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An Update on PROMESA and a Proposal for Restructuring Puerto Rico's Debt

Gregory Makoff

Key Points

- → The Financial Oversight and Management Board for Puerto Rico (FOMB) should quickly move to certify a fiscal plan that specifies the cash flow available to debt service so that negotiations can begin over the distribution of losses among creditors.
- → Puerto Rico's tax-supported debt should be reduced from about US\$45 billion to about US\$6 billion, with debt service fixed at about US\$350 million a year.
- → Contingent payment obligations, such as GDP warrants, should be avoided.

Introduction

It has been almost two years since the US Congress enacted the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA), a law designed to facilitate the recovery of Puerto Rico's finances and economy. And yet, these many months later, there is little progress with the debt restructuring or fiscal reforms to report.

To allow for discernible progress before PROMESA hits its two-year anniversary in June, the FOMB should undertake steps in the next few weeks to certify a comprehensive and robust fiscal plan for Puerto Rico. Importantly, this plan should specify the aggregate cash available for debt service, so that the debt restructuring process can move on to the resolution of thorny intercreditor issues.

This policy brief suggests one way to do it. The idea is to reset the size of Puerto Rico's debt so that the US territory's debt service burden as a percentage of its own revenue approximates that of the 50 states. This approach suggests creditor recoveries of about 13.6 cents on the dollar and annual debt service capacity for Puerto Rico of about US\$350 million a year. This brief also advises against the use of GDP warrants as part of the solution on both policy and technical grounds.

The discussion begins with an update of events since the passage of PROMESA, as well as a short summary of the structure of Puerto Rico's debt. It then moves on to the debt restructuring proposal, followed by a discussion of the use of GDP warrants.

About the Author

Gregory Makoff has been a CIGI senior fellow with the Global Economy Program since February 2015. At CIGI, Gregory's research focuses on issues in sovereign debt management, including the management of sovereign debt crises. From 1993 through 2014 Gregory was a professional at Salomon Brothers/Citigroup specializing in debt advisory, liability management and derivatives for sovereign borrowers, corporations and financial institutions. His sovereign advisory assignments have varied widely and have included helping the Republic of Colombia establish its debt management team in the mid-1990s, assisting the Republic of the Philippines in carrying out debt reprofiling transactions in both its local and international markets. and serving as adviser to the government of Jamaica in its 2010 and 2013 domestic debt restructurings. He has worked extensively in Latin America, the Caribbean, Asia, Europe, Eastern Europe and Africa, and recently worked for one year at the US Department of the Treasury as a senior policy adviser on the Puerto Rico team. Gregory holds a Ph.D. in physics from the University of Chicago and a B.Sc. from the Massachusetts Institute of Technology in both physics and political science. Gregory is also a CFA® charterholder.

PROMESA Update

Box 1 lists some of the most important events that have occurred since the enactment of PROMESA.

The first key event after the passage of the law in June 2016 was the appointment of the FOMB in September 2016. The FOMB is composed of seven voting members who were chosen by then US President Barack Obama in consultation with members of the US Congress from both the Democratic and the Republican parties. The FOMB's voting members are distinguished professionals from both on and off the island whose individual expertise covers public finance, bankruptcy, pensions and the Puerto Rican economy. The FOMB's executive team includes an executive director, a legal counsel and a revitalization coordinator.

After its appointment, the FOMB moved to work with the Puerto Rican government and various advisers to develop fiscal plans for the commonwealth, as well as for other key borrowers subject to restructuring, including the Puerto Rico Electric Power Authority (PREPA), the Puerto Rico Aqueduct and Sewer Authority, the Government Development Bank for Puerto Rico and the University of Puerto Rico. As a federally mandated entity, the board is fully transparent about its operations and its determinations, and therefore all relevant materials may be found on its website.²

Progress was fairly steady in the first year after the law's passage but stalled in the fall of 2017. First, the government of Puerto Rico began a campaign of pushing back heavily against FOMB-mandated fiscal reforms, and then the island was pummelled by two hurricanes that caused massive damage.

Although in the past several months the Government of Puerto Rico has tabled new fiscal plans for the commonwealth and its key instrumentalities and agencies (to adjust for the impact of the hurricanes), consensus has been hard to find. In the last week of March 2018, the FOMB asked the government to tighten terms in its fiscal plans, which triggered a fiery speech by Governor Ricardo Rosselló, in which he declared his

¹ See https://juntasupervision.pr.gov/index.php/en/home/.

² See https://juntasupervision.pr.gov/index.php/en/documents/.

Box 1: Selected Events since the Enactment of PROMESA

June 2016 → PROMESA is enacted and an eight-month stay of litigation goes into effect.

September 2016 → The FOMB is appointed.

January 2017 → Governor Rosselló takes power in Puerto Rico, and President Donald Trump is inaugurated in Washington, DC.

February 2017 → The stay of litigation is extended by three months.

March 2017 → The FOMB confirms a fiscal plan for Puerto Rico.

April 2017 → Ongoing discussions take place with creditors about a voluntary out-of-court debt restructuring.

May 2017 → Puerto Rico files for protection from creditors in the federal court system.

June 2017 → Puerto Rico approves a budget consistent with the fiscal plan.

→ The FOMB does not approve PREPA's Restructuring Support Agreement, which had been negotiated prior to the enactment of PROMESA.

July 2017 → Puerto Rico begins implementation of the new budget.

August 2017 → The FOMB sues Governor Rosselló for refusing to implement furloughs or reduce pension payments (Coto 2018).

→ US hedge fund Aurelius Capital Management files suit against PROMESA, arguing that the FOMB's creation was unconstitutional (Hals 2017).

September 2017 → Hurricanes Irma and Maria create widespread devastation on the island and knock out the power grid.

November 2017 → The FOMB loses litigation against Governor Rosselló over the appointment of an emergency manager for PREPA (US District Court 2018).

→ The FOMB sends a letter to Governor Rosselló following his announcement of payment of Christmas bonuses without FOMB approval (FOMB 2017).

January 2018 → Governor Rosselló announces a privatization plan for PREPA (PREPA 2018).

→ Puerto Rico announces a new fiscal plan for the commonwealth (Government of Puerto Rico 2018a).

February 2018 → The FOMB carries out a public listening session in New York on the future of Puerto Rico's energy sector (FOMB 2018a).

→ The US Congress passes a funding bill with significant money allocated to Puerto Rico.

→ Puerto Rico presents a revised fiscal plan with significantly more funding for creditors, following the passage of the federal funding bill (Government of Puerto Rico 2018b).

March 2018 → The FOMB announces required changes to the fiscal plans for Puerto Rico (FOMB 2018b).

→ Governor Rosselló announces a refusal to implement key reforms (Giel 2018).

Source: Author.

"tenacious opposition" to key reforms and accused the FOMB of intending to dictate policy (Giel 2018).

As of early April 2018, the various stakeholders await the release of a certified fiscal plan and clarity regarding whether or not the governor will cooperate with the restructuring process.

Puerto Rico's Debt Spaghetti

Before presenting a proposal on how to restructure Puerto Rico's debt, it is useful to briefly discuss its structure.

A look at Puerto Rico's debt, set out in Table 1 in the annex, brings to mind a line heard around the time of Enron Corporation's default in November 2001, that it would "take years to untangle all the debt spaghetti." And years it did take for forensic auditors, lawyers and bankruptcy judges to clean up the mess. That tangle is the sort of situation Puerto Rico and its creditors now face.

The largest portion of Puerto Rico's US\$70 billion of debt, and the concern of this policy brief, is the approximately US\$45 billion of bonds backed by the commonwealth's taxing powers. The central problem for creditors is that Puerto Rico has little capacity to repay this debt while also providing essential public services. Creditor recoveries will be low.

However, as a result of ambiguities in the different financing contracts, the biggest challenge of the operation will be to allocate losses among creditors. Of greatest import is the battle for priority between the holders of constitutionally prioritized general obligation (GO) bonds and the holders of Puerto Rico Sales Tax Financing Corporation (COFINA) bonds, which are backed by a pledge of sales tax revenues. However, the great GO-COFINA battle is but the tip of the iceberg of legal issues that need to be resolved in Puerto Rico's bankruptcy process.

Because of the legal complexity of Puerto Rico's debt, it will take many months, if not a year, for the parties to negotiate or litigate all of the issues that need to be resolved in distributing the losses among Puerto Rico's creditors — hence the urgency of fixing the aggregate amount of cash flow available

for debt service, so that the process can move on to the resolution of intercreditor disputes.

Restructuring Puerto Rico's Debt

The problem at hand is to reduce Puerto Rico's US\$45 billion dollars of tax-supported debt to a sustainable level.

A wide range of approaches can be used to set the terms of a sovereign or municipal debt restructuring. There are top-down approaches, where the losses to creditors are fixed with reference to prior debt restructurings, and there are bottom-up approaches, where economic and fiscal models are used to project the debtor's ability to repay debt in the future. However, in this case, neither the top-down nor the bottom-up approaches work very well.

Top-down approaches are not appropriate here because fixing the haircut to be applied to Puerto Rico's creditors using an average of levels agreed in prior deals does not meet the technical requirements of PROMESA; the law requires that the FOMB certify a fiscal plan that assures debt sustainability based on Puerto Rico's facts and circumstances.

Unfortunately, neither do conventional, International Monetary Fund (IMF)-style, bottomup models work very well in this instance. Not only is the economy in a steep and unprecedented decline and household and business behaviour hard to predict, but the one factor that is known to help — increases in federal support for the island — raises problems of circularity and public policy. Economic growth and territory revenue are strongly correlated to aggregate federal spending on the island, so if more money is promised to the island, creditor recoveries go up, while if less money is promised, recoveries go down. It is an awkward situation, as recently underlined when the Government of Puerto Rico proposed increased payments to bondholders on the heels of the recent US budget deal that included substantial emergency aid for hurricane recovery (Slavin 2018; Kaske 2018).

As a result, solving the problem requires a different, third approach. The idea is to resize Puerto Rico's debt against a neutral benchmark to resolve the

III. Debt to State Personal Income I. Debt Service to Revenues 28 1% 30.0% 120.0% 102.6% 25.0% 100.0% 20.0% 80.0% 15.0% 60.0% 8.8% 10.0% 40.0% 4.4% 5.0% 20.0% 6.9% 0.9% 3.0% 0.5% 0.0% Lowest 10 Highest 10 Puerto Rico Lowest 10 US Average Highest 10 Puerto Rico US Average States' Average States' Average States' Average II. Debt per Capita IV. Debt to GDP 60.0% 55 1% \$20,000 \$16,662 50.0% \$16,000 40.0% \$12,000 30.0% \$8,000 20.0% \$3 708 \$4,000 6.0% 10.0% \$1.473 2.6% \$238 0.5% Highest 10 Puerto Rico Highest 10 Lowest 10 US Average Lowest 10 US Average Puerto Rico States' Average States' Average States' Average States' Average

Figure 1: Debt Metrics — Puerto Rico Debt vs. the 50 States

Source: Adapted and reprinted from Government of Puerto Rico (2018a, 42).

circularity of Puerto Rico's dependence on federal funding. The proposed approach is to reduce Puerto Rico's debt service burden to a level that matches that of the 50 states, using the conventional debt rating metrics as presented in Figure 1.

Of the various options, the data displayed in the first panel of Figure 1, the debt service to revenue ratio, is the most relevant.³ This metric is a robust choice because the data required to complete the analysis is readily measurable. It also directly informs the policy problem at hand — how to fairly divide government resources among servicing debt, spending on social services and supporting economic growth.

To cuff the implied recovery for creditors (using the numbers from Figure 1), one can simply take the ratio of what Puerto Rico's debt service ratio should be (about 4.4 percent) to what it currently is (28.1 percent) — 4.4/28.1 — which equals 15.6 percent.

Here is a five-step method for calculating Puerto Rico's debt service capacity and creditor recoveries:

- → **Select the scaling factor.** Choose the debt service to revenue ratio as the scaling factor for determining Puerto Rico's debt capacity based on the ratio observed in the 50 states.
- → Select the scaling factor value. Select 3.5 percent, or about 20 percent below the 4.4 percent average for the 50 states, in light of Puerto Rico's outsized social needs and weak long-term growth prospects.

A more detailed analysis below suggests a somewhat smaller recovery for creditors, because Puerto Rico's competiveness and growth prospects are below average while its social spending needs are much higher than average, given that Puerto Rico's poverty rate is more than three times the national average (Bishaw and Benson 2017) and the quality of its social services are far below par.⁴

³ There are clear problems with using any of the other three measures illustrated in Figure 1: debt per capita is not fair, given the relatively low income on the island; debt to personal income would imply a recovery below three percent to creditors; and debt to GDP would give a recovery below five percent and is not robust because of tax differences.

⁴ For the quality of education, see a New York Federal Reserve report (Chakrabarti, De Giorgi and Schuh 2016); for the state of health care, see an Urban Institute report (Perreira et al. 2017).

- → Identify the cash flow baseline.

 Identify US\$10 billion as the revenue base, which is Puerto Rico's proven own cash-flow-generating ability.⁵
- → Calculate annual cash flow available for debt service. Multiply US\$10 billion revenue by the 3.5 percent debt service to revenue ratio to obtain the estimated annual debt service of US\$350 million.
- → Calculate the nominal debt amount. The present value of 30 years of US\$350 million annual payments is approximately US\$6.1 billion if a four percent discount rate is applied. Hence, creditor recoveries would be US\$6.1 billion/US\$45 billion or about 13.6 cents on the dollar.

Of course, there is plenty of room to debate the exact magnitude of Puerto Rico's debt capacity, as many will doubtless do. However, the resulting debt should not be either significantly lower or significantly larger than that recommended here, for the following reasons.

On the low end of the debate, some analysts believe — and this analyst believes — that Puerto Rico has no capacity to pay debt given the territory's lack of growth and great social needs. Yet, it is not legally practical to simply wipe out the debt, because a vote of creditors is required *and* the judge needs to certify that the plan of adjustment is in the best interests of creditors. As well, it does not seem fair to have creditors bear a complete loss when there is a diversity of responsibility for the situation.

On the high end, it is hard to see how Puerto Rico could be left with a debt burden two or three times that of the average state. It seems implausible that Puerto Rico would have any chance of regaining market access on reasonable terms — and the FOMB leaving the island — if Puerto Rico were to be left with much more debt than the average municipal market borrower.

To be sure, there will be those who say that this approach that uses a simple ratio to fix Puerto Rico's debt capacity is too simplistic — after all, the IMF always bases its recommendations on detailed models. But that would be to misunderstand the

argument implicit in the discussion. The point is that an appropriately conservative model will show that Puerto Rico has no debt capacity and that its finances and its economic health are completely dependent on federal transfers.⁶ Since giving creditors nothing is not a practical way forward, the idea here is to reduce Puerto Rico's debt to a level comparable to that of the 50 states — an approach that seems fair because it would expose creditors to losses to the extent that they lent far too much to Puerto Rico. Since money is fungible, it is inevitable that federal money will be used to pay this debt. However, given the scale of the social and economic crisis, policy makers should have much more to worry about in Puerto Rico than the possibility that US\$350 million of federal money might leak to creditors each year, provided that that is a cap and not a floor.

For further details on the proposed restructuring, please see the indicative term sheet provided in Table 2 in the annex.

Should Contingent Payment Instruments Be Part of the Solution?

As is common in debt restructuring discussions, some observers have suggested that state-contingent instruments — that is, GDP warrants — should form part of the consideration given to Puerto Rico's creditors (Guzman, Stiglitz and Weiss 2017). However, this approach does not make sense for Puerto Rico.

The idea of the use of such instruments in debt restructurings has deep roots in the economic literature. For example, Nobel Prize winner Kenneth Arrow points out in his classic *The Limits to Organization* (1974) that the variability of economic outcomes leads one to prefer contingent contracts

⁵ This revenue number excludes revenues derived by Puerto Rico from its local Act 154, since these revenues are, in economic substance, temporary federal government budgetary transfers rather than sustainable own revenue (Sullivan 2014).

⁶ To get any debt capacity the analyst would need to assume: one, continued federal support for Medicaid, an optimistic read on Puerto Rico's ability to replace Act 154 revenue when federal support lapses; and/or two, unrealistic growth expectations, given Puerto Rico's fundamental lack of competitiveness combined with its lack of reliable power (Makoff and Setser 2016); and/or three, unrealistic assumptions for Puerto Rico's ability to increase its tax revenue or cut public services without losing investment or its population.

— contracts whose terms depend on the state of the world. However, the market experience is mixed.

On the positive side, several Brady bond restructurings completed in the late 1980s and early 1990s included state-contingent instruments. The most important of these were the oil warrants issued by Nigeria and Venezuela that increased the coupon of the bonds issued if oil prices increased, in light of the direct dependence of the states' revenue on international oil prices. These instruments worked well.

On the negative side, Argentina's use of GDP warrants in its contentious 2005 debt restructuring had many downsides. First of all, investors in fixed-rate bonds attributed little value to the warrants, given their complexity, and in the end the warrants were very expensive to service. In retrospect, Argentina should have offered creditors the choice of accepting a base amount of bonds plus the warrants, or the base amount plus one or two percent additional base bonds in place of the warrant. If they offered this choice, the deal might have been much more successful and the realized cost probably would have been much lower.

There are market, policy and technical grounds for skepticism about the potential use of GDP warrants or similar instruments in Puerto Rico's debt restructuring. To start with, the instruments are far too complicated for most of the holders (many of whom are retail investors), who would just sell them quickly at a poor price. Furthermore, the application to Puerto Rico is questionable because the key state variable is the level of federal support for the island (Makoff and Setser 2017) — would it really be appropriate for a federally appointed board to approve an instrument that pays bonuses to creditors if federal funding increases in the future? Lastly, there is no precedent for the use of these instruments in the municipal bond market, where their tax character is uncertain.

Finally, there is the issue of complexity. Puerto Rico is in the middle of a terribly complicated restructuring process. There is hardly room to introduce a highly complex contingent instrument into the negotiation process. As experienced debt

managers often advise, the best way forward in the area of debt is to keep it simple.⁷

To close, even Arrow (1974, 34–36) admits that "there is more than one reason for the failure of the theoretically desirable contingent prices to exist. One doubtlessly is the sheer complexity of the price schedule."

Conclusions

Despite the initial actions taken under PROMESA, Puerto Rico remains mired in a deep social, political and economic crisis. The long-term damage is increasing because investors are holding their wallets as they await clarity about the future of power and policy on the island, while outmigration continues apace.

To restore confidence on the island, now is the time to make headline progress on the debt restructuring.

The FOMB should move in the upcoming weeks to certify a comprehensive plan for Puerto Rico and the restructuring of its debt. Aggregate terms of the debt restructuring should be fixed so that the process can move on to resolving intercreditor disputes.

This policy brief recommends that Puerto Rico devote approximately US\$350 million a year to debt service for the next 30 years, based on an approach that benchmarks Puerto Rico's debt service capacity to the average debt service burden assumed by the 50 states.

⁷ However, if GDP warrants were to be included, three rules of the road would be essential: first, cap the size; second, include a call option; and third, give creditors the choice of the warrants or a small incremental payment.

Annex

Table 1: Puerto Rico's Tax-Supported Debt (as of July 31, 2016)

Issuer	US\$ Billions	Repayment Source	Special Features and Concerns
GO bonds	12.54	General revenues	Constitutional priority of payment
Public Buildings Authority	4.01	Rent on public buildings	Constitutional priority guarantee
COFINA (senior bonds)	7.59	Sales tax	Subject to a dispute with GO bondholders over priority and constitutionality
COFINA (junior bonds)	9.73	Sales tax	Subordinated to COFINA senior bonds
Infrastructure Financing Authority	1.86	Allocated rum and other taxes	Subordinated to GO bonds on a cash flow basis*
Highways & Transportation Authority	4.18	Allocated gas and other taxes	Subordinated to GO bonds on a cash flow basis
Convention Center District Authority	0.39	Allocated hotel- room tax	Subordinated to GO bonds on a cash flow basis
Employee Retirement System Pension Obligation Bonds	3.14	Commonwealth's annual contributions to the retirement system	Authorization limited to board of the Employee Retirement System
Public Finance Corporation	1.09	Appropriated funds	Payment limited to appropriations, and therefore payment has ceased
University of Puerto Rico	0.50	Tuition and budget transfers	Payments supported directly by tuition revenue and indirectly by general fund transfers
Total Tax-Supported Debt	45.03		

Data source: Commonwealth of Puerto Rico (2016).

Notes: This table excludes:

- debt of Puerto Rico's municipalities that are supported by various taxes;
- relatively small borrowings by the Puerto Rico Industrial Development Company, the Mortgage Bankers' Association, the Port of the Americas Authority, the transportation authority's Teodoro Moscoso Bridge revenue bonds, Puerto Rico Infrastructure Financing Authority's Port Authority, Mental Health and Anti-Addiction Services Administration secured bonds;
- debt secured on external cash flows, including the Children's Trust (tobacco litigation cash flow securitization) and Housing Finance Authority (securitization of Department of Housing and Urban Development revenues);
- US\$4 billion of debt of Puerto Rico's Government Development Bank, which will be separately restructured; and
- US\$13 billion of revenue bonds and other facilities issued by PREPA and the Aqueduct and Sewer Authority, which will be separately restructured.

^{*}Bonds subject to non-payment, or a "clawback" provision, if GO bonds are not paid.

Table 2: Indicative Terms and Conditions for Puerto Rico's Debt Restructuring

Parameter	Indicative Term	Rationale
Amount	US\$6 billion (area)	Debt sustainability
Final maturity	30 years	As required by the Puerto Rican Constitution
Cash flow profile	Level pay, US\$350 million a year	Standard practice in the municipal bond market and financially prudent as it leaves reasonable capacity to meet capital expenditure needs
Legal ranking	Senior unsecured GO bonds	The simplest possible structure should meet the widest appeal, provided debt covenants protect against subordination
Debt covenants and negative pledge	Debt covenants should tightly constrain the amount of future debt The pledge of any general tax revenues should be forbidden	Prevent the recurrence of financial distress and prevent the subordination of bondholders with new financing structures
Bond modification provisions	Aggregate vote of two-thirds of creditors to approve any future debt restructurings	Prevents the imposition of a new PROMESA process if Puerto Rico needs to restructure its debt again in the future
GDP warrants or other contingent pay instruments	Should be avoided in the municipal bond context	Inefficient, complex

Source: Author.

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