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Life After Debt in Puerto Rico: How Many More Lost Decades?

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Executive Summary

As Puerto Rico enters the legal debt restructuring process, this paper examines the future prospects for an economy that has had no growth over the last ten years — a lost decade. The facts indicate that the fiscal plan approved by Puerto Rico's Financial Oversight Board will not lead to an economic recovery in the foreseeable future and that another lost decade, or worse, is a much more likely outcome. Nor will the proposed restructuring satisfy creditors, who may then further impede economic recovery by taking legal action in an attempt to collect the full value of the bonds they hold. The paper also notes the recent historical and structural causes of the economy's decline, which led to the debt crisis; and that these, too, will need to be addressed if Puerto Rico is ever to have a sustainable recovery.

According to International Monetary Fund (IMF) data, the growth of Puerto Rico's real gross domestic product (GDP) declined precipitously in the 2000s from its average for the 1980s (3.2 percent) and 1990s (3.8 percent). It went negative in 2005, remaining negative each year to today (with the exception of one year of nearly zero growth).

The paper presents data showing that Puerto Rico's economic decline was one that many countries and regions suffered as the rules of global commerce were rewritten in ways that made their economies less competitive. This is indicated by the data on GDP growth, investment, manufacturing employment, and the outsized role of manufacturing — mostly of pharmaceuticals — in the economy. This was exacerbated by Puerto Rico's hybrid and dysfunctional political status, with limited policy space to respond to changes that were decided by the US government or negotiated in international treaties.

Instead, Puerto Rico faced harmful restrictions on its commerce while not eligible for the full benefits of federal aid that US states receive. For example, its federal payments for Medicaid and Medicare are at a lower percentage than for most US states, especially poorer states that still have higher per capita income levels than Puerto Rico — and unlike in US states, these payments are capped. These limited payments alone, as compared to those for US states, account for billions of dollars of Puerto Rico's debt.

For all of these reasons and more, there is a substantial case for federal aid to Puerto Rico, as well as sufficient debt cancellation, to allow for a speedy economic recovery.

The lost decade of economic growth, together with government austerity policies, and a decline in investment has produced a profound employment crisis on the island. In 2016, only 42.5 percent of people over the age of 15 were part of the labor force, down from 47.5 in 2007. In contrast, labor force participation in the US is consistently over 60 percent, even during economic downturns. Although Puerto Rico's unemployment has declined substantially from its 2010 peak of 16.4 percent (following the Great Recession), in 2016 it was still more than twice the US level, at 11.8 percent.

Puerto Rico also has an alarmingly high poverty rate, with over 46 percent of the population living under the US federal poverty line. For children, the poverty rate is even higher, at 58 percent — nearly three times the rate for the US overall.

Responding to the lack of economic opportunity and declining living standards, a significant portion of the population has left the island, a trend that has accelerated in the last three years. Between 2007 and 2016, the population fell from 3.8 million to 3.4 million, a 9.8 percent drop that has pushed Puerto Rico into a downward spiral of further economic contraction.

Throughout Puerto Rico's lost decade, the government ran large budget deficits that were financed by borrowing. Bonds were one of the few tools that the government could use to maintain living standards on the island. Puerto Rico's bonds were attractive, too: due to its special political status, bonds were triple tax-exempt (from local, state, and federal taxation), and Puerto Rico guaranteed payment of general obligation debt before any other expense in its constitution.

Saddled with an unsustainable debt burden, Puerto Rico's public institutions were unable to access the same bankruptcy proceedings as US municipalities due to its special political status. In June 2016, the US Congress passed the Puerto Rico Oversight, Management and Stability Act (PROMESA), which created the Financial Oversight and Management Board of Puerto Rico (the Board). The Board oversees the island's budget and most important policy decisions.

In March 2017, the Board certified Puerto Rico's ten-year fiscal plan. The plan would commit Puerto Rico to ten more years of austerity and a deepening recession in the short run while doing little to free up resources to satisfy creditors' demands. In addition to the continued austerity, a closer look at the fiscal plan reveals that it is based on unrealistic economic assumptions and ignores the long-term problems of the Puerto Rican economy.

The plan provides the same growth projections in the baseline scenario (without austerity measures) as it does after the proposed spending cuts, with no assessment of what impact those measures may have on growth. Under the current proposed fiscal plan, Puerto Rico is projected to continue negative growth until 2024, which would result in nearly two lost decades. Such prolonged periods of depression are extremely rare in the past century, and Puerto Rico is on a path to possibly set a new record. Previous protracted failures have almost always been the result of a set of repeat policy errors that are imposed by external control or coercion. But taking into account the proposed fiscal austerity, the negative growth is likely to persist for years longer than that.

As Puerto Rico's debt crisis became apparent, large institutional investors sold their holdings at a steep discount to hedge funds, which now hold a significant share of the debt stock. Although the Board approved the government's fiscal plan, creditors have rejected it and demanded the Board "certify a fiscal plan with more frothy and optimistic assumptions." That is, the creditors demanded a plan with economic forecasts of better — perhaps even more unrealistic — economic outcomes in order to allocate more money for debt service over the ten-year period.

Despite mediation, the parties could not come to an agreement, and on May 1, 2017, a bankruptcy-like process created under PROMESA was initiated. Though the final outcome is unknown, it is unlikely that the court could address many of the underlying and historical causes of the crisis, as it does not have the ability to do so.

The current legal proceedings offer little more hope than the Board-approved fiscal plan while introducing further problems such as the threat of privatization of public assets. Both the Board and legal proceedings have failed to adequately address the underlying causes and consequences of Puerto Rico's debt crisis, some of which are unique to the island due to its special political status.

If Puerto Rico is going to have a chance to avoid a continued deterioration of living standards and loss of population, either the policies imposed from outside will have to change, or Puerto Rico will have to change its political status.

Puerto Rico's Economic Decline Since the 1990s

For decades, Puerto Rico's economy has been heavily dependent on manufacturing. The exact percentage of GDP (or GNP)[1] that is attributable to manufacturing is difficult to determine because of the lack of quality data,[2] but it has been quite large; in official government data, it averaged about 38 percent of GDP in the 1990s.[3] For comparison, the average in Latin America and the Caribbean is about 19.5 percent.[4]

Manufacturing has also made up the vast majority of its exports — over 99 percent in the 1990s. As can be seen in **Table 1**, the largest component of manufacturing has been pharmaceuticals. For example, from 1991 to 1999, pharmaceuticals represented 38 percent of manufacturing exports. Most of the rest was machinery (21.3 percent), food (13 percent), other chemicals (9 percent), and professional and scientific instruments (7 percent).

TABLE 1

Share of Manufacturing Exports

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Drugs and Pharmaceuticals	35.7	34.8	32.7	37.0	37.5	32.9	34.9	44.3	50.3
Machinery	22.3	21.3	19.8	19.5	21.4	23.9	23.9	21.4	18.5
Food	12.5	14.4	15.3	13.5	12.0	14.5	14.2	12.2	12.2
Other Chemicals	9.2	9.2	10.7	10.1	9.7	10.5	9.6	8.5	6.4
Professional and scientific instruments	6.9	8.2	8.2	7.8	7.0	7.1	6.8	5.6	6.0
Other	9.5	8.3	8.8	8.2	8.6	7.4	7.1	5.2	4.5
Apparel and textiles	3.8	4.0	4.5	3.9	3.8	3.6	3.4	2.7	2.1

Source: Government Development Bank for Puerto Rico (2016).

As can be seen in **Figure 1**, the economy went into decline after 2001. According to IMF data, growth of real GDP declined precipitously from its average for the 1980s (3.2 percent) and 1990s (3.8 percent), and went negative in 2005, remaining negative each year to today (with the exception of one year of nearly zero growth). Investment peaked at 20.7 percent of GDP in 1999 and fell to just 8.25 percent in 2016, according to government data.

1 Puerto Rico has one of the largest differences in the world between GDP and GNP. This is due to the foreign ownership of most manufacturing, especially pharmaceuticals; and some of it (as in Ireland: see Kennedy 2016, for example.) is likely due to foreign ownership of patents, and to transfer pricing. See MacEwan (2016).

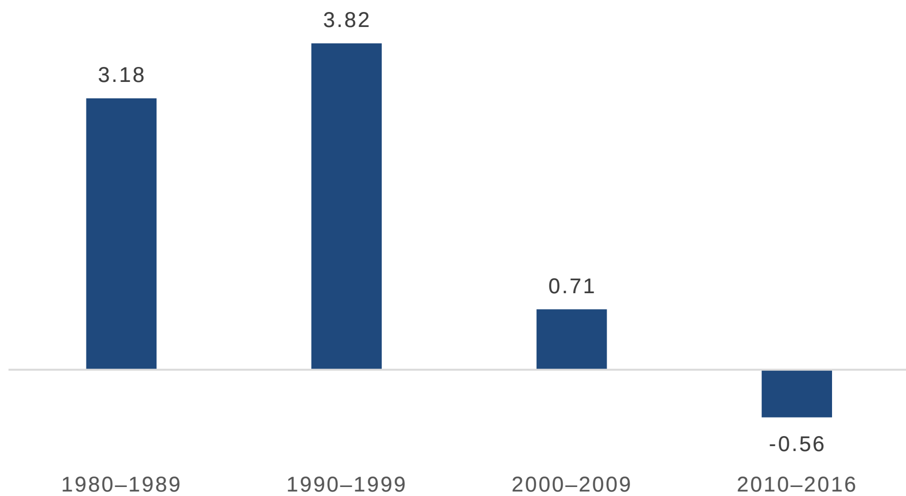
2 See MacEwan and Hexner (2016) for some of the problems with available data from Puerto Rico's statistical and financial institutions. For example, the only measures of real GNP from the Puerto Rican government are in 1954 dollars. This is inadequate for measuring real GNP growth in recent decades. In what follows we use data that appear to be reliable, or at least approximate, for the comparisons made.

3 Government Development Bank for Puerto Rico (2016).

4 World Bank (2016).

FIGURE 1

Average Yearly Real GDP Growth



Source: International Monetary Fund (2017).

The reasons for Puerto Rico's long-term decline — which led to the current debt crisis — are common to many countries and localities that faced some of the upheavals of "globalization" in the 1990s. By globalization, we refer not primarily to changes in technology or communications but to the rewriting of the rules of global commerce. Since the 1990s, the Puerto Rican economy has been subject to some negative shocks that resulted from decisions made in Washington, DC and that were out of its control. Among these were, in chronological order: the North American Free Trade Agreement (NAFTA, which went into effect in 1994); the formation of the World Trade Organization (WTO, in 1995), in which the United States government agreed to rules that would allow for more imports of pharmaceutical drugs from outside of the US and its territories; the admission of China to the WTO in 2001, which made it more profitable for pharmaceutical companies to have manufacturing facilities in China; and the repeal of Section 936 of the US Internal Revenue Service Tax Code, which had given special tax breaks to US corporations producing in Puerto Rico.

All of these changes affected the competitiveness of Puerto Rico's manufacturing sector. It is difficult to evaluate the impact of each of them on Puerto Rico's economic decline in the twenty-first century. For example, MacEwan (2016) has provided evidence that the repeal of Section 936 has had much less impact than commonly believed. Section 936 had exempted US corporations from paying income tax in the US on their profits in Puerto Rico. This repeal was phased in from 1996 to 2006.

Nonetheless, there was a huge decline in manufacturing employment, from its peak of about 159,000 (about 15–16 percent of the employed labor force) in 1990 and 1995 to 74,000 in 2016 (about 7 percent of the employed labor force).

It, therefore, seems clear from the data that Puerto Rico's economic decline since the 1990s was one that many countries and regions suffered as the rules of global commerce were rewritten in ways that made their economies less competitive. This is indicated by the data on GDP growth, investment, manufacturing employment, and the outsized role of manufacturing — mostly of pharmaceuticals — in the economy.

This, in turn, was the primary cause of Puerto Rico's debt crisis, as the economy shrank and the government sought to maintain its services as revenues fell. There was also mismanagement and corruption,[5] but the primary cause was economic decline, in combination with Puerto Rico's hybrid and dysfunctional political status. If Puerto Rico were an independent country, it could have potentially had more policy space to respond to changes decided in the United States or negotiated in international treaties. (This would include, for example, monetary and exchange rate policies.) Instead, Puerto Rico faced harmful restrictions on its commerce (as explained above), while not being eligible for the full benefits of federal aid that US states receive. For example, its federal payments for Medicaid and Medicare are at a lower percentage than most US states, especially poorer states that still have higher per capita income levels than Puerto Rico; and unlike in US states, these payments are capped.

For all of these reasons and more, there is a substantial case for federal aid to Puerto Rico, as well as sufficient debt cancellation, to allow for a speedy economic recovery.

Puerto Rico's Lost Decade

Since 2005, the economy of Puerto Rico has been shrinking by an average real (inflation-adjusted) annual rate of 1 percent. **Figure 2** shows that throughout this time period there has only been one year, 2012, when the Puerto Rican economy experienced non-negative real growth — although it was hardly different from zero, at just 0.03 percent. The IMF projects that this year the economy will be 13 percent smaller than it was in 2005.

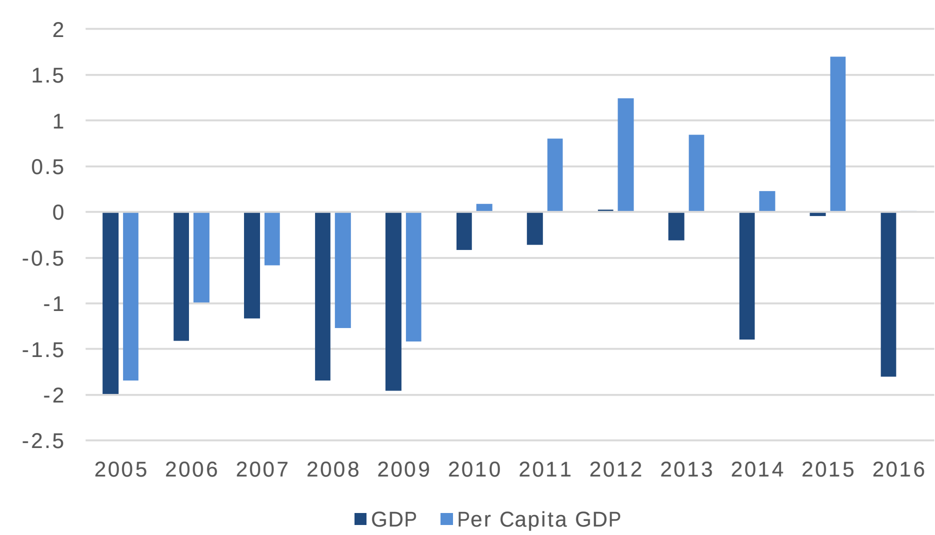
Measured in real, per-capita terms, Puerto Rico has had virtually no increase in GDP since 2005: just 0.6 percent over the entire 11 years (2005–2016). The fact that per capita GDP growth was positive

5 Pantojas-García (2016).

at all is the result of an unprecedented wave of out-migration in recent years. As can be seen in Figure 2, after falling from 2005 to 2009, real per capita GDP began to grow in 2010 when the pace of out-migration began to accelerate.

FIGURE 2

Real Growth Rate of GDP, and Per Capita GDP



Source: International Monetary Fund (2017).

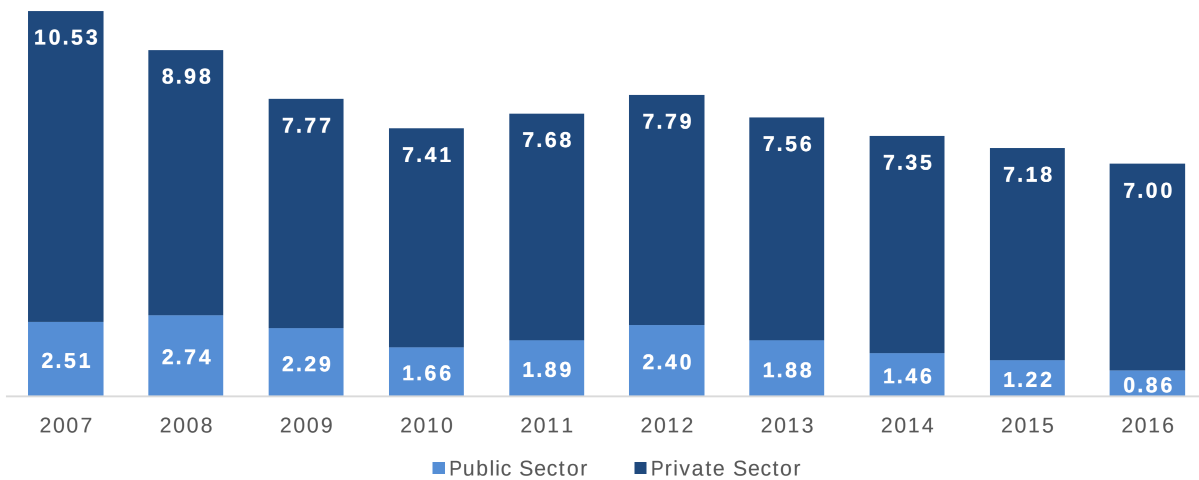
In 2009, Puerto Rico began implementing austerity policies. While accurate data on government spending is not available, government consumption, as a percent of nominal GDP, dropped from 9.4 percent in 2009 to 7.0 percent in 2015.[6]

Figure 3 shows the decline in investment, which reached a high of 20.7 percent of GDP in 1999, over the last decade. In 2016, fixed capital investment in Puerto Rico was less than 7.9 percent of GDP, a decrease of almost 40 percent from 2007. The vast majority of investment comes from the private sector, and it fell by 33 percent. But public sector investment fell even more, by 66 percent to just 0.9 percent of GDP in 2016.

6 Government Development Bank for Puerto Rico (2016).

FIGURE 3

Fixed Capital Investment as a Percent of GDP



Source: Government Development Bank for Puerto Rico (2016).

The lost decade of economic growth, together with government austerity policies and a decline in investment, has produced a profound employment crisis on the island. **Table 2** provides an overview of Puerto Rico's labor market. In 2016, only 42.5 percent of people over the age of 15 were part of the labor force, down from 47.5 percent in 2007. In contrast, the labor force participation rate in the US is consistently over 60 percent, even during economic downturns.

Although it has declined substantially from its 2010 peak of 16.4 percent (following the Great Recession), the unemployment rate was still more than twice the US level, at 11.8 percent in 2016. The decline in the labor force participation rate noted above, and its failure to recover after the Great Recession, also shows the continued weakness of the labor market. Overall, the number of employed persons has decreased by 19.7 percent over the last decade.

TABLE 2

Puerto Rico's Labor Market, Select Indicators

	Labor Force Participation Rate	Unemployment Rate	Employed People	Government Employees	People age 15+ not in labor force
2007	47.53	11.17	1,232,118	298,308	2,917,632
2008	46.40	11.78	1,186,279	299,375	2,897,613
2009	46.62	15.38	1,102,068	288,408	2,793,358
2010	43.85	16.38	1,060,816	268,133	2,892,415
2011	42.72	15.98	1,025,616	259,250	2,857,377
2012	42.44	14.45	1,022,050	259,092	2,814,798
2013	42.32	14.23	1,000,031	244,608	2,754,871
2014	42.31	13.87	977,201	234,342	2,681,248
2015	42.37	12.09	986,068	231,175	2,646,926
2016	42.46	11.79	989,512	227,025	2,641,666

Source: World Bank (2017) and Bureau of Labor Statistics (2017).

In 2007, government employees made up just under 25 percent of total employees. Following years of austerity, however, more than 70,000 have lost their jobs; in 2016, the public sector comprised about 20 percent of employment. Further cuts in government spending — which appear likely — will add to the unemployed.

Further austerity measures will likely exacerbate the already precarious living conditions faced by Puerto Ricans. The yearly median household income in Puerto Rico is just $19,000, compared to a US average of $53,900. Yet, for metropolitan areas, the overall cost of living is estimated to be about 8 percent higher in San Juan than the US average. [7] Puerto Rico has an alarmingly high poverty rate, with over 46 percent of the population living under the US federal poverty line. For children, the poverty rate is even higher, at 58 percent — nearly three times the rate for the US overall. [8]

The median hourly wage in Puerto Rico is $9.73, compared to the US average of $17.81. While some argue that lowering the minimum wage in Puerto Rico could incentivize companies to hire more workers, lower wages would increase the already high poverty levels while eroding living standards.[9]

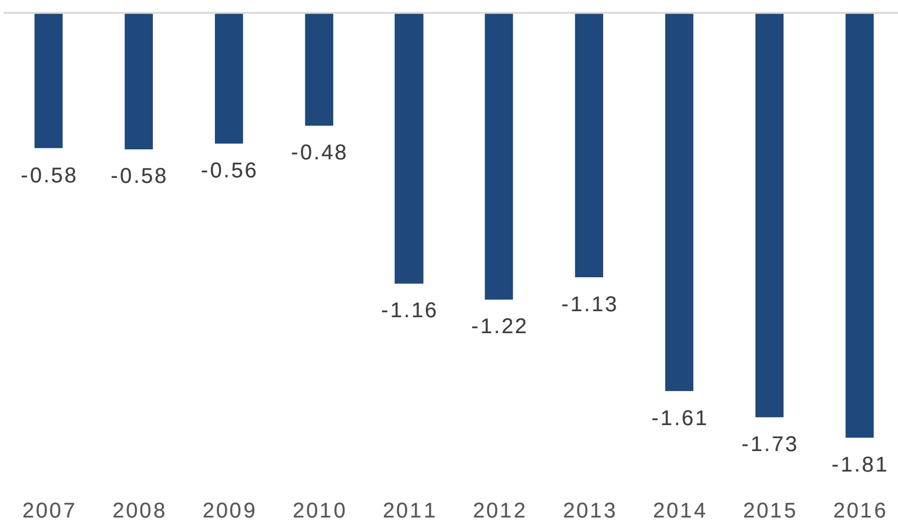
Among other impacts, the high poverty rate means that a large segment of the population qualifies for health insurance coverage financed by the government of Puerto Rico. As of 2015, 60 percent of the population had such coverage.[10] However, Puerto Rico receives less in per capita Medicare and Medicaid payments than US states. It also cannot participate in the insurance exchanges provided by the Affordable Care Act because it is not eligible for subsidies awarded to states. Because of this exclusion from the ACA, Puerto Rico received subsidies that totaled $6.3 billion over the past seven years, but these will expire in 2018.

Throughout Puerto Rico's lost decade, a significant portion of the population has left the island, a trend that has accelerated in the last three years. Between 2007 and 2016, the population fell from 3.8 million to 3.4 million, a 9.8 percent drop. As can be seen in **Figure 4**, the population experienced its largest decrease in 2016, falling 1.8 percent. The majority of Puerto Ricans who leave the island cite economic conditions as their reason for migrating.[11] With Puerto Rico's economy continuing to shrink, few prospects for jobs, and cuts to essential public services, this trend is expected to continue. The IMF projects the population to continue to decline for the next six years — as far as IMF projections extend.

7 Instituto de Estadísticas de Puerto Rico (2016).
8 US Census Bureau (2016).
9 Krueger, Tejas, and Wolfe (2015).
10 *Ibid.*
11 Krogstad (2016).

FIGURE 4

Population Growth



Source: International Monetary Fund (2017).

The Fiscal Plan: Ten More Years of Austerity?

The decline of the Puerto Rican economy led to government budget deficits that were financed by borrowing. Bonds were one of the few tools that politicians could use to maintain living standards on the island. Investors, usually long-term, institutional investors, as well as Puerto Ricans themselves, bought bonds issued by the government and by government-supported entities. Declining living standards and out-migration — exacerbated by austerity policies — led to a downward spiral that furthered the economic contraction.

Puerto Rico's bonds were attractive, too: due to its special political status, bonds were triple tax-exempt (from local, state, and federal taxation), and in its constitution Puerto Rico guaranteed payment of general obligation debt before any other expense. As Puerto Rican debt was downgraded and institutional investors began to sell, hedge funds eagerly stepped in. Puerto Rican politicians sought bankruptcy protection, while these hedge funds lobbied against it and for continued austerity. The US Supreme Court ruled that the island was barred from accessing the same bankruptcy proceedings as US municipalities, due to its special political status.

The Supreme Court's ruling motivated the US Congress to draft a bill to address Puerto Rico's crisis. In June 2016, the Puerto Rico Oversight, Management and Stability Act (PROMESA) became law. PROMESA created the Financial Oversight and Management Board of Puerto Rico (the Board). The Board oversees the island's budget and most important policy decisions and holds significant administrative and investigative powers, such as the power to prevent Puerto Rico's government employees from striking, and the power to issue subpoenas.

PROMESA created two processes for addressing the island's debt: a consensus process and a bankruptcy-like framework, the latter of which draws heavily on existing Chapter 9 and 11 bankruptcy law.[12] It also, importantly, put stays on creditor lawsuits and allowed for Puerto Rico to stop servicing its debt.

The consensus process includes the development of 10-year fiscal plans that keep the government operational, provide services to residents, and do not rely on help from the US government. Fiscal plans must also allocate enough debt repayment to be accepted by the creditors.

In March 2017, the PROMESA Oversight Board certified Puerto Rico's ten-year fiscal plan. This plan has been rejected by bondholders, whose claims are now being heard in a bankruptcy-like framework. Nevertheless, the Board has continued to advocate for the fiscal plan to be implemented.

The plan would commit Puerto Rico to ten more years of austerity and a deepening recession in the short run. Over the ten-year period, the plan proposes spending cuts of $25.7 billion (about 2.4 percent of GDP) and revenue increases of $13.9 billion (about 1.3 percent of GDP).

Table 3 shows the estimates for the government balance, before and after the proposed austerity measures, as a percent of estimated GDP.

Without the proposed austerity measures, Puerto Rico is projected to run a budget deficit from 2018 through 2026, averaging 3 percent of GDP over the ten-year period. But even with these draconian fiscal measures, the plan expects a total surplus over the decade of just $7.9 billion (0.74 percent of GDP over the ten years), which would be used to pay claims from Puerto Rico's creditors.

This $7.9 billion would only make a small dent in the island's unsustainable total debt stock of $74 billion. Additionally, creditors are unlikely to accept such a significant haircut and indeed are already fighting the fiscal plan in court.

12 Austin (2016).

TABLE 3

Revenue Forecast as a Percent of Predicted GDP

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Revenue before Measures	19.13	18.18	17.46	17.57	17.71	17.76	17.75	17.68	17.58	17.43	16.12
Expenses before Measures	-18.04	-19.71	-20.46	-20.86	-21.42	-21.92	-22.13	-22.23	-22.45	-22.22	-19.12
Pre-measures Balance	1.09	-1.53	-3.01	-3.29	-3.71	-4.16	-4.39	-4.54	-4.87	-4.79	-2.99
Revenue Measures	n.a	0.96	1.47	1.48	1.64	1.75	1.84	1.83	1.80	1.78	1.31
Expense Measures	n.a	0.99	2.14	2.58	3.20	3.38	3.45	3.50	3.80	3.81	2.42
Net Impact of Measures	n.a	1.95	3.61	4.06	4.85	5.13	5.29	5.33	5.61	5.59	3.74
Post-measures Balance	1.09	0.42	0.60	0.77	1.14	0.97	0.91	0.78	0.74	0.80	0.74

Source: Puerto Rico Fiscal Agency and Financial Advisory Authority (2017).

The cuts to expenditures, which make up the bulk of the austerity measures, target both health care spending and general government spending. The fiscal plan proposes responding to the loss of US federal health care subsidies by simply providing less in the way of health care services. The bulk of the savings is expected to come from developing a model "in which the government pays for basic, less costly benefits," which effectively means reducing coverage for the island's most vulnerable groups that currently qualify for the state-run health insurance program. These measures are expected to save approximately $6 billion over the ten-year period, about 0.7 percent of projected GDP.[13]

The biggest group of spending cuts will take place through "government rightsizing," which is expected to save $20 billion over the ten-year period, or about 1.9 percent of projected GDP. The cuts are broken down into three categories: personnel-related, non-personnel-related, and a reduction of subsidies.[14]

The first category takes aim directly at government employees and proposes a freeze in payroll increases and a reduction in benefits to "produce higher attrition rates." [15] As noted previously, more than 20 percent of employed workers hold government jobs. Non-personnel-related savings are expected to come from a freeze on operational costs as well as from "externalizing services to private entities." While privatization efforts may save some money in the short term, costs would likely be shifted to consumers who are already facing very high living costs. A reduction in government subsidies would also be expected to add to the burden on an already struggling citizenry.

The cuts also target the island's public education system. In an effort to cut costs, Puerto Rico will close almost 180 out of the 1,292 currently operating public schools.[16] This follows the closure of 150 schools between 2010 and 2015. The budget of the University of Puerto Rico will be reduced by about

13 "March Plan," or, Puerto Rico Fiscal Agency and Financial Advisory Authority (2017).
14 *Ibid.*
15 *Ibid.*
16 Coto (2017).

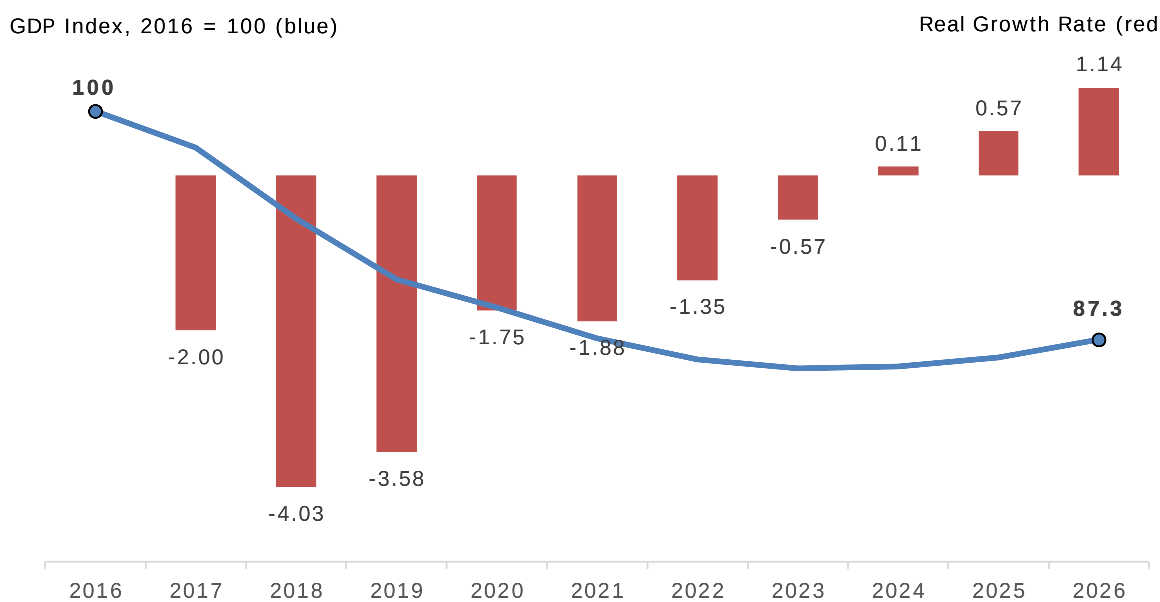
one-third of its current level of $900 million. The university is responding to the cuts by raising tuition costs, thus shifting the burden onto the students.[17]

In addition to the direct impact of the budget cuts, a closer look at the fiscal plan reveals that it is based on unrealistic economic assumptions and ignores the long-term problems of the Puerto Rican economy.

The growth projections that underpin the fiscal plan are shown in **Figure 5**. The plan projects that the economy of Puerto Rico will not return to real growth until 2024. That would constitute a near-twenty-year period of negative real growth. As can be seen in the Figure, GDP is expected to be nearly 13 percent below its current level by the end of the ten-year plan. However, the plan provides the same growth projections in the baseline scenario (without austerity measures) as it does after the proposed spending cuts, with no assessment of what impact the proposed austerity measures may have on growth. This is not a plausible scenario.

FIGURE 5

March Fiscal Plan, Projected Real Growth Rate and GDP



Source: Puerto Rico Fiscal Agency and Financial Advisory Authority (2017) and authors' calculations.

Estimates for regional fiscal multipliers for the economy were found to be between 1.5 and 2.5.[18] Taking this into consideration, cuts in government spending would have a considerable impact on the economy. At the lower end, with a fiscal multiplier of 1.5, the proposed spending cuts of $25.7 billion

17 Robles (2017).
18 Romer (2012).

over the ten-year period would be expected to have a $38.5 billion impact on the economy, and thus a contraction of about 3.6 percent of GDP. Using a fiscal multiplier of 2.5, the spending cuts would be expected to produce a loss of about 6.1 percent of GDP.

This does not include the fiscal multipliers on the effect of the tax increases in Table 3, which would also have a significant contractionary effect on GDP.

Overall, the proposed austerity measures are bound to have a much deeper impact on the economy than what the fiscal plan projects, and could result in a much more serious and prolonged recession than the current forecasts indicate.

Increases in revenue are expected to come from increased taxation; however, the negative impact of the spending cuts on the economy would also reduce the tax base of the island. Given a higher-than-anticipated economic shock of the austerity measures, and an already struggling economy, it appears that the projected revenue increases are not grounded in reality. Even the Board, which approved the plan, acknowledged this dynamic during the ongoing bankruptcy proceedings. "Grim economic conditions will continue to spur out-migration, which in turn will reduce production and demand for goods and services and thus drive further economic contraction," the Board wrote.[19]

Previously, in October 2016, Puerto Rico submitted a fiscal plan that took a drastically different path, though it was rejected by the Board. This proposal argued that Puerto Rico had already tried to implement austerity policies and that those policies had led to more out-migration and a continually shrinking economy. This plan was built on the principle of restoring growth in the short term before focusing on debt servicing. The plan projected a budget deficit continuing over the ten-year period, and was rejected by the Board on the grounds that it did not do enough to increase revenue and make funds available for debt payments.[20] For the creditors, even the approved fiscal plan, despite the projected lost decade, is not austere enough.

An interesting aspect of the previous plan was that it included projections under a scenario in which federal health care funding would not be cut. The fiscal plan projected that with federal health care support, the economy would experience positive growth each year from 2018 through 2026.[21] It is clear that in order for Puerto Rico to return to economic growth and recover from its lost decade, some outside support is needed.

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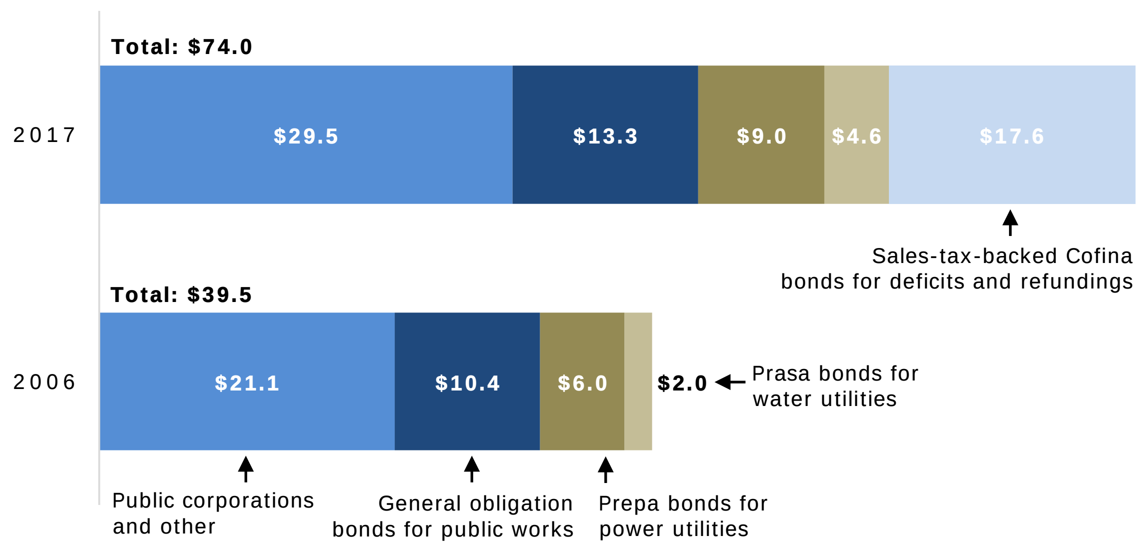
19 Oversight Board (2017).
20 *Ibid.*
21 "October Plan," or: Puerto Rico Fiscal Agency and Financial Advisory Authority (2016).

Debt

As of February 2017, Puerto Rico's total public-sector debt was about $74 billion, up from $39.5 billion in 2006.[22] Of that, about 18 percent, or $13.3 billion, was general obligation debt backed by the full faith and credit of the Puerto Rican government (an additional $4.5 billion in debt is also backed by this guarantee). Another $17.6 billion is debt backed by the island's sales tax authority, COFINA, which was created in 2006 to finance previous debt obligations. In 2009, its purpose was expanded to financing operational activities of the government. About $51.5 billion in debt is covered under the fiscal plan, or 70 percent of the total amount (**Figure 6**). Bond markets have commonly lumped the debt issued by all these different agencies together as public-sector debt.[23] Some bonds were from public entities that were not directly backed by the central government, but the support the central government offered to these entities "reasonably led investors to believe that the Commonwealth provides some backing." [24]

FIGURE 6

Debt Issued by Puerto Rico, billions of dollars



Source: Puerto Rico Fiscal Agency and Financial Advisory Authority (2017).

Other public corporations have significant amounts of debt. The Highways and Transportation Authority, the Public Buildings Authority, and the Government Development Bank all have about $4.1 billion in debt each. The Employment Retirement System has $3.2 billion in debt, while the

22 Puerto Rico Fiscal Agency and Financial Advisory Authority (2017), p. 27.
23 Federal Reserve Bank of New York (2014).
24 *Ibid.*

Infrastructure Financing Authority has $2.2 billion, and the Public Financing Corporation has $1.2 billion. Other corporations have debts under $1.0 billion; most notably, the University of Puerto Rico, the island's only university, has $496 million in debt.[25]

Significantly, entities not covered under the fiscal plan but still subject to the bankruptcy proceedings have large amounts of debt. This includes two utilities, the Electric Power Authority and the Aqueduct and Sewer Authority, which have $9.0 billion and $4.6 billion in debt, respectively. The Children's Trust — which provides programs for young people from a tobacco settlement — has $1.5 billion in debt, and the Housing Finance Authority has $542 million. In total, debt from entities not covered by the fiscal plan is $17.3 billion.

Although it became increasingly clear that the Puerto Rican government would not be able to pay its debt even before it was downgraded to junk status in early 2014, various Puerto Rican entities continued to sell debt until the governor declared the debt "unpayable" in 2015.[26] This was somewhat necessary as entities sought to service their debt — often made worse by acceleration clauses triggered by downgrades from rating agencies. In 2013, as the market began to realize that Puerto Rico had an increasingly negative outlook, many funds limited their exposure to Puerto Rican bonds. This was especially true for mutual funds and pension funds that had been taking a buy-and-hold approach to Puerto Rican debt before any inkling of a crisis.[27] These were predominantly large institutional investors that were attracted by the aforementioned triple-tax-exempt status of the bonds.[28] In 2015, it was estimated that 20 percent of US bond mutual funds held at least some Puerto Rican debt, especially from COFINA.[29] These funds were estimated to own $11.3 billion of the total debt at that point in time.

In 2014, hedge funds began to buy up debt at a steep discount on the secondary market as well as on the primary market, especially general obligation debt. These funds realized that the Puerto Rican government and associated entities had not only no legal way to declare bankruptcy, but also that they had to prioritize payment of general obligation debt above any other expenses. Believing that Puerto Rico could be the next Argentina, the funds bought up billions in debt.[30] This buying spree continued through late 2014 and into 2015. An estimate in 2014 put the amount of debt owned by hedge funds

25 Puerto Rico Fiscal Agency and Financial Advisory Authority (2017).
26 Corkery (2014).
27 Bary (2013).
28 Created by the Jones-Shafroth Act, see: Carmel (2017).
29 Long (2015).
30 Argentina experienced a severe recession in the late 1990s and early 2000s, defaulting on its debt in 2001. It restructured its debt in 2005, but a minority of creditors rejected restructuring and sued for full repayment. Many of these creditors had bought Argentine debt for pennies on the dollar. See Stevenson (2016).

at about 24 percent of the total debt, or $15 to 17 billion; another less precise estimate in 2015 estimated that hedge funds owned about 50 percent of the public-sector debt.[31]

Among this group of hedge funds is the Ad Hoc Group of Puerto Rico's General Obligation Bondholders, which aggressively offered to buy more bonds as Puerto Rico's access to credit markets deteriorated. The investors lobbied against Puerto Rico's access to bankruptcy proceedings and promoted austerity policies as the crisis deepened in 2015 and 2016. The passing of PROMESA and the entrance into legal proceedings was seen as a partial defeat for these investors. For example, in early January 2017, Puerto Rico's new governor, Ricardo Rosselló, lobbied US President Trump to push for a solution in the consensus, rather than legal, process.[32] During his campaign, Rosselló had promised to prioritize debt repayment, in contrast to the former governor, Alejandro García Padilla, who took a harder line with creditors.

Besides institutional investors and hedge funds, the remainder of the debt is held by individuals, many of them Puerto Ricans, and by Puerto Rican banks. The impact of restructuring on these bondholders could have negative consequences for the Puerto Rican economy and Puerto Rican banks, even though the latter had been reducing their exposure to the island's debt since 2011. However, Puerto Rican banks still had $240 million of the debt on their books in 2015, down from $442 million two years prior.[33]

The clear "winners" of the debt crisis have been banks that did the underwriting for Puerto Rican bonds — mostly large multinational banks — which profited from fees. Underwriters collected fees totaling $1.6 billion across 87 deals from 2006 to 2013, in which $61 billion of debt was issued, according to a Wall Street Journal analysis.[34] These banks often sold the bonds they were issued in payment of these fees, limiting their exposure to risk.[35]

Entrance Into "Bankruptcy"

Although the Board approved the government's fiscal plan under the consensus process, creditors demanded the Board "certify a fiscal plan with more frothy and optimistic assumptions." That is, the

31 Fitch Ratings (2014) and Gandel (2015).
32 Eisinger (2017).
33 Moody's (2017) and Davies (2015).
34 Corkery and Cherney (2013).
35 Young (2015).

creditors demanded a plan with economic forecasts of better — perhaps even more unrealistic — economic outcomes, in order to allocate more money for debt service over the ten-year period.[36]

Despite mediation, the parties could not come to an agreement, with creditors rejecting a restructuring offer of as much as 77 cents on the dollar for general obligation debt and 58 cents for its sales-tax bonds.[37] As the stay on creditor lawsuits expired on May 1, 2017, the Board moved into the bankruptcy-like process, which draws heavily on existing Chapter 9 and 11 bankruptcy law, automatically triggering another stay.[38]

The move to the bankruptcy-like process changed the Board's role in the proceedings significantly: as prescribed by PROMESA, the Board took on the role of the debtor — Puerto Rico — and began advocating for its interests.[39] In this role as debtor, the Board is more candid about Puerto Rico's crisis. In a court filing shortly after the initiation of the bankruptcy-like process, the Board acknowledged the dire fiscal and humanitarian situation that will spur continued out-migration and lead to a "bleak spiral" furthering the economic contraction.[40] While noting that "Congress points to a lack of financial transparency, excessive borrowing, management inefficiencies, and a severe economic decline as having created the crisis" and claiming that "flaws in Puerto Rico's governance and fiscal controls have combined to create the financial problems the Commonwealth faces today," the Board nevertheless lists fifteen institutional problems, many of which are historical or that the Government of Puerto Rico has little-to-no control over.[41]

Those problems include high costs for energy, transportation of goods, and, generally, for living on the island. Puerto Rico needs to generate all of its own electricity, and uses "archaic oil-based facilities and technology." It also is subject to the Merchant Marine Act of 1920 (called the "Jones Act"), which bars foreign vessels from transporting goods between US ports (cabotage). That is, a foreign vessel could not stop in Puerto Rico and then the mainland US directly afterward, severely limiting the economic opportunities on the island as this increases the costs of both importing and exporting goods.[42] Together, these costs likely contribute to prices for many goods and services that are higher than the island would face if it had control over economic policy.[43]

36 Oversight Board. (2017) p. 21.
37 Kaske (2017).
38 Austin (2016) and Walsh (2017).
39 Austin (2016), p. 4.
40 Oversight Board. (2017), p. 3 and 4.
41 Oversight Board (2017), p. 10.
42 Unlike the Virgin Islands, another US territory, Puerto Rico is not exempt from this law. This likely increases shipping costs, although estimates vary. See, for example, US Government Accountability Office (2013b) and Federal Reserve Bank of New York (2012).
43 US Government Accountability Office (2013b).

Lastly, as described previously, Puerto Rico faces significant challenges with regard to out-migration and health care funding, both of which it does not have much control over.

The Puerto Rican economy has notable advantages — such as a bilingual population, a cohesive national identity, and a high level of development, including of institutions, for its income level. But against these advantages is the very heavy weight of externally imposed constraints that restrict economic policy in ways that hold back economic growth and development.

PROMESA, which was intended by its drafters as a template for other US territories that might run into financial and debt crises similar to those of Puerto Rico,[44] is an extreme example of the long-term damage that such externally imposed constraints can cause. Rather than simply amending Chapter 9 bankruptcy law so that Puerto Rico could again be included under it, Congress essentially applied the law to the island with additional and wide-ranging conditions attached.[45] For example, PROMESA sets a "training wage" lower than the minimum wage for people under the age of 25; limits the rights of government employees to strike; opens the door to cutting pensions; and enshrines "pro-growth" reforms and certain conditions as the metrics by which fiscal plans will be judged. These policies constrain Puerto Rico's ability to manage its economy going forward.

It is unclear what will come of the bankruptcy-like proceedings. Many observers believe that the result will be more favorable to Puerto Rico than the consensus process would be, a view also held by some creditors. However, although this process could restructure all of Puerto Rico's debt (which was not guaranteed by the consensus process), PROMESA allows for selling off public assets — privatization — in the proceedings, which could have broad consequences for the government's ability to manage its economy and use of public infrastructure going forward.[46] Also, as a result of the bankruptcy-like proceedings, it is possible that many of the temporary conditions prescribed under PROMESA could be enshrined into law. The decision from the court could also instruct Puerto Rico to cut pensions, limit the bargaining rights of organized labor, and further consider only economic plans that prioritize debt reduction at the expense of economic recovery, assuming there is no additional outside assistance. It is unlikely that the court could address many of the underlying causes of the crisis (explained above) as it does not have the ability to do so.

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44 Austin (2016).

45 Puerto Rico was included under Chapter 9 bankruptcy law until 1984. This would have allowed public entities to declare bankruptcy.

46 The island main airport was privatized in 2013, with the government receiving a $615 million upfront fee, which was cited as easing the island's debt load (Bipartisan Policy Center 2016, Long 2013).

Conclusion

Under the current proposed fiscal plan, Puerto Rico is projected to continue negative growth until 2024, which would result in nearly two lost decades. But as noted above, taking into account the proposed fiscal austerity, negative growth is likely to persist for years longer than that. At the same time, the creditors are not satisfied and will likely continue to sue in court, thus possibly blocking Puerto Rico's return to credit markets, which could extend its prolonged depression even further.

Periods of depression of this length are rare in the past century, and Puerto Rico is on a path to possibly set a new record. Previous protracted failures have generally been the result of a set of repeat policy errors that are imposed by external control or coercion. Greece, for example, has suffered through a depression for nearly all of the past eight years that it almost certainly would not have had if it were in control of its own most important macroeconomic policies, including fiscal, monetary, and exchange rate policies.[47] The closest analogy in the Caribbean is Jamaica, which is the only country in the region with a worse growth performance than that of Puerto Rico over the past 20 years.[48] Here the external role is played primarily by the IMF, which has pressured the Jamaican government to accept agreements committing it to running unsustainable primary budget surpluses as high as 7.5 percent of GDP (more than twice the level of Greece's unsustainable debt burden).[49]

Without such external control or pressure, governments would almost certainly find a vastly quicker path to recovery, regardless of any debt that they had accumulated. It is rare that creditors by themselves can enforce a debt burden that would put a country into a semipermanent state of depression or stagnation. At the end of 2001, Argentina declared what was then the largest sovereign debt default in history after three-and-a-half years of depression; the downturn worsened for one more quarter, but the economy then began a robust recovery of more than 58 percent growth over the next six years.[50]

If Puerto Rico were a sovereign country, it could reduce its public debt burden through negotiations with its creditors, or through default if that failed. It would then be able to start over, and also to begin with the business of restructuring its economy, adopting policies enabling it to be more competitive

47 As a relatively small member of the eurozone, Greece's monetary and exchange rate policies are decided by the European Central Bank, which together with the other European authorities imposed prolonged fiscal austerity in Greece, even going so far as to force a shutdown of the Greek banking system in June 2015. See Weisbrot (2015a); also *Failed: What the "Experts" Got Wrong about the Global Economy* (Weisbrot 2015b).

48 International Monetary Fund (2017).

49 See Johnston (2013) and Johnston (2015).

50 International Monetary Fund (2017).

in the global economy of the twenty-first century and allowing for sustainable macroeconomic policies as well.

But Puerto Rico is not a sovereign country, and therefore the external control over Puerto Rico's economic policies is, particularly at the moment, much stronger and vastly more destructive than even that of the European authorities over the more vulnerable eurozone countries. If Puerto Rico is going to have a chance to avoid a continued deterioration of living standards and loss of population, either the policies imposed from outside will have to change, or Puerto Rico will have to change its political status.

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