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SERIES

# STUDIES AND PERSPECTIVES

ECLAC OFFICE  
IN WASHINGTON, D.C.

## Puerto Rico

Fiscal and economic growth challenges

Inés Bustillo  
Helvia Velloso



UNITED NATIONS

ECLAC

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This document has been prepared by Inés Bustillo, Chief of the ECLAC office in Washington, D.C., and Helvia Velloso, Economic Affairs Officer at the ECLAC office in Washington, D.C.

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## Abstract

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Puerto Rico's economy and population have been contracting for almost a decade and debts have swollen to about 100% of its Gross National Product (GNP). On June 29, 2015, Puerto Rico's Governor called the Commonwealth's debts 'unpayable' and on August 3, Puerto Rico failed to make a requisite payment on one of its bonds (issued by the Public Finance Corporation). It was the first act of default since Puerto Rico came under jurisdiction of the United States 117 years ago.

Puerto Rico's situation is unique because of its legal status. It is an unincorporated U.S. territory and a commonwealth (with its own constitution, bicameral legislature, chief executive and judiciary), as opposed to a full state, or a sovereign country. Investors have benefitted from the tax exemption given to U.S. municipal debt but the island is barred from seeking protection under the United States Bankruptcy Code, and it cannot go to the International Monetary Fund for a bailout.

The objective of this paper is to assess the challenges that Puerto Rico's economy is currently facing. Puerto Rico's development experience in the postwar period is briefly discussed in order to understand the nature of the island's current situation. Puerto Rico's recent economic performance, credit position, debt situation and fiscal conditions, including its complex capital structure and recently released fiscal and economic growth plan are also analyzed.

High levels of indebtedness have led to financial fragility and lower levels of investment and growth. The way forward for Puerto Rico, the analysis suggests, is one of collaborative work between the local government, business leaders, bondholders and the federal government toward not only a short-term solution to the island's debt problems, but also a long-term strategy. Achieving sustained economic growth will be crucial to maintain debt sustainability and to create the fiscal space needed to confront poverty, inequality, and informality.



## List of acronyms

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COFINA	Puerto Rico’s Sales Tax Financing Corporation
ERS	Employees Retirement System for government workers
FED	Federal Reserve
FEGP	Fiscal and Economic Growth Plan
FY	Fiscal Year
GDB	Government Development Bank
GDP	Gross Domestic Product
GNP	Gross National Product
GO	General Obligation
IMF	International Monetary Fund
PBA	Public Buildings Authority
PFC	Public Finance Corporation
PRASA	Puerto Rico’s Aqueduct and Sewer Authority
PREPA	Puerto Rico’s Electric Power Authority
PRHT	Puerto Rico’s Highways and Transportation Authority
SIFMA	Securities Industry and Financial Markets Association
TRS	Teachers Retirement System



## Introduction

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On June 29, 2015, Puerto Rico's Governor called the Commonwealth's debts "unpayable," adding that the assertion was not about politics, but about "math." He added that the only way the island could "climb out of this mire is if we come together and are willing – bondholders included – to assume shared sacrifices today, so that tomorrow we may all share benefits of a growing economy."<sup>1</sup>

On August 3, Puerto Rican government debt prices slid as investors sold off positions after the U.S. Commonwealth failed to make a requisite payment on one of its bonds (issued by the Public Finance Corporation), paying only US\$ 628,000 of the US\$ 58 million due to creditors. Moody's viewed the missed payment as a default, saying that it was a first in what it believed will be broad defaults on Commonwealth debt. It was the first act of default since Puerto Rico came under jurisdiction of the United States 117 years ago.

Puerto Rico's economy and population have been shrinking for almost a decade and debts have swollen to about 100% of its Gross National Product (GNP) as the government took advantage of the tax exemption enjoyed by U.S. municipal debt. Puerto Rican debt trades as a municipal security in the United States capital markets, and much of the interest earned on this debt is exempt from local, state and federal income taxes, regardless of where in the U.S. the investor lives, making it very attractive to investors.

One of the pressing tests for the island is the roughly US\$ 20 billion debt owed by three government-owned companies: the electricity utility, the water and sewer system, and the highway authority. The public corporations are important both for the role they have played in issuing debt as well as the scale of the public services they provide to Puerto Rico's population. Currently, public corporations account for 72% of the total public-sector debt<sup>2</sup> and have been responsible for much of the debt buildup – of the roughly 43% increase in the overall public sector debt-to-GNP ratio between 2000 and 2013, the public corporations accounted for almost 85% of that increase.<sup>3</sup>

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<sup>1</sup> Aaron Kurilof, "Puerto Rico Urges Concessions from Creditors," *Wall Street Journal*, 29 June 2015.

<sup>2</sup> See Government Development Bank, "Commonwealth of Puerto Rico Quarterly Report dated May 7, 2015", p. 63.

<sup>3</sup> See Dudley, William C. (2014).

Puerto Rico's current challenges are traced, in part, to a successful postwar economic strategy that transformed it from an agricultural to a manufacturing economy.<sup>4</sup> This transformation was paved with corporate tax breaks. The most important one was Section 936 of the U.S. tax code, which exempted the profits earned by U.S. companies located in Puerto Rico from federal taxes. In 1996, the U.S. Congress began phasing out this crucial tax break, however, and ten years later it had expired completely. The tax break phasing out, compounded by high electricity rates and transportation costs,<sup>5</sup> prompted the number of manufacturing jobs to fall by almost half between 1996 and 2014, driving tens of thousands of workers to depart the island, and leaving Puerto Rico in search of a new economic strategy.

Puerto Rico's situation is unique because of its legal status, making the current situation more complex. It is an unincorporated U.S. territory and a commonwealth (with its own constitution, bicameral legislature, chief executive and judiciary), as opposed to a full state, or a sovereign country.<sup>6</sup> This means that investors have benefitted from the tax exemption given to U.S. municipal debt but the island is barred from seeking protection under the United States Bankruptcy Code, and it cannot go to the International Monetary Fund for a bailout.

The objective of this paper is to assess the challenges that Puerto Rico's economy is currently facing. In the first section, Puerto Rico's development experience in the postwar period is briefly discussed in order to understand the nature of the island's current situation. The recent economic performance is examined next, followed by a discussion in the third section of Puerto Rico's credit position and the sequence of credit rating actions taken in recent years. In the fourth section, the debt situation and fiscal conditions are analyzed, including a discussion of its complex capital structure and recently released fiscal and economic growth plan. Finally, we conclude with some thoughts about the challenges Puerto Rico faces to raising economic growth and steps that may be taken towards fiscal sustainability.

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<sup>4</sup> In 1940, agriculture represented 34% of total net income, while manufacturing had 13% of the total. By the beginning of the 21st century, agriculture composed 1% of total net income while manufacturing made up 46% of the total. See Government Development Bank of Puerto Rico, Economic Fact Sheet.

<sup>5</sup> At about the same time as corporate tax breaks expired, oil prices embarked on an upward trend. Higher oil prices led to high electricity rates, since oil is the major fuel used in generating Puerto Rico's electricity, compounding the economic difficulties. Moreover, the U.S. Jones Act of 1920, which requires that cargo carried between Puerto Rico and U.S. ports go in U.S. vessels, has increased transportation costs (see Krueger, Teja and Wolfe (2015)).

<sup>6</sup> Puerto Rico came under United States sovereignty pursuant to the Treaty of Paris, signed on December 10, 1898, which ended the Spanish-American War. Puerto Ricans have been citizens of the United States since 1917. The Commonwealth exercises virtually the same control over its internal affairs as do the 50 states. It differs from the states, however, in its relationship with the federal government. See Government Development Bank, Puerto Rico Basic Facts, <http://www.gdb-pur.com/economy/puerto-rico-facts.html>

## **I. Development experience in the postwar period<sup>7</sup>**

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Puerto Rico's development experience in the postwar period illustrates the extent to which fast growth and income convergence can be fostered when not only trade liberalization is present in the convergence process, but also other factors such as labor mobility and common laws and institutions. Puerto Rico shares a common citizenship, defense, currency, and market with the United States, with free movement of good and factors of production between both.

Puerto Rico's development strategy initiated in the 1940s with Operation Bootstrap, which yielded robust industrial growth by attracting U.S. investment and transforming Puerto Rico's agricultural base into an economy led by manufacturing and services. The main ingredient of Puerto Rico's development strategy was the attraction of U.S. capital for investment purposes in industries oriented towards exports to the United States, within a virtually tax-free environment. However, two other factors were essential to support this strategy: labor mobility, with the unrestricted out-migration to the U.S. made possible by the fact that Puerto Ricans are U.S. citizens, and a large positive inflow of transfer payments from the U.S. that supported incomes and compensated for the adverse impact of foreign investments on the generation of employment.

The package of incentives included industrial tax exemptions and other incentives under both Puerto Rican and United States laws. From the beginning of Operation Bootstrap up to the Industrial Incentive Act of 1978, Puerto Rico offered full tax exemption from local taxes and other fees, and provided also a variety of subsidies on rent and labor costs. In addition to these incentives, exemptions from the United States corporate income taxes was granted to firms (qualifying U.S. "possessions corporations") operating in Puerto Rico. Under Section 936 of the United States Internal Revenue Code (Section 931 until 1976), U.S. corporations obtained tax credits against federal taxes attributable to the income earned from business operations and certain financial investments in Puerto Rico. Section 936 stimulated investment for export, for the most part from mainland capital.

Puerto Rico's industrial incentives and Section 936 shaped the manufacturing sector. The "936 corporations", as they were called, came to dominate Puerto Rico's manufacturing sector, whose share of total output increased from 22% in 1950 to 39% in 1990, with Puerto Rico ranking above all 50 states

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<sup>7</sup> This session draws on Bustillo and Ocampo (2003), Chapter IV, updating data and developments since 2002.

of the mainland in manufacturing's share of gross domestic product. Manufacturing was the lead force in Puerto Rico's growth of trade, particularly exports of chemical products such as drugs and pharmaceutical.<sup>8</sup>

Although Puerto Rican exports increased significantly during the period, from about a third in 1950, to about a half of all output in 1980, to about US\$ 2 of exports of every US\$ 3 of total production in the 1990s and 2000s (see table 1), they were dominated by U.S. firms. As a result, forward and backward linkages to the local economy were extremely limited in the production process, such that the impact of trade on Puerto Rico's economic growth was reduced.<sup>9</sup>

**Table 1**  
**Puerto Rico's exports as a share of GDP**  
(Percentages)

Years	Exports as a share of GDP
1950	33.7
1960	37.2
1970	34.8
1980	56.8
1990	67.5
2000	65.7
2010	68.3
2013	66.6

Source: ECLAC, on the basis of data from Puerto Rico's Planning Board, Balance of Payments, and Puerto Rico's National Accounts ([www.jp.gobierno.pr](http://www.jp.gobierno.pr)).

**Table 2**  
**GDP per-capita in Puerto Rico and the United States: a comparison**  
(Current U.S. Dollars)

Year	Puerto Rico	United States	GAP	GAP Percentage Change
1950	328.15	1 971.50	6.01	
1960	722.42	3 007.14	4.16	-31%
1970	1 857.14	5 247.01	2.83	-32%
1980	4 533.95	12 597.92	2.78	-2%
1990	8 701.47	23 954.81	2.75	-1%
2000	16 214.52	36 450.24	2.25	-18%
2010	26 369.96	48 373.69	1.83	-18%
2014	28 850.07	54 628.68	1.89	3%

Source: ECLAC, on the basis of data from Puerto Rico's Planning Board, Macroeconomic Data Center ([www.jp.gobierno.pr](http://www.jp.gobierno.pr)) and U.S. Bureau of Economic Analysis.

During the early period of economic expansion via Operation Bootstrap, with the transformation of the agricultural-based economy to one led by the urban industrial and service sectors, the gap between income per person in the U.S. and Puerto Rico declined from a factor of nearly six in 1950 to a factor of four in 1960, and 2.8 in 1970<sup>10</sup> (see table 2). In the 1970s and 1980s the relative gap between incomes in the two economies failed to converge any further. In the 1990s and the 2000s the income gap closed

<sup>8</sup> By the 1990s, Puerto Rico provided 50% of the United States pharmaceutical imports and close to 25% of the world wide demand for drug products (Bustillo and Ocampo, 2003).

<sup>9</sup> The shift of the locus of structural transformation towards U.S. firms and financing, and away from expanding the base of local entrepreneurs and local control, hurt the possibilities of the expansion of a local industrial class.

<sup>10</sup> See Dietz, James L. (2001) for a discussion on the relative income gap between Puerto Rico and the U.S. from 1950 to 1999.

again, although at a very slow pace, declining to a factor of 2.2 in 2000 and 1.8 in 2010. The gap reached 1.9 in 2014, showing a slight widening since 2010. The income gap closed faster when GDP per capita showed strong growth. The average annual growth of Puerto Rico's real GDP per capita was 5.3% in the 1950s and 6.4% in 1960s (see table 3).

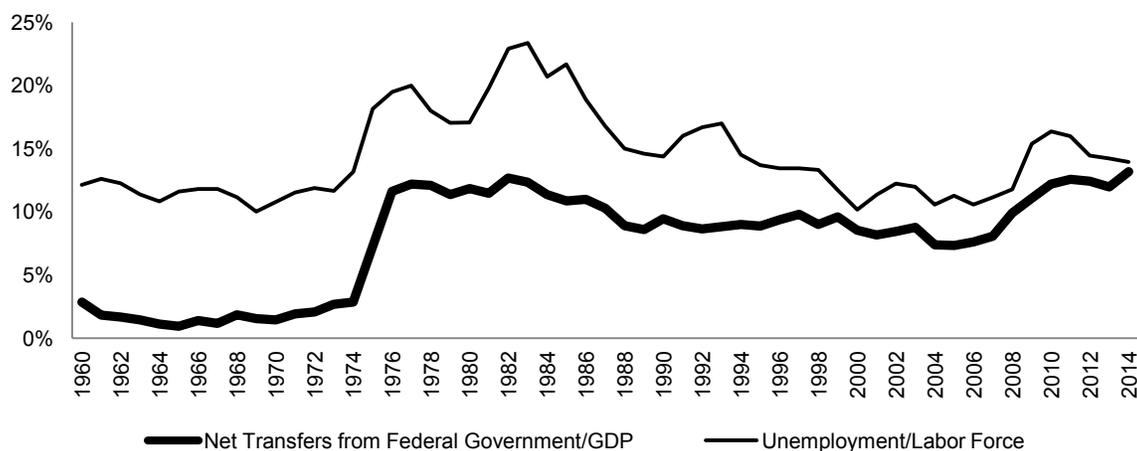
**Table 3**  
**Average annual growth of Puerto Rico's real GDP per-capita**  
(Percentages)

Period	Annual Real GDP per Capita
1950-1960	5.3
1960-1970	6.4
1970-1980	2.6
1980-1990	2.6
1990-2000	3.3
2000-2010	0.9
2010-2014	0.8

Source: ECLAC, on the basis of data from Puerto Rico National Accounts and Baumol and Wolf (1996), for the period 1950-1960.

Since the 1970s, particularly following the slowdown in economic growth that left the income gap between the United States and Puerto Rico basically unchanged from 1970 to 1990, federal transfers have played a very important counter-cyclical role in Puerto Rico's economy. The high level of federal transfers in the period of 1960 to 2014 was strongly correlated with the business cycle.<sup>11</sup> There was a strong positive correlation between federal transfers and unemployment level (figure 1). Moreover, the net flows of official transfers compensated for the low public (central and municipal governments) saving rates in the period. Federal transfers have been much higher than public savings as a percentage of GDP since 1974 (figure 2).

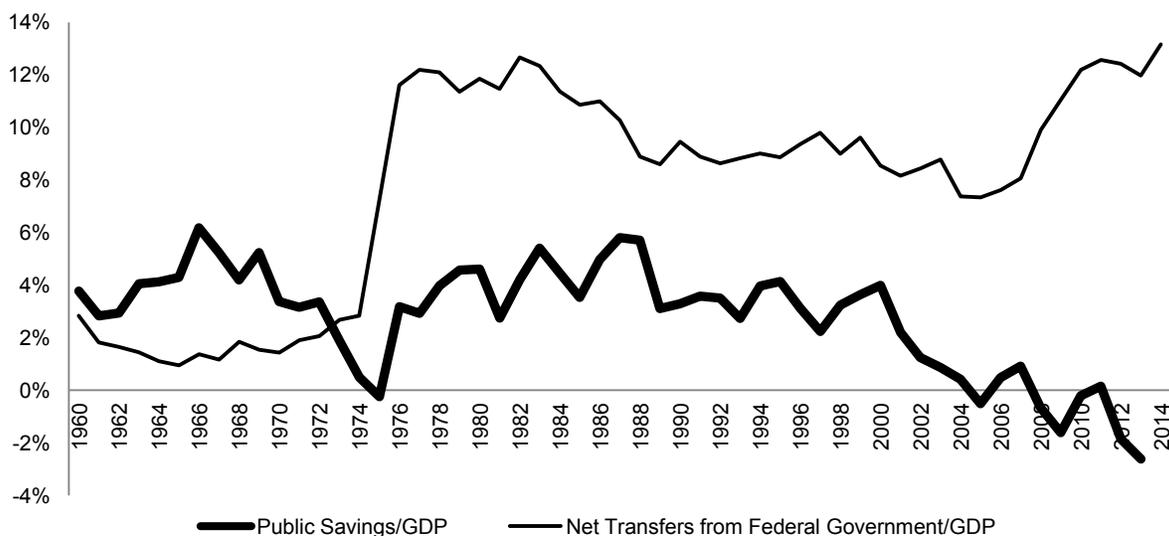
**Figure 1**  
**Puerto Rico: net transfers from the federal government and unemployment**  
(Percentage of GDP and unemployment rate)



Source: ECLAC, on the basis of data from Puerto Rico's Planning Board and the U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS).

<sup>11</sup> See Hausmann (1995) who pointed to the strong correlation of net federal transfers with the business cycle from 1960 to 1993.

**Figure 2**  
**Puerto Rico: net transfers from the federal government and public savings**  
 (Percentage of GDP)



Source: ECLAC, on the basis of data from Puerto Rico's Planning Board and National Accounts.

In addition, the high level of sustained inflows of external capital was fundamental to finance Puerto Rico's investment rate during the period, given the low level of savings. The inflows of external capital averaged 12.5% of GDP in the 1960-2013 period, what helps to explain the investment rate of almost 19% (see table 4).

**Table 4**  
**Puerto Rico's matrix of correlations, 1960-2013**

	Total gross domestic investment/GDP	Net inflow of external capital, adjusted/GDP	Public savings/GDP	Transfers to individuals/GDP	Total net transfers from federal gov./GDP	Unemployment level/labor force
Average, 1960-2013	18.85%	12.47%	2.79%	12.11%	7.71%	14.44%
Total gross domestic investment/GDP	1					
Net inflow of external capital adjusted/GDP	0.59	1				
Public savings/GDP	0.36	0.59	1			
Transfers to individuals/GDP	-0.83	-0.27	-0.14	1		
Total net transfers from federal gov./GDP	-0.90	-0.43	-0.24	0.97	1	
Unemployment level/labor force	-0.53	0.06	0.17	0.75	0.68	1

Source: ECLAC, on the basis of data from Puerto Rico's Planning Board and National Accounts.

During the 1960-2013 period, transfers from the federal government showed a strong negative correlation with the rate of investment as a share of GDP, and a strong positive correlation with the unemployment level as a share of the labor force. The correlation between investment as a percentage of GDP and unemployment as a share of the labor force was also relatively strong and negative. Federal transfers were thus strongly correlated with the economic cycle, assuming a fundamental counter-cyclical role.

In addition to the effect of the transfers from the federal government on the economy, the massive migration of Puerto Ricans to the United States also played an important counter-cyclical role.<sup>12</sup> Puerto Rico's development strategy after the 1940s was not successful at providing more employment opportunities to the bulk of the potential labor force. The industrialization strategy, based on low-wage labor, gave positive results in the first decades of growth, but faced difficulties after that, as the institutional link of Puerto Rico to the United States induced the application of U.S. minimum wages, which forced wages up to a much higher level than supply and demand would determine. In addition, competition from other lower wage countries that followed the Puerto Rican export-oriented strategy resulted in a comparative disadvantage for Puerto Rican exports. The industrial sector was thus not capable of absorbing labor at the desired level, what resulted in a lasting high unemployment rate in the postwar period.<sup>13</sup>

The insufficient creation of employment has been one of Puerto Rico's enduring problems. Since the 1950s, unemployment has, for the most part, exceeded 10% of the labor force. The unemployment rate reached its lowest level in September 2000 (9.7% of the labor force, according to the U.S. Bureau of Labor Statistics), and reached its highest level in February 1983 (24% of the labor force). The unemployment rate was 14% at the end of 2014.

According to estimates by Baumol and Wolff (1996), net emigration reached almost one million persons in the period 1950-1990, declining from a peak of 42,200 per year in the 1950s, to 15,700 in the 1960s, and 9,200 in the 1970s. Net emigration increased to an average of 27,600 per year in the 1980s, however (see table 5).

Emigration has picked up considerably in recent years as well, as Puerto Rico's economy has deteriorated, with Puerto Rico's population shrinking by more than 7% over the course of the past decade – from a peak of 3.83 million residents in 2004, to 3.55 million in July 2014 –according to data from Puerto Rico's Planning Board (see table 6).

**Table 5**  
**Puerto Rico's net emigration, 1950-1990**  
(Thousands)

Period	Annual average
1950-1960	42.2
1960-1970	15.7
1970-1980	9.2
1980-1990	27.6
1950-1990	23.7

Source: Baumol and Wolff (1996).

<sup>12</sup> The role of the unrestricted emigration to the mainland, the generous federal transfer payments and special tax incentives for investment is subject to debate in the economic literature on Puerto Rico. On this controversy, see Baumol and Wolff (1996) and Dietz (2001). A major issue in the debate was the sustainability of Puerto Rico's development strategy.

<sup>13</sup> For an analysis of Puerto Rico's insufficient creation of employment see Santiago (1992). A wage policy more adapted to Puerto Rico's factor endowments and a larger proportion of local capital in manufacturing investment might have produced a somewhat more balanced economy in Puerto Rico, capable of absorbing a bigger share of the labor force.

**Table 6**  
**Puerto Rico's net migration, 1980-2010**  
*(Annual average; thousands)*

Year	PR port authority	Population equation	US department of transportation	PR community survey
1980-1989	24.3	-9.9	na	na
1990-1999	23.8	1.9	-32.2	na
2000-2009	-38.4	-31.5	-34.6	na
2000-2004	-9.6	-17.6	-27.6	na
2005-2009	-68.6	-45.4	-41.6	-28.6
2010	-31.0	-32.0	-47.0	-28.0

Source: ECLAC, on the basis of data from Puerto Rico's Planning Board, Economic and Social Planning Program, "Resumen Económico de Puerto Rico; Suplemento Especial: Migración," March 2014, p.17.

Notes: Net migration is the number of immigrants minus the number of emigrants, including citizens and noncitizens, for the five-or ten-year period.

In Puerto Rico there are four indicators of net migration: (1) the Puerto Rican port authority collects data on the entry and exit of passengers; (2) on the basis of demographic data provided by the Puerto Rican Health Department, it is possible to derive net migration using the population equation; (3) the U.S. Department of Transportation collects data on the entry and exit of airport passengers; (4) the Puerto Rican Community Survey, which has been implemented since 2005, estimates the migratory movement between Puerto Rico and the United States.

Despite the statistical discrepancies, according to all indicators the surge in out-migration intensified since 2005.

The pace of Puerto Rico's population loss is expected to pick up further over the remainder of the current decade and to decline by more than 8% overall by 2020, according to new projections from Puerto Rico's Planning Board. The new forecast projects Puerto Rico's population will be under 3.4 million by 2020, down more than 300,000 from the current population of roughly 3.6 million. The potential 8.3% decline would far outpace the 2.2% drop registered between the 2000 and 2010 census counts.

This exodus of Puerto Rican citizens to the U.S. mainland – which includes a large share of younger people – has hastened population aging, adding to the burden of supporting the island's elderly population. Moreover, a smaller population translates into a shrinking tax base, which in turn strains government finances and adds pressure on the financially ailing public-pension system. This means that alongside the many economic challenges currently facing Puerto Rico, there is a significant demographic challenge.

## II. Recent economic performance

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Puerto Rico's economy has been in a recession since 2006, hurt by the end of tax breaks in the manufacturing sector, a difficult environment for investment, and high electricity and transportation costs. Economic activity remains generally flat at a depressed level, with domestic issues weighting heavily on Puerto Rico's performance. Its unemployment rate was 14% in December 2014 and 41.2% of the population lived below the poverty line as of 2013. The weak economic performance of the past few years has increased Puerto Rico's fiscal challenges. Financial uncertainty has risen, and so has the risk of default. The need for fiscal adjustments has thus increased, but these needed adjustments are expected to have an adverse impact on short-term growth, completing a vicious cycle.

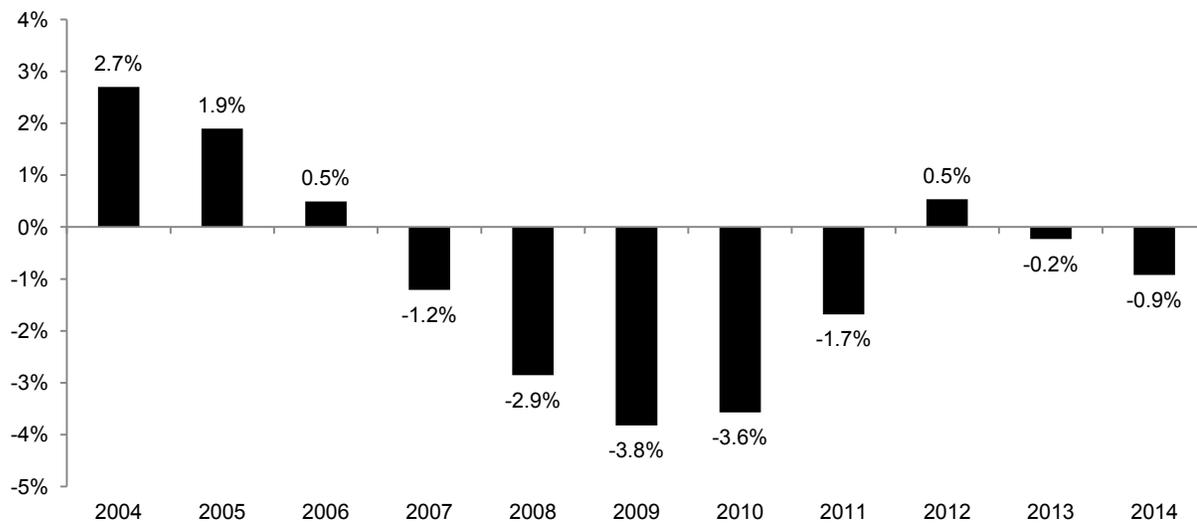
Gross National Product (GNP) is used in preference to Gross Domestic Product (GDP) as a measure of growth in Puerto Rico's local economy, as it filters out the large outflows of profits from U.S. firms operating in the island (these add up to around 45% of GDP, according to the Economist Intelligence Unit).<sup>14</sup> As all Puerto Rican economic indicators, GNP is officially calculated on a fiscal-year rather than a calendar-year basis. Puerto Rico's economy has performed poorly since 2006. After declining for five straight years, real (inflation-adjusted) GNP rose 0.5% in fiscal year 2012, but declined again in FY 2013 (-0.2%) and FY 2014 (-0.9%) (figure 3). On a per capita basis, real GNP declined steadily from 2006 to 2011, although it has edged up recently, as the population has fallen (figure 4).

The Economic Activity Index, a monthly index published by Puerto Rico's Government Development Bank, paints a similar picture of an economy that has been declining since 2006 and is now relatively steady at a depressed level. The index shows that the island's economy picked up somewhat in FY 2012, only to weaken again after that (see figure 5).

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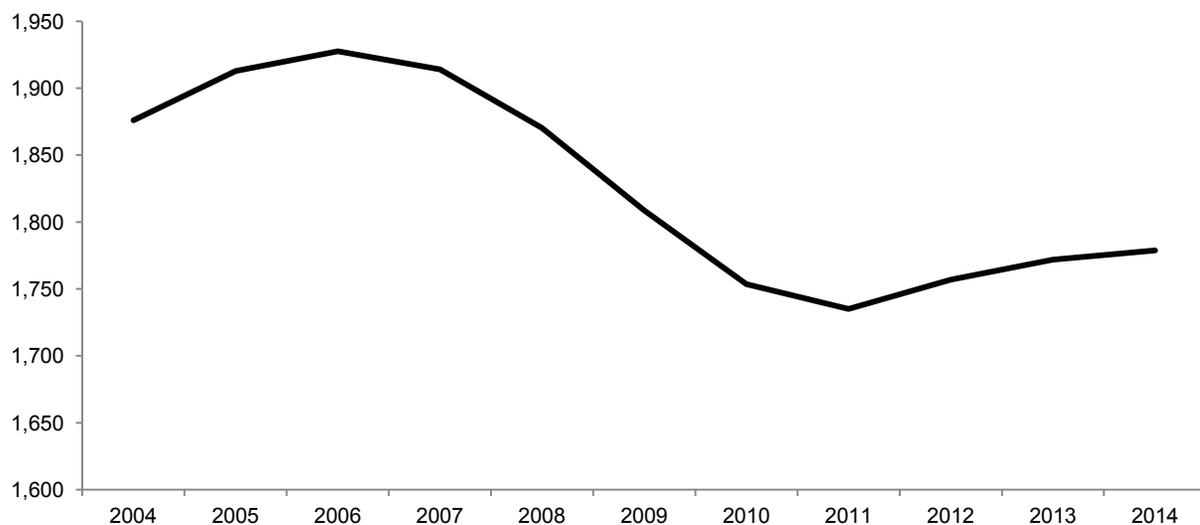
<sup>14</sup> Economist Intelligence Unit (2015).

**Figure 3**  
**Puerto Rico: real GNP Growth**  
*(Percentage)*



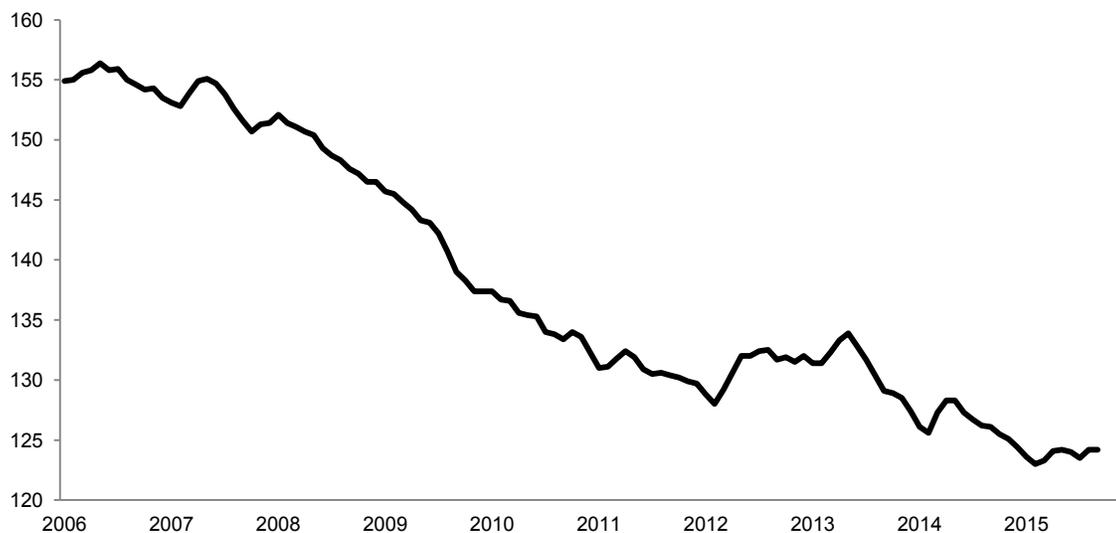
Source: Puerto Rico's Planning Board.

**Figure 4**  
**Puerto Rico: real GNP per-capita**  
*(At constant 1954 U.S. dollars)*



Source: Puerto Rico's Planning Board.

**Figure 5**  
**Puerto Rico: Economic Activity Index**  
*(Index, January 1980=100)*



Source: Government Development Bank for Puerto Rico; calculated on a fiscal-year basis.

According to Krueger, Teja and Wolfe (2015) – the so-called “Krueger report,” prepared at the request of Puerto Rico’s legal counsel – structural problems, economic shocks and weak public finances have yielded a decade of stagnation, outmigration and debt. The expiration in 2006 of important corporate tax breaks in Section 936 of the U.S. tax code is usually cited as one of the triggers of Puerto Rico’s long economy descent, but the authors, among others, argue that this is just part of the explanation.

The economic shocks have been many, including an investment/housing bust, with investment falling by 10% of GNP in the decade to FY2014 and construction accounting for three-quarters of the overall reduction in the investment ratio. The fall in Puerto Rico’s house prices was sharp and preceded the one on the mainland. In addition, oil prices doubled during the 2005-2012 period, which was another major setback for the island’s economy, given its dependence on imported oil for virtually all of its power generation. The downturn in U.S. activity during 2007-2009 also had a significant negative effect on Puerto Rico’s economic activity, but the subsequent recovery in U.S. demand has not lifted the island’s manufacturing, suggesting a structural problem with competitiveness.<sup>15</sup>

Puerto Rico’s manufacturing sector represents almost half of Puerto Rico’s economic output, at 48% of GDP in 2014. The island’s largest manufacturing sectors are the chemical sector (which includes a large pharmaceutical component), at 31% of total GDP in 2014, and the computer and electronic products sector at 11%, with beverage, tobacco products, and many miscellaneous industries comprising the other 6%. Chemicals and electronics provide about 90% of total manufacturing employment. Although industry remains very important for Puerto Rico, it has gone through some significant challenges, including the expiration in 2006 of the tax breaks in Section 936 (the loss of federal tax breaks removed incentives for mainland manufacturers to add to investments), market-driven transformations in the key pharmaceutical sector, a complicated permitting process and rising energy-

<sup>15</sup> Anne O. Krueger, Ranjiv Teja, and Andrew Wolfe (2015), “Puerto Rico – A Way Forward,” p.5.

transportation- and labor-driven costs.<sup>16</sup> Moreover, a number of local laws and regulations also restrict domestic competition and business investment.

High energy costs have adversely impacted growth and economic activity in Puerto Rico. Electricity is produced and distributed by Puerto Rico's Electric Power Authority (PREPA), which is over-staffed and uses outdated technologies that undermine competitiveness and efficiency. High oil prices, which began to set in around the same time the key tax break (Section 936) was phased out a decade ago, also have contributed to worsen Puerto Rico's recession as the electricity utility relies on oil for about 70% of its generating capacity.

High transportation costs are common to all islands, but Puerto Rico's are even higher because of the U.S. Jones Act, which stipulates that all shipping to and from U.S. ports should be conducted with U.S. vessels and crews, and local laws (prices and licensing requirements set by the Public Service Commission for ground transportation) that add to transportation costs.<sup>17</sup>

Opportunities in Puerto Rico's labor market have been difficult to find. Since the beginning of Puerto Rico's current recession in 2006, more than 40,000 manufacturing jobs have been lost. The number of payroll jobs in the manufacturing sector declined from approximately 120,000 in January 2005, to close to 75,000 in July 2015, according to the U.S. Bureau of Labor Statistics.

Overall employment fell by 22% between 2006 and 2014, according to payroll data from the U.S. Bureau of Labor Statistics, while the unemployment rate went from an annual average of 10.6% in 2006 to an annual average peak of 16.4% in 2010. In 2014 the average annual unemployment rate was 14%.

Puerto Rican employers face challenges in hiring new workers. The U.S. federal minimum wage is very high relative to the local average – full time employment at the minimum wage is equivalent to 77% of per capita income, versus 28% on the mainland – and local regulations with respect to overtime, paid vacation, and dismissal are costly and more onerous than on the U.S. mainland. In addition, workers are less inclined to take up jobs because the welfare system provides generous benefits that often exceed what minimum wage employment yields. According to Krueger, Teja and Wolfe, the result is “massive underutilization of labor, foregone output, and waning competitiveness.”<sup>18</sup>

There is a relatively large informal economy in Puerto Rico that employs a large segment of the population. Activity in the informal sector goes unrecorded, thus allowing workers and firms to avoid many of the taxes and other costs associated with formal employment. Despite the difficulty to measure the informal sector, estimates of its size are on the order of 23% of GNP.<sup>19</sup>

The low labor force participation, particularly among the younger and less educated workers, is an important factor limiting the island's competitiveness, according to a report from the Federal Reserve of New York.<sup>20</sup> Overall labor force participation has declined from almost 49% in 2006 to slightly less than 41% in 2014, according to Puerto Rico's Planning Board.

The rate of emigration or outmigration has increased significantly in recent years, in large part because of the poor labor market opportunities available for many workers, and it has contributed to an acceleration in the population decline. As mentioned previously, Puerto Rico's population fell from its peak of 3.8 million in 2004 to 3.6 million in July 2014, a decline of almost 300,000 residents, or 7%, over this ten-year period. The population decline, which is expected to continue through 2020 according to the Planning Board projections, leads not only to decreases in demand on the island, but also in potential growth as the labor force continues to shrink.

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<sup>16</sup> Puerto Rico's manufacturing sector also faces more competition from exports of countries that have signed free trade agreements with the United States. For example, Puerto Rican exports to the countries covered by the free trade agreement CAFTA-DR are said to have fallen by much more than the increase of Puerto Rican exports to the NAFTA countries.

<sup>17</sup> Krueger, Teja, and Wolfe (2015), p.8.

<sup>18</sup> Krueger, Teja, and Wolfe (2015), p.7.

<sup>19</sup> See Enchautegui and Freeman (2006).

<sup>20</sup> See Federal Reserve Bank of New York (2012).

### III. Puerto Rico's credit position

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Economic deterioration and weakening liquidity have put increasing pressure on Puerto Rico's credit position, which, in tandem with the island's economic decline, has been deteriorating since 2006. In February 2014, the debt obligations of the Commonwealth of Puerto Rico and its agencies and instrumentalities lost their coveted "investment grade," formally losing a large portion of its investor base.<sup>21</sup> This action included the Commonwealth's general obligation (GO) bonds, which are full-faith and credit obligations benefiting from a constitutional first-claim on the Commonwealth's revenues (see table 7).

The three main credit rating agencies – Fitch, Moody's and Standard & Poor's – all decided that debt previously rated BBB-, Baa3 and BBB-, respectively, needed to be downgraded two notches lower as BB, Ba2 and BB+, respectively. The three agencies pointed to a loss of confidence in Puerto Rico's government debt among investors starting in mid-2013, as well as to deterioration in economic and fiscal fundamentals over a period of many years. According to Standard & Poor's, Puerto Rico's poor economic growth prospects remain a key factor in their speculative-grade general obligation (GO) rating on the Commonwealth.<sup>22</sup>

To put Puerto Rico's loss of investment grade in context, one needs to consider that as of mid-September 2014, of more than 4,000 U.S. local-government credits rated by Standard & Poor's, the average credit rating was AA-, and that only 3% of the total universe was rated BBB or lower. Moreover, in the past decade, none of the fifty U.S. states have been assigned a rating lower than A-. Therefore, Puerto Rico's loss of creditworthiness was a deviation and a concern from the U.S. investors' perspective.<sup>23</sup>

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<sup>21</sup> Municipal mutual funds – which represented roughly 20% of Puerto Rico's investor base as of December 2013 according to the New York Fed – often have restrictions on the types of debt they can invest in. Investment-grade funds, for example, typically have a limit on how much below-investment-grade debt they can hold in their portfolios [Federal Reserve Bank of New York, 2014].

<sup>22</sup> Standard & Poor's (2014a).

<sup>23</sup> See Standard & Poor's (2014b) and Arturo C. Porzecanski (2015).

**Table 7**  
**Credit rating reports on the Commonwealth of Puerto Rico**

Date	Credit rating actions
1-Jul-15	Moody's downgrades Puerto Rico's GOs and COFINA senior bonds to Caa3 from Caa2; outlook negative
29-Jun-15	S&P lowers Puerto Rico's GO rating to CCC- from CCC+; outlook negative on likelihood of default or distressed exchange
29-Jun-15	Fitch downgrades Puerto Rico's GO and related ratings to CC; maintains Rating Watch Negative
21-May-15	Moody's downgrades Puerto Rico's GDB notes to Ca from Caa1, GOs to Caa2 from Caa1
24-Apr-15	S&P downgrades Puerto Rico to CCC+ from B on weakened market access; placed on CreditWatch Negative
26-Mar-15	Fitch downgrades Puerto Rico's GO and related debt ratings to B from BB- and placed them on Rating Watch Negative
19-Feb-15	Moody's downgrades Puerto Rico's GO bonds to Caa1 from B2, COFINA to B3/Caa1 from Ba3/B1
12-Feb-15	S&P's lowers Puerto Rico's GO debt rating to B from BB
11-Jul-14	S&P's lowers Puerto Rico's GO rating one notch to BB following debt legislation; outlook negative
9-Jul-14	Fitch downgrades Puerto Rico's GO to BB- from BB and sales tax, retirement system and water revenue bonds to BB- from AA-
1-Jul-14	Moody's downgrades Puerto Rico's GOs to B2 from Ba2, COFINA Senior-Sub to Ba3-B1; outlook negative
11-Feb-14	Fitch downgrades Puerto Rico's GO and related debt ratings to BB from BBB-; outlook negative
7-Feb-14	Moody's downgrades Puerto Rico's GO and related bonds to Ba2 from Baa3, notched bonds to Ba3 and COFINA to Baa1, Baa2; outlook negative
4-Feb-14	S&P lowers Puerto Rico's GO rating to BB+ from BBB-; remains on Watch Negative
13-Dec-12	Moody's downgrades Puerto Rico's GO and related bonds to Baa3 from Baa1 and certain notched bonds to Ba1
4-Jun-09	S&P affirms Puerto Rico's GO, Appropriation Debt Ratings at BBB- on fiscal and budget stabilization reforms
3-Sep-08	S&P assigns BBB- with stable outlook to Puerto Rico GO Series 2008 A
22-May-07	S&P lowers Puerto Rico's GO debt rating to BBB- due to structural imbalance
22-Mar-06	S&P places Puerto Rico's debt ratings on CreditWatch Negative; persistent structural imbalance cited

Source: Fitch Ratings, Moody's Investors Services, and Standard & Poor's. In red: loss of investment grade.

Puerto Rico had to turn to hedge funds to fund itself after this barrage of credit rating agency downgrades caused its traditional investor base – U.S. municipal funds – to flee in droves in 2013-14. The hedge funds bought a significant share of a US\$ 3.5 billion bond issued in March 2014, and struck a tentative agreement to back another debt sale as long as Puerto Rico overhauled and increased its sales tax regime. However, the bond was issued at yields above 8% – a borrowing cost that would be clearly unsustainable if applied to Puerto Rico's entire debt load.

The mounting financial pressures on the Commonwealth have also been evident in the difference, or "spread," between the yields on Puerto Rico's debt and those of major municipal issuers with credit standings perceived to be strong. This spread is an indicator of how markets perceive Puerto Rico's relative default risk. By the end of 2012, the spread was already among the widest of any U.S. state or territory. At the end of December 2014, the S&P Municipal Bond Puerto Rico Index's yield-to-worst stood at 7.6%, the highest among the 55 U.S. state and territory indices, and more than double the second highest.

## A. Summer of 2014: the Recovery Act and subsequent downgrades

On June 25, the “Puerto Rico Public Corporation Debt Enforcement and Recovery Act” (the “Recovery Act”) was proposed by the government and approved two days later by Puerto Rico’s legislature. Puerto Rico is statutorily barred from seeking protection under the United States Bankruptcy Code. In addition, Puerto Rico’s municipalities and instrumentalities cannot be debtors under chapter 9 of the Code. The legislation attempted to remedy this problem by creating a judicial debt-relief process modeled on chapters 9 and 11 of the U.S. Bankruptcy Code for certain public corporations. It aimed to ring-fence Puerto Rico from potential liabilities arising from defaults by its public corporations and to give the corporations a framework for restructuring their obligations (see box 1).

### Box 1 Puerto Rico Public Corporation Debt Enforcement Act (The Recovery Act)

The Act’s stated purpose was “to establish a debt enforcement, recovery, and restructuring regime for the public corporations and other instrumentalities of the Commonwealth of Puerto Rico during an economic emergency.”<sup>a</sup> The justification was that “there is no Commonwealth statute providing an orderly recovery regime for public corporations that may become insolvent,” and also because “the provisions of the federal laws applicable to corporations in state of insolvency are inapplicable to the Commonwealth’s public corporations.”<sup>b</sup>

Puerto Rico’s public corporations were given two ways to obtain debt forgiveness through the Recovery Act. “The first is a consensual debt modification procedure that would culminate in a recovery program (chapter 2 of this Act) and the second is a court-supervised procedure that would culminate in an orderly debt enforcement plan (chapter 3 of this Act). A public corporation can seek relief under either chapter 2 or chapter 3 at the same time or sequentially. This Act is designed in many respects to mirror certain key provisions of title 11 of the United States Code, and courts and stakeholders are encouraged to review and consider existing precedent under title 11 of the United States Code, where applicable, when interpreting and applying this Act.”<sup>c</sup>

In the first procedure, new terms could be negotiated if creditors representing at least 50% of the debt in a given class voted on the negotiated new terms, and if at least 75% of participating voters approved them. In this case, the new terms would be binding on all parties, upon court approval.<sup>d</sup>

The second alternative addressed “the debt problem of the Commonwealth’s public corporations through a judicial solution requiring the same consent required in, for example, chapters 9 and 11 of title 11 of the United States Code.” It would “enable each qualifying public corporation to defer debt repayment and to decrease interest and principal to the extent necessary to enable each entity to continue to fulfill its vital public functions.”<sup>e</sup> The law could be used to reject or modify collective-bargaining agreements, but pension and retiree health benefits would not be affected, and worker’s wages and related benefits would be honored.

Source: The Puerto Rico Public Corporation Debt Enforcement and Recovery Act (English version starts on p.74) [http://www.gdbpr.com/investors\\_resources/documents/ley-71-28-Jun-2014.pdf](http://www.gdbpr.com/investors_resources/documents/ley-71-28-Jun-2014.pdf)

<sup>a</sup> The Puerto Rico Public Corporation Debt Enforcement and Recovery Act, p.75.

<sup>b</sup> Ibid. p.80.

<sup>c</sup> Ibid. p.82.

<sup>d</sup> Ibid. p.84.

<sup>e</sup> Ibid. p.85.

The immediate market reaction to the passage of the Recovery Act was negative. Bond prices plunged, especially on bonds issued by state-owned companies. The average yield-to-maturity of the S&P Municipal Bond Puerto Rico Index jumped from less than 7% in the several weeks before the Recovery Act’s announcement to about 8.25% by early July 2014.

On June 26, 2014, Fitch downgraded the credit of the Puerto Rico Electric Power Authority (PREPA) nine notches, to CC from BB, with the agency noting that “bondholders now face a probable

financial restructuring or default by [PREPA] in light of newly proposed legislation in Puerto Rico.”<sup>24</sup> Fitch went on to downgrade other Puerto Rico bond categories in early July.

On June 27, 2014, Standard & Poor’s lowered its rating on PREPA bonds two notches, to BB from BBB-, to take account for “the risk to bondholders posed by the law passed by the Legislature of Puerto Rico.”<sup>25</sup> In the following two weeks, the agency went on to downgrade PREPA bonds four notches further, to B-; the obligations of the Puerto Rico Highways and Transportation Authority (PRHTA) four notches, to B from BB+; and the Commonwealth’s GO rating one notch, to BB from BB+. On July 31, PREPA bonds were downgraded a further two notches by S&P, to CCC from B-.

Moody’s also followed suit, announcing on July 1, 2014, that the Commonwealth of Puerto Rico’s rating was being cut three notches, to B2 from Ba2, and PREPA’s rating five notches, to Caa2 from Ba3, while PRHTA’s and the Puerto Rico Aqueduct and Sewer Authority (PRASA)’s were downgraded four notches, to Caa1 from Ba3. The reason for the downgrades, according to Moody’s, was that “by providing for defaults by certain issuers that the central government has long supported, Puerto Rico’s new law marks the end of the Commonwealth’s long history of taking actions needed to support its debt. It signals a depleted capacity for revenue increases and austerity measures, and a new preference for shifting fiscal pressures to creditors, which, in our view, has implication for all of Puerto Rico’s debt, including that of the central government.”<sup>26</sup>

## **B. 2015: further deterioration in credit quality**

On February 6, 2015, a federal district court judge struck down the “Recovery Act” as unconstitutional. More downgrades followed. On February 12, Standard & Poor’s downgraded the rating on Puerto Rico’s general obligation debt by three notches, citing the island’s declining revenue and the recent district court ruling. Moody’s followed with another downgrade on February 19. The judge’s decision and the rating downgrades hit demand for Puerto Rico’s debt and added to pressures on the broader municipal securities market, where U.S. states and municipalities raise capital.

At the end of April 2015, the island’s House of Representatives voted down a sales tax bill considered essential for an agreement with hedge funds to back future debt sales, deepening concerns over the Commonwealth’s creditworthiness. The bill intended to reform the value added tax (VAT) and help close a budget deficit that has led debts to spiral. The failure to pass the VAT bill triggered another rout in Puerto Rico’s bonds, with many analysts and investors fearing that a default and restructuring were becoming inevitable. On May 21, Moody’s downgraded Puerto Rico’s rating deeper into junk territory.

At the end of May 2015, however, Puerto Rico passed the tax bill. The VAT tax proposal of 16% evolved into an 11.5% proposal and is intended to provide more liquidity for Puerto Rico by an estimated US\$ 1.5 billion per fiscal year subject to final rate and exemptions.<sup>27</sup> The VAT tax increase raised investors’ optimism that a funding deal with some of Puerto Rico’s creditors to keep the government solvent for another year could be salvaged. The expectation was that another temporary financing deal with Puerto Rico’s hedge fund creditors or a banking consortium would give the government time to tackle its deeper economic and financial problems.

Those market hopes were dashed at the end of June, however, when Puerto Rico’s Governor announced that he needed to pull the island out of a “death spiral,” concluding that the Commonwealth could not pay its debts, an admission that had wide-reaching repercussions. The government also released a report it had commissioned, the “Krueger report,” which recommended consideration of a restructuring of the Commonwealth’s debt among other options.

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<sup>24</sup> Fitch Ratings (2014).

<sup>25</sup> Standard & Poor’s (2014c).

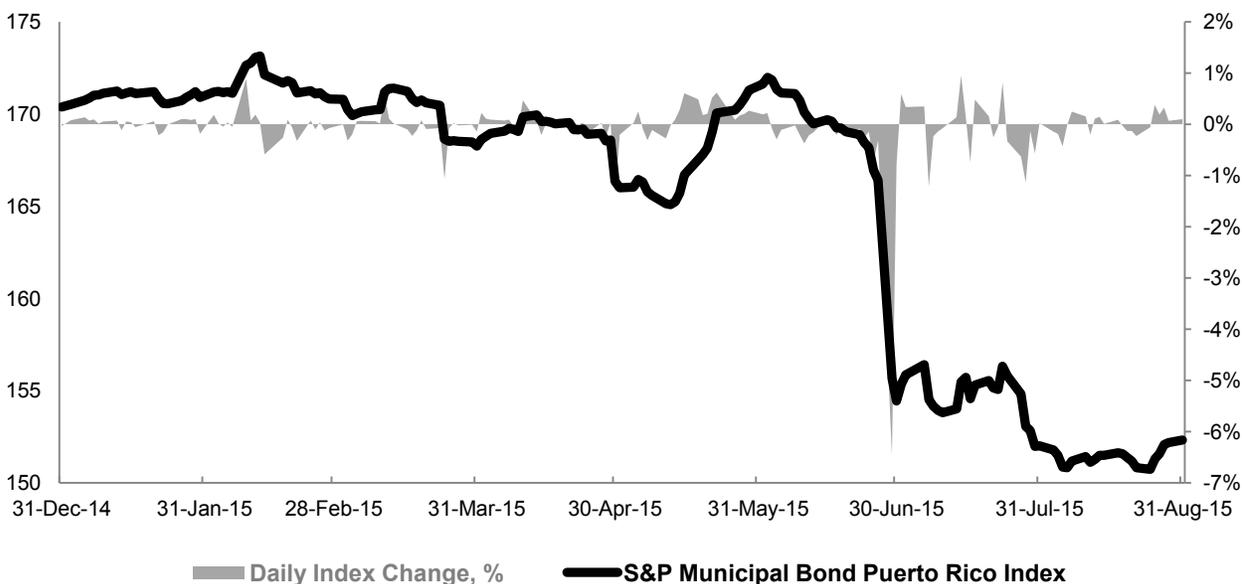
<sup>26</sup> Moody’s Investors Service (2014).

<sup>27</sup> See James E. Spiotto (2015).

On June 29, both Fitch and Standard & Poor’s downgraded Puerto Rico’s general obligation rating to CC and CCC-, respectively, with Fitch keeping the rating on Rating Watch Negative and S&P’s assigning it a negative outlook. Both agencies viewed that a default of some kind appeared probable, based on the governor’s public comments supporting a broad restructuring strategy. On July 1, Moody’s followed suit, downgrading Puerto Rico’s general obligation rating to Caa3 from Caa2, citing the governor’s declaration that the Commonwealth could not pay its debt, as well as “the suspension of a law requiring monthly general obligation debt service deposits and the decision to devise broad restructuring plans,” which it said were “clear signs that holders of even those securities with strong legal protections face significant loss.”<sup>28</sup>

Puerto Rico bond prices have largely declined on growing liquidity pressures and credit deterioration. The S&P Municipal Bond Puerto Rico Index is a broad, market value-weighted index that seeks to measure the performance of bonds issued within Puerto Rico. On June 29, the day Puerto Rico’s Governor called the island’s debt “unpayable,” the S&P Municipal Puerto Rico Index declined by an astounding 6.5%. From January to August 2015, the index declined by almost 11% (see figure 6).

**Figure 6**  
**S&P Municipal Bond Puerto Rico Index**  
(Index level and daily percentage change)



Source: S&P Dow Jones Indices, <http://us.spindices.com/indices/fixed-income/sp-municipal-bond-puerto-rico-index>.

<sup>28</sup> Moody’s, Rating Action: Moody’s downgrades Puerto Rico GOs and COFINA Sr Bonds to Caa3 from Caa2; outlook negative, 01 July 2015.



## IV. Fiscal conditions and debt situation

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Puerto Rico has faced significant fiscal pressures following years of weak economic performance and of public-sector deficits. The stagnation of the economy has been a major driver of the buildup in public-sector debt, which contributed to the increase in debt through both larger fiscal deficits and a slower rate of increase in GNP.

However, persistent deficits, according to the Krueger report, reflect institutional factors, not just the weak economy. The Commonwealth's budget has been based on overly optimistic revenue projections that have systematically exceeded actual collections by some US\$ 15 billion each year (15% of the original budget). With a lack of expenditure control, the stock of payables has been rising in recent years. Extensive tax credits and exemptions are granted to attract investment (to alleviate the problem of the island's high cost structure), with tax collections having lagged behind the growth in manufacturing income. And, according to the report, the standard measure of the fiscal balance in Puerto Rico, using General Fund accounts, greatly understates the true deficit and the challenges ahead.

Puerto Rico's persistent deficits and debt buildup also reflect some of the unique features of the fiscal institutions, policies and practices of the island. In particular, the public sector is usually defined as comprising not only the Commonwealth government itself (the central government), but also the municipal government and the public-sector corporations. Most prominent among these corporations, are the Puerto Rico Electric Power Authority (PREPA), the Puerto Rico Aqueduct and Sewer Authority (PRASA), the Puerto Rico Highway and Transportation Authority (PRHTA), and the Public Buildings Authority (PBA). Two additional important public-sector corporations are the Government Development Bank (GDB), which acts as fiscal agent, bank and financial advisor to the Commonwealth, and the Puerto Rico Sales Tax Financing Corporation (COFINA), which is a special-purpose entity set up for issuance of bonds to refinance certain debts.

Available operational data and projections indicate that the three big state enterprises (PREPA, PRASA and PRHTA) and the employee and teacher retirement funds are generally running overall deficits (see table 8). These flow deficits have worsened prospects for debt sustainability. Consolidating the central government, the three enterprises and the two retirement funds yields an overall deficit averaging 5% of GNP in FY2013-FY2014, according to Krueger's report. As nominal GNP growth is less than 1%, flow deficits of this magnitude imply rising debt ratios, and explain the growing concern in financial markets about the sustainability of public debt.

**Table 8**  
**Operational Data and Projections**  
*(Millions of dollars)*

	PREPA		PRASA		HTA	
	2014	Proj. 2015	2014	Proj. 2015	2014	Proj. 2015
Operating Revenue	4 660.5	4 124.0	1 045.5	1 105.6	826.9	918.9
Noninterest expenditure	4 211.7	3 563.0	985.5	951.6	438.7	639.3
Primary Balance	448.8	561.0	60.1	153.9	388.2	279.6
Interest expenditures	458.4	414.6	241.1	284.6	435.8	255.1
Financing Needs	298.5	764.0	258.4	234.4	380.8	80.7
<b>Deficit</b>	<b>9.6</b>	<b>-146.4</b>	<b>181.0</b>	<b>130.7</b>	<b>47.7</b>	<b>-24.5</b>
Amortization	288.9	910.4	77.4	103.7	33.1	105.2
Financing Sources	816.9	764.0	432.8	234.4	380.8	105.5
Payables	479.3	0.0	230.5	0.0	298.8	285.0
Changes in deposits and Investments	-337.4	342.3	-39.3	-560.6	-20.6	-204.3
Disbursements	675.0	0.0	241.5	795.0	102.7	0.0
Arrears on debt service	0.0	421.7	-	-	-	-
Debt Stock (includes arrears)	8 526.7	8 969.5	4 095.5	4 095.5	4 824.7	4 719.5
Deposits	1 465.9	1 123.6	462.9	1 023.5	769.4	973.7

	ERS		TRS	
	2014	Proj. 2015	2014	Proj. 2015
Contributions	893.1	925.0	-	383.4
Pensions & Admin Costs	1 537.0	1 629.0	-	671.8
Primary Balance	-643.9	-704.0	-	-188.4
Interest Expenditures	179.4	166.5	-	0.0
Financing need	823.2	870.5	-	188.4
<b>Deficit</b>	<b>823.2</b>	<b>870.5</b>	<b>-</b>	<b>188.4</b>
Amortization	0.0	0.0	-	0.0
Financing sources	854.2	872.5	-	188.4
Payables	0.0	0.0	-	0.0
Net assets movements	853.2	870.5	-	188.4
Disbursements	1.0	2.0	-	-
Debt stock	2 186.6	2 186.6	0.0	0.0
Assets	2 021.7	1 151.2	1 303.8	1 115.4

Source: Krueger, Teja, and Wolfe (2015), p.13. ERS: employee retirement system; TRS teacher retirement system.

The persistence of government fiscal deficits, together with years of weak economic performance, has led to the buildup in public-sector debt. For more than a decade the island has financed deficits in its general fund account through borrowing, and that practice has continued through the current downturn. The level of gross public debt expressed as a percentage of annual GNP rose from about 70% in 2006 to about 100% in 2014.<sup>29</sup> Total public debt in Puerto Rico is far higher than in any U.S. mainland state. Among the states, the highest ratio is New York's at 29%, according to data from the Federal Reserve Bank of New York. A comparison with other countries shows that Puerto Rico's debt levels are among the highest in a group of advanced and emerging-market economies.

Persistent debts also characterized the public-sector corporations. The public-sector corporations are particularly important for the role they have played in generating debt and for the scale of public services they provide to the population. Of the roughly 43% increase in the overall public sector debt-to-

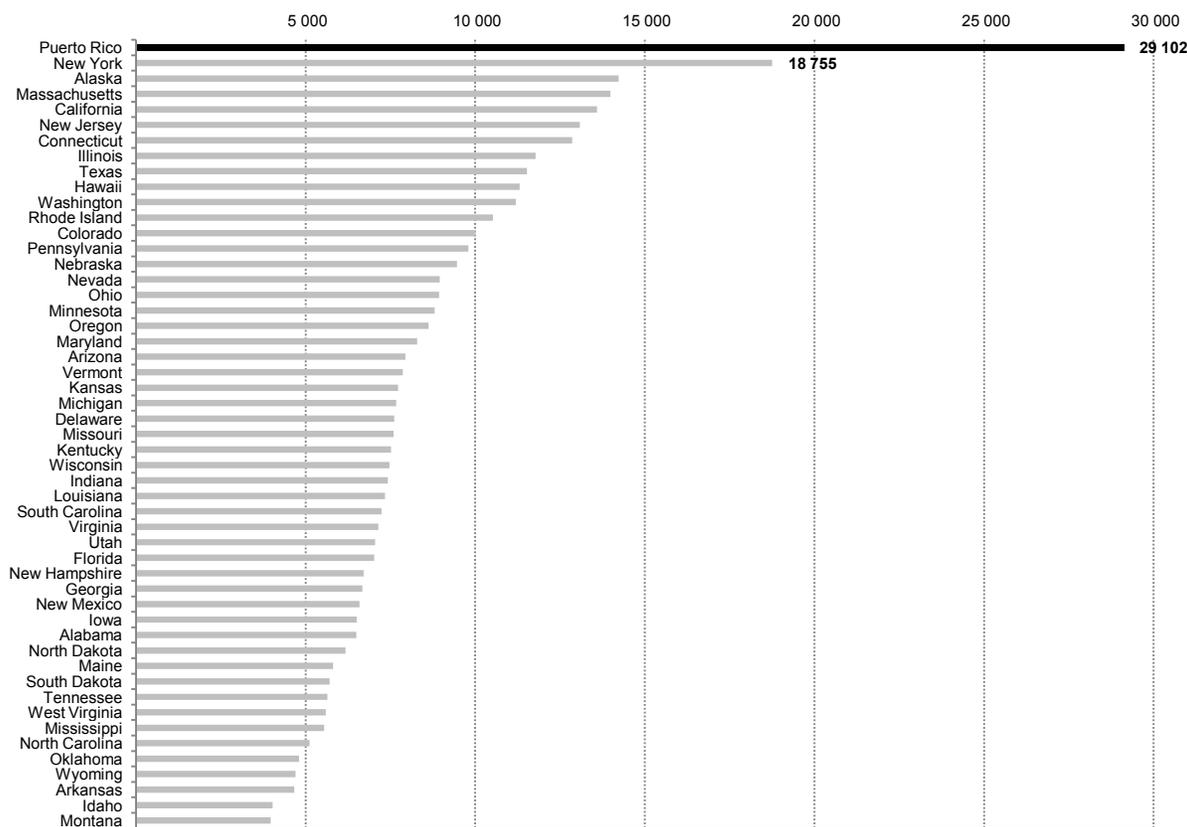
<sup>29</sup> See the 2014 Statistical Appendix of the Economic Report for the Governor and Legislative Assembly, tables 1 and 29; <http://www.gdb-pur.com/economy/statistical-appendix.html>

GNP ratio between 2000 and 2012, public-sector corporations accounted for almost 85%. Hence the corporations' financial standing can impair the central government's credit standing.<sup>30</sup>

The Commonwealth of Puerto Rico, its municipalities, instrumentalities and public corporations are important issuers of tax-exempt municipal bonds, which are sold by leading securities dealers in the U.S. capital markets. Tax-exempt public bonds of Puerto Rico (exempt from local, state and federal income taxes, regardless of where in the U.S. the investor lives) are available at attractive yields in many maturities. New bonds are frequently issued and are actively traded in the secondary market. Public bonds of Puerto Rico are mainly held by U.S. mainland investors, including individuals, bonds funds, insurance companies, commercial banks and others.<sup>31</sup>

The demand from investors has allowed the Commonwealth to borrow in order to finance deficits and provide some stimulus to the economy. With global markets flushed with liquidity and municipal bonds offering tax breaks for U.S. investors, money flooded into Puerto Rico in recent years, despite its economic woes. Puerto Rico has piled on more municipal bond debt per capita than any other state (see figure 7). That enabled the government to maintain a generous welfare state, and to delay facing inefficiencies in its governance structure. However, the current high level of debt has become a dominant feature of Puerto Rico's economy and the central focus of its fiscal and economic policy.

**Figure 7**  
Total municipal debt outstanding per capita  
(U.S. Dollars)



Source: SIFMA 2015:Q2; Census (population from July 2014).

<sup>30</sup> Federal Reserve Bank of New York (2014), p.9.

<sup>31</sup> Global Development Bank of Puerto Rico, [http://www.gdp-pur.com/investors\\_resources/introduction.html](http://www.gdp-pur.com/investors_resources/introduction.html).

Up until last year, there had been no instance of default in the timely payment of principal of, or interest on, any public held debt in the history of the Commonwealth of Puerto Rico, its public corporations and political subdivisions. On August 3, 2015, however, Puerto Rico's Public Finance Corporation (PFC), a small, single-purpose entity that has no power to levy taxes, failed to make a US\$ 58 million payment to bondholders, the first act of default since Puerto Rico came under jurisdiction of the United States 117 years ago. The PFC bonds lack a legal mechanism to enforce payment, since the bond's terms only oblige the PFC to pay what the legislature has appropriated.

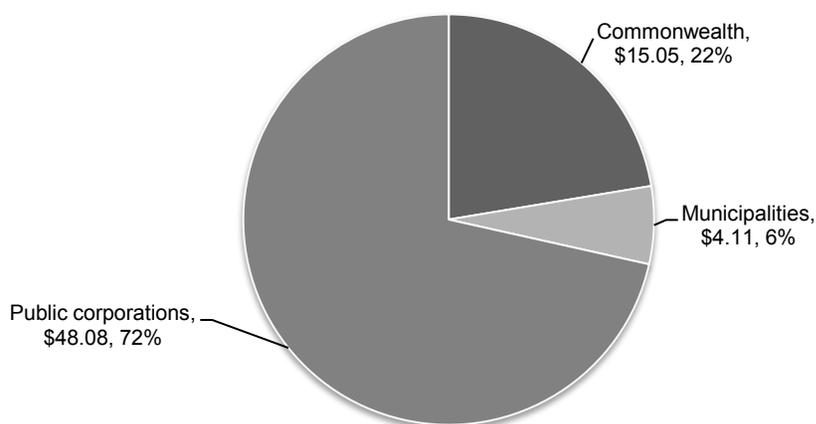
The decision to skip two payments on its PFC bonds – Puerto Rico also missed a September 1 payment, according to the Municipal Securities Rulemaking Board – raised the impression among investors that the Commonwealth was prioritizing some of its debt over others. The PFC's default has contributed to accelerate Puerto Rico's debt crisis, by making the possibility of a chaotic, piecemeal default among its many different agencies and types of bonds more palpable.

## A. Puerto Rico's complex capital structure

Puerto Rico's debts are a web of direct, guaranteed or implicitly-backed obligations, of different rankings and legal protections, in some cases with legally challengeable first claims on specific revenue streams. Puerto Rico has about 18 different debt issuing entities all with different legal protection and financial capabilities.

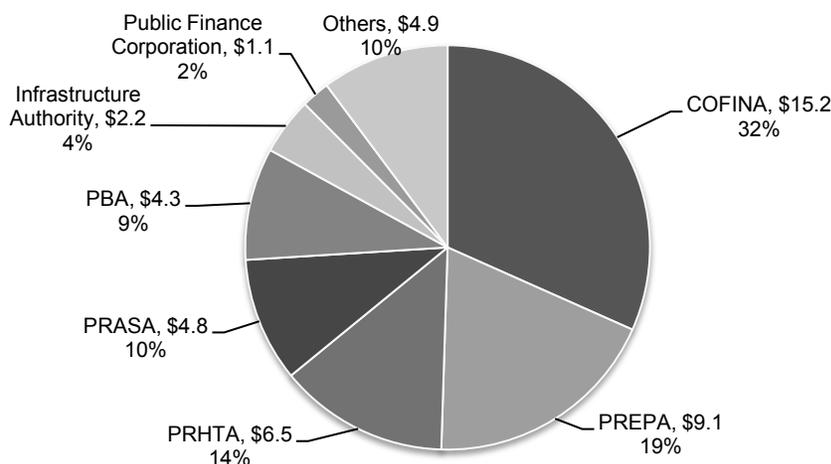
The state-owned companies, such as the utilities and transportation and infrastructure authorities, owe about US\$ 48 billion of the total (see figure 8). In between the riskier and the safer general obligation debt sits a mixture of liabilities including pension bonds, bonds issued by the University of Puerto Rico and a convention centre, and specific revenue-backed bonds, which total almost US\$ 30 billion. The biggest share is US\$ 15.2 billion of COFINA bonds backed by sales tax revenues (figure 9).

**Figure 8**  
**Puerto Rico: public-sector debt by major category as of 31 March 2015**  
*(Billions of dollars)*



Source: Government Development Bank, "Commonwealth of Puerto Rico Quarterly Report dated May 7, 2015", p. 63. The total debt does not include "Pension Funding Bonds" and "Other limited obligation debt and non-recourse debt," which are included in table 9.

**Figure 9**  
**Puerto Rico: outstanding debt of public corporations as of 31 March 2015**  
*(Billions of dollars)*



Source: Government Development Bank, "Commonwealth of Puerto Rico Quarterly Report dated May 7, 2015", p. 64. Others include: Puerto Rico's Infrastructure Financing Authority, University of Puerto Rico, Convention Center District Authority, Ports Authority, Housing Finance Authority, Industrial Development Company, and Port of the Americas Authority.

In early September 2015, the Puerto Rico Electric Power Authority (PREPA) announced that it had reached an agreement with the Ad Hoc Group of PREPA bondholders on the economic terms of a restructuring of their PREPA power revenue bonds. The Ad Hoc Group – comprised of traditional municipal bond investors and hedge funds – holds approximately 35% of PREPA's outstanding bonds. The agreement covers only the uninsured part of the debt, with the insurers expected to negotiate separate terms for their debt at a later date. The deal, after months of talks between the parties, could pave the way for similar agreements between investors and Puerto Rico's other public agencies.

Each side made concessions. Bondholders took a loss of 15% on their holdings – bondholders are slated to receive 85% of the face value of their bonds in exchange for new securities that will be designed to carry investment-grade rating – while PREPA in turn gets to receive interest rate relief and a five-year payment moratorium. Bonds from PREPA are currently rated junk. According to the restructuring plan, bondholders will have the option to receive two types of securities in exchange of their existing bonds, with one sold at 85% face value and carrying interest rates as high as 4.75% (Option A Bonds) and the other as high as 5.5%, but that will pay no principal for the first five years, to help PREPA conserve cash (Option B Bonds).<sup>32</sup> The restructuring agreement is still contingent on several factors, including obtaining legislative authority for certain aspects of the agreement, underscoring the complexity of the challenges Puerto Rico faces in reducing its debt.

After the public corporations are removed, the composition of the Commonwealth's spending is broadly similar to that of the states. There are US\$ 13 billion general obligation and US\$ 5.5 billion Puerto Rico government-guaranteed bonds (see table 9).

Puerto Rico's constitution stipulates that general obligation bonds should be serviced ahead of all other liabilities, including pay and pensions. However, on August 1, 2015, the government failed, for the first time ever, to make its regular monthly deposit into the General Obligation (GO) Redemption Fund,

<sup>32</sup> Option A Bonds will pay cash interest at a rate of 4.0% - 4.75% (depending on the rating obtained) and Option B Bonds, which are convertible capital appreciation securitization bonds, will accrete interest at a rate of 4.5% - 5.5% for the first five years and pay current interest in cash thereafter. Option A Bonds will pay interest only for the first five years, and Option B Bonds will accrete interest but not receive any cash interest during the first five years.

a move that markets perceived as opening the possibility of a default in the central government's constitutionally guaranteed bonds. In addition, a proposed plan by a Working Group established by the government has suggested a combination of structural reforms and broad debt restructuring to reduce Puerto Rico's projected financing gaps that would certainly include the GO bonds.<sup>33</sup> No state in the U.S. has ever restructured its general obligation debt.

**Table 9**  
**Public-sector debt of the Commonwealth of Puerto Rico**  
(Millions of dollars)

	31 June 2015
Good faith and credit bonds and notes issued by the Commonwealth	13 061
Bonds and notes guaranteed by the Commonwealth's good faith and credit	5 547
<b>Subtotal– good faith and credit bonds and notes</b>	<b>18 608</b>
Debt supported by Commonwealth appropriations or taxes	4 047
Tax and Revenue Anticipation Notes (TRANS)	300
<b>Subtotal – debt payable from general fund</b>	<b>22 955</b>
Bonds and notes payable from asles and use tax revenue (COFINA)	15 224
Debt issued by the Commonwealth and its instrumentalities	23 877
Debt issued by municipalities	4 126
Pension Fund Bonds (payable from employer contributions to ERS)	2 948
Other limited obligation debt and non-recourse debt	1 987
<b>Subtotal – other public sector debt</b>	<b>48 162</b>
<b>PUERTO RICO'S TOTAL PUBLIC DEBT</b>	<b>71 117</b>

Source: Working Group for the Fiscal and Economic Recovery of Puerto Rico, "Puerto Rico Fiscal and Economic Growth Plan," September 9, 2015, p.75. Totals may not add due to rounding. ERS: Employee Retirement System.

## B. Puerto Rico's Fiscal and Economic Growth Plan

On September 9, 2015, Puerto Rico released its Fiscal and Economic Growth Plan (FEGP), prepared by the Working Group for the Fiscal and Economic Recovery of Puerto Rico created by Executive Order 2015-022. According to the government, it is "a comprehensive set of economic growth and reform measures aimed at achieving long-term fiscal stability and growth for the Commonwealth and its residents. It calls for serious discussions around debt restructuring and urges stakeholders to act in collaboration with the Commonwealth." The plan reconfirmed the findings of the Krueger report, concluding that reforms in conjunction with restructuring of the Commonwealth's liabilities are essential to restoring Puerto Rico's economic growth.

The plan notes that Puerto Rico has already taken "extraordinary measures" such as delaying residents' income tax refunds and liquidating the assets of three social-insurance funds, which helped it to preserve some of its liquidity but have not been enough to reduce total debt. The plan shows that Puerto Rico faces a US\$ 27.8 billion financing gap over the next five years. Moreover, the Puerto Rico Treasury's single cash account and the Government Development Bank for Puerto Rico are each expected to exhaust their liquidity before the end of calendar year 2015. In face of these challenges, the Working Group proposes a plan consisting of a number of actions that can be grouped into three different areas: a combination of revenue increase and expenditure reduction measures and structural reforms, compromise with creditors towards an orderly restructuring of Puerto Rico's debt, and help form the federal government.

<sup>33</sup> See "Puerto Rico Fiscal and Economic Growth Plan," prepared by the Working Group for the Fiscal and Economic Recovery of Puerto Rico, September 9, 2015.

The FEGP proposes adjusting taxes to increase revenues, reducing government spending, reducing costs and improving ease of doing business, privatizing government assets, investing in strategic infrastructure, revamping welfare, consolidating public schools, reorganizing the Department of Economic Development and creating a fiscal oversight board to ensure such changes are implemented. The five member board, which would be created in consultation with a third party put forth by creditors, would have the power to impose measures drafted by the Working Group, and would have an independent staff and budget. Such boards have been used in many parts of the United States to improve the governance of distressed cities, counties and school districts; they can sometimes impose unpopular fiscal measures that elected officials cannot.

After the implementation of these measures, which is subject to significant political and execution risks, the Working Group projections suggest that Puerto Rico cannot meet all of its debt service requirements as currently scheduled, thus it will still fall short of securing the amount it needs to pay bondholders in the next five years. After accounting for the estimated impact of all measures and including the benefit of potential economic growth spurred by structural reforms, the Working Group still projects a cumulative financing gap of US\$ 14 billion from 2016 to 2020 that would need to be at least partially addressed through restructuring Puerto Rico's US\$ 71 billion debt load. "Therefore, a consensual compromise between creditors and the Commonwealth will be required in order to avoid a disorderly default on the Commonwealth debt and a legal morass that will further destabilize the economy and public finances," it concludes.<sup>34</sup>

A Puerto Rico restructuring would be the largest in the municipal-bond market, surpassing Detroit's record bankruptcy filing in July 2013. Along with about US\$ 71 billion of debt, Puerto Rico's pension fund is the worst-funded among U.S. state retirement plans and it stands to deplete its assets by 2020, according to Moody's Investors Service.

The plan includes important measures to adjust Puerto Rico's budget and policies, but some market analysts argue it lacks important details for investors, such as the engines of economic growth, the powers of the control board, or how the island will treat its constitutionally protected general obligation bonds versus its sales-tax debt.

A report commissioned by a group of the island's bondholders and released in late July had argued that Puerto Rico's debt is sustainable in the medium-term and that a broad restructuring of the debt is "not substantiated." It suggested that budget cuts, tax increases and short-term borrowing would be sufficient for the Commonwealth to avert a default.<sup>35</sup>

The plan requires either concessions negotiated from creditors or legislation to be enacted at the local or the federal level, suggesting a long and difficult road ahead. At present, the prospect of achieving some of these goals seems complicated. At the federal level, the plan seeks help from the U.S. Congress, asking it to allow some Puerto Rico government entities to access bankruptcy protections. The Working Group believes Puerto Rico must have an orderly process to restructure its liabilities. The plan also requests Congress to grant a 10-year waiver from future minimum wage increases for workers aged 25 and younger, to promote the hiring of young workers, exemption from Jones Act application to reduce transportation costs and increase competitiveness, equitable Medicare and Medicaid treatment and funding from U.S. Government, to help control the island's health care costs,<sup>36</sup> as well as a tax treatment that encourages U.S. investment on the island.<sup>37</sup>

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<sup>34</sup> Working Group for the Fiscal and Economic Recovery of Puerto Rico (2015), p.6

<sup>35</sup> See Jose Fajgenbaum, Jorge Guzman, Claudio Loser (2015).

<sup>36</sup> There is a vast disparity in federal funding for health care on the island compared with the 50 states. This disparity is partly responsible for US\$ 25 billion of Puerto Rico's more than US\$ 70 billion debt, according to some estimates, as its government was forced to borrow over time to keep the Medicaid program afloat.

<sup>37</sup> This includes amending the U.S. Internal Revenue Code to add new section 933A to permit U.S.-owned business in Puerto Rico to elect to be treated as U.S. domestic corporations, and enacting an economic activity tax credit for U.S. investment in Puerto Rico designed as a targeted, cost-efficient version of former section 936.



## V. Looking ahead

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A major difference between Puerto Rico's balance sheet and those of the states is the presence of large, heavily indebted corporate-like entities. These entities benefitted from access to the U.S. municipal bond market, but are now making Puerto Rico's access to this market more difficult. Puerto Rico's public corporations' heavy debt load needs to be confronted for any financial reform agenda to be successful. The recent restructuring of the electric power authority's debt provide some room to believe that a consensual compromise with creditors could be reached.

Key elements to any agreement should include strengthening their financial standing and increasing the efficiency of their operations. According to the Federal Reserve Bank of New York, future financial discipline could be enhanced through reform of public-sector corporations' governance and ownership structures, including "selective privatization, setting targets for profitability and payments of dividends to the central government, strictly limiting and/or putting on a fully market basis Government Development Bank lending to the public-sector corporations, and transparently budgeting for any remaining subsidies from the central government to these corporations within a reformed budget process."<sup>38</sup> The New York Fed also recommends the use of an independent regulator, which has become the norm for utilities throughout the United States.

Puerto Rico's unique status means that finances are not regularly surveyed by a public agency. Improving financial reporting and transparency could facilitate access to financial markets and the implementation of steps toward fiscal sustainability.

Tax reform would also contribute to resolve some of the island's fiscal issues. Puerto Rico's tax system tends to levy high rates on narrow bases, which increases incentives to shield activities from taxes, by moving them to the informal sector. Breaking the cycle requires broadening the tax base and simultaneously reducing rates across a range of taxes. A tax reform was passed by Puerto Rico's legislature at the end of May 2015, which will shift the weight of taxation from income to consumption. The centerpiece of the reform is an 11.5% valued added tax (VAT) that replaces the existing sales and use tax, and a substantial cut in income tax rates for individuals and businesses.

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<sup>38</sup> Federal Reserve Bank of New York (2014), p.25-26.

Important steps have been taken recently to improve the island's fiscal position, including a pension reform. The government has also announced a balanced budget for 2014/15, including US\$ 1.4 billion cuts in public spending. However, besides short-term actions to solve its immediate problems, Puerto Rico needs a new longer-term strategy for its fiscal and economic future. It is very important to revive efforts to raise economic growth and make the economic environment more supportive of growth, development, and innovation. The Fiscal and Economic Growth Plan (FEPG) released by the Working Group for the Fiscal and Economic Recovery of Puerto Rico in early-September is an attempt to do just that, although there has been some concern that the plan appears to be tilted toward austerity rather than growth.

Policy recommendations for Puerto Rico include strengthening the labor market by reducing barriers to job creation and labor force participation, creating a more business-friendly environment and using the island's strengths – a bilingual and well-educated adult population, an open economy occupying a central position in the Caribbean, wide experience as host to multinational corporations and close ties to the United States mainland economy – in order to restore growth and raise living standards. Expanding support for partnerships between higher education and industry should also be considered as a way to promote innovation, entrepreneurship, and economic growth, as well as attracting private investment for infrastructure upgrades and other projects to stimulate growth.<sup>39</sup>

Most importantly, the experiences of U.S. mainland cities show that problems are best addressed when the government and private sector work together to find solutions. In the case of Detroit, for example, politicians, officials and business leaders are working together in an unusually collaborative manner.<sup>40</sup>

Although bankruptcy is not currently an option in Puerto Rico's case, an open and transparent discussion of the island's challenges, and a public-private coalition, with all relevant stakeholders working on a collaborative manner, would certainly be important steps forward. The FEPG may be a step in this direction. It has called for creditors to participate in a voluntary debt exchange, although at this stage there are few details on which parts of the US\$ 71 billion stock of debt will be affected and on the potential terms of a restructuring.

What Puerto Rican debts may have to be restructured is not an easy calculus. High levels of indebtedness have led to financial fragility and lower levels of investment and growth. In this context, the government's ability to provide public goods and services may be impaired as it runs out of fiscal space and struggles to pay back its creditors. That's why it is important that the path chosen by Puerto Rico's government, business leaders, bondholders and the federal government be one of collaborative work towards not only a solution to the island's debt problems, but also towards a long-term strategy that allows the Commonwealth the ability to grow and to confront obstacles to its economic and social development.

A development strategy that builds on Puerto Rico's strengths and addresses its lack of economic competitiveness and low productivity is vital to address the challenges posed by the lack of employment opportunities. Achieving sustained economic growth is essential to maintaining debt sustainability and to create the fiscal space needed to confront poverty, inequality and informality.

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<sup>39</sup> Recently, a new law to streamline the evaluation and approval process for small and medium scale projects was enacted, so some projects should go ahead. Efforts will focus on key economic sectors, particularly high-technology industries such as pharmaceuticals, biotechnology and aerospace, but also tourism, including medical tourism. See Economist Intelligence Unit (2015).

<sup>40</sup> Detroit's challenge is huge: its population has halved since 1950, its local manufacturing base has shrunk and, in 2013, the city declared bankruptcy, the largest in the U.S. public sector history. Since then, the Detroit government has implemented an US\$ 18 billion restructuring plan with its creditors – a remarkable achievement since bondholders, unions and city pensioners were in deep disagreement. The issue of transparency has also been emphasized: problems have been described as honestly as possible to voters as well as to political and business leaders. See Gillian Tett (2015).

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