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The Economics of PROMESA

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ABSTRACT

In this study I examine whether PROMESA is achieving its main goal of insuring a string of balanced budgets and to restore Puerto Rico's access to credit markets under favorable terms that involve the restructuring of the debt, and whether the implementation of policies consistent with achieving those goals provides a pathway to restoring economic growth. I conclude that the Fiscal Oversight and Management Board's policies of balanced budgets and fiscal austerity are insufficient — and based on their own ten-year Fiscal Plan projections — not likely mechanisms for overcoming the economic crisis. Especially after the impact of Hurricane Maria on Puerto Rico's economy and a deepening of the population exodus, achieving the stated goals is untenable in the absence of federal stimulus policies in addition to the projected disaster recovery funding. The economic effects of PROMESA and the austerity policies currently implemented by the Oversight Board on Puerto Rico's long-term economic development are still an open question and critically dependent on further Congressional action. [Key words: PROMESA, U.S. policy, debt crisis, austerity, economic development, federal funding]

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The Puerto Rico Oversight, Management and Economic Stability Act (PROMESA) was enacted by Congress and signed into law by President Barack Obama on June 30, 2016. At that time, Puerto Rico's public debt was over $74 billion, not including nearly $50 billion in public pension obligations, and its economy was in a prolonged recession that resulted in massive migration to the U.S. and a steady decline in the island's population. These factors in turn resulted in a sizeable decline in tax revenues and associated austerity measures. The unemployment rate in Puerto Rico remained more than double the U.S. national average, only about four of ten adults participate in the labor force, and nearly half of the population lived in poverty—a rate substantially higher than any state. In this context, Hurricane Maria landed in Puerto Rico in September 20, 2017. And, according to the 2018 Fiscal Plan, the hurricane caused an estimated "over $80 billion in damages, and is projected to cause a real decline to GNP of 7.4 percent in FY18."

The debt restructuring of Puerto Rico became the largest debt restructuring by a governmental unit in the history of the United States. From the U.S. Congress's perspective, extreme circumstances called for extreme measures. PROMESA created the Financial Oversight and Management Board for Puerto Rico (the "Oversight Board") to oversee the territory's finances "to achieve fiscal responsibility and access to the capital markets."[1] One of PROMESA's main goals, is to restore Puerto Rico's access to credit markets under favorable terms. In 2014, Puerto Rican bonds were downgraded to non-investment grade (better known as "junk status") by three bond credit rating agencies.[2] To achieve these overarching goals, PROMESA has three core policy components intended to address interrelated aspects of the fiscal and economic crisis:

- Authorizing a legal framework for the restructuring of Puerto Rico's public debt;
- The establishment of a fiscal control board to oversee public finances and establish a Fiscal Plan and corresponding annual budgets (including payment of substantial unfunded pension obligations); and,
- Enabling and expediting economic development projects, especially as they relate to energy and infrastructure.

The Oversight Board created under PROMESA is constituted by seven members appointed by the United States President and has control over Puerto Rico's finances through its budget setting authority that supersedes local law.[3] To make viable the restructuring of the debt, PROMESA granted a stay on debt services until May 1, 2017. Shortly after this deadline expired, the Oversight Board extended the debt moratorium by filing for bankruptcy on federal court on behalf of the Commonwealth of Puerto Rico. Yet, Congress acted on the premise that the legislation was not a "bailout" to bondholders or Puerto Rico and enacted a law that did not include stimulus policies or funding for the economic recovery of the island (Schroeder and Lane 2016). Considerations for federal policies to support economic development was delegated to a Congressional Task Force on Economic Growth in Puerto Rico (the "Task Force") created by PROMESA to make recommendations to Congress. To date, Congress has not acted on those recommendations.

PROMESA's promise was as simple as it was powerful: Puerto Rico's fiscal and economic house would be put in order without spending one penny of federal money—avoiding a so-called "bailout." But has PROMESA kept its promise? The main goal of this paper is to evaluate PROMESA as a policy intended to stabilize the commonwealth's finances. The analytical question examined in this study is whether the core components of the act are sufficient to achieve the act's stated goals of restructuring the government budget (and by implication operations) to achieve balanced budgets consistently, and to restore Puerto Rico's access to credit markets under favorable terms through debt restructuring. In this context, an ancillary question is whether the policies emanating from the Oversight Board—the actual implementation of PROMESA in terms of the Fiscal Plan and corresponding annual budgets mandated by the law, and the restructuring of the debt—are supportive of economic growth. This is not a trivial question. Contractions in government expenditures and significant population losses are a dampening force to economic activity—the more the economy contracts, the more difficult it is to balance budgets and to service the debt as revenue projections and borrowing capacity are centrally based on growth projections.

I conclude that two years after the enactment of PROMESA the policy is working as intended—controlling expenditures, boosting revenues, and restructuring the debt through the federal court. But, even by the Oversight Board and the governor's budget projections included in the Fiscal plan, which are inclusive of federal recovery funding and severe austerity measures, show a stagnant economy a decade after the enactment of PROMESA. Especially after the impact of Hurricane María on Puerto Rico's economy, restoring fiscal stability and access to credit markets while preserving adequate public services is untenable in the absence of substantive investment of federal resources in stabilizing public services and of other policies that incentivize private capital investment in Puerto Rico. Both the Congressional Task Force on Economic Growth in Puerto Rico and in their annual report the Oversight Board itself support stimulus measures from Congress to overcome this downward spiral dynamic. In short, though restoring economic development is not an explicit goal of the act, the effectiveness of the policies mandated by the act is interdependent with economic growth. All in all, the economic effects of PROMESA and the austerity policies currently implemented by the Oversight Board on Puerto Rico's long-term economic development are still an open question and critically dependent on further congressional action.

Infrastructure development was a strategy that required significant borrowing of public corporations in municipal markets and led directly to the accumulation of a substantial portion of debt and to the ensuing debt crisis.

I divide the paper into seven sections. The first two section provide an overview of the processes that led to the unset of the fiscal and debt crisis. The debt crisis can be attributed to global factors affecting economic development in Puerto Rico, such as the oil crisis or the impact of globalism on manufacturing, and to the interplay of federal and local politics. In the next section "Up and Down the Debt Rollercoaster," I examine how the public debt crisis can be attributed directly to inconsistent U.S. policies toward the island, such as Section 936 and other federal tax exemptions, and federal bankruptcy procedures. The following section "Local Politics and the Fiscal Crisis" examines the response of the local political elite to changing external circumstances. I demonstrate that in response to the phase-out of (or as a substitute of) Section 936, the administration of Governor Pedro Rosselló (the father of the current governor, Ricardo Rosselló) instituted a core economic development strategy of accelerating infrastructure development that required substantial borrowing for projects, such as the Urban Train, a short-lived Superaqueduct, the construction of the Coliseum and the Convention Center, and numerous roads and bridges. Infrastructure development was a strategy that required significant borrowing of public corporations in municipal markets and led directly to the accumulation of a substantial portion of debt and to the ensuing debt crisis. Yet, in 2006, the local political stalemate in response to the phase-out of Section 936 and the steady decline in manufacturing employment also affected by globalization, and the increase in debt services and declining revenues, led directly to significant additional borrowing through the enactment of an island-wide sales tax separate from the commonwealth revenues to pay for those bonds. Given a choice, politicians in both governing parties chose to "kick the can down the road" rather than compromising on structural fiscal reforms.

The following two sections examine the debt crisis and the various policies proposed or implemented to supersede the debt crisis. In the section "Debt Crisis Highpoint and Austerity," I describe the outstanding debt by public agencies and corporations as of 2017 and market indicators such as the average market value of the bonds, and whether these bonds are covered or not by the Fiscal Plan for debt services. One of the most significant fiscal reforms with far reaching consequences for the manufacturing industry in Puerto Rico was the enactment of a 4 percent excise tax on the sales of multinational corporations (primarily pharmaceutical companies). By 2017, Act 154 revenues accounted for 21.3 percent of total government revenues. In the following section, "Seeking Solutions to the Debt Crisis," I discuss how the "Krueger Report," released in June 2015, established the structural reform framework that has guided both the core policy components of PROMESA as much as the structural reforms implemented through the Fiscal Plan.

It should be no surprise to anyone that PROMESA is working as intended. For one, oversight board precedents in New York and Washington, D.C., testify to the effectiveness of fiscal oversight boards as a mechanism to control public finances. While, multiple jurisdictions across the globe that have accepted and implemented IMF-like structural reforms to accommodate debt restructuring and a limited infusion of capital to boost liquidity have experienced similar outcomes as Puerto Rico—austerity and prolonged economic stagnation. In the section "PROMESA's Ping Pong: Fiscal Plans, Budgets, and Austerity," I describe the back and forth process between the Oversight Board and the governor embedded in PROMESA for the "development, submission, approval, and certification of fiscal plans." This process, leading to significant austerity imposed by the Oversight Board, led to a legal confrontation in federal court that reiterated the Oversight Board's authority of establishing the overall budget level, while delegates the establishment of policies to achieve that level to the prerogative of the administration and the legislature.

The role and impact of structural reforms to restructure public finances and balance the budget is addressed in the section "The Simple Math of Austerity." After explaining austerity measures that affect "essential" services, such as education, health, justice, the University of Puerto Rico and police, even in the context of projections of substantial disaster recovery funding, are insufficient and not likely mechanisms for overcoming the economic crisis. The projections of the fiscal plan suggest that additional economic stimulus policies are necessary to turn the Puerto Rico economy around and induce sustained economic recovery. The next section of the study "PROMESA and Economic Development" examines the stimulus policies identified by the Congressional Task Force on Economic Growth in Puerto Rico and the Oversight Board. Core stimulus policies include solving the structural disparity in Medicaid, and extending an Earned Income Tax Credit (EITC) and the full federal Child Tax Credit (CTC) to residents of Puerto Rico, among others. In the final section of the paper "Discussion and Conclusions," I elaborate further on the findings and implications of the study.

Up and Down the Debt Rollercoaster

The history of Puerto Rico's current fiscal situation spans many decades, literally. In that span of time, congressional policies regarding Puerto Rico have been inconsistent, at times beneficial, at times harmful. And as important, U.S. policy toward Puerto Rico departed from expansionist geopolitical policies, and the interests of American corporations and political dynamics. In 1917, the Jones Act amended the Foraker Act to confer greater authority for local government and U.S. citizenship on Puerto Ricans. But the Jones Act also established triple tax-exempt bonds. Triple tax exemption served as an economic development tool and allowed the public sector—central government, municipalities and utilities—to have access to the U.S. municipal capital market. Access to municipal capital markets was an important element for the post-war expansion of state enterprises-led infrastructure development, one of the cornerstones of the government industrialization program Operation Bootstrap (Ayala and Bernabe 2007; Dietz 1987).

When enacted, access to municipal capital markets was part of a package to stimulate the economic development of U.S. territories, which also included tax benefits to companies that invested in Puerto Rico. The Revenue Act of 1921 exempted from U.S. taxation all corporations that received at least 80 percent of their income from U.S. possessions. Liquidated distributions of income from U.S. possessions were tax-free though income was taxable on repatriation. Congress expanded tax benefits to U.S corporations significantly in 1976 with Section 936 of the Internal Revenue Code that granted a foreign tax credit that exempted companies from Federal taxes on income earned in Puerto Rico and allowed for the immediate repatriation of profits (Dietz 1982; Feliciano 2018). As intended by the law, federal tax exemption induced the rapid expansion of export-oriented manufacturing especially in the pharmaceutical and technology sectors.

Prior to 1984 Puerto Rico had the option of declaring municipal bankruptcy under the Bankruptcy Code.

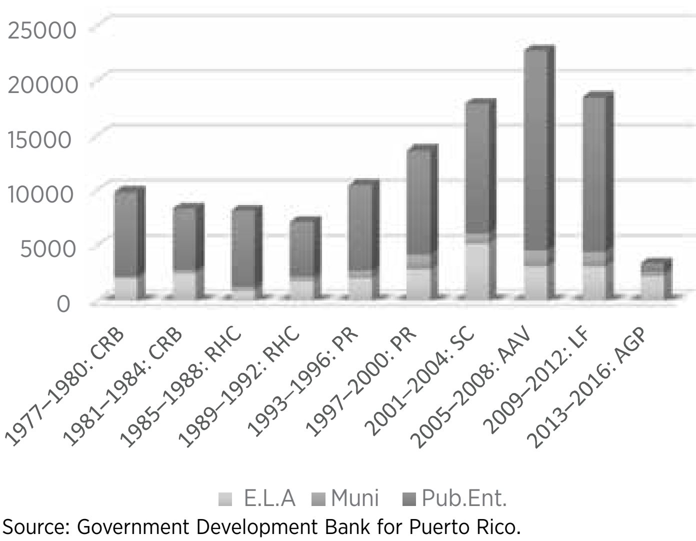
For reasons that elude even experts on the subject, in 1984 Congress adopted Section 903(1) of the Bankruptcy Code and introduced a new definition of "State" that excluded Puerto Rico's municipalities from access to municipal bankruptcy. Prior to 1984 Puerto Rico had the option of declaring municipal bankruptcy under the Bankruptcy Code. Exclusion from bankruptcy would prove to be critical when the economic crisis unfolded at the beginning of the twenty-first century. Though the central government would not have benefited from access to bankruptcy, the bulk of public debt carried by public authorities and municipalities would have been covered by the U.S Bankruptcy Code.

However, bonds issued by the commonwealth as general obligation bonds are of critical importance because these types of securities have constitutional guarantees that other types of bonds do not enjoy and were at the center of legal controversy in relation to debt service obligations and seniority as creditors. The July 1, 2016, presumed deadline for the enactment of PROMESA and the enactment of the stay on bond payments was driven by fears of the impact of bond payments due for close to $2 billion debt service of general obligations bonds. General obligation bonds were favorite targets of speculators who bought them often at a steep discount from face value. Hedge fund investors were betting that eventually the courts will force a substantial payout given Puerto Rico's constitutional protection of this type of bonds. The hedge funds invested substantial resources in a campaign intended on stopping the enactment of PROMESA.

In short, the accumulation of debt was partly the result of a prolonged recession and the concomitant decline in tax revenues. However, the ruling political parties' inability to respond with effective economic development and fiscal policies to counter the phase out of Section 936 federal tax incentives and to other broader factors such as technological change and globalization affecting manufacturing more generally, and their inability to restructure government to conform to a new fiscal reality were (and are) critical factors inducing the fiscal crisis. Facing the steady decline of manufacturing jobs during the phase-out period of Section 936, the local government failed to develop or implement effectively a coherent development strategy to diversify the local economy in key sectors such as the manufacturing based including the pharmaceutical and high technology sectors, service exports, tourism, and agriculture, to name just a few.

In addition, the public debt crisis can be attributed directly to inconsistent U.S. policies toward the island as much as to the local political stalemate and inability to respond with policies that circumvented, adapted, or superseded inconsistent federal tax exemption policies as cornerstone of industrial development. Industrialization through federal tax exemption, especially Section 936, had a clear impact on the development of pharmaceutical and high-tech manufacturing and these sectors pulled Puerto Rico out of stagnation and served as poles of economic growth in prior decades. Yet, when the industrialization model based on infrastructure development through borrowing in municipal capital markets collapsed and the need for restructuring of public corporations became evident, Puerto Rico lacked the legal framework for these municipalities to be restructured and possibly sold to private investors under favorable terms and better options from a public policy and interest perspective. Local political dynamics play a critical role leading to the fiscal crisis and are discussed in the next section.

Graphic 1: Puerto Rico Public Dept by Governors and Type



Source: Government Development Bank for Puerto Rico.
Note: In millions of dollars, as of June 30, adjusted for inflation where 2014=0.
Acronyms: Carlos Romero Barceló (CRB), Rafael Hernández Colón (RHC), Pedro Rosselló (PR), Sila María Calderón (SC), Aníbal Acevedo Vilá (AAV), Luis Fortuño (LF), Alejandro García Padilla (AGP).

Local Politics and the Fiscal Crisis

By the time Section 936 federal tax exemption were phased out (2006) and government declining revenues and mounting deficits became increasingly problematic, the question for the political elite (the governing parties and leadership in control of the legislative and executive branches) was: What type of structural reforms should be implemented to cope with the fiscal crisis? The public policy choices to cope with the crisis were not politically palatable—cuts in services and public employment, austerity, public corporations' reforms, and possibly privatization of public services and public corporations. With divided executive and legislative branches of government, other choices were less contentious and offered short-term solutions with disastrous long-term implications: use contributions to pension funds to finance deficits, borrow in municipal markets to close central government deficits and subsidize inefficient public corporations' operations, and avoid confrontations with mayors about restructuring municipal services.

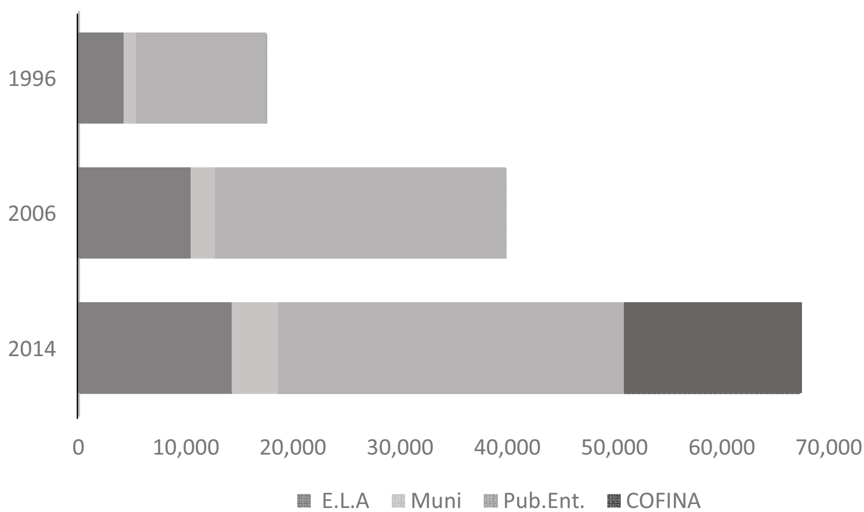
Graphic 1 illustrates the relative accumulation of public debt during each of the governors from the late 1970s to 2016. Clearly the turning point for the escalation of the public debt was the borrowing during Governor Pedro Pedro Rosselló's administrations (from 1993–1996 and 1997–2000). Governor Rosselló was a fervent advocate for statehood for Puerto Rico and was a leading actor along with then Resident Commissioner Carlos Romero Barceló and President Clinton in the phasing out of Section 936. In this context, infrastructure development was partially intended to mitigate the elimination of federal tax exemption and many of the major initiatives planning begun shortly after his election. Governor Rosselló's initiatives for major infrastructure projects required substantial financing through public borrowing. These projects included the Urban Train, a short-lived Superaqueduct, the Coliseum, the Convention Center, and numerous roads and bridges (Márquez and Carmona 2011). The total public debt borrowing reached a historical low (adjusted for inflation) of about $7.1 billion during his predecessor Governor Rafael Hernández-Colón (1989–1992). By comparison, Governor Rosselló borrowed $10.5 billion during his first term and $13.7 billion during his second. By far, the largest proportion of debt was accrued by public corporations of $7.8 and $9.5 billion during the first and second terms, respectively. Infrastructure development by increasing public indebtedness faster than induced economic activity, which would have expanded the commonwealth's tax base, was not an effective alternative long-term economic development strategy and set the foundation for the increased indebtedness of the country.

Borrowing continued at an accelerated pace during the Popular Democratic Party administrations that followed Governor Pedro Rosselló. Despite initiating far fewer infrastructure projects, none of the magnitude of those under Governor Rosselló's administration, Governors Sila Calderón (2001–2004), and Aníbal Acevedo Vilá (2005–2008) increased the total debt by $17.9 billion and $22.7 billion, respectively. As was the case in all prior administrations, the largest component of the debt was of public corporations $11.8 billion and $18.2 billion, respectively. The implementation of fiscal reform was near impossible for the administration of Governor Aníbal Acevedo Vilá. After a tight electoral victory, both the House and the Senate were in control of the opposition party. This is the context in which the Puerto Rican political elite faced the end of Section 936 and the subsequent economic and fiscal crises that started in 2006 and the subsequent financial crisis that started in 2008.

The solution to this dilemma was to introduce for the first time in modern history an island-wide sales tax.

The onset of the island's debt crisis began with the phase-out of Section 936 and the acceleration of infrastructure development, events and processes that preceded the U.S. financial crisis of late 2007 and the Great Recession that followed. One of the political leadership's first steps in the avoidance of dealing with the structural factors underlying the debt crisis was to borrow from municipal capital markets. The problem faced by the rival political parties in control of the executive and legislative branches of government was how to borrow additional resources when it was evident that the commonwealth was not generating enough revenues to be able to serve future debt. The solution to this dilemma was to introduce for the first time in modern history an

Graphic 2: Puerto Rico Public Dept by Sector



Source: Government Development Bank for Puerto Rico.
Notes: In millions of dollars, as of June 30, adjusted for as of June 30, adjusted for inflation where 2014=0.

island-wide sales tax. Rival political parties could not agree on much regarding policies to cope with by then evident fiscal crisis except on increasing the debt to avoid politically difficult structural fiscal reforms. The Puerto Rico Sales Tax Financing Corporation (COFINA, from Spanish Corporación del Fondo de Interés Apremiante) was created in 2006 to issue government bonds paid for by Puerto Rico Sales and Use Tax (SUT). Originally the sale tax was of 7 percent, with one-and-a-half percent going to municipalities, and the rest equally divided between the central government and COFINA. With the deepening of the fiscal crisis, on July 1, 2015, Puerto Rico raised its sales tax from 7 percent to 11.5 percent. Puerto Rico, at 11.5 percent, has a highest sales tax than any other jurisdiction in the U.S. (Beyer 2015). COFINA bonds were paid with tax revenues set aside separate from the commonwealth revenues.

Graphic 2 depicts breakdowns the debt by type for three key benchmark years—1996 when the Section 936 phaseout began, 2006 when COFINA was enacted, and 2014 the high point of accumulated public debt when Puerto Rico bonds reached "junk" status. The second term of Governor Pedro Rosselló (1997–2000), in which his administration implemented an infrastructure development strategy to counter the phaseout of Section 936, marked the explosion of public enterprises'[4] debt. Public enterprises debt increased about $15 billion, from $12.7 billion in 1996 to $27.2 billion in 2006—the second largest increase in debt between the selected benchmark years. The following period, between 2006 and 2014, public enterprises increased their total debt about $5 billion, from $27.2 to $32.4 billion. By 2014, public enterprises share of Puerto Rico's total debt reached 46.8 percent of the total debt. The largest increase in public debt, however, belongs to COFINA. Between 2006 when COFINA was enacted to 2014, COFINA debt stood at $16.3 billion or 23.5 percent accounting for the total debt. By 2014, the Commonwealth's (or E.L.A. for Spanish Estado Libre Asociado) debt accounted for 20.7 percent of the public debt and the municipal debt for the remaining 6 percent of the debt. In this context, if Puerto Rico had been covered by the U.S. Bankruptcy Code, the bulk of public debt carried by public authorities and municipalities accounting for over 50 percent of the total could have been restructured in federal court as the public corporations became insolvent and potentially avoided PROMESA's debt restructuring.

In sum, the failure of the infrastructure development strategy to counter the loss of manufacturing employment had dire long-term consequences. For one, the continuing erosion of manufacturing jobs triggered a steady exodus of migrants relocating stateside (Mora, Dávila and Rodríguez 2018). As Puerto Rico lost population, budget restructuring became more evident and servicing the debt became more difficult. As important, local political dynamics are directly responsible for borrowing beyond repayment capacity and for instituting fiscal policies that further contributed to the debt crisis. The cumulative consequences of these erratic policies are discussed in the next section.

Debt Crisis Highpoint and Austerity

After winning the 2008 elections, one of the first legislatives initiatives undertaken by Governor Luis Fortuño (2009–2012) was to declare a state of fiscal emergency and to enact a fiscal stabilization plan. With his party in control of the legislature, Governor Fortuño proposed a Fiscal and Economic Recovery Plan that would reduce annual expenditures by more than $2 billion. Opponents to the plan suggested that up to 30,000 government employees would be laid off (Puerto Rico's Governor Says 2009). Teachers and other public employees called for massive protests. During Governor Fortuño's tenure total government employment (including municipalities) was reduced by 13.3 percent, from 297.3 to 257.7 thousand. In addition, Governor Fortuño's administration reduced expenditures of the central government modestly by slightly over $100 million, from $1,365.3 million in 2009 to $1,259.7 million in 2012 (Statistical Appendix of the Economic Report to the Governor Economic 2016).

In addition to these austerity measures, Governor Fortuño reformed the tax structure in significant ways. The first part of the reform was to impose, for the first time in Puerto Rico's history, an excise tax on the sales of multinational corporations (primarily pharmaceutical companies) of 4 percent (Valentín Ortiz 2016). Since then, this sales tax has been deducted by U.S. foreign corporations on their federal tax returns de facto becoming a federal tax business expense deduction for U.S. corporations operating in Puerto Rico (Bail-Out By The Back Door 2014). By 2017, Act 154 Excise Tax Revenues were estimated to be $1,924 million or 21.3 percent of the total General Fund Revenues of $9,045 million (Backdoor Bailout' Boosts 2014). The enactment of the Tax Cuts and Jobs Act on December of 2018, which lowers the corporate income tax rate to 21 percent and moves the United States from a worldwide to a territorial system of taxation (Preliminary Details and Analysis 2017), allows for the deduction of Puerto Rico's sale tax from federal tax liabilities as a business expense but imposes other taxes on Controlled Foreign Corporation (CFC) that could affect investments in Puerto Rico adversely (Mugabi et al. 2018).

Though García Padilla is the governor most associated with the debt crisis, he was the one with the smallest increase in debt in absolute or relative terms—simply put, the municipal market was closed to Puerto Rico and only high-risk investors such as hedge funds were willing to lend to the Commonwealth and only at excessively harsh and severe terms.

Despite cost-cutting measures taken during Governor Fortuño's first two years in office and the approval of Law 154 and other tax reforms, Puerto Rico's public debt kept mounting. Total public debt increased by $18.5 billion (in 2014 dollars, after adjusting for inflation) during Governor Fortuño's tenure. Public corporations increased the most at $14.1 billion between 2009 and 2012, while the central government debt increased by $3.1 billion during the same period.

Table 1: Puerto Rico Outstanding Debt, 2017

Agency/Corporation Total Debt ($ millions)	Principal	Interest Rate	Market Price (2016)	Maturity
Covered by Fiscal Plan				
COFINA Total	17,880	5.75%	52%	FY 2040
General Obligation Bonds	13,267	6.05%	68%	FY 2031
HTA Total	4,247	5.49%	51%	FY 2031
Public Buildings Authority	4,129	5.57%	60%	FY 2031
Government Development Bank Total	4,126	4.90%	30%	FY 2020
Employment Retirement System	3,156	6.28%	37%	FY 2040
Puerto Rico Infrastructure Financing Authority	2,207	5.08%	48%	FY 2033
Puerto Rico Public Finance Corporation	1,197	5.35%	12%	FY 2027
University of Puerto Rico	496	5.00%	41%	FY 2026
Puerto Rico Convention Center District Authority	386	4.80%	78%	FY 2029
Puerto Rico Industrial Development Company (PRIDCO)	156	5.40%	58%	FY 2025
Other Central Gov. Entities	667	NA	NA	NA
Total	51,916			
Not Covered by Fiscal Plan				
Puerto Rico Electrical Power Authority (PREPA)	8,956	5.40%	66%	FY 2030
Puero Rico Aqueduct and Sewer Company (PRASA)	4,568	5.52%	68%	FY 2035
Children Trust Fund	1,460	5.98%	77%	FY 2043
Puerto Rico Housing Finance Authority	542	4.69%	106%	FY 2023
PRIICO	98	NA	NA	NA
Municipal Debt	1,696	4.65%	44%	FY 2022
Total	17,320		55%	
Less: GDB Bonds (excl. TDF)	-3,766			
Plus: Loans from GDB/MFA Entities	8,796			
Public Sector Debt	74,268			

Source: Commonwealth of Puerto Rico Fiscal Plan to the Financial Oversight and Management Board for Puerto Rico, March 13, 2017.

The public debt crisis reached its highpoint during Governor García-Padilla's administration (2013–2016). Shortly after he took office, by 2014, Puerto Rico's debt reached $67.3 billion and obligations to pension funds added another $50 billion (see Table 1). By the end of Governor García-Padilla tenure in 2016, Puerto Rico bonds were downgraded to non-investment grade ("junk bonds,") by the "big-three" bond credit rating agencies. For the first time in decades, the overall public debt declined by $3 billion in 2014. Though García Padilla is the governor most associated with the debt crisis, he was the one with the smallest increase in debt in absolute or relative terms—simply put, the municipal market was closed to Puerto Rico and only high-risk investors such as hedge funds were willing to lend to the Commonwealth and only at excessively harsh and severe terms. In total, Puerto Rico borrowed $3.7 billion during the García-Padilla administration, with most of this debt issued as general obligations bonds. The last batch of General Obligation Bond for a total of $3.5 billion issued in March of 2014 by the Commonwealth of Puerto Rico were classified at the lowest rating of Ba2, BB+ and BB by Moody's Investors Service, Standard & Poor's and Fitch Ratings respectively, and were offered at 8 percent interest with a price of 93 prcent of face value for a yield of 8.727. By January of 2018, post-Hurricane Maria, these bonds with a 2035 maturity were selling at 27 percent of face value.

Table 1 depicts "Puerto Rico Outstanding Debt" by public agencies and corporations as of 2017. In 2016, the average market value of the bonds was 55 cents on the dollar. Prior to the enactment of PROMESA, bonds were priced way below face value—in the case of General Obligations bonds about 68 cents on the dollar, and for COFINA 52 cents on the dollar. And, because of their junk rating status, most bonds were paying substantially higher interest rates (5.43% on average versus 2% of the ten-year BAA index) than average market rates. After Hurricane María's economic devastation, bond prices were initially further eroded. For example, the newer PREPA bonds have gone from trading at 55–58 percent of face value price prior to Hurricane Maria to a 27–32 percent price post-Hurricane María, and after Congress enacted earmarks in recovery funding to Puerto Rico these bonds were trading in July of 2018 at 44.1 percent. In short, even before PROMESA was enacted and after a catastrophic natural disaster, the bond market determines a price that could be used as a benchmark for any debt-restructuring plan based on categories of bondholders. And, these benchmarks were and are clearly not nearly 100 percent of original value, though market value for bonds affected by federal recovery funding (e.g., PREPA) increased in value. Whether bonds and the public debt are restructure close to market price is an indicator of whether the proposed restructuring adjust the debt to reflect market conditions, but it is not an indicator of whether the resulting debt service is sustainable over time. Debt sustainability is primarily a function of the ability of the government to generate sufficient revenues to pay debt services over time.

Despite the complex structure of PROMESA and the fact that there was no real precedent for this type of mandate combining fiscal oversight and court bankruptcy procedures for debt restructuring, PROMESA and Title III bankruptcy procedures in federal court opened the door for public employees' pension to get in line as creditors. As depicted in Table 2, unfunded pensions liability (net of assets) total $48.8 billion. In addition, the Commonwealth owes $3.2 billion in retirement health benefits for a total of $52.2 pensions liability. For decades, the commonwealth routinely used funds designated as contributions to pension funds to cover operational deficits. As a result, the Employees Retirement System (ERS), the largest pension system servicing over 125,000 beneficiaries, had the pitiful funded ratio (assets over liabilities) of -1.77 percent. In addition, there are an almost equal number of active members' (125,671) contributing to the retirement system as of retirees' (124,497) receiving pensions. This indicated that payments to retirees would need to be made from ongoing contributions from general revenues since members' contributions are not able to support but a fraction of obligations. The other two retirement systems, accounting for an additional forty thousand retirees, had at the time a funded ratio of about 12 percent—clearly insufficient to cover upcoming obligations. By comparison, the average fund in the United States also showed unfunded pension obligations with a funded ratio of about 75 percent of obligations (State Public Pension Investments Shift 2014).

In essence, grossly unfunded pension obligations was the public employees retirees organizations and public sector union's case for including payments to existing pension systems obligations as a priority in PROMESA (Delgado 2016; Fact Sheet 2016). Though PROMESA does not give priority to pension liabilities over payments to bondholders, it mandates "adequate" funding for pension liabilities (Brannon 2017). In the absence of PROMESA, litigation in local (or federal) court over the enforcement of existing contracts would had likely given priority to General Obligation bonds as guaranteed by the Commonwealth constitution over payments to pension liabilities. Subsequently, in anticipation of a federal court-mandated pension restructuring under Title III of PROMESA, the legislature passed and Governor Ricardo Rosselló signed a pension reform law based on funding the pension system through a pay-as-you-go system and a defined contributions accounts moving forward to be managed by a third party (Bradford 2017). The Oversight Board called for an overall 10 percent cut in pensions (Oversight

Table 2: Puerto Rico Retirement Plans, 2015 (a)

($ thousands)

	ERS	TRS	JRS
Active Members	125,671	39,343	364
Retirees	124,497	40,601	430
Total Pension Liability (TPL)	32,669,162	16,307,731	585,312
Actuarial Value of Assets (net)	-578,633	1,313,148	42,729
Net Pension Liability	33,247,795	14,994,583	542,583
Net Position as % of TPL	-1.80%	8.10%	7.30%

Source: Congressional Task Force on Economic Growth in Puerto Rico, Report to the House and Senate, 114th Congress, December 20, 2016.
Notes: Puerto Rico Retirement Plans are the Puerto Rico Teachers Retirement System (TRS), the Puerto Rico Government Employees Retirement System (ERS), and the Puerto Rico Judiciary Retirement System (JRS).

Board and Puerto Rico Government 2017). With mounting pressure for covering payments on the debt and no borrowing capacity, local authorities turned to openly seeking feasible strategies for dealing with the debt crisis. In the next section I discuss the "Krueger Report" and PROMESA as the core conceptual and policy framework for solving the fiscal and debt crisis.

Seeking Solutions to the Debt Crisis

In June 29 of 2015, Governor García-Padilla declared the by-then obvious, that "The public debt...is unpayable." He also made a stark assessment of Puerto Rico's economic future and acknowledged the forgone conclusion (also at the core of his predecessor's political agenda) of the need for structural fiscal reforms and the inevitability of further austerity. With growing internal and external economic and political pressures to conceive solutions to the crisis, the government of Puerto Rico recruited Anne Krueger, IMF's former first deputy managing director, to produce a blueprint to restore economic stability and prosperity. The "Krueger Report," released in June 2015, called for structural reforms in government services, pension systems and public finances (Puerto Rico, Investors Look 2015). One of the revelations of report was that "the true fiscal deficit is much larger than assumed" and that the Commonwealth faced an imminent liquidity shortage (Krueger, Teja and Wolfe 2015).

The key recommendations package of economic reforms of the Krueger Report included (Krueger, Teja and Wolfe 2015):

- **Structural reforms.** Restoring growth requires restoring competitiveness. Key here is local and federal action to lower labor costs gradually and encourage employment (minimum wage, labor laws, and welfare reform), and to cut the very high cost of electricity and transportation (Jones Act). Local laws that raise input costs should be liberalized and obstacles to the ease of doing business removed. Public enterprise reform is also crucial.
- **Fiscal reform and public debt.** Probably the most startling finding in this report will be that the true fiscal deficit is much larger than assumed. Even a major fiscal effort leaves residual financing gaps in coming years, which can be bridged by debt restructuring (a voluntary exchange of existing bonds for new ones with a longer/lower debt service profile). Public enterprises too face financial challenges and are in discussions with their creditors. Despite legal complexities, all discussions with creditors should be coordinated.
- **Institutional credibility**. The legacy of weak budget execution and opaque data—our fiscal analysis entailed many iterations—must be overcome. Priorities include legislative approval of a multi-year fiscal adjustment plan, legislative rules on deficits, a fiscal oversight board, and more reliable and timely data.

As it was the case with Governor Fortuño's policies, the report included a package of tax increases and more spending cuts and austerity, and public employees' pension reform. But, more forcefully than the prior administration, Governor García-Padilla called for debt restructuring. Since Puerto Rico lacked a legal framework for debt restructuring since its exclusion of Chapter 9 in 1984, the Commonwealth enacted its own bankruptcy law to restructure about $26 billion of public enterprises' debt. The law was halted by the federal court and subsequently the decision was reiterated by the U.S. Supreme Court.

In many ways, the Krueger Report offered a blueprint for what would become PROMESA—with a key critical distinction. At the time the Kruger Report is released to the public, there was no legal framework allowing for debt restructuring and all the Kruger Report and the commonwealth could call for was for "a voluntary exchange of existing bonds for new ones with a longer/lower debt service profile." In principle, Puerto Rico's lenders were free to negotiate terms of a debt restructuring with the commonwealth. Yet, the prospects for a voluntary restructuring of the debt, especially for general obligation bonds guarantee by the constitutions, were minimal. Here is how *The Economist* describes the conundrum:

> [ ] big mutual funds like Oppenheimer Funds and Franklin Templeton Investments — are free to negotiate terms individually. But since the island's debt lacks "collective-action clauses," which could impose the terms of a deal struck by a super-majority on all bondholders, the government cannot force recalcitrant investors to accept a loss. Any creditor who does not receive full and timely payment could file a lawsuit to obtain it, and place competing claims on the state-owned enterprises' remaining assets. Particularly aggressive bondholders might even be able to stop their conciliatory counterparts from receiving a cent until they are paid in full: last year, a group of hedge funds holding defaulted Argentine bonds persuaded American courts to block payments on Argentina's performing debt. With such strong incentives for investors to balk, Mr. García-Padilla's hope for a "transparent and consensual" restructuring looks dim. (Another Fine Debt Crisis 2015)

Pressure was mounting. With no other viable option opened to policymakers, resolving the impasse required congressional action. The first default followed shortly after in August of 2015. For the first time in history, the Puerto Rico government default on $58 million of principal and interest due on Public Finance Corp. bonds and other so-called "moral obligation" bonds (Ismailidou 2015). Shortly after, in January of 2016, the Puerto Rico government defaults for the second time on payments of $35.9 million of non-commonwealth guaranteed Puerto Rico Infrastructure Financing Authority debt and $1.4 million of Public Finance Corp. bonds (Brown 2015). The money in an escrow account for these payments were diverted to pay investors who were owed $328.7 million of interest on general obligation debt, which were assumed to have seniority or legal priority for payment. An important element to consider in the Puerto Rico debt conundrum at the time, an important factor inducing Congress to enact PROMESA, was the staggering amount of debt forthcoming in July of 2016 in addition to the debt payments missed already in 2015. In total, Puerto Rico was scheduled to pay $5,040 million, of which $2,055 were general obligations or COFINA bonds that have first in line status from general obligations and from set-aside sales tax revenues respectively.

Puerto Rico's economic crisis pushed the commonwealth onto a fiscal crisis and ensuing humanitarian crisis, and with the first default on debt services onto a debt crisis.

Default on the debt, what many observers had predicted years earlier, forced Congress to act. Puerto Rico's economic crisis pushed the commonwealth onto a fiscal crisis and ensuing humanitarian crisis, and with the first default on debt services onto a debt crisis. Comparisons to Argentina and Greece, and to Washington, D.C., and Detroit were common. The default option and trajectory for Puerto Rico was to continue the economic downward spiral, massive defaults on general obligation and other bonds, and to eventually enter a legal entanglement in local and federal courts lacking a legal framework for debt restructuring. The default option for Congress, to do nothing, was the worst possible scenario from an economic recovery perspective and as measured by the likely humanitarian cost to be extracted by a deepening fiscal crisis.

To prevent endless litigation while the Oversight Board was established and functioning, PROMESA included a stay on debt payments. Given that Puerto Rico's lacked liquidity to make almost $2 billion in debt payments due July 1, 2016, from various branches of the Puerto Rican government, the prospect for a disorderly default were extremely likely. A glance at legal chaos ensued on Monday, May 1, 2017, at the end of PROMESA's stay on bondholders' litigations. Creditors filed multiple lawsuits against Puerto Rico the following day prompting the Oversight Board to unanimously request for court relief on Wednesday, May 3, under bankruptcy-like protection provided by Title III of PROMESA (Associated Press 2017; Walsh 2017).

PROMESA provided a concrete mechanism for restructuring the debt through federal court and provided a framework for the Oversight Board to approve the fiscal Plan and corresponding annual budgets. The process for the approval and certification of fiscal plans and budgets for Puerto Rico is the subject of the next section.

PROMESA's Ping Pong: Fiscal Plans, Budgets, and Austerity

Embedded in PROMESA is a process for the "submission, approval, and certification of fiscal plans and budgets for Puerto Rico" (U.S. Public Law 114-187 2016) that is best described as a back and forth between the Oversight Board and the governor for the "development, submission, approval, and certification of fiscal plans." The process is like table tennis or ping pong—where the rules for the back and forth are given by Title II of the Act and the federal court serves as the ultimate referee. The process starts with the governor's submission of a fiscal plan to the Oversight Board for a "period of at least five years and provide a method to achieve fiscal responsibility and access to the capital markets." Afterward each annual budget must adhere to the projections of the fiscal plan to fund essential public services, public pensions, and investments necessary to promote economic growth while balancing the budget and establish fiscal controls and accountability. If the governor fails to comply with the submission of a satisfactory fiscal plan and subsequent conforming annual budgets, the Oversight Board could develop a fiscal plan and present it directly to the legislature for approval. When the board makes recommendations to the legislature and or the governor, they are mandated to respond with recommendations whether these would be adopted or not and to provide a rationality for their action.

To date, the process has worked as intended by Congress, including the to-be-expected political acrimony about austerity measures and the implicit tradeoffs in public services and repayment of the debt. The first step in the fiscal restructuring came in October 2016 when former Governor Alejandro García-Padilla presented his fiscal and economic growth plan to the Oversight Board. Since Governor García-Padilla was not biding for reelection, the plan submitted by his administration did not include any significant fiscal reforms. Considering an annual budget hovering around $9 billion, García-Padilla's budget projected an estimated cumulative budget gap of around $59 billion dollars until 2026, which the Oversight Board changed subsequently to a budget gap estimate of $67.5 billion. Such was the starting point for newly elected Governor Ricardo Rosselló.

Shortly after Governor Rosselló's inauguration in January 2017, the Oversight Board sent a letter to the governor recommending deep cuts to the budget that included restructuring of public agencies and corporations, reductions on health care and higher education spending, and pension reform. Governor Rosselló rejected most of the FMOB recommendations and suggested various alternatives for reaching balanced budgets. Governor Rosselló's first legislative initiative, Public Law 4 (also known as Labor Transformation and Flexibility Act), did not target the government sector but was intended as an initiative for job creation (by reducing benefits to workers in the private sector). Among other provisions, the law "provides for flex-time work schedules and daily overtime rates at time-and-a-half" and "places a reduced limit on Christmas bonuses, caps the amount of damages attainable in employment discrimination cases and reduces the amount of time to file an unjust dismissal or wage claim" (Farone 2017). Despite criticisms that Public Law 4 infringed on workers' rights, Governor Rosselló defended the legislation as a necessary economic development initiative.

Governor Rosselló's first proposed ten-year Fiscal Plan was submitted to the Oversight Board on February 28, 2017. Weeks later, the Oversight Board rejected Governor Rossello's initial budget, stating that the "proposal relies on overly optimistic projections and fails to cut spending deeply enough to erase the government's chronic budget deficits" (Spalding 2017). The Oversight Board submitted amendments to the fiscal plan intended to close the projected spending gap that included additional taxes and annual cuts to pensions of $200 million beginning in 2020, $450 million cuts to the University of Puerto Rico (UPR) by the year 2021, use of furloughs to public employees to achieve liquidity, and removal of Christmas bonuses among other austerity measures.[5] After intense negotiations and $160 million more projected in government revenue, the plan was approved. New tax revenues include higher traffic fines, an increase in an excise tax on tobacco products, a tax on insurance, and the extension of an existing tax break for manufacturers on the island (Costa 2017). The Oversight Board and the administration agreed on additional cuts if certain conditions were not satisfied, these included among others cuts in pensions, government workers' furloughs, and cuts in Christmas bonuses.

Political posturing between the Oversight Board and Governor Rosselló intensified during the 2018 budget approval process, the first one submitted under the fiscal parameters set up by the fiscal plan and under the Oversight Board supervision. The FY18 proposed budget for the government's general fund was $9.5 billion, an increase of more than $575 million from the previous year. Most of the proposed increase would come from the sale of liquid assets from the public employees' retirement system that will be used to finance a new pay-as-you-go system. In part, the budgetary negotiations gave Governor Rosselló the opportunity to come across as a populist, vowing to resist deep cutbacks to government programs that would hurt residents of an island where nearly half live below the poverty line and challenging the legal authority of an increasingly unpopular Oversight Board. The governor actively portrayed his administration as limiting the impact of austerity on public employees, education, the UPR, pension and health-care system and by extension responding to widespread protests led by unions and students.

The Oversight Board and the governor finally settled on a budget contingent on meeting specific revenue targets. Lacking evidence that the administration has reached the savings threshold called for, the Oversight Board threatened with legal action if the administration refuse to implement a budget consistent with the approved Fiscal Plan (González 2017). Specifically, the Oversight Board called for the implementation of a furlough program to close an estimated $218 million budget gap (Bernal 2017). When Governor Rosselló refused to adopt employee furloughs and pension cuts the Oversight Board sued the administration in federal court (Basas 2017). Three weeks after the filing Hurricane Maria devastated the island and the Oversight Board requested a revision of the fiscal plan from the governor, but the underlying issue of the authority of the Oversight Board to curtail specific expenditures was eventually resolved in court.

Governor Rosselló submitted revised post-Hurricane Maria fiscal plan on January 24, 2018. The projections were sobering: a drop in GDP of 11 percent and a population drop of nearly 8 percent (Associated Press 2018). The proposed plan did not include allocations for repayment of the debt setting aside the prior fiscal plan allocation of

$787 million a year on average to pay creditors. In addition, the plan called for the privatization of the Puerto Rico Electric Power Authority (PREPA) (Giel 2018). A core assumption of the plan is an injection of capital related to the recovery of the island of $35 billion from the federal government and another $22 billion from private insurance companies. Despite the drop in GDP in the year immediately after the hurricane, the plan assumed overtly optimistic economic growth projections of 7.6, 2.4, 1.8 and 1.5 percent, respectively, in subsequent years. In other words, given the uncertainty of these appropriations in Congress, the proposed fiscal plan for the recovery from Hurricane Maria were dependent upon favorable congressional action.

The process of approval of the revised Fiscal Plan eventually led to a federal court case oversee by Judge Laura Taylor Swain in charge of the bankruptcy proceedings. After the Oversight Board approved the Fiscal Plan in June 29, 2018, Governor Ricardo Rosselló challenged in court, among other provisions, the imposition of a hiring freeze, limitations on government employees' benefits (such as paid holidays, sick and vacation days, and the Christmas bonus), and the institution of automatic "efficiency savings" in agencies that were not meeting budget projections. The Retirees' Committee (Comité Oficial de Retirados) intervening in the federal bankruptcy case summarizes Judge Swain's decision as follows:

> **[ ] the Court explained that PROMESA permitted the Board to "make binding policy choices for the Commonwealth," but that in doing so, PROMESA did not give the Board the "power to affirmatively legislate." If a policy measure requires the Government to enact a new law or repeal an old law, the Board can only attempt to persuade the Government to take that action by imposing budget restrictions; it has no authority to mandate the legislation. Applying that understanding of PROMESA, the Court concluded that the FOMB could restrict the government from using money from prior budgets to fund current expenses or otherwise reprogramming budgeted funds, because the Board has exclusive control over the certified budget. The Court reached the opposite result with respect to the automatic budget reductions and the imposition of penalties for failure to comply with the budgets, because these provisions constituted amendments to Puerto Rico's existing legislature. (Summary of Judge Laura Taylor Swain's Orders 2018)**

Clearly, Judge Swain's decision settled any dispute, short of a successful appeal to the U.S. Supreme Court, about the ultimate decision power of the Oversight Board with respect to the level of the budget, while the policies implicit or explicit as they relate to the budget are the administration and the legislature prerogative. The Oversight Board, by certifying the proposed Fiscal Plan and corresponding annual budgets, also oversees the assumptions made to estimate operating revenues and expenses. But given the reality of declining revenues and structurally sticky expenses, austerity was inevitable. The question was where the budget cuts and revenue enhancements will come from to balance the budgets. In the next section I examine the implicit tradeoffs among various budget categories, and what critical services have been most affected by austerity.

The Simple Math of Austerity

The impact of the fiscal plan and corresponding annual budgets on public services are closely related to debt services and to U.S. policies such as social transfers and reconstruction funding. With declining tax revenues, the math of austerity is simple: a dollar spent in debt services is a dollar not spent in public services or in economic reconstruction and development. Table 3 illustrates the commonwealth's budget for FY2016 (actual) to FY2018 (proposed). By far, the largest allocation in FY2016 corresponds to the Oversight Board designated "essential" services that include education, health, justice, UPR, and police. Among these, education and health accounted for $3.4 billion of the total $9.7 billion or one-third of the total budget. From FY2016 to the proposed FY2018 budget, the overall budget declines $413 million or 14.25 percent. Given their share in the overall budget, essential services received the largest budget cuts in FY2018 (in thousands): education -176,000 (-10.5%), health -153,578 (-11.3%), justice -94,078 (-11.1%), UPR 202,719 (-23.2%), police -23,755 (-3.2%) and municipalities -175,000 (-44.3%). Pension were maintained level funded from the prior year, but when FY2016 is used as a baseline, pensions for commonwealth's retirees were cut -81,031 or -24.8 percent. The only line item that increased over this period was the budget office account used to centralize payments—that among others would include future debt service — with a $2.4 billion increase from FY2016 to FY2018, representing a corresponding increase from 3 percent to 26 percent of the overall budget.

The question of how much would be the so-called haircut,[6] which will determine actual debt service in subsequent years, is pending in federal court bankruptcy procedures.

FY2016 was the last year that the commonwealth paid debt services prior to the stay granted by PROMESA. Table 4 summarizes the commonwealth's Consolidated and General Fund budgets from FY2015 to FY 2018 (Recommended) including debt payments, federal funds and Act 154 contributions. PROMESA's stay saved the commonwealth a cumulative $8.3 billion in FY2017 and FY2018 when debt payments in FY2015 and FY2016 are use as a baseline. To put this figure in perspective, savings in debt payments on average amounted to 12 percent of the General Fund and 13 percent of the Consolidated Budget. For example, total revenues from sales tax used for debt service to pay COFINA bondholders alone would have exceeded $700 million in 2017. In the recommended FY2018 budget, federal funds account for $6 billion or 30 percent of the total $20.4 Consolidated Budget, and Act 154 accounts for $2.1 billion or 23 percent of the General Fund. Both federal revenue sources are critical to the Commonwealth, and both are dependent on future congressional and presidential action. The austerity described above would be severely harsher if the subsidization provided by federal funds or the tax treatment of CFC's changes in the future.

According to PROMESA, the Commonwealth's annual budgets must correspond to the Fiscal Plan approved by the Oversight Board. Though there have been multiple versions of the Fiscal Plan, as it is negotiated between the Oversight Board and the governor, there are two approved versions of the plans. The first was submitted in March of 2017, pre-Hurricane María, and the most recent in August of 2018 and incorporates disaster relief in ten-year projections. Table 5 summarizes the average annual budget allocation in the Fiscal Plan based on ten-year financial projections included in the plan, which include the projected federal funding for disaster relief. These projections are based on a plethora of assumptions, among which are the

Table 3: Puerto Rico General Fund Budget FY 2015 to FY 2018

(in thousands)

Agency	FY 2016	FY 2017	FY 2018 Rec.
Education	1,985,496	1,674,497	1,498,497
Health (a)	1,372,534	1,356,794	1,203,216
Justice (b)	883,680	848,853	754,775
UPR	869,696	872,432	669,713
Police	804,946	734,061	710,306
Pension (c)	407,219	326,188	326,188
Municipalities	365,700	394,730	219,730
Budget Office	304,397	1,234,595	2,443,116
Other	1,751,640	1,544,850	1,458,459
Public Debt	951,210	-	-
Total	9,696,518	8,987,000	9,284,000

Notes
(a) Includes: Administración de Seguros de Salud de Puerto Rico, Departamento de Salud, Administración de Servicios de Salud Mental y Contra la Adicción, Administración de Servicios Médicos de Puerto Rico, Cuerpo de Emergencias Médicas de Puerto Rico, Salud Correccional. (b) Includes: Departamento de Corrección y Rehabilitación, Tribunal General de Justicia, Departamento de Justicia. (c) Includes: Sistema de Retiro de Maestros, Sistema de Retiro de Empleados del Gobierno y La Judicatura (Sistema Central).
Source: Oficina de Gerencia y Presupuesto, Gobierno de Puerto Rico, PROMESA Requirement #1A, Recommended General Fund Budget by Concept and Source of Funds FY 2018 (rounded to thousands).

Gross National Product (GNP) growth rate, population and migration, and reform measures to improve revenue collections and reduce expenses, among many others.

Following International Monetary Fund-like structural reforms implemented in other countries or jurisdictions “without monetary policy options and high informal labor markets,” the Fiscal Plan proposes labor, energy, ease of doing business and education reforms intended to have a positive impact on economic performance that according to projections will allow for an annual average of $1.5 billion or 9 percent increase in revenues. On the revenue side, in addition to a continuation of Federal Transfers for an average of $7.8 billion annually, the Fiscal Plan estimates a steady decline in projected Act 154 revenues from $2.1 billion in 2017 to an annual average of $1.6 billion. Given the ambiguity about future congressional appropriations for the Affordable Care Act (ACA), the Fiscal Plan preclude the Governor from including this funding past the expiration of the current grant after FY2019. This exclusion represents an annual average loss of $1.8 billion. In addition to revenue measures, the Fiscal Plan estimates that cost saving measures will add on average $2.9 billion annually. The combined net impact of revenue generation and cost savings measures is projected to an annual cash flow for debt services of $787 million a year. By any measure, projected debt service in the ten-year fiscal plan amounts to about a fifth of what debt services would have been in the absence of PROMESA. Not one creditor would be paid in full given these numbers. The question of how much would be the so-called

Table 4: Budget, Federal Funds and Debt Paymnets (Million)

	FY 2015	FY 2016	FY 2017	FY 2018 Rec.
Consolidated Budget	26,987	27,856	25,678	20,433
Federal Funds	6,182	6,709	6,643	6,056
%	0.23	0.24	0.26	0.30
Debt Payment	4,187	3,522	1,499	130
%	0.16	0.13	0.06	0.01
General Fund	9,479	9,697	8,987	9,284
Foreign (Act 154)	1,943	1,862	2,078	-
%	0.20	0.19	0.23	-
Debt Payment	1,136	1,072	24	-
%	0.12	0.11	0.00	-

Source: Oficina de Gerencia y Presupuesto, Gobierno de Puerto Rico, PROMESA Requirement #1C, #1D, Recommended General Fund Budget by Concept and Source of Funds FY 2018, Recommended Consolidated Budget by Concept and Source of Funds FY 2018, and Apendice Estadistico, Informe Economico del Gobernador, 2017, Table 27 - PUERTO RICO GOVERNMENT NET RECURRENT REVENUES: FISCAL YEARS.

haircut,[6] which will determine actual debt service in subsequent years, is pending in federal court bankruptcy procedures.

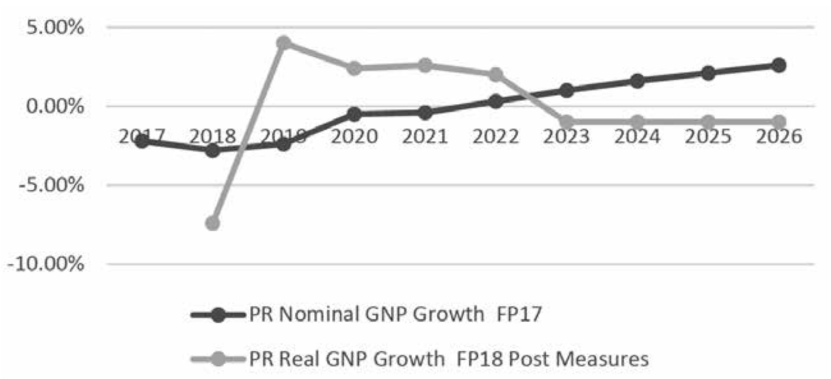
The Fiscal Plan projects that federal disaster-relief funding will total $83 billion over the next decade, with the bulk of this funding $75 billion coming from the federal government and an estimated $8 billion from private insurance. The portion of disaster relief funding considered in the Fiscal Plan projections amount to an average of $6.1 billion annually. By all counts, this injection of liquidity will play a significant role in the economic recovery of Puerto Rico over the next decade. The impact of the proposed reforms and cost saving measures and injection of disaster relief funding on the overall economic performance of Puerto Rico is illustrated by the projected GNP for the ten-year period (Graphic 3). The baseline for comparison is the GNP reported in the Fiscal Plan 2017 before the advent of Hurricane María and without the implementation of the proposed reforms. As suggested by post-disaster recovery data from many other countries (cited in the Fiscal Plan 2018), in 2018, the impact of Hurricane María resulted in an immediate GNP decline of 7.4 percent. The injection of recovery funding will result in an initial increase to 4 percent of GNP in 2019, gradually declining to 2 percent by 2022 and then hovering around negative one percent beginning in 2023 and for the rest of the period ending in 2026. In other

Table 5: Summary of Financials for 10-Year Projections (Average from 2017 to 2026)

Revenues Before Measures	17,081
Projected Act 154 Revenues	1,548
Loss of Affordable Care Act ("ACA")	-1,792
Federal Transfers	7,785
Revenue Measures	1,544
Revenues After Measures	18,471
Expenses Before Measures	-20,251
Expense Measures	2,854
Expenses After Measures	-17,682
Cash flows pre-Measures	-3,171
Net impact of measure	4,399
Cash Flow Available for Debt Service	787
Projected Public Disaster Relief Funding	7,225
Private Insurance	2,667
CDBG Cost Share	271
Adj. Public Disaster Relief Funding	6,065

Source: Commonwealth of Puerto Rico, Fiscal Plan to the Financial Oversight and Management Board for Puerto Rico, October 14, 2016 and March 13, 2017.

Graphic 3: Fiscal Plan 2017 and 2018 GNP Growth



words, the Fiscal Plan alarming projections are that Puerto Rico—a decade after the enactment of PROMESA, the implementation of significant IMF-like structural reforms as suggested by the "Krueger Report," and the injection of disaster-relief funding—would continue in a protracted economic recession.

In sum, the Oversight Board's policies of balanced budgets and fiscal austerity, even in the context of projections of substantial disaster recovery funding, are insufficient and not likely mechanisms for overcoming the economic crisis. The projections of the fiscal plan suggest that additional economic stimulus policies are necessary to turn the Puerto Rico economy around and induce sustained economic recovery. The next section of the study examines the stimulus policies identified by the Congressional Task Force on Economic Growth in Puerto Rico and the Oversight Board.

PROMESA and Economic Development

PROMESA, in addition to providing for the restructuring of the Puerto Rican debt and the establishment of an Oversight Board, includes other provisions of great importance to long-term economic development that makes this legislation far reaching into Puerto Rico's future. The Congressional Task Force on Economic Growth in Puerto Rico (the "Task Force") was created as part of PROMESA to recommend policy options for sustainable long-term economic growth and job creation. Of special consideration are three industries: manufacturing, energy, and health. Each of these industries is vital to the economic stability and growth of the Puerto Rican economy, and the U.S. Congress and the President are instrumental in enacting policy.

In December 20, 2016, the Task Force released its final report on policy recommendations for supporting economic growth for Puerto Rico. Of these key policy recommendations, health care is by far the one with significant costs to the federal government. The catastrophic impact of Hurricane Maria on Puerto Rico and specifically in its health system, brought urgency to resolving Medicaid funding. In February of 2018, President Donald Trump signed a bill allocating $4.8 billion to fund Puerto Rico's

Medicaid program for two years. However, in the absence of Congressional action to close the structural disparity in funding, the Fiscal Plan approved by the Oversight Board calls for "savings" of $6.123 billion in ten years for health programs servicing the most vulnerable populations—children, seniors, and the poor. Budget cuts will affect basic coverage for "primary needs" such as prescription medications, dental services, private nursing, prosthetic devices, physical and occupational therapy, optometry, hospice services, and services for speaking, hearing, and language disorders.

However, as significant as the recommendations made by the Task Force are the policy proposals considered but for which there was no consensus and were not made. One of the key policy areas in which the Task Force failed to propose concrete policy recommendations is labor market reform. The Task Force recommended for Congress to consider the merits of giving Puerto Rico greater flexibility in unemployment compensation benefits to increase employment. Besides this timid proposal, the Task Force did not recommend the extension of the Earned Income Tax Credit (EITC) to Puerto Rico as recommended by President Obama (Cornwell 2016). Puerto Rico has a substantially lower labor force participation when compared to any other state. The EITC encourages labor force participation and increases labor supply by making work more attractive to low-wage workers. The EITC may also serve as a policy to mitigate the massive exodus of Puerto Ricans to Florida and other states.

The inclusion of Puerto Rico in the EITC has been a priority for the Democratic leadership in Congress. According to a paper authored by Arthur MacEwan and J. Tomas Hexner (2016), there is a "lack of fairness" in the way residents of Puerto Rico are excluded from eligibility for the EITC and CTC. For example, assume two families each consisting of two parents and two young children that have earned income of $28,000 in 2015 but one family is in the states and one in Puerto Rico. Further, assume that each family pays the same in Social Security taxes ($1,736) and in Medicare taxes ($406) and have no federal income tax liability. The family in the states receives an EITC of $4,622 and a CTC of $2,000 for a total income of $32,480 or a 26 percent greater income than the Puerto Rican family. MacEwan and Hexner (2016) estimate that the cost of eliminating this disparity by extending the EITC and CTC to Puerto Rico on equal bases as the states would be about $1 billion annually.

In July of 2018, at the conclusion of its second year of operations, the Oversight Board filed the Annual Report for Fiscal Year 2018 and made several recommendations to the Federal Government (Financial Oversight & Management Board 2018). The report concludes that:

> [T]he disaster relief funding is by no means a long-term solution to Puerto Rico's long standing structural problems. [T]he Oversight Board continues to believe that the Commonwealth's recovery and fulfillment of PROMESA's objectives will be significantly aided by the Federal Government's support in the following key Executive and Legislative areas [among others]:

- Legislate a long-term Medicaid program solution to mitigate the drastic reduction in federal funding for healthcare in Puerto Rico that will happen next year.
- The new international tax and base erosion rules of the U.S. Tax Code should be framed in a manner that will help Puerto Rico, as a U.S. territory, retain the current CFC base and to favorably compete with foreign jurisdictions in attracting new investments, and to comply with the fiscal plan.
- Recommend that Congress explore ways to minimize the challenges and maximize the opportunities of extending an Earned Income Tax Credit (EITC) to residents of Puerto Rico.
- Extend the full federal Child Tax Credit (CTC) to residents of Puerto Rico to allow otherwise eligible families in Puerto Rico with one child or two children to claim the additional child tax credit.

Clearly the Oversight Board recognizes that budget projections indicate that after the injection of disaster relief funding the economy will revert to a continued recession They recognize the potential impact that extending the Opportunity Zones program could have on a stagnant economy. Yet, to date, Congress has failed to act on the recommendations made by its own Task Force and recently endorsed by the Oversight Board. All in all, the proposed package of economic stimulus legislation that emanates from the Task Force and the Oversight Board recommendations might be similar in scope to President Obama's package of $7 billion, of which $1.4 billion were for federal agencies and $5.6 billion for the state government, through the American Recovery and Reinvestment Act of 2009 (ARRA). ARRA funding was spent from 2009 to 2013, a similar stimulus package would have to be extended for a longer period of time and would have to include Medicaid parity as a separate line item. However, because most of the ARRA funds were intended to maintain police and other essential public services, the allocations of funds to stabilize the health system in Puerto Rico, support families and incentivize labor force participation should have a bigger multiplier effect and long-lasting impact on the island's economy.

Discussion and Conclusions

It is too early for a final verdict on the long-term impact of PROMESA on the Puerto Rico economy. For one, there are too many unfolding processes, from the restructuring of the debt to the revamping of the infrastructure damaged by the hurricane, to the impact of structural fiscal reforms. There are, however, some important implications from the data and analysis presented above. To judge the law's effectiveness is important to assess how far it addresses the commonwealth's three key problems: too much debt, a budget that exceeds revenues, and, most importantly, whether it can support a battered economy. For one, PROMESA allowed Puerto Rico to undertake a necessary restructuring of its public debt. The Oversight Board approved the filing of close to $50 billion of the commonwealth's debt under Title III of PROMESA, which can significantly reduce or eliminate the debt and lower payments to creditors. What levels of the debt are restructured and how much money retirees get back from their pensions are issues that are now in the hands of New York Federal Judge Swain, who oversees Title III proceedings. She will also preside over dozens of lawsuits that have been filed contesting a myriad of issues related to the government's finances.

The Oversight Board's fiscal policy prescriptions, often described as draconian, are intended to balance the commonwealth's budget. With severe population exodus and concomitant declines in tax revenues, austerity is unavoidable. The math to reach this conclusion is as simple as it is difficult to restructure annual budgets. Since Governor García-Padilla declared that Puerto Rico's debt was unpayable in 2015 and the subsequent stay effective when PROMESA was enacted in 2016, besides a minimal payment of $328.7 million of interest on general-obligation debt, Puerto Rico has not made payments on the debt. Yet government revenues have continued to fall short of covering expenditures. Given that Puerto Rico lacks access to borrowing in capital markets, even in the context of no payments to bondholders budgets have to be cut, or new sources of revenues have to be found, such as higher taxes or the privatization of public assets.

The difficulty for the administration and the Oversight Board is in how to balance a budget while minimizing austerity to preserve adequate public services, protect the most vulnerable sectors of the population and continue to invest on economic development and job creation. The ten-year fiscal plan approved by the board included, among others, cuts to the University of Puerto Rico, health care cuts that could lead to thousands of Puerto Ricans losing their insurance, a 10 percent reduction of certain pension benefits, and even significant cuts to the legislative branch. Until the advent of Hurricane María, the fiscal plan also called for debt services of up to a billion dollars annually though these payments represent, on average, less than 20 cents on the dollar of what is currently owed to creditors. No one knows for sure what long-term economic effect austerity measures will have, how much of the debt service the government will eventually have to pay, and whether or when the economy will grow. What we do know, based on the government's own financial projections, is that austerity alone will not solve the problem. Puerto Rico cannot simply cut its way into solvency.

In the core principles for a revised Fiscal Plan to account for the adverse economic impact of Hurricane Maria submitted at the end of January 2018, the Oversight Board guidelines include "sufficient resources to ensure appropriate immediate emergency response and recovery effort in anticipation of federal funds, including provision of public safety, healthcare and education, in order to avoid increased outmigration"; [and a] capital expenditure plan [that] must provide the basis for a long-term economic recovery plan for Puerto Rico, focusing on increased and expedited support for rebuilding critical infrastructure such as energy, water, transportation, and housing" (Financial Oversight and Management Board 2017). As a group of distinguished economists and policy analysts asserted, "These are positive statements" (A Fiscal Plan for Puerto Rico Recovery n.d.).

Yet, achieving the goals of restoring fiscal stability and access to credit markets while preserving adequate public services and investing in economic development is untenable in the absence of substantive investment of federal resources and of congressional policies that incentivize private capital investment in Puerto Rico. The effects of the policies implemented by the Oversight Board on Puerto Rico's economic development are still an open question and critically dependent on further congressional action.

Hurricane María deepened an already unfolding humanitarian crisis.

Clearly, Hurricane María changed everything. By all counts, Hurricane María had a devastating effect on the economy though its real impact will take years to assess. Hurricane María deepened an already unfolding humanitarian crisis. Prior to the hurricane, the recession has forced over half a million Puerto Ricans to move from the island to the U.S., and with more emigrating every day it is expected that the depopulation of Puerto Rico will continue unabated. In addition, high unemployment and low labor force participation rates are enduring indicators of economic stagnation and consequently about half the population lives in poverty. About 18 percent of housing units are vacant. Puerto Rico's recovery from a debilitating economic recession since 2006 became more daunting post Hurricane María. Whether Congress and President Trump will be moved by the impact of Hurricane María on the island to support the proposed package of economic stimulus legislation recommended by the Task Force and the Oversight Board remains elusive. PROMESA was enacted based on the Republican majority premise that it will not become a "bailout" of Puerto Rico or the bondholders. The recommendations made by the Congressional Task Force on Economic Growth in Puerto Rico and the Oversight Board are necessary steps in a variety of ways the U.S. government can support Puerto Rico's economic recovery.

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NOTES

[1] Title I, Sec. 101(a) Purpose. S. 2328 (114th): PROMESA.

[2] There are three market dominant credit rating agencies: Moody's Investors Service, Standard & Poor's, and Fitch Ratings. Collectively they control approximately 95 percent of the industry, with the two largest rating agencies—Moody's, S&P—controlling roughly 80 percent market share globally.

[3] The act states, "The provisions of this act shall prevail over any general or specific provisions of territory law, State law, or regulation that is inconsistent with this Act."

[4] A public enterprise is a quasi-public business organization wholly or partly owned by government controlled through a public authority and an appointed board of directors.

[5] Entities not included in the Fiscal Plan included: PREPA, PRASA, Children's Trust Fund and PRHFA.

[6] "In debt restructuring agreements, a haircut is a percentage reduction of the amount that will be repaid to creditors" (Who Needs a Haircut n.d.).

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