).

According to the results, education turns out to be the major contribution to the GDP growth, followed by investment as a ratio of GDP, and the growth of the population as a proxy for the labor force. On the other hand, the economy underperformed by about 0.9 percent per year. In agreement with Dietz, if the difference between the growth of the projected and observed GDP is interpreted as the total productivity of the factors, one can analyze the stages in which there were transitions in the intensive utilization of the factors of production. Dietz emphasizes that human capital, together with the generation and the good use of the financial assets utilized for purposes of investment, ought to be the principal factors in the strategy of economic future.

Puerto Rico must continue to reinvent its economic strategy with a look to the future and build upon its most abundant resource, its human capital, but also with an eye toward generating and controlling more of the local financial assets used for investment purposes (2003: 192).

The current consensus: Connectivity of agendas for the economic development of Puerto Rico
Since the mid-1990s, this aspect of the new economy, together with others no less important, have been the bases of the development of various important processes of reflection for redefining the future development. Puerto Rican sectors have elaborated proposals about the strategies, policies, and measures for achieving a better economic and social development. Nevertheless, the proposals appear often as distinct products and, at times, seem contradictory. The book by CEPAL serves as nexus for agendas regarding the development of Puerto Rico.

What stands out among the reviewed studies and proposals for the development of Puerto Rico is its grouping into thematic themes. Each group presents the strategies that are convergent in the proposals, emphasizing those with a direct relationship to the economic and social development of Puerto Rico.

Among the relevant themes identified as convergent in the analysis by CEPAL:
technology transfer, the development of new productive sectors, the capture of new countries which include: i) to accelerate the rhythm of innovations, including that CEPAL has promoted for the economic development of Latin American 

According to the book, such a strategy coincides fundamentally with the proposals that should be adopted, emphasizing innovation, technology transfer, and the support of learning processes, and ii) to help reduce the coordination costs for exploiting synergies between businesses and productive sectors that contribute to generating "systemic competitiveness."

The principal contributions of this book appear in the first and second sections. In the first, associated economic aspects of dependency are analyzed. Odishelidze and Laffer point out that since 1920, industries on the Island, and in particular the American pharmaceuticals, have enjoyed a tax treatment that exempts them from all corporate taxes on profits earned in Puerto Rico.

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Given the importance of solving the status problem for both parties, the second section of this book is dedicated, exclusively, to that discussion. The alternatives for status available to Puerto Ricans are presented and explained. They are the same as those recently elaborated in a White House Report:

The available alternatives were clear. Puerto Rico could:

1. Choose sovereignty and independence from the United States. Under this alternative, Puerto Rico would follow the path initiated for Cuba in 1902 and the Philippines in 1946, both of which had been war booty and become possessions of the United Sates in 1898.

   The meaning of independence could not be illustrated more clearly than it has been by the contrasting fates of these latter two countries.

2. Choose sovereignty as a freely associated state or associated republic.

   This might be described as "Canada without the crown." Under this status, Puerto Rico would establish treaty relations with the United States that would

1. Greater correspondences in the area of business development. One can easily identify concurrent proposals stressing the importance of promoting simultaneously savings and investments at the local level, business formation at the local level, and support programs;

2. The necessity to strengthen the chain of value in manufacture;

3. An increase in the promotion of investments in the service sector and consequent grounding in manufacturing;

4. An increase in public and private services of support for Puerto Rican enterprises; and an improvement in the method of financing, including venture capital;

5. The importance of research and development. One must deepen alliances among businesses, universities, and other research centers;

6. The importance of investing in the infrastructure to become a distribution center for the Americas, with concrete proposals about specific investments in shipping ports and airports;

7. The necessity of greater participation at the municipal level in development initiatives (relating to the proposals on the importance of support and promotion of local businesses);

8. Education: a consensus exists regarding its relevance in the new economy. It coincides with the efforts to improve the Puerto Rican educational system;

9. Health Care: the necessity to improve coverage and quality of services as well as facilitate access to health care for the entire population;

10. Health Care-Senior Citizens: general agreement on the necessity to carry out studies about the impact of aging on the population in health care and social and economic services;

11. Environment: general agreement about improving land use and enforcing standards. Several proposals agree in the urgency of a master plan on land use and enforcement of regulations;

12. Environment: agreement to support the conservation of watersheds and create waste management plans;

13. Policy Implementation: agreement with respect to the quantity of bureaucratic procedures involved for the establishment of a business and the loss of time in requirements by the government, thus discouraging investment;

14. Civil Society: including the private sector: agreement among proposals about the importance of civil society in several areas—health, education, community management, labor relations, environment, etc.—in decision-making and the management of certain services.

From the CEPAL findings, one can say that a broad consensus exists on the strategy that should be adopted, emphasizing innovation, technology transfer, exploitation of the positive externalities from interindustry linkages, and the capture of external markets.

The authors also stress that, in Puerto Rico, this consensus has taken the form of proposing a strategy centered on the promotion of industrial clusters of high technology that go beyond the basic production and distribution operations of merchandise and services, and become a focus of innovation and dynamic efficiency. According to the book, such a strategy coincides fundamentally with the proposals that CEPAL has promoted for the economic development of Latin American countries which include: i) to accelerate the rhythm of innovations, including technology transfer, the development of new productive sectors, the capture of new markets, and the support of learning processes, and ii) to help reduce the coordination costs for exploiting synergies between businesses and productive sectors that contribute to generating "systemic competitiveness."

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preserve friendship and mutually beneficial arrangements—open immigration for example—while maintaining real sovereignty and enjoining the right to unilaterally revoke prior agreements.

3. Opt for statehood, setting in motion a process for Puerto Rico’s admission to the union as the 51st state, with permanent guarantees of citizenship and equally with other states.

4. Continuation of its current status as an incorporated territory of the United States, enjoying the substantial measure of self-rule that had been achieved over time but acknowledging the ultimate discretion of the U.S. Congress, consistent with the U.S. constitution, to determine the parameters of that rule (2004: 243).

Concluding remarks
The four books emphasize the debate over the interpretation of the evolution of the Puerto Rican economy since the end of WWII and how it integrates with understanding the current situation and feasible solutions. Curet’s analysis focuses on the political and administrative aspect and their effects on economic activity, especially since 1975. The book points out that the economic activity of the country has been affected severely by: excessive growth of public debt, a rupture of continuity in the public policies about economic development, a significant drop in knowledge about political power, the lack of governability, and the review of organizational structures and regulatory oversight (to stimulate attendance to business and citizen requests), as well as government intervention in the direct provision of certain services.

In agreement with Curet, all this adversely affects the current public policy and contributes to the unfavorable tax scenarios that the government routinely faces. For his part, Dietz, grounded in the theory of endogenous growth, conjectures that the level of education and accumulation of human capital, like the investment in physical capital, are factors that significantly contribute to economic growth. As seen in the empirical evidence, the greatest source of economic growth comes from an increase in efficiency, derived from the accumulation of human capital and assimilation of technology, combined with an appropriate level of physical capital investment. Dietz concludes that human capital as much as the creation and good use of financial assets for investment purposes should be the principal factors in the economic strategy for the future.

The synthesis about globalization and development by CEPAL draws on the work of Dietz and Curet, showing how several different proposals converge. The strategic emphasis placed by CEPAL lies in education, the environment, and industrial linkages and can throw light on important aspects such as the functioning of political economy. What emerges is the “connectivity of the agendas of economic development of Puerto Rico,” based in the most influential works on the Puerto Rican economy from the 1990s onward.

Odishelidze and Laffer offer a relevant issue for U.S. taxpayers, concluding that Puerto Rico is an onerous burden to the U.S. By their argument, Puerto Rico has also not benefited other than in the creation of some jobs. The largest beneficiary has been the businesses, especially the pharmaceuticals, for the tax exemptions that they have enjoyed. Odishelidze and Laffer conclude that, for mutual benefit, Puerto Rico should lessen its economic dependance. The authors give much importance to the definition of the political status of the Island.

“In methodological terms, the positions of Curet and Dietz are the only ones that emerge from empirical evidence determined by distinct econometric models of growth.”