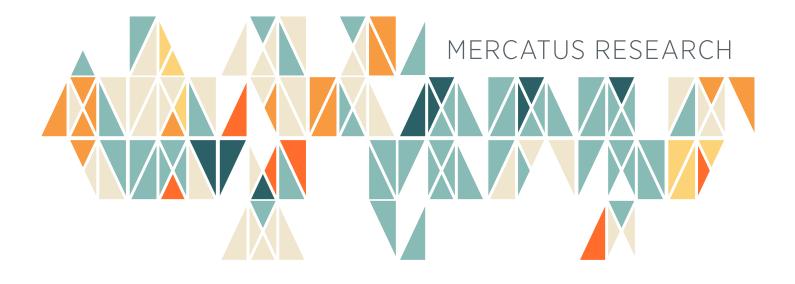
Origins of the Puerto Rico Fiscal Crisis

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ABSTRACT

Puerto Rico's heavy public-sector debt burden is the unintended consequence of a series of policy decisions extending back to the US takeover of the island in 1898. Rather than placing Puerto Rico on a path to statehood, Congress imposed a series of unique governing structures on the island. Today, the Commonwealth of Puerto Rico stands in stark contrast to most American states because it has no meaningful constitutional limits on central government deficits and debt accumulation, while at the same time it operates a number of public corporations that have unsustainable debt loads. Relative to American states, Puerto Rico's government has poor fiscal transparency, low levels of public employee pension funding, and excess government staffing. To address these longstanding problems, Puerto Rico will require a federal control board, debt adjustment, constitutional reform, and privatization of state enterprises.

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Keywords: Puerto Rico, commonwealth, debt, fiscal crisis, government bonds, public finance, municipal debt, financial reporting, economic history, constitutional reform

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uerto Rico is facing a severe fiscal crisis. As this study was being completed, most knowledgeable observers were convinced that the commonwealth and other public-sector entities on the island would fail to service their debts on time and in full, making default and debt restructuring inevitable.

The financial press and mainstream news outlets have provided and will continue to provide detailed coverage and commentary on the evolving crisis. The purpose of this paper is to add to the discussion by providing historical and institutional perspectives. We explore how certain events in Puerto Rico's 118-year-long association with the United States produced economic and governing institutions unable to balance revenues and expenditures. We then give some examples of contemporary institutional problems including the island's issues regarding its pension, healthcare, and correctional systems and offer some broad policy proposals.

A data appendix provides annual Puerto Rico debt totals from 1910 to 2015 gathered from commonwealth annual reports and other historical sources.

HISTORICAL SURVEY

Puerto Rico's history has bequeathed the island political institutions that are unable to balance revenues and expenditures, along with an economy that is dominated by the public sector and unable to address the unintended consequences of congressional action. Further, the roots of Puerto Rico's troubles extend much deeper into Puerto Rico's past than many observers realize.

Developments before Full Democracy

Spain colonized Puerto Rico in the early 16th century and governed the island until 1898. During the Spanish colonial period, Puerto Rico had little political autonomy and was largely ruled by governors appointed in Madrid. "Congress's approach to Puerto Rico differed from its handling of other territories. Arizona, New Mexico, and Oklahoma—all territories at the time—had fully elected legislatures." In November 1897, the Spanish government issued La Carta Autonómica—a charter granting Puerto Rico substantial self-rule.¹ Fernando Picó links the charter's implementation to the influence of Puerto Rico's Autonomist Party, which had been formed a decade earlier.² Others characterize the charter as a reaction to the growing independence movement in neighboring Cuba³ and to fear of US intervention.⁴

The United States invaded and occupied Puerto Rico during the Spanish American War of 1898, stripping the new autonomous government of its powers and imposing military rule.⁵ In April 1900, Congress passed the Foraker Act, restoring civilian government. The act provided for an elected lower legislative house, with both the territory's governor and upper house appointed by the US president⁶ still leaving the island with less autonomy than it had at the end of Spanish rule.

Congress's approach to Puerto Rico differed from its handling of other territories. Arizona, New Mexico, and Oklahoma—all territories at the time—had fully elected legislatures.⁷ It is especially notable that the Hawaiian Organic Act—also enacted in April 1900—gave Hawaii a

^{1.} *Carta Autonómica de 1897 de Puerto Rico*, Lex Juris Puerto Rico, http:// www.lexjuris.com/lexlex/lexotras/lexcartaautonomica.htm.

^{2.} Fernando Picó, *History of Puerto Rico* (Princeton, NJ: Markus Wiener Publishing, 2013), 222–25.

^{3.} Kal Wagenheim and Olga Jiménez de Wagenheim, eds., *The Puerto Ricans: A Documentary History* (Princeton, NJ: Marcus Wiener Publishers, 2013), 92.

^{4.} Guillermo Moscoso, "Puerto Rico Should Forget about Dual Citizenship," San Juan Star, August 2, 1998, http://www.puertorico-herald.org/issues /1997-98misc/moscoso-19980802.html.

^{5.} Wagenheim and Wagenheim, The Puerto Ricans, 93.

^{6.} L. S. Rowe, *The United States and Porto Rico* (New York: Longmans, Green, and Co., 1904), 135.

^{7.} Al Bates, "Days Past: The First Arizona Territorial Election Is Held," *Daily Courier*, July 13, 2014, http://dcourier55.lupprelaunch.com/main .asp?SectionID=1&SubsectionID=1&ArticleID=133811; "New Mexico's First Constitution 1850," New Mexico Office of the State Historian, http:// admin.newmexicohistory.org/filedetails.php?fileID=24057; "Oklahoma Territory," *Encyclopedia of Oklahoma History and Culture*, Oklahoma Historical Society, 2009, Oklahoma Territory. http://www.okhistory.org /publications/enc/entry.php?entry=OK085.

territorial government in which both legislative houses were elected.⁸ Like Puerto Rico, Hawaii was an overseas territory annexed by the United States in 1898, so the difference in their respective territorial constitutions appears to be discriminatory.

One difference between Hawaii and Puerto Rico is that the former had an Anglo ruling class before annexation.⁹ Suspicion of Puerto Rico's Spanishspeaking elite and condescension toward the territory's general public was captured in an 1899 letter to the *New York Times*:

Turn this island over to the dominant class, and it will be Spanish in all but name a hundred years from now. Make a district of Puerto Rico. Appoint a commission of citizens of the United States to govern it. Introduce a few hundred school teachers. Organize a system of free schools, teaching nothing but English, and in a few years a portion of these people can be safely admitted into the Government.... The people are a lighthearted, simple-minded, harmless, indolent, docile people, and while they gamble and are fond of wine, women, music, and dancing, they are honest and sober. They seem to realize that labor there has no reward, and that their existence is not much improved by the small share they receive of what they produce. Therefore they had just as well not labor at all. As Ignorant and simple as they are, they hope a change of government will improve their miserable condition.¹⁰

Aside from offering less democratic control, the 56th Congress declined to give Puerto Ricans US citizenship, while granting it to Hawaiians. The lack of US citizenship placed Puerto Rico residents in a legal limbo, unable to travel abroad without a US government endorsement.¹¹ That inequity was resolved when Congress passed the Jones-Shafroth Act in 1917,¹² which granted US citizenship to any Puerto Rican who did not explicitly refuse it.

^{8.} Hawaiian Organic Act, Pub. L. No. 45-331, 31 Stat. 141 (1900). Full text available at http://www .hawaiiankingdom.org/us-organic-act-1900.shtml.

^{9.} Learning Network, "Hawaiian Monarchy Overthrown by America-Backed Businessmen," *New York Times*, January 17, 2012, http://learning.blogs.nytimes.com/2012/01/17/jan-17-1893-hawaiian -monarchy-overthrown-by-america-backed-businessmen/?_r=0.

^{10.} S. S. Harvey, "Americanizing Puerto Rico," *New York Times*, February 22, 1899. 11. Picó, *History of Puerto Rico*, 250.

^{12.} An Act to provide a civil government for Porto Rico, and for other purposes, Pub. L. No. 64-368, 39 Stat. 951 (1917), available at http://www.legisworks.org/congress/64/publaw-368.pdf.

The new law also replaced Puerto Rico's unelected Executive Council with an elected Senate.

One provision of the Jones-Shafroth Act had unintended consequences that still resonate today. The law exempted interest on Puerto Rico government bonds from federal, state, and local income taxation in the United States, making Puerto Rico municipal bonds attractive to tax-sensitive investors throughout the country.¹³ At the same time, however, the act limited government borrowing to 7 percent of the total assessed value of Puerto Rico property.

The granting of US citizenship to Puerto Ricans would later facilitate mass migration to the United States mainland. During the 1920s, approximately 42,000 Puerto Ricans—representing about 3 percent of the island's population—left for the mainland. After World War II, the pace of migration rose sharply,¹⁴ limiting economic growth and draining Puerto Rico of many ambitious workers and entrepreneurs.

Three years after the Jones-Shafroth Act was enacted, Washington Senator Wesley Jones introduced the Merchant Marine Act of 1920, which prevents foreign-flagged ships from transporting goods between the US mainland and overseas territories such as Puerto Rico. The impact on Puerto Rico, Guam, Alaska, and Hawaii was and remains higher shipping expenses increasing costs for offshore consumers and raising the prices of products shipped to the continental United States.

Although Puerto Rico's economy performed well during the initial years under American control, much of the benefit flowed to absentee owners, including large US-based sugar companies. Agricultural wages, typically less than \$1 per day, were below those reported in Hawaii, Cuba, and Honduras.¹⁵

In the late 1920s and early 1930s, Puerto Rico's economy was buffeted by two major hurricanes and the worldwide Great Depression. Wages fell and unemployment increased. Between 1929 and 1933, national income fell from \$176 million to \$134 million.¹⁶

^{13.} While interest on municipal bonds issued by mainland states and cities is also exempt from federal income tax, it can only be exempt from state and local income taxes within the state of issuance. Puerto Rico bonds are unique in that they are exempt from *all* state and local income taxes nationwide.

^{14.} José L. Vázquez Calzada, *La población de Puerto Rico y su trayectoria histórica* (Río Piedras, PR: Escuela Graduada de Salud Pública, Recinto de Ciencias Médicas, Universidad de Puerto Rico, 1988), 286.

James L. Dietz, *Economic History of Puerto Rico: Institutional Change and Capitalist Development* (Princeton, NJ: Princeton University Press, 1986), 111.
 Ibid., 137.

In the mid-to-late 1930s, national income rebounded—largely due to increased government spending. As a proportion of national income, the government sector increased from 20.7 percent in 1934 to 32.1 percent in 1939.¹⁷ Much of this growth is related to the establishment of the Puerto Rico Reconstruction Administration, a New Deal program that funded more than 100 work projects around the island.¹⁸

Rexford Tugwell, appointed by Franklin Delano Roosevelt as Puerto Rico's governor in 1941, believed that radical steps were necessary to improve the island's economy. Tugwell was a Columbia University economist who visited the Soviet Union in 1927. Impressed with the Soviet state's ability to produce goods and distribute prosperity more broadly, he hoped to bring the benefits of central planning to the United States.¹⁹ During Roosevelt's first term, Tugwell helped create and implement a number of New Deal programs, including the Agricultural Adjustment Administration, which paid farmers not to grow food.²⁰

As governor of Puerto Rico, Tugwell created or expanded a number of public corporations. These included the Water Resources Authority (which later became the Electric Power Authority, PREPA), the Aqueduct and Sewer Authority (PRASA), the Transportation Authority (which later became the Highway and Transportation Authority, PRHTA), the Land Authority and the Government Development Bank (GDB).

Public corporation borrowing also began under Tugwell in 1944. The Water Resources Authority issued a \$20 million bond to purchase the Porto Rico Railway,²¹ the Light and Power Company, and the Mayagűez Light, Power, and Ice Company—effectively nationalizing most of the island's electric power supply. After this initial issue, public corporation debt grew rapidly—reaching \$50 million in 1947 and almost \$100 million by 1952.²² By the early 1950s, both

21. Until the mid-20th century, the name Puerto Rico was usually anglicized to Porto Rico. 22. Puerto Rico Department of Finance, *Treasurer's Annual Report: 1951–52*.

^{17.} Angel G. Qunitero-Rivera, "La base social de la transformación ideológica del Partido Popular en la década del '40," in *Cambio y desarrollo en Puerto Rico : La transformación ideológica del Partido Popular Democrático*, ed. Navas Dávila (Río Piedras, PR: Editorial Universitaria, Universidad de Puerto Rico, 1977), 46.

^{18. &}quot;Facts about the Puerto Rico Reconstruction Administration," Information Research Section, December 1938, New Deal Network, accessed November 30, 2015, http://newdeal.feri.org/pr/pr10 .htm.

^{19.} Jim Powell, *FDR's Folly: How Roosevelt and His New Deal Prolonged the Great Depression* (New York: Three Rivers Press, 2003).

^{20.} Lawrence W. Reed, "The Man Who Sowed the Seeds of Puerto Rico's Collapse," Foundation for Economic Education, July 31, 2015, http://fee.org/articles/the-man-who-sowed-the-seeds-of-puerto -ricos-collapse/.

the Transportation Authority and the Aqueduct and Sewer Authority had joined the Water Resources Authority in issuing debt.

The rapid growth in borrowing by public corporations contrasted with relatively restrained debt accumulation by the insular government (later known as the commonwealth government) and by municipalities. When the United States established a civilian government in Puerto Rico, the insular government had no debt, while municipalities owed approximately \$500,000 in aggregate.²³ After several years of conservative fiscal management, the governor and executive council began authorizing government borrowing to support infrastructure development.

In 1913, combined insular and municipal debt totaled \$5.8 million. (Due to a relatively small amount of municipal borrowing from the insular government, this total reflects some double-counting.) By 1931, total debt had increased by a factor of nine, to \$49.1 million. Although quite dramatic, this increase is less concerning when placed in the context of the overall municipal bond market at the time. The inception of the US individual income tax in 1913—with its exemption of municipal bond interest—and the demand for paved roads after World War I fueled a nationwide boom in state and local borrowing. A number of states, including North Carolina and Florida, experienced an even faster growth in government borrowing than did Puerto Rico during this period.²⁴

After 1931, Puerto Rico municipal and insular debt outstanding shrank, falling by roughly half to a low of \$24.4 million in 1947. However, this traditional government debt was already dwarfed by the \$50 million in Water Resources Authority bonds then outstanding.

An Elected Government, A New Constitution, and Accelerated Debt Accumulation

After World War II, popular pressure for greater self-government in Puerto Rico increased. The Truman administration and Congress responded by appointing the first native Puerto Rican governor in 1946, authorizing popular gubernatorial elections in 1948, and approving a new constitution in 1952. The constitution provided Puerto Rico's government with greater autonomy, as

^{23.} Victor S. Clark et al., *Porto Rico and Its Problems* (Washington, DC: Brookings Institution, 1930), 315.

^{24.} Marc Joffe, "Drivers of Municipal Bond Defaults during the Great Depression" (master's thesis, San Francisco State University, 2013).

suggested by the re-characterization of Puerto Rico from a territory to a commonwealth.²⁵

This period of increased self-rule coincided with a sharp expansion of government debt. The era of fiscal restraint ended in 1947 when insular government debt was the lowest it had been since 1920. By 1953, the new commonwealth's debt had tripled to \$33.1 million; by 1960, it had quadrupled to \$144.3 million. Municipal debt grew more slowly, but the new class of corporate debt continued its rapid growth—increasing from \$105.2 million in 1953 to \$313.7 million in 1960. Cumulatively, between 1948 and 1960 total Puerto Rico public-sector debt rose by a factor of almost seven in nominal terms, while more than quintupling in real dollars.

While debt accumulation coincided with greater local control, Puerto Rico had institutional structures to constrain borrowing. Unfortunately, these structures—a balanced budget clause in the 1952 constitution and a limit on government debt at 7 percent of assessed property valuations—both failed.

Constitutional Balanced Budget Requirement²⁶

In 1950, the US Congress passed the Puerto Rico Federal Relations Act (PL 81-600), allowing Puerto Rico to hold a plebiscite on the issue of rewriting the island's constitution.²⁷ Citizens of Puerto Rico overwhelmingly voted in favor of electing delegates to establish their own constitution in 1951.²⁸

(Oxford: Oxford University Press, 2005), 556.

"Cumulatively, between 1948 and 1960 total Puerto Rico public-sector debt rose by a factor of almost seven in nominal terms, while more than quintupling in real dollars."

^{25.} Efrén Rivera-Ramos, "Puerto Rico: Autonomy or Colonial Subordination?," in *Practising Self-Government*, ed. Yash Ghai and Sophia Woodman (Cambridge: Cambridge University Press, 2013), 101–5. 26. This section expands on an article by David R. Martin: "Back Story on Puerto Rico's Debt Crisis," *The Hill*, September 4, 2015, http://thehill.com /blogs/congress-blog/economy-budget/252723-back-story-on-puerto -ricos-debt-crisis. The authors would also like to thank Mr. Martin for sharing source materials.

^{27.} An act to provide for the organization of a constitutional government by the people of Puerto Rico, Pub. L. 600, 64 Stat. 319–20 (1950).
28. Dieter Nohlen, ed., *Elections in the Americas: A Data Handbook*, vol. 1

Ninety-two delegates were elected to draft a constitution.²⁹ These delegates convened for the Constitutional Convention throughout 1951 and 1952. During the convention, the delegates established the fundamental tenets of self-governance, modeled after the principles of the US Constitution and Bill of Rights.³⁰

Convention delegates debated various sections of the proposed constitution. One such debate, involving Victor Gutiérrez Franqui and Luis Negrón López,³¹ had major implications for Puerto Rico's fiscal future. The debate related to the interpretation of the total funds to be classified as "resources" for the purpose of balancing the commonwealth's budget each fiscal year.

Section 34 of the 1917 Jones-Shafroth Act contained the following language concerning a balanced budget:

No appropriation shall be made, nor any expenditure authorized by the legislature, whereby the expenditure of the Government of Porto Rico during any fiscal year shall exceed the total revenue then provided for by law and applicable for such appropriation or expenditure, including any available surplus in the treasury, unless the legislature making such appropriation shall provide for levying a sufficient tax to pay such appropriation or expenditure within such fiscal year.³²

The English version of the 1952 constitution ultimately included the following, roughly similar, language in section 7 of article VI:

The appropriations made for any fiscal year shall not exceed the total revenues, including available surplus, estimated for said fiscal year unless the imposition of taxes sufficient to cover said appropriations is provided by law.

- 30. "Constitución del Estado Libre Asociado de Puerto Rico," Puerto Rico's Office of Legislative Services, accessed December 10, 2015, http://www.oslpr.org/v2/documentos.aspx.
- 31. "Diario de Sesiones de la Convención Constituyente de Puerto Rico," Puerto Rico's Office of Legislative Services, accessed December 10, 2015, http://www.oslpr.org/v2/documentos.aspx.
 32. An Act to provide a civil government for Porto Rico, and for other purposes, Pub. L. No. 64-368, 39 Stat. 951.

^{29.} R. Sam Garrett, *Political Status of Puerto Rico: Options for Congress*, Congressional Research Service Report No. RL32933, June 7, 2011.

In the Spanish text, the English term "total revenues" was translated as "recursos totales." As David Martin notes in *The Hill*, "recursos totales" is most accurately translated as "total resources"³³—a concept that could be interpreted more broadly.

At the Constitutional Convention, Delegate Gutiérrez Franqui asked for a clarification the meaning of "recursos totales."³⁴ Delegate Negrón Lopez argued that "total resources" did not mean the same thing in the early 1950s as it did when the 1917 Jones-Shafroth Act was enacted. Negrón López claimed that the reading of "total income" found in the Jones-Shafroth Act "did not fully encapsulate the total resources available to the government."³⁵ The convention decided to adopt a looser interpretation of funds available for the government vis-à-vis the 1917 act. This interpretation included revenues from taxation, surpluses, royalties, federal assistance, and, most importantly, funds obtained through the sale of bonds. By allowing debt proceeds to be used as a tool to balance the budget, the convention opened the door to recurring operating deficits.

In 1974, Puerto Rico Attorney General Francisco de Jesús Schuck provided guidance regarding the legal extent of the two key words mentioned earlier, "recursos totales," as they should apply to the finances of the commonwealth government.³⁶ The attorney general ruled that the 1951 delegation intended to provide the word "resource" with "the most general definition."³⁷ The attorney general's decision goes on to note that "the legislative intention [during the constitutional debates] was to expand the availability of financial mechanism and resources available for public management."³⁸ The attorney general—a gubernatorial appointee—thus offered an interpretation that supported the continued deficit spending.

Had the matter advanced to the Puerto Rico Supreme Court, the outcome may not have been much different because appointed courts like those in Puerto Rico display less independence than separately elected courts. In an extensive analysis of US state spending and fiscal institutions, David Primo finds that states with elected courts more effectively enforced budget limita-

^{33.} Martin, "Back Story on Puerto Rico's Debt Crisis."

 ^{34. &}quot;Diario de Sesiones de la Convención Constituyente de Puerto Rico," 1090.
 35. Ibid.

^{36.} P.R. Op. Sec. Just. 1974-15, 1974 WL, 326062, Opiniones del Secretario de Justicia de Puerto Rico, May 21, 1974.

^{37.} Ibid., 1, our translation.

^{38.} Ibid., our translation.

tions than those with appointed judges.³⁹ This empirical finding is consistent with theory. As Primo explains,

The ultimate arbiters of constitutional rules are the courts. Certain types of judges may be more inclined to aid and abet the legislative and executive branches in playing fast and loose with constitutional budget rules. The success of balanced budget rules can be compared by distinguishing between elected and appointed jurists. The former are less likely to be beholden to the legislature or the governor, as they are selected by the electorate, and are therefore not inclined to rubber-stamp legislative actions. While budget disputes rarely wind their way to a state high court, it may be that the threat of effective enforcement is enough to obtain compliance with the rules.⁴⁰

Relaxation of the Public Debt Ceiling

The 1917 Jones-Shafroth Act also limited Puerto Rico's bonded indebtedness to 7 percent of assessed taxable property value. The limit applied to the total of insular and municipal debt. In 1950, Congress revised this limitation. The Puerto Rico Federal Relations Act provided for a split debt limit: 10 percent of assessed valuation in certain major cities and 5 percent for the rest of the island.

By the mid-1950s, Government Development Bank officials became concerned that this limitation would impede the government's borrowing program, and they started searching for ways around it. Options included creating special-purpose districts whose borrowing would not count toward the congressionally imposed limit or convincing Congress to remove the limit.⁴¹

In 1961, Congress amended the Puerto Rico Federal Relations Act to remove the federally imposed debt limit once Puerto Rico voters ratified a constitutional amendment with debt limitation language.⁴² The amendment approved by voters on December 4, 1961, contained significantly weaker debt

^{39.} David M. Primo, *Rules and Restraint: Government Spending and the Design of Institutions* (Chicago: University of Chicago Press, 2007), 103.

^{40.} Ibid., 86.

^{41.} John Pershing Jr., Government Development Bank, Memorandum: Commonwealth Debt Limit, September 22, 1955.

^{42.} To provide for amending section 3 of the Puerto Rican Federal Relations Act, Pub. L. 121, 75 Stat. 245 (1961).

limitation language.⁴³ Municipalities were allowed to borrow between 5 percent and 10 percent of assessed value on their own, without including commonwealth debt in the calculation.

The commonwealth itself no longer had a debt limit based on assessed valuation. Instead, the amendment imposed a 15 percent ceiling on *debt service* (principal and interest payments) as a percentage of tax revenues. It thus became possible for the governor and legislature to borrow more if they increased tax rates—an option that did not exist under the assessed value-based limits prevailing before 1961.

Finally, the commonwealth borrowing limit only applied to "bonds or notes for the payment of which the full faith credit and taxing power of the Commonwealth shall be pledged." The constitutional language does not apply to bonds backed by a single tax. Ultimately, the Puerto Rico government would avail itself of this loophole by creating COFINA, an entity that issues bonds backed exclusively by commonwealth sales tax revenues.⁴⁴

None of these limits appear to apply to public corporation debt, which is theoretically backed by revenues from user fees. But to the extent that public corporation operating losses were offset by subsidies from Puerto Rico's general fund, their debt is partially serviced by tax revenues—thereby defeating the purpose of the original borrowing limit.

More Recent Developments

The development of public corporations, the hollowing out of the commonwealth's constitutional balanced budget requirement, and the relaxation of borrowing limitations abetted Puerto Rico's debt accumulation in the years after World War II. As we saw earlier, commonwealth and

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"By the early 1980s, Puerto Rico's debt burden had already become a cause for concern."

^{43.} Constitution of the Commonwealth of Puerto Rico, art. VI, § 2 as Amended on December 4, 1961, http://www.constitution.org/cons/puerto rico-eng.htm.

^{44.} Martin, "Back Story on Puerto Rico's Debt Crisis."

corporate debt increased sharply between 1947 and 1960. Debt outstanding continued its rapid rise in the 1960s and 1970s. Commonwealth debt outstanding rose from \$144 million to more than \$1.6 billion during this period, while corporation debt skyrocketed from \$314 million to more than \$5.2 billion. In real terms, public-sector debt quintupled between 1960 and 1980.

By the early 1980s, Puerto Rico's debt burden had already become a cause for concern. In a 1982 article, local economist Tosporn Chotigeat warned about the rapid growth of the island's debt burden. Chotigeat argued that debt service constituted an ongoing outflow of funds, because most of the debt was held externally. He also expressed concern that the long life of the debt meant that it would become a burden on future generations, and he further observed that proceeds from newly issued bonds were often being used to pay principal and interest on previously issued bonds rather than to build infrastructure. Chotigeat's article is important because it contradicts the view that Puerto Rico's debt crisis has relatively recent origins.⁴⁵

That said, some more recent policy changes have exacerbated Puerto Rico's situation. In 1984, Congress explicitly denied Puerto Rico entities access to Chapter 9 municipal bankruptcy protection. Before that year, Chapter 9 applied to a "political subdivision or public agency or instrumentality of a State." Although Puerto Rico is not a state, it is possible that courts would have decided that the legislative intention was to include municipalities in "statelike" entities such as Puerto Rico. However, the Bankruptcy Amendments and Federal Judgeship Act of 1984⁴⁶ explicitly applied all chapters of the bankruptcy code *other than* Chapter 9 to Puerto Rico and Washington, DC.⁴⁷ Luis A. Ferré Sadurní reviewed the legislative record and found no rationale for this provision, which does not appear to be have been debated. The language apparently received little thought at the time, perhaps due to Puerto Rico's lack of a representative with voting power in Congress.⁴⁸

In 2014, the Puerto Rico legislature enacted the Puerto Rico Debt Enforcement and Recovery Act, creating a bankruptcy process for municipalities and public corporations analogous to Chapter 9. Thus far, US courts have ruled that Congress's exclusion of Puerto Rico municipalities

^{45.} Tosporn Chotigeat, "A Cause for Concern over Puerto Rico's Public Debt," *Revista/Review Interamericana* 12, no. 3 (Fall 1982): 457–61.

^{46.} Bankruptcy Amendments and Federal Judgeship Act of 1984, Pub. L. No. 98-353, § 421(j)(6), 98 Stat. 333 (1984).

^{47.} The specific language reads as follows: "'State' includes the District of Columbia and Puerto Rico, except for the purpose of defining who may be a debtor under chapter 9 of this title."

^{48.} Luis A. Ferré Sadurní, "The Puerto Rico Paradox," Public Policy Initiative, Penn Wharton,

January 7, 2015, http://publicpolicy.wharton.upenn.edu/live/news/444-the-puerto-rico-paradox.

from Chapter 9 preempts the Puerto Rico law and have thus not allowed it to take effect.⁴⁹ However, Boston First Circuit Appeals Judge Juan Torruella argued in his opinion that Congress's 1984 act deviates from the constitutional requirement for nationally uniform bankruptcy statutes and does so for no particular reason.⁵⁰ As of this writing, the US Supreme Court has granted *certiorari* to Puerto Rico's appeal of the lower court's decision.

Finally, a number of observers have attributed Puerto Rico's fiscal crisis to the phaseout of Section 936 of the Internal Revenue Code, which had exempted corporate income earned in Puerto Rico from taxation.⁵¹ Although Section 936 was added to the code in 1976, it replaced a variety of other corporate tax benefits dating back to 1921.⁵² Congress phased out the exemption over a 10-year period starting in 1996. At the end of the phaseout period in 2006, Puerto Rico entered a recession, which has largely continued until today.⁵³

Congress's repeal of Section 936 was one of a number of federal legislative actions that had the unintended consequence of exacerbating Puerto Rico's current debt crisis. As we have seen from this historical sketch, other congressional actions that contributed were (1) the triple tax exemption on Puerto Rico municipal bond interest, (2) restricting foreign-flagged ships from transporting goods between the mainland and Puerto Rico, (3) the granting of US citizenship to Puerto Rico residents, (4) the elimination of the federally imposed debt limit, and (5) the exclusion of Puerto Rico entities from Chapter 9 bankruptcy. Although a number of these measures appear to be well intentioned, they all had the unintended consequence of encouraging debt accumulation beyond Puerto Rico's fiscal capacity (by facilitating debt accumulation, by limiting economic growth and thus fiscal capacity, or by preventing excessive debts from being restructured).

^{49.} Franklin California Tax Free Trust v. Commonwealth of Puerto Rico, No. 15-1218 (FAB) (D.P.R. July 6, 2015).

^{50.} Ibid., 58. "A tracing of [the 1984 amendment's] travels through the halls of Congress sheds less light than a piece of coal on a moonless night regarding the reason for its enactment."

^{51.} Scott Greenberg and Gavin Ekins, "Tax Policy Helped Create Puerto Rico's Fiscal Crisis," *Tax Policy Blog* (Tax Foundation), June 30, 2015, http://taxfoundation.org/blog/tax-policy-helped-create -puerto-rico-s-fiscal-crisis.

^{52.} General Accounting Office, *Tax Policy: Puerto Rico and the Section 936 Tax Credit* (report to the Senate Committee on Finance, June 1993).

^{53.} Puerto Rico has experienced negative real GNP growth each year between 2006 and 2015, with the exception of 2012, when the commonwealth saw growth of +0.5 percent. Growth in 2015 is also expected to be negative. For 2006–2014 growth rates, see http://www.tradingeconomics.com/puerto -rico/gdp-growth-annual. Focus Economics forecasts negative growth for the 2015 and 2016 fiscal years. See http://www.focus-economics.com/countries/puerto-rico.

SOME CURRENT ISSUES

Now that we have provided the historical perspective, we will survey four areas of Puerto Rico's contemporary fiscal dysfunction. First we will discuss problems with Puerto Rico's fiscal transparency; then we will consider the public employee pension funding crisis that affects the commonwealth. Third and fourth, we will examine two specific categories of expenditure that are displaying serious excesses: corrections and healthcare administration.

Fiscal Transparency

Former World Bank Chief Economist Anne Krueger and her coauthors, Ranjit Teja and Andrew Wolfe, find that the "accounting systems in Puerto Rico do not permit timely and reliable monitoring of fiscal trends."⁵⁴ They note that the commonwealth's annual audited financial statements are not timely and that interim reports are incomplete. We discuss each of these issues in this section.

US governmental units that issue municipal bonds or receive federal grants in excess of \$750,000 are generally required to file annual audited financial statements. These reports usually follow standards established by the Governmental Accounting Standards Board. In the municipal finance industry, these statements are usually known as comprehensive annual financial reports (CAFRs).⁵⁵

Truth in Accounting (a not-for-profit organization that studies government financial filings) monitors the timeliness of CAFRs issued by the 50 states.⁵⁶ According to the organization's statistics, the average lag between the end of the fiscal year and the publication of a state's CAFR was 188 days in 2013 and 192 days in 2014. This level of timeliness compares poorly with that of publicly traded companies, which typically file financial statements within 90 days of year-end.⁵⁷ The states with the worst timeliness were Illinois and New Mexico. Illinois took 243 days to publish its 2013 CAFR and 255 days to publish

^{54.} Anne O. Krueger, Ranjit Teja, and Andrew Wolfe, *Puerto Rico: A Way Forward*, June 29, 2015, p. 10. 55. Technically this is a misnomer. A CAFR includes basic financial statements as well as statistical data specified by the Government Finance Officers Association. Most local governments only file the basic financial statements. Puerto Rico downgraded its reporting from a full CAFR in 2012 to basic financial statements in 2013.

^{56.} Truth in Accounting, "State Data and Comparisons," State Data Lab, accessed December 1, 2015, http://www.statedatalab.org/state_data_and_comparisons/.

^{57.} Alan I. Blankley, David N. Hurtt, and Jason E. MacGregor report a median lag of roughly 63 days. "Are Lengthy Audit Report Lags a Warning Signal?," *Current Issues in Auditing* 9, no. 2 (2015): P19– P28, http://aaapubs.org/doi/pdf/10.2308/ciia-51215. SEC deadlines for Form 10-K annual financial filings range from 60 to 90 days. See US Securities and Exchange Commission, "Fast Answers: Form 10K," accessed December 1, 2015, http://www.sec.gov/answers/form10k.htm.

its 2014 CAFR. New Mexico took 364 days to publish its 2013 CAFR and 407 days to publish its 2014 CAFR. 58

Puerto Rico's CAFR publication performance compares poorly to that of the 50 states. The commonwealth's financial statements for the fiscal year ending June 30, 2013, appeared 365 days later—on June 30, 2014. As of February 1, 2016, the commonwealth's 2014 CAFR has yet to appear.⁵⁹

Furthermore, Puerto Rico has not effectively managed investor expectations regarding the CAFR's timing. On April 21, 2015, the commonwealth posted a notice on the Electronic Municipal Market Access (EMMA) system of the Municipal Securities Rulemaking Board. The notice advised investors that the government would be unable to issue its CAFR by the May 1 filing deadline and that it expected to file by July 31. On July 31 it filed a second extension notice specifying a new date of October 31. One day before that new deadline, the commonwealth filed a third delay notice with no forecast release date:

NOTICE IS HEREBY GIVEN that the Commonwealth of Puerto Rico (the "Commonwealth") will not file its audited financial statements for fiscal year 2014 (the "2014 Financial Statements") by October 31, 2015, as had been previously announced by the Commonwealth. The Commonwealth cannot provide an estimate at this time of when it will be able to complete and file its audited financial statements. The Commonwealth has been unable to finalize its 2014 Financial Statements principally due to the delay of certain component units and fiduciary funds in completing their financial statements and the independent auditor's decision to conduct additional audit procedures given the liquidity risk and uncertainties affecting the Commonwealth and such units and funds. The component units and fiduciary funds that have not issued their audited financial statements as of the date of this notice are the three retirement systems of the Commonwealth, the Puerto Rico Electric Power Authority, the Puerto Rico Highways and Transportation Authority and the Government Development Bank for Puerto Rico. The audited financial statements of such component units and fiduciary funds are required to

^{58.} Institute for Truth in Accounting, "State Data and Comparisons."

^{59.} More recently the commonwealth released an unaudited version of its 2014 Financial Statements.

"As of June 30, 2014, Puerto Rico's three major pension systems had aggregate actuarial liabilities of \$45.5 billion compared to net assets of \$1.9 billion—yielding a funded ratio of only 4 percent." be incorporated into the Commonwealth's financial statements.⁶⁰

This language suggests a widespread breakdown in auditing discipline across Puerto Rico's public sector, which will make it difficult for the commonwealth or its instrumentalities to regain capital market access.

In the absence of CAFRs, investors and researchers can review interim reports published by the Commonwealth Treasury. Unfortunately, these reports are not comprehensive. As Krueger, Teja, and Wolfe explain, the Treasury reports apply only to the commonwealth's general fund.⁶¹ This scope excludes 150 other funds that may run significant deficits. The commonwealth's 2013 basic financial statements show a general fund deficit of \$1.3 billion and a total governmental funds deficit of \$3.6 billion.⁶² Thus, governmental funds other than the general fund ran deficits aggregating to \$2.3 billion.

Furthermore, the Treasury's general fund reporting has limitations that constrain analysts' ability to monitor fiscal performance. For example, monthly general fund reports published on the treasurer's website⁶³ do not include general fund expenditures or federal grants. In fiscal year (FY) 2013, federal grants (labeled "Intergovernmental" in the financial statements) accounted for 39 percent of overall general fund revenue.

Reports on financial information and operating data, available on EMMA, contain more information but are published at irregular intervals.⁶⁴ General fund rev-

^{60.} Commonwealth of Puerto Rico, "Notice of Failure to File Annual Report," October 30, 2015.

^{61.} Krueger, Teja, and Wolfe, *Puerto Rico*.

^{62.} Commonwealth of Puerto Rico, "Basic Financial Statements and Required Supplementary Information, Fiscal Year Ended June 30, 2013," p. 26, http://emma.msrb.org/EA614904-EA481549-EA878168.pdf. 63. See Departamento de Hacienda, General Fund Revenues, http://www .hacienda.gobierno.pr/inversionistas/estadisticas-y-recaudos-statistics -and-revenues/ingresos-netos-al-fondo-general-general-fund-net -revenues.

^{64.} See Departamento de Hacienda, Commonwealth of Puerto Rico Financial Information and Operating Data Report, http://www.hacienda

enues and expenditures provided in these disclosures are reported on a budgetary basis, which varies from the modified accrual basis employed for governmental fund statements in CAFRs. The numbers are thus not consistent with those appearing in annual audits.

Pension Systems

In addition to the commonwealth's \$69.9 billion in bonded debt, Puerto Rico's public-sector entities have substantial unfunded employee pension obligations. The state fiscal ranking analysis published by the Mercatus Center at George Mason University concluded that Puerto Rico ranked behind all 50 states in terms of trust fund solvency in 2013.⁶⁵ As of June 30, 2014, Puerto Rico's three major pension systems had aggregate actuarial liabilities of \$45.5 billion compared to net assets of \$1.9 billion—yielding a funded ratio of only 4 percent.⁶⁶

While the Judiciary and Teachers Retirement Systems were both about 12 percent funded, the Employees Retirement System (ERS) had a funded ratio of just 0.42 percent.⁶⁷ During the 2015 fiscal year, the ERS exhausted its remaining net assets, compelling the system to either operate on a pay-as-you-go basis or fail to make promised benefit payments. ERS obligations are shared by the commonwealth, public corporations, and municipalities.

The shortage of assets in Puerto Rico's public employee pensions was the result of chronic underfunding. In the fiscal year ending June 30, 2014, public-sector employers made a total of \$850 million in pension contributions versus total actuarially required contributions of \$2.572 billion. In other words, public-sector employees paid only one-third of the amount actuaries deemed necessary to maintain the system's long-term solvency. Similar underpayments occurred in previous years.

[.]gobierno.pr/inversionistas/informacion-financiera-y-reporte-de-data-operacional-del-estado-libre -asociado-de-puerto-rico-commonwealth-puerto-rico-financial-information-and-operating-data. 65. Eileen Norcross, "Puerto Rico," Mercatus Center at George Mason University, 2015, http:// mercatus.org/statefiscalrankings/puertorico.

^{66.} Most of the data in this section are the authors' calculations based on actuarial valuation reports dated June 30, 2014, published by the three retirement systems: Puerto Rico Employees Retirement System (http://www.retiro.pr.gov/files/Actuarial%20Valuations/PRGERS_Val_June302014_Revised Oct2015.pdf), Puerto Rico Judiciary Retirement System (http://www.retiro.pr.gov/files/Actuarial% 20Valuations/PRJRS_Val_June302014.pdf), and Puerto Rico Teachers Retirement System (http:// www.srm.pr.gov/pdf/PRTRS_Val_June302014.pdf).

^{67.} Excluding ERS's pension obligation bonds—which will be discussed below—the funded ratio would have been 4.16 percent. Since the \$3 billion of outstanding pension obligation bonds are included in the commonwealth's total public-sector debt, some analysts may wish to add these bonds back to ERS's balance sheet when computing total public-sector liabilities.

As the pension systems exhaust their assets, benefits will have to be paid entirely from employer and employee contributions. In the fiscal year ending June 30, 2015, these benefits were estimated to total \$2.1 billion. This amount is expected to rise to \$2.8 billion in 2044.

As the ERS's assets diminished, the commonwealth resorted to using pension obligation bonds (POBs). When governments or retirement systems issue POBs, they are essentially gambling that the investment returns they receive on the borrowed funds will exceed their borrowing costs.

Between January and June 2008, the ERS issued three series of POBs with a total face value of \$2.95 billion. Interest rates ranged from 5.85 percent to 6.55 percent. Not all the bond proceeds were available to invest. The ERS paid \$9 million, or 0.31 percent of proceeds, in up-front borrowing costs. For the POB to pay off, ERS investments would have to also offset these issuance costs. Further, \$82 million of the bond proceeds were deposited in reserve accounts required under the bond agreement to protect investors. These funds must be kept in very liquid accounts, paying little or no interest. Because some proceeds were required to cover issuance costs and protect investors, the ERS would have had to realize returns well in excess of the 5.85–6.55 percent interest costs for the bond deal to be a net positive.⁶⁸

Unfortunately for Puerto Rico, the POBs were not a net positive. In the fiscal year ending June 30, 2009—the year immediately following the POB issuance—the ERS suffered a 13 percent loss on its investments. Although performance improved in subsequent years, the system's investment portfolio was unable to fully recover due to the need to pay benefits in excess of employer and employee contributions.⁶⁹

The timing of the ERS's POB issuance—at the onset of the Great Recession—was particularly unfortunate, but POBs are generally not a good solution for pension underfunding. Aside from the issuance costs and interest expenses they generate, these bonds encourage governments to underfund their pension obligations. Alan Sloan and Cezary Podkul found that three-quarters of the largest POB issuers failed to make full actuarially required contributions in the years after issuance, and a majority used proceeds to pay benefits—"borrowing from the future to pay today's expenses."⁷⁰

^{68.} Figures quoted in this paragraph are based on bond offering documents available on the Municipal Securities Rulemaking Board's EMMA website at http://emma.msrb.org/IssuerView /IssuerDetails.aspx?cusip=29216M.

^{69.} Investment portfolio performance data obtained from Puerto Rico Employees Retirement System's audited financial statements, http://www.retiro.pr.gov/index.php/finanzas-asr/.
70. Allan Sloan and Cezary Podkul, "When Wall Street Offers Free Money, Watch Out," *Washington Post*, July 11, 2015, https://www.washingtonpost.com/business/when-wall-street-offers-free-money -watch-out/2015/07/10/11452e6e-2583-11e5-b72c-2b7d516e1e0e_story.html.

Puerto Rico's attempts at pension reform have been hampered by court rulings. In 2014 the Puerto Rico Supreme Court struck down legislative changes to the Teachers Retirement System, finding that the law "substantially diminished the contractual rights of the petitioners in terms of their retirement plan."⁷¹

Since vested pension benefits are generally understood to be a contractual right in both Puerto Rico and US states, government employers should be required to fully fund these benefits when they are earned. Otherwise, pension costs are effectively transferred to future taxpayers either in Puerto Rico or on the US mainland—if the federal government ultimately bails out the commonwealth. Unfortunately, Puerto Rico's constitution did not require the commonwealth or its other public-sector entities to pay the full actuarially required contribution each year.

Managerial Inefficiencies

In 2015 the president of Puerto Rico's senate commissioned a staff report entitled *Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Performance through the Budget Process.*⁷² The review was led by Arnaldo Cruz, cofounder of the Center for Integrity and Public Policy, a Puerto Rico think tank.

Cruz found numerous inefficiencies across the commonwealth government that could be eliminated with minimal impact. Poor management costs the commonwealth millions of dollars in unnecessary spending and perpetuates outdated institutional mechanisms. In the next two sections, we review Cruz's findings in two major service areas: public health and correctional facilities.

Department of Health

Cruz found numerous inefficiencies in Puerto Rico's Department of Health, including systemic fragmentation (which hampers the effective and efficient procurement of resources), redundant facilities such as Bayamon Regional

^{71.} Cate Long, "Puerto Rico Government Stumbles on Teacher Pension Reform," *Muniland Blog* (Reuters), April 14, 2014, http://blogs.reuters.com/muniland/2014/04/14/puerto-rico-government -stumbles-on-teacher-pension-reform/.

^{72.} Arnaldo Cruz et al., *Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Performance through the Budget Process* (report to the Puerto Rico Senate, 2015). The report is only available in Spanish, but it was partially translated for our study.

Hospital, and an excessively high cost of Medicaid administration across the island.

The first area of concern involves the fragmented procurement of health and medical goods by public hospitals. The Cruz report notes that there is no sound reason to explain why the Department of Health has failed to employ the services of the General Services Administration (ASG), the agency whose entire mission is premised on procuring government goods in an effective and efficient manner.⁷³

Additionally, the Department of Health lacks a cohesive and effective centralized procurement system of its own. As noted in the report, this has resulted in a "very fragmented system, with purchasing units and contracts in every hospital of the department."⁷⁴ Thus, the department has failed to utilize the very agency devoted to the efficient procurement of goods and has also neglected to devise any mechanism of its own to streamline purchases.

The second area of concern relates to the exceptionally large budgets of the Bayamon and Metro Regional hospitals. The areas served by these hospitals have the highest number of health facilities per square mile and receive the highest level of funding per thousand residents of any region in Puerto Rico.⁷⁵

The report identifies a \$35.6 million subsidy to Bayamon Regional Hospital split between the commonwealth's general fund and the Department of Health. The Cruz report suggests that the hospital is redundant because residents of Bayamon have many other options for care, including private hospitals, three private diagnostic and treatment centers (CDTs in Spanish), and various other health facilities.⁷⁶ Finally, while the number of available beds at Bayamon Hospital is 173, the most recent statistics indicate that occupancy averaged only 43 beds in 2014.⁷⁷ When asked about the hospital's low occupancy rate and whether there is a legitimate need for Bayamon Regional Hospital, Secretary of Health Anna Rius responded that she could not justify Bayamon Regional Hospital for any reason besides its academic value.⁷⁸

Finally, the Department of Health is expending substantial resources to administer the Medicaid program. There are 82 Medicaid offices across Puerto Rico, which will require \$24.2 million in FY 2016. As the report notes,

^{73. &}quot;Misión y Visión," Administración de Servicios Generales, accessed December 13, 2015, http://www.asg.pr.gov/Sobre-ASG/Misi%C3%B3n-y-Visi%C3%B3n.

^{74.} Cruz et al., Opportunities to Reduce Fragmentation, 35.

^{75.} Ibid., 38.

^{76.} Ibid.

^{77.} Ibid., 39.

^{78.} Ibid., 40.

whether the program is analyzed by square mile or by population, Puerto Rico operates proportionately more Medicaid offices than any US state.⁷⁹ These 82 offices employ a staff of 792 individuals. Moreover, subsidies for the more cost-effective 330-Center program have been diverted for the past two years to cover the gap in Medicaid funding.⁸⁰ In Puerto Rico, "330 Centers" provide an array of diagnostic and primary care services under one roof.

Department of Corrections

The Department of Corrections accounted for almost 5 percent of the general fund's 2015 budget.⁸¹ Correction expenditures are relatively high because the commonwealth has not consolidated facilities despite a sharp decline in the inmate population, refuses to take advantage of savings available from subcontracting operations to private firms, and perpetuates administrative redundancies.

First, the department has continued to operate 36 facilities since 2004 in spite of a significant decline in the island's inmate population. As a result, 20 percent of beds are unused in adult facilities, while 50 percent of beds at juvenile institutions are not utilized. Puerto Rico's inmate to officer ratio of 2.1:1 is lower than that of any US state.⁸² According to the Cruz report, adjusting facilities and staffing to more normal levels could save the department between \$5.9 million and \$21.6 million in FY 2016 and \$35.0 million and \$46.2 million in FY 2017.⁸³

The Department of Corrections could also achieve significant cost savings by subcontracting the functions of state correctional officers to staff employed by private "The [Department of Corrections] has continued to operate 36 facilities since 2004 in spite of a significant decline in the island's inmate population."

^{79.} Ibid., 42.

^{80.} Ibid.

^{81.} Government of Puerto Rico, Presupuesto Consolidado del Fondo General por Agencia Años Fiscales 2013 al 2016, accessed December 21, 2015, http://www2.pr.gov/presupuestos/Presupuesto2015-2016/Tablas %20Estadsticas/05.pdf.

^{82.} Cruz et al., Opportunities to Reduce Fragmentation, 27–28.83. Ibid., 28.

firms. As noted in the report, the primary reason why subcontracting in the last decade was not fully effective was that the Department of Corrections failed to allow private firms to utilize their own staffs, opting to run facilities with government-employed staffs instead. If the Department of Corrections committed to a full public-private partnership, it could save between \$6.1 million and \$9.0 million in FY 2016 and between \$12.1 million and \$18.0 million in FY 2017.⁸⁴

As noted earlier, these findings for the health and correction departments are similar to those for other departments. Overall, Cruz identified more than \$150 million in spending cuts for FY 2017 that would minimally impact service levels.

POLICY ANALYSIS AND RECOMMENDATIONS

Puerto Rico's public sector has amassed an unsustainable level of bonded debt and pension obligations. As we've seen in the historical survey, the commonwealth lacks structures that effectively restrain debt accumulation. Furthermore, because the commonwealth government has relied heavily on bond proceeds and federal subsidies, political leaders lack incentives to balance taxation and expenditures. The electorate receives benefits from government expenditures that exceed the taxes it contributes, so officials who take steps to promote fiscal sustainability are unlikely to maintain political support.

Additional borrowing no longer seems feasible. In this respect, it is important to recognize that commonwealth entities had effectively lost access to capital markets even before leadership broached the idea of defaulting. In March 2014, the commonwealth sold general obligation bonds at a yield of 8.73 percent—more than 500 basis points above the benchmark yield for US municipal bonds.⁸⁵ In the absence of inflation, borrowing at this level of cost cannot be a long-term solution. Further, in late 2014, the Government Development Bank indicated an interest in floating a new bond⁸⁶ but failed to do so—an indication that additional borrowing was impossible at virtually any price. It was not until June 2015 that Governor Alejandro García Padilla

^{84.} Ibid., 30.

^{85.} Oliver Renick, Robert Slavin, and Christine Albano, "Market Close: Oversubscribed Puerto Rico Bonds Buy Island Time to Build," *Bond Buyer*, March 11, 2014, http://www.bondbuyer.com/issues /123_48/market-close-oversubscribed-puerto-rico-bonds-buy-island-time-to-build-1060600-1.html.
86. Municipal Insight Committee of Eaton Vance, "Why Puerto Rico May Now Be Stuck in 'No Man's Land," *Advisor Perspectives*, March 2, 2015, http://www.advisorperspectives.com/commentaries /20150302-eaton-vance-why-puerto-rico-may-now-be-stuck-in-no-man-s-land?channel=Mutual% 20Funds.

said that Puerto Rico's debt was "unpayable"—signaling an intention to default. Even if García Padilla is replaced in 2017 with a new governor more willing to accommodate bond investors, it seems unlikely that the capital markets will provide affordable funding.

Consequently, Puerto Rico would have to run surpluses for several years to pay down its existing debt while avoiding further defaults. Given existing political incentives and the lack of constitutional restrictions on spending, this seems unlikely.

A more plausible outcome would involve some combination of debt restructuring and additional federal aid. But if bondholders and federal taxpayers are to accept additional losses, it is reasonable for them to expect institutional changes that would prevent a replay of the current crisis in future decades. Below we suggest a solution that combines various ideas suggested recently or gleaned from an analogous fiscal crisis that occurred in North America several decades ago.

After World War I, Newfoundland—an island 900 miles northeast of Portland, Maine—incurred repeated large deficits during a long-term economic malaise. At the time, Newfoundland was an autonomous British colony with a century-long tradition of democratic self-government. By late 1932, default became inevitable and the elected government requested a bailout, which was jointly funded by the United Kingdom and the Dominion of Canada. In consideration for the bailout, Newfoundland's government agreed to abide by the findings of a royal commission. This commission recommended replacing the elected government with a body consisting of appointees evenly divided between Newfoundland residents and outsiders. This unelected governing commission took over in 1934. Fifteen years later, it was replaced by an elected parliament and the former British colony was admitted to Canada as the Province of Newfoundland and Labrador.⁸⁷

The unelected government eliminated Newfoundland's debt and left a small cash surplus for the elected government that took over in 1949. Unfortunately, Canadian provinces generally do not have balanced budget requirements, so deficit spending returned. In the 54 fiscal years from 1949 to 2003, Newfoundland ran 51 deficits. The province faced fiscal crises in the early 1990s and again in the years after 2000 before higher oil prices brought economic improvement and fiscal stability.⁸⁸

^{87.} Marc Joffe, *Provincial Solvency and Federal Obligations* (Ottawa: Macdonald Laurier Institute, 2012), 41. 88. Ibid., 43.

This history suggests that an unelected government can be effective at resolving debt, but when democracy returns, it must be accompanied by strong constitutional spending and borrowing restraints—like those that prevail in most US states. (In this latter regard, it is instructive to note that most Canadian provinces are struggling under much larger debt burdens than those confronting US states.) Full replacement of the elected government by an appointed body may not be necessary, especially since legislatures address many issues that have minimal fiscal implications. When New York City became insolvent in 1975, the state imposed an emergency financial control board without removing the elected mayor and council.

In applying an undemocratic solution to Puerto Rico, it is worth recalling that the island has faced numerous antidemocratic interventions, beginning with the US invasion in 1898, which overturned an autonomous government. Furthermore, had Puerto Rico been treated like Hawaii—a territory taken over by the US in the same timeframe—it would have attained statehood and probably avoided its current troubles. Thus the implementation of a financial control board is preferable to replacing the elected government with a commission, and the process should end with a path to full statehood—thereby enabling Puerto Rico to leverage a proven governing model.

Consequently, we recommend the imposition of a strong financial control board that has the power to adjust all commonwealth obligations—including debt service, pensions, and service commitments. The control board should also have access to a federal appropriation that can be used to reduce the sacrifices imposed on Puerto Rico's stakeholders.

Once the financial control board's work is finished, Puerto Rico will require a new governing paradigm that restores autonomy while encouraging solvency. Decision makers would be well advised to avoid bespoke governing arrangements like those that have prevailed in Puerto Rico over the last 118 years. Independence and statehood are both options, but if the commonwealth arrangement is to be retained, Puerto Rico should at least have a revised constitution that is more like those operating in US states. Such a constitution would apply the best spending and debt control practices followed by American states, including a balanced budget requirement enforced by an elected judiciary, two-thirds voter support for new general obligation debt, and restrictions on other forms of borrowing. If the constitution protects public pensions, it should also oblige the governor and legislature to make the full actuarially required contribution each year.

The financial control board is an appropriate solution for commonwealth debt, especially since giving the commonwealth access to Chapter 9 of the

Bankruptcy Law could set an unwanted precedent of extending bankruptcy protection to US states. The concern about setting precedents does not apply to Puerto Rico municipalities and public corporations. On the mainland, entities in these categories have successfully resolved their debts through the bankruptcy process.

One case-specific change may be appropriate for Puerto Rico public corporations. As we saw in the history discussion, these corporations owe their existence to New Deal–era policies that gave rise to large, state-owned business enterprises. However, the privatization movement that began under Margaret Thatcher in the United Kingdom has provided substantial evidence that denationalization—when implemented properly—can transform inefficient state enterprises into competitive market institutions.⁸⁹

We suggest privatizing PREPA, PRASA, PRHTA, and other public corporations and giving bondholders shares in the newly privatized firms in lieu of some or all of their debt holdings. Conversion of debt to equity is common in private-sector bankruptcies,⁹⁰ so it seems reasonable to apply this approach to newly privatized utilities. Following the best practices of Thatcherera privatizations, remaining shares in the denationalized corporations should be spread widely among the Puerto Rico public to encourage political support and avoid cronyism.⁹¹

CONCLUSION

Over the last eight decades, no US state has faced a fiscal crisis equaling the one now afflicting Puerto Rico. A major reason that the state fiscal model works relatively well is that it was created in reaction to the frequent insolvencies afflicting states during the 19th century. To avoid further defaults, framers included constitutional mechanisms to limit operating deficits and borrowing.

Unfortunately, the Commonwealth of Puerto Rico did not benefit from this evolution in state fiscal management. While unelected, nonnative

^{89.} Alistair Osborne, "Margaret Thatcher: One Policy That Led to More Than 50 Companies Being Sold or Privatised," *Telegraph*, April 8, 2013, http://www.telegraph.co.uk/finance/comment/alistair -osborne/9980292/Margaret-Thatcher-one-policy-that-led-to-more-than-50-companies-being-sold -or-privatised.html.

^{90.} James H. M. Sprayregen et al., "Recharacterization of Debt to Equity: An Overview, Update, and Practical Guide to an Evolving Doctrine," in *2004 Annual Survey of Bankruptcy Law*, ed. William L. Norton Jr. (n.p.: Thomson West, 2004), 1–32.

^{91.} For a literature review on the efficacy of transitioning from nationalized to privatized industries, see William L. Megginson and Jeffry M. Netter, "From State to Market: A Survey of Empirical Studies on Privatization," *Journal of Economic Literature* 39, no. 2 (June 2001): 321–89.

governors left the commonwealth with relatively little debt, they also created New Deal–style public corporations that issued large volumes of bonds. Meanwhile, as soon as popularly elected governors assumed office in the late 1940s, they rapidly expanded commonwealth borrowing. Although the 1952 Puerto Rico constitution tried to mimic balanced budget requirements in US states, the benefits were mainly lost in translation before being interpreted away by an appointed attorney general.

Various congressional reforms of the US colonial relationship with Puerto Rico had long-term unintended consequences that have exacerbated the current crisis. Granting a nationwide tax exemption to interest on Puerto Rico bonds greatly increased the demand for commonwealth debt securities, creating an incentive toward overborrowing. Allowing free emigration from Puerto Rico to the mainland United States—without creating adequate job opportunities in the commonwealth—has resulted in the loss of many gifted and ambitious residents, and, more recently, an overall decline in population. Taxing corporate income in Puerto Rico has tipped the island's economy into a chronic recession. Mandating the use of US-flagged vessels has increased consumer prices and hampered exports.

This history bequeathed Puerto Rico a commonwealth government unable to balance revenues and expenditures without heavy dependence on bond proceeds and federal grants. It also left the island with inefficient staterun enterprises that took on excessive debt.

Puerto Rico will eventually emerge from the current crisis through some combination of federal subsidies and debt adjustment. New crises will be almost inevitable in the absence of major institutional change. Privatizing public corporations, using a financial control board to stabilize commonwealth finances, and then implementing strong constitutional measures to perpetuate fiscal balance are steps that will transition Puerto Rico to a fiscal model that has served US states well over the past century.

DATA APPENDIX

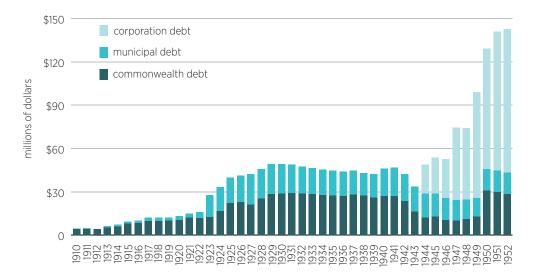
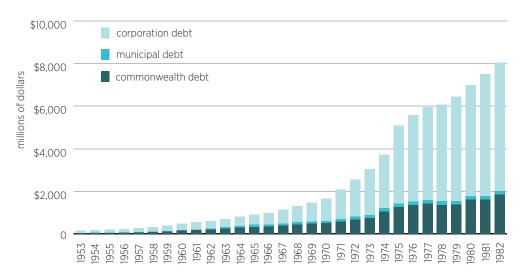


FIGURE A1. PUERTO RICO PUBLIC-SECTOR DEBT, 1910-1952

FIGURE A2. PUERTO RICO PUBLIC-SECTOR DEBT, 1953-1982





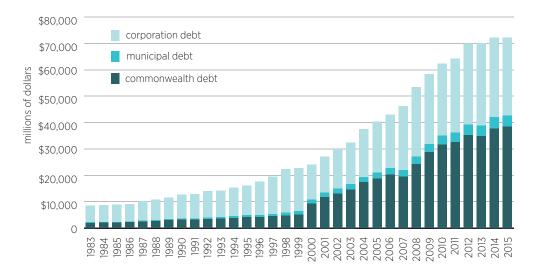


TABLE A1. PUERTO RICO DEBT, 1910-2015

Year	Commonwealth debt (\$)	Municipal debt (\$)	Corporation debt (\$)	Total debt (\$)
1910	4,175,382	471,794	0	4,647,176
1911	4,387,021	361,426	0	4,748,447
1912	4,139,760	243,384	0	4,383,145
1913	5,225,000	961,733	0	6,186,733
1914	5,925,000	1,331,899	0	7,256,899
1915	7,980,000	1,303,474	0	9,283,474
1916	8,480,000	1,559,980	0	10,039,980
1917	9,880,000	2,263,986	0	12,143,986
1918	9,900,000	2,303,464	0	12,203,464
1919	10,050,000	2,218,586	0	12,268,586
1920	10,564,000	2,578,620	0	13,142,620
1921	12,146,000	2,896,166	0	15,042,166
1922	11,895,000	4,132,178	0	16,027,178
1923	12,694,000	15,089,170	0	27,783,170
1924	16,773,000	16,421,572	0	33,194,572
1925	22,250,000	17,427,184	0	39,677,184
1926	22,954,000	18,375,000	0	41,329,000
1927	21,302,397	20,888,000	0	42,190,397

continued on next page

Year	Commonwealth debt (\$)	Municipal debt (\$)	Corporation debt (\$)	Total debt (\$)
1928	25,517,000	20,123,500	0	45,640,500
1929	28,509,950	20,538,077	0	49,048,027
1930	28,679,800	20,426,096	0	49,105,896
1931	29,097,000	19,957,352	0	49,054,352
1932	28,761,000	18,882,541	0	47,643,541
1933	28,542,000	17,861,043	0	46,403,043
1934	27,875,000	17,636,730	0	45,511,730
1935	27,480,000	17,006,852	0	44,486,852
1936	27,155,000	16,794,168	0	43,949,168
1937	28,230,000	16,401,776	0	44,631,776
1938	27,400,000	15,660,035	0	43,060,035
1939	26,215,000	16,190,213	0	42,405,213
1940	26,975,000	19,120,219	0	46,095,219
1941	27,200,000	19,701,988	0	46,901,988
1942	23,700,000	18,500,332	0	42,200,332
1943	16,398,000	17,286,734	0	33,684,734
1944	12,254,000	16,571,383	20,000,000	48,825,383
1945	13,064,000	15,756,747	24,730,000	53,550,747
1946	10,652,000	15,182,331	26,945,000	52,779,331
1947	10,070,000	14,284,481	50,000,000	74,354,481
1948	11,262,000	13,304,543	49,680,000	74,246,543
1949	12,819,000	12,758,476	73,680,141	99,257,617
1950	31,036,000	14,656,650	83,487,000	129,179,650
1951	29,898,000	14,634,700	96,410,031	140,942,731
1952	28,310,000	15,159,750	99,303,293	142,773,043
1953	33,081,000	22,729,800	105,245,748	161,056,548
1954	41,542,000	22,180,250	115,050,552	178,772,802
1955	43,300,000	17,700,000	140,800,000	201,800,000
1956	56,549,000	21,200,000	154,886,853	232,635,853
1957	61,475,000	24,825,000	185,979,001	272,279,001
1958	76,636,000	28,450,000	224,705,664	329,791,664
1959	100,497,000	32,075,000	262,938,855	395,510,855
1960	144,313,000	35,700,000	313,700,000	493,713,000
1961	176,884,000	44,300,000	337,800,000	558,984,000
1962	193,200,000	53,100,000	369,300,000	615,600,000
1963	243,900,000	72,700,000	394,700,000	711,300,000
1964	285,815,000	90,000,000	426,000,000	801,815,000
1965	327,200,000	99,500,000	483,200,000	909,900,000
1966	350,300,000	97,000,000	535,900,000	983,200,000

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Year	Commonwealth debt (\$)	Municipal debt (\$)	Corporation debt (\$)	Total debt (\$)
1967	384,700,000	107,300,000	640,700,000	1,132,700,000
1968	444,400,000	108,900,000	755,500,000	1,308,800,000
1969	476,000,000	113,500,000	883,600,000	1,473,100,000
1970	505,000,000	115,300,000	1,037,500,000	1,657,800,000
1971	567,600,000	129,700,000	1,382,200,000	2,079,500,000
1972	671,000,000	143,100,000	1,731,800,000	2,545,900,000
1973	740,200,000	155,800,000	2,136,800,000	3,032,800,000
1974	1,040,200,000	165,100,000	2,520,100,000	3,725,400,000
1975	1,266,400,000	158,500,000	3,657,100,000	5,082,000,000
1976	1,347,200,000	181,600,000	4,052,900,000	5,581,700,000
1977	1,415,000,000	184,100,000	4,358,000,000	5,957,100,000
1978	1,361,000,000	177,900,000	4,537,600,000	6,076,500,000
1979	1,372,000,000	174,700,000	4,900,400,000	6,447,100,000
1980	1,599,700,000	182,100,000	5,212,600,000	6,994,400,000
1981	1,611,600,000	171,900,000	5,721,500,000	7,505,000,000
1982	1,834,100,000	171,400,000	6,047,300,000	8,052,800,000
1983	1,949,900,000	208,400,000	6,275,100,000	8,433,400,000
1984	2,051,500,000	231,100,000	6,410,000,000	8,692,600,000
1985	2,040,300,000	235,000,000	6,562,000,000	8,837,300,000
1986	2,199,000,000	230,100,000	6,694,300,000	9,123,400,000
1987	2,553,300,000	357,400,000	7,231,900,000	10,142,600,000
1988	2,636,900,000	395,800,000	7,774,200,000	10,806,900,000
1989	2,967,000,000	399,400,000	8,279,300,000	11,645,700,000
1990	3,196,000,000	389,900,000	9,189,000,000	12,774,900,000
1991	3,241,600,000	415,200,000	9,132,000,000	12,788,800,000
1992	3,401,900,000	499,200,000	10,043,300,000	13,944,400,000
1993	3,603,400,000	536,500,000	10,102,300,000	14,242,200,000
1994	3,833,500,000	618,100,000	10,805,600,000	15,257,200,000
1995	4,265,900,000	732,400,000	10,994,700,000	15,993,000,000
1996	4,203,400,000	765,200,000	12,657,100,000	17,625,700,000
1997	4,512,600,000	894,800,000	14,100,200,000	19,507,600,000
1998	4,818,600,000	1,030,300,000	16,473,500,000	22,322,400,000
1999	5,096,900,000	1,275,400,000	16,305,900,000	22,678,200,000
2000	9,292,800,000	1,464,400,000	13,431,600,000	24,188,800,000
2001	11,828,300,000	1,632,200,000	13,699,100,000	27,159,600,000
2002	13,092,700,000	1,795,800,000	15,124,100,000	30,012,600,000
2003	14,679,600,000	1,955,100,000	15,889,800,000	32,524,500,000
2004	17,347,000,000	2,046,000,000	18,040,600,000	37,433,600,000
2005	18,852,900,000	2,181,400,000	19,234,100,000	40,268,400,000

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Year	Commonwealth debt (\$)	Municipal debt (\$)	Corporation debt (\$)	Total debt (\$)
2006	20,356,500,000	2,330,300,000	20,449,500,000	43,136,300,000
2007	19,560,900,000	2,463,000,000	24,159,400,000	46,183,300,000
2008	24,231,100,000	2,819,400,000	26,342,400,000	53,392,900,000
2009	28,776,800,000	2,997,300,000	26,640,800,000	58,414,900,000
2010	31,686,900,000	3,231,400,000	27,287,900,000	62,206,200,000
2011	32,624,100,000	3,537,000,000	28,118,100,000	64,279,200,000
2012	35,274,900,000	3,871,500,000	30,801,400,000	69,947,800,000
2013	34,952,300,000	3,882,000,000	31,208,700,000	70,043,000,000
2014	37,762,000,000	4,193,000,000	30,311,800,000	72,266,800,000
2015	38,478,000,000	4,114,000,000	29,613,000,000	72,205,000,000

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