Final Version

ANALYSIS OF PUERTO RICO'S CURRENT ECONOMIC AND FISCAL SITUATION

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We live forward;
but we can only think backward.
—Soren Kierkegaard

Puerto Rico currently faces two distinct, yet related, crises. The first, and most urgent, arises out of the government's weak financial situation. The second is the product of the chronic stagnation of its economy over the last ten years.

Decades of fiscal and economic mismanagement have engendered an economy characterized by: (1) chronic primary deficits; (2) high debt-to-GNP ratios; (3) low employment levels in the formal economy; (4) a large informal economy, encompassing both legal and illegal activities; (5) significant government corruption and predatory rent-seeking behavior in both the public and private sectors [1]; (6) substantial tax evasion; (7) a hollow productive base; and (8) high levels of private consumption and indebtedness enabled by having access to a stronger currency than its economic fundamentals would warrant. In our opinion, the parallels with Greece are quite evident for all to see and none to misunderstand.

In this paper we delve deeper into the some of the historical factors that played a role in creating this dysfunctional economy, analyze some aspects of the current economic and fiscal crises and provide both short and medium-term policy recommendations.

Puerto Rico: A Child of the Postwar World

It is perhaps quite difficult for people living in 2015 to imagine the state of the world at the end of Second World War. Europe was shattered, full of ruins from the coast of Normandy all the way to the outskirts of Moscow; Britain was exhausted after six years of war; Germany was literally split in four parts; France was still traumatized by the shame of Nazi occupation and the guilt of those who collaborated with it; Japan had just witnessed the nuclear obliteration of two of its most important commercial and industrial cities; China was in the midst of a civil war; and India was still part of the British Empire. There was little trade, almost no international investment, transnational capital flows had slowed down to a trickle, and migration consisted of refugees displaced by the war, returning POWs, and people escaping from the Soviet army in Eastern Europe. It is safe to say that globalization was then at a low point.

Yet, this was the global context that shaped the thinking of a group of relatively young technocrats who set out to modernize Puerto Rico in the 1940s. Back then Puerto Rico was a small agricultural economy with a large labor surplus, little or no local capital and an undeveloped local market. The basic idea was to exploit Puerto Rico's advantages in a de-globalized world, namely, the ability to use the dollar as its currency, its cheap

[1] "Rent-seeking" can be defined as the pursuit of uncompensated value from other economic agents; in contrast with profit seeking, where economic agents seek to create value through mutually beneficial economic activity.

labor, its privileged duty-free access to the U.S. market, and its political stability to attract U.S. capital, match it with the excess pool of local labor, and export the resulting products to the United States, and, to a lesser extent, the rest of the world.

By most accounts this model, with some later re-tooling, was relatively successful in jumpstarting the Puerto Rican economy and economic growth rates soared between 1948 and 1974. However, during the mid-1970s economic growth stopped partly because it was not based on the institutions or structures necessary to sustain it over the long-term. Furthermore, when economic growth collapsed in 1974, the Puerto Rican government, instead of rethinking this model and restructuring the productive basis of the economy, simply put it on life support: obtaining a new federal tax exemption for U.S. firms operating in Puerto Rico (Section 936), increasing government employment, seeking additional increases in federal transfers (food stamps, among others), and issuing public debt in ever larger amounts.

During the first decade of the 21st century it became evident that Puerto Rico's economic model had collapsed. Section 936 has been phased-out by the federal government; government employment has increased to its upper limits; federal transfers are contingent on the economic and political dynamic in Washington DC—and thus cannot be the basis of future growth—and public indebtedness is currently at historic highs and unlikely to be a significant source of financing for long-term investment in the island.

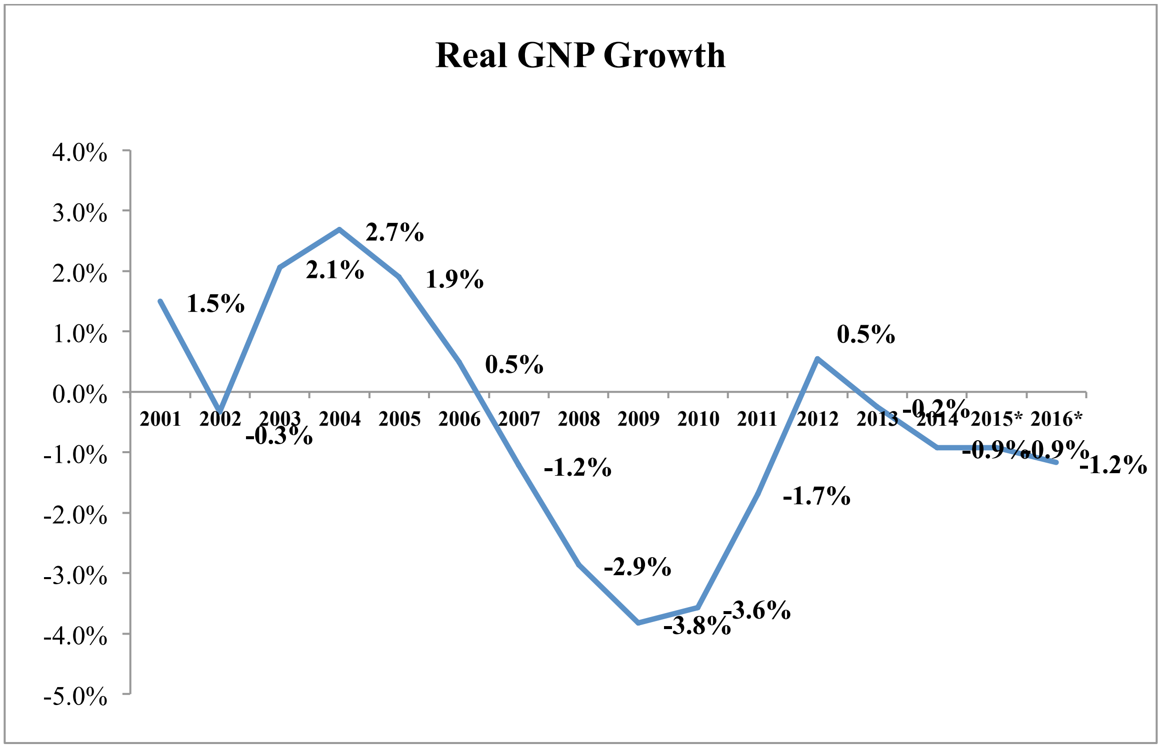
The fundamental problem is that the world has changed in significant ways since 1945 and Puerto Rico has failed to adapt to this new environment. Today the European Union is an economic giant (admittedly with serious financial problems); Japan and Germany are two of the world's leading exporters and technological innovators; China and India are important players in the world economy, becoming manufacturing powerhouses while adding close to two billion workers to the world's labor supply; and, on this side of the globe, Brazil, Mexico, Chile, and to a lesser extent Argentina, have overcome decades of economic mismanagement to emerge as significant regional economic powers.

Furthermore, those advantages that were specific or particular to Puerto Rico in 1945 have either disappeared, in the case of cheap labor, or ceased to be unique to Puerto Rico, in the case of the dollar, privileged access to U.S. market, and political stability. At the same time, we are at a high point in the globalization cycle and international trade, investment, and financial flows, as well as migratory movements, have exploded. The pressing challenge is to think about how Puerto Rico can insert itself in these global flows. Yet, policymakers in Puerto Rico remain either oblivious to, or willfully ignorant of, this new reality.

The Current Economic Crisis

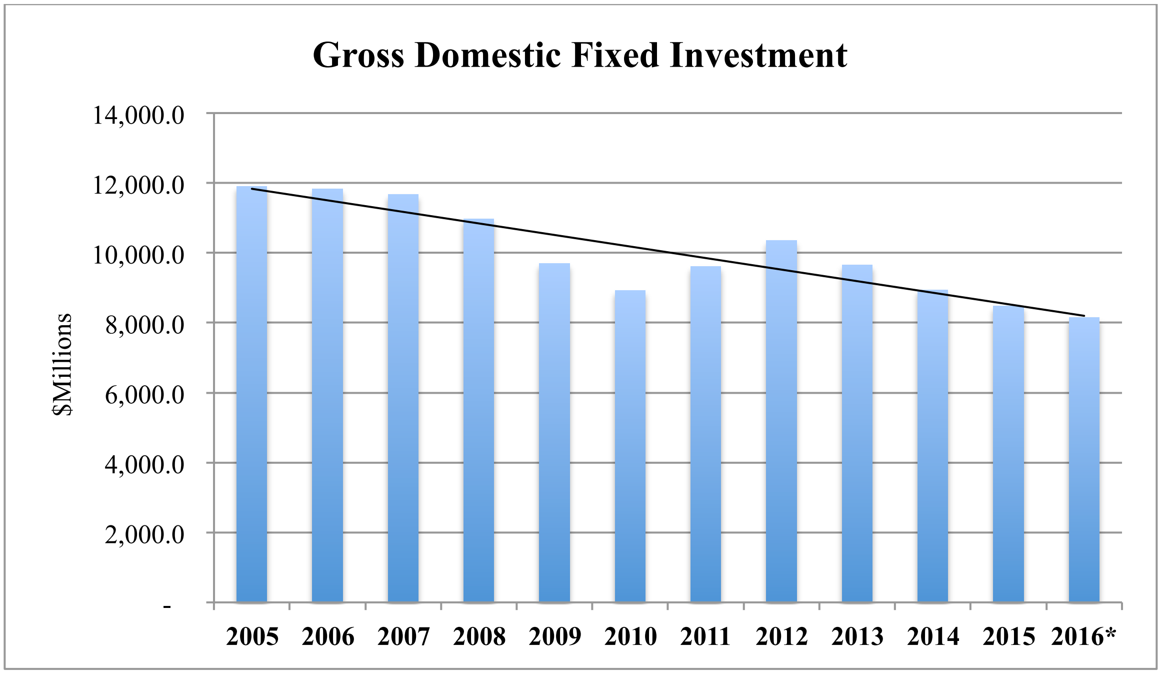
Puerto Rico's economy currently appears to be in a state of secular decline, partly as a result of the failure to implement a new economic strategy. All the important economic indicators have been for the last nine or ten years, and continue to be, either contracting or stagnant.

According to official government data real GNP has declined by an aggregate of 13% between fiscal years 2006 and 2014. During that period the island's economy contracted for five consecutive years, only to show anemic growth of 0.5% in 2012; and go back into a contraction of (0.2%) in 2013; and (0.9%) in 2014. The official government forecast for the current fiscal year is for the economy to contract by another 1.2%.



Source: Puerto Rico Planning Board (PRPB)

This dismal economic performance can be attributed, at least in part, to a sharp decline in real investment (machinery, equipment, construction etc.). Gross domestic fixed investment, at current prices, has declined from $11.8 billion in fiscal year 2006 to $8.9 billion in 2014, a decrease of $2.9 billion, or 24.5%. The forecast for FY2016 is for another reduction of about $800 million or close to 9%.

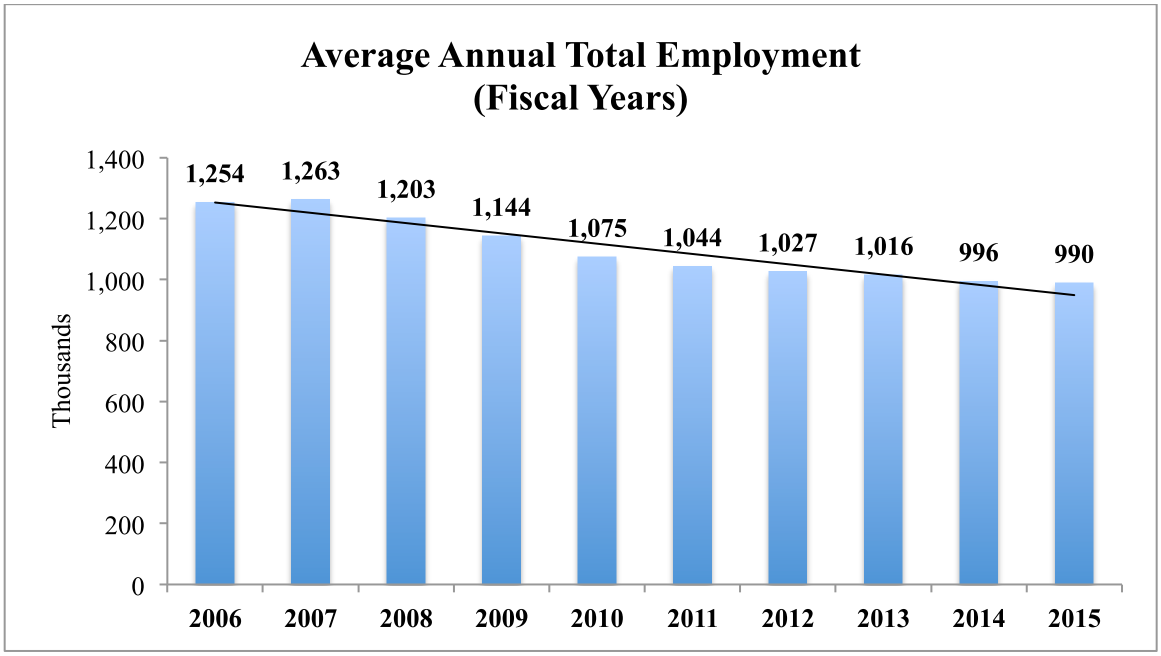


Source: PRPB

A second factor that has contributed to the island's prolonged economic contraction has been the significant deleveraging of private financial institutions. Total commercial bank assets in Puerto Rico have decreased from a peak of $101.5 billion as of December 2005 to $59 billion as of June 2015, a reduction of $42.5 billion, or 41.8%.

Furthermore, loan and lease portfolios have declined by approximately 33%, from $57.1 billion in 2005 to $37.7 billion as of June 2015. The banking sector in Puerto Rico, therefore, appears to be recuperating very slowly from the FDIC's decision to intervene and shut down three Puerto Rican commercial banks, in April 2010, and the closing of yet another financial institution earlier this year.

Given the magnitude of these declines in both real and financial investment, it should not be surprising that total employment has decreased significantly during the last ten years or so. Average total employment, including self-employment, has declined from 1,263,000 in fiscal year 2007 to 990,000 in fiscal year 2015, a net loss of 273,000 jobs, or 21.6%.



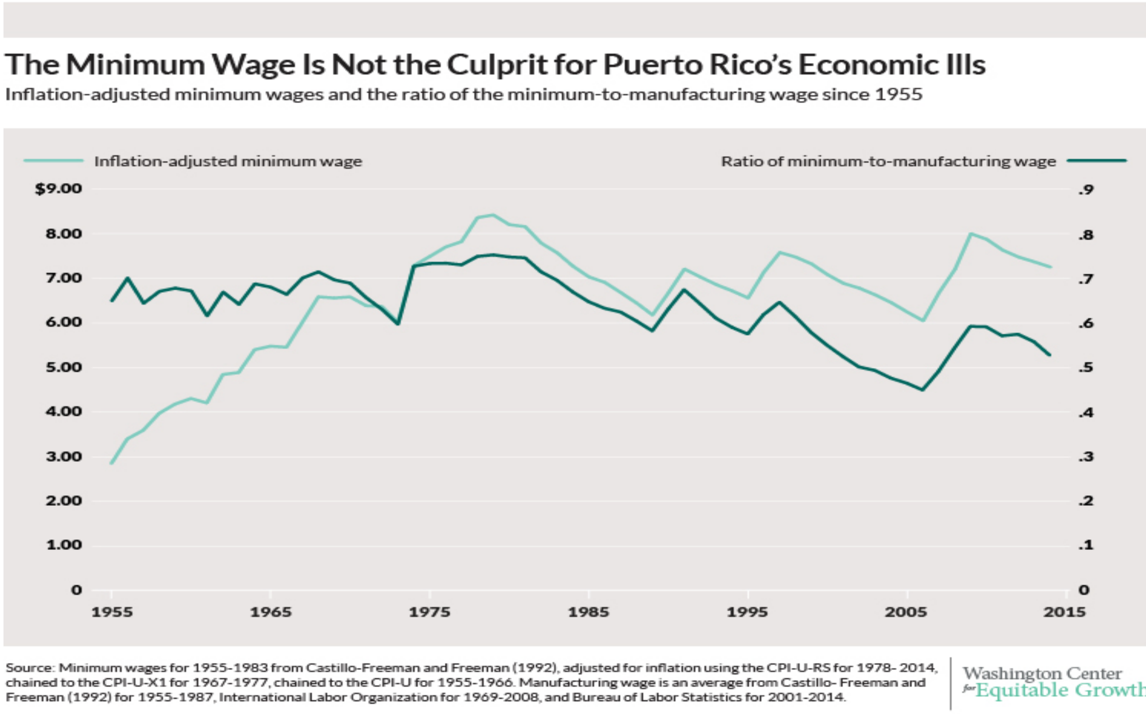
Source: Dept. of Labor and Human Resources, Household Survey

At the same time, the average labor force participation rate has declined from 48.6% in 2007 to 39.9% in 2015. Furthermore, during that same period the employment rate in Puerto Rico declined from 43.5% to 34.7%. The most recent data (for August 2015) puts total employment at 987,600; labor force participation at 39.7%, and the employment rate at 34.8%.

Some economists have posited that Puerto Rico's labor market is dysfunctional due to the application of the federal minimum wage to the island and have suggested reducing the minimum wage applicable to Puerto Rico or allowing Puerto Rico to set its own, presumably lower, minimum wage. We disagree. A recent analysis of this issue by Arindrajit Dube and Ben Zipperer reaches the following conclusions:

"First, the current inflation-adjusted value of the federal minimum wage is not higher than it was when Puerto Rico first adopted it. Puerto Rico's minimum wage is worth slightly less today than in 1983, even though its economy, in terms of GDP per capita, has grown by 72 percent.

Second, real wages in Puerto Rico were lower three decades ago. As a result, if we measure the bite of the minimum wage as the ratio of the minimum wage to the average manufacturing wage, the bite was closer to 70 percent when Puerto Rico first adopted the federal minimum wage, much higher than it is today, at 53 percent. (We use the manufacturing wage for this comparison because the median wage series is not available over as long a historical period, to the best of our knowledge.)



Source: Arindrajit Dube and Ben Zipperer Puerto Rico's predicaments: Is its minimum wage the culprit?

Third, additional evidence suggests the current minimum wage in Puerto Rico is also less consequential today than it was during the 1980s. In 1983 the share of Puerto Rico's workers affected by the minimum wage was around 44 percent, but by 2010 this share had fallen to around a third. It is difficult to explain the economic crisis in Puerto Rico starting in the mid-2000s with a minimum wage that is, if anything, on the wane."[2]

Finally, we should add that in an economy with a labor force participation rate of only 40% it is highly unlikely that lowering the minimum wage would provide a strong incentive for people to join the formal labor force. Lowering the minimum may lead to more job openings, but is highly unlikely that workers will be lining up to take them.

In addition, lowering the minimum wage, in the absence of some countervailing income transfer program, would probably increase Puerto Rico's already high level of income inequality. As the data set forth in the table below demonstrates, Puerto Rico's income inequality is already high even by the standard of some of the poorest states in the mainland.

[2] Arindrajit Dube and Ben Zipperer Puerto Rico's predicaments: Is its minimum wage the culprit? Accesible at http://equitablegrowth.org/puerto-ricos-predicaments-minimum-wage-culprit/

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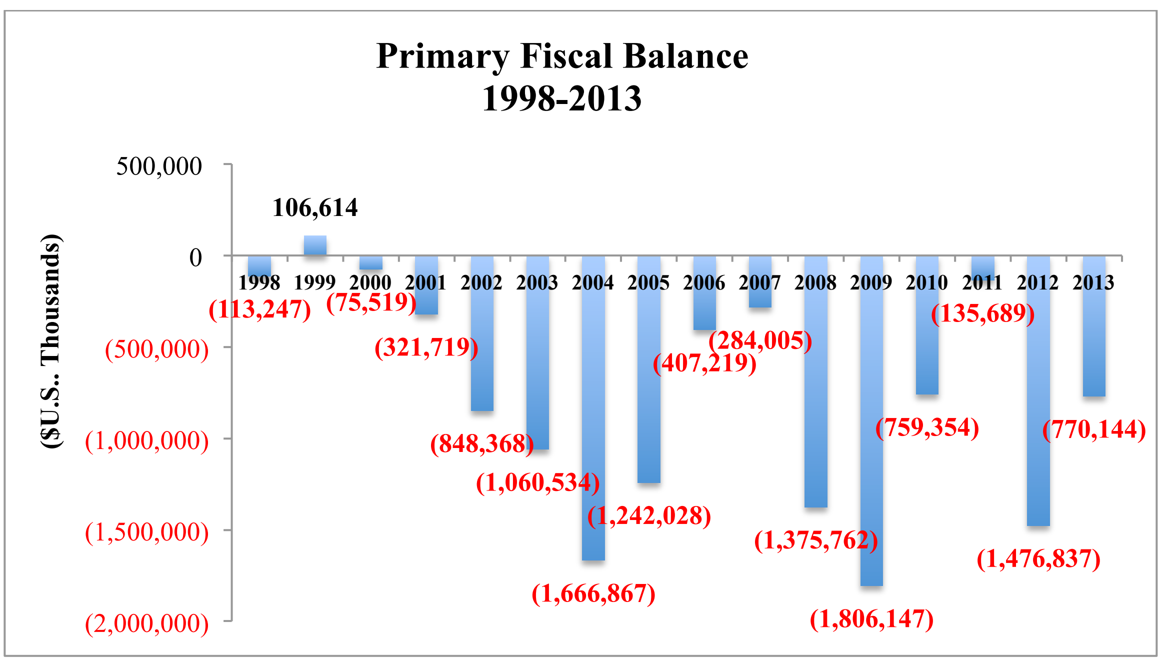
	Arkansas		Mississippi		West Virginia		Puerto Rico	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Quintile Share of Aggregate Income:								
Lowest Quintile	3.37	+/-0.11	3.02	+/-0.10	3.30	+/-0.12	1.51	+/-0.09
Second Quintile	8.65	+/-0.17	8.12	+/-0.17	8.59	+/-0.17	6.83	+/-0.15
Third Quintile	14.60	+/-0.26	14.52	+/-0.21	14.84	+/-0.24	12.76	+/-0.23
Fourth Quintile	22.97	+/-0.33	23.43	+/-0.32	23.58	+/-0.35	22.14	+/-0.38
Highest Quintile	50.40	+/-0.74	50.91	+/-0.59	49.69	+/-0.71	56.76	+/-0.71
Top 5 Percent	21.85	+/-0.90	21.76	+/-0.75	21.10	+/-0.86	26.53	+/-1.16

Source: ACS and PRCS 1 year estimates 2013

The Fiscal Situation

For more than a decade, Puerto Rico has experienced significant General Fund budget deficits. These deficits, including the payment of a portion of the Commonwealth's debt service obligations, have been covered primarily with the net proceeds of bonds issued by the Puerto Rico Public Finance Corporation, the Puerto Rico Sales Tax Financing Authority ("COFINA") and Commonwealth general obligation bonds, with interim financings provided by GDB and, in some cases, with extraordinary one-time revenue measures or expense adjustment measures. The Commonwealth currently expects that its ability to finance future budget deficits will be severely limited. This point was made painfully clear when the Commonwealth issued $900 million of short-term notes (with a nine month maturity) in October 2014 paying tax-exempt coupon rates in excess of 7%.



Source: CAFR 2005, 2012, and 2013; CNE Analysis

As shown in the chart above, in addition to running General Fund deficits, Puerto Rico has been running significant primary deficits, defined as non-interest revenues minus non-interest expenditures plus net interfund transfers, at least since 1998 (with a rather odd exception in 1999).

Trends in Puerto Rico's Fiscal Balance (1) ($U.S. Thousands)	Fiscal Years																
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	CAGR
Revenues (2)	9,830,784	10,342,439	10,854,821	11,208,442	11,658,874	12,183,423	12,099,666	13,681,709	14,155,224	14,988,612	13,572,589	14,676,309	15,266,436	15,463,887	15,812,086	15,985,930	
Interest Revenue	116,030	97,880	91,525	67,020	90,940	85,565	58,914	116,686	117,080	176,674	160,926	114,699	56,145	28,529	28,659	(6,230)	
Non-Interest Revenues	**9,714,754**	**10,244,559**	**10,763,296**	**11,141,422**	**11,567,934**	**12,097,858**	**12,040,752**	**13,565,023**	**14,038,144**	**14,811,938**	**13,411,663**	**14,561,610**	**15,210,291**	**15,435,358**	**15,783,427**	**15,992,160**	3.4%
Total Expenditures (3)	9,382,657	8,731,896	9,663,259	9,900,315	13,217,832	14,596,201	14,648,379	16,033,758	15,510,239	16,253,409	16,134,376	17,713,069	17,604,942	17,403,585	19,163,860	18,870,467	
Non-Interest Expenditures	**8,787,604**	**8,289,282**	**9,218,664**	**9,355,314**	**12,603,485**	**13,437,452**	**13,910,877**	**15,299,827**	**14,688,005**	**15,438,686**	**15,097,240**	**16,618,927**	**16,235,497**	**15,801,598**	**17,480,058**	**17,009,212**	4.5%
Interest Expenditures	595,053	442,614	444,595	545,001	614,347	1,158,749	737,502	733,931	822,234	814,723	1,037,136	1,094,142	1,369,445	1,601,987	1,683,802	1,861,255	
Net Interfund Transfers (4)	(1,040,397)	(1,848,663)	(1,620,151)	(2,107,827)	187,183	279,060	203,258	492,776	242,642	342,743	309,815	251,170	265,852	230,551	219,794	246,908	
Primary Fiscal Balance (5)	(113,247)	106,614	(75,519)	(321,719)	(848,368)	(1,060,534)	(1,666,867)	(1,242,028)	(407,219)	(284,005)	(1,375,762)	(1,806,147)	(759,354)	(135,689)	(1,476,837)	(770,144)	
Overall Fiscal Balance (6)	(708,300)	(336,000)	(520,114)	(866,720)	(1,462,715)	(2,219,283)	(2,404,369)	(1,975,959)	(1,229,453)	(1,098,728)	(2,412,898)	(2,900,289)	(2,128,799)	(1,737,676)	(3,160,639)	(2,631,399)	
Nominal GNP (7)	35,110,700	38,281,200	41,418,600	45,102,400	45,999,700	48,492,200	51,826,500	54,861,900	57,854,300	60,642,700	62,703,100	63,617,900	64,294,600	65,720,700	68,085,700	68,768,200	4.6%
Primary Fiscal Balance/GNP (%)	**-0.3%**	**0.3%**	**-0.2%**	**-0.7%**	**-1.8%**	**-2.2%**	**-3.2%**	**-2.3%**	**-0.7%**	**-0.5%**	**-2.2%**	**-2.8%**	**-1.2%**	**-0.2%**	**-2.2%**	**-1.1%**	
Overall Fiscal Balance/GNP (%)	-2.0%	-0.9%	-1.3%	-1.9%	-3.2%	-4.6%	-4.6%	-3.6%	-2.1%	-1.8%	-3.8%	-4.6%	-3.3%	-2.6%	-4.6%	-3.8%	

Source: CAFR 2005, 2012 and 2013; GNP is from the PRPB

(1) Includes the central government and certain blended component units, notably COFINA and PBA, but excludes other public corporations.

(2) Includes taxes, charges for services, intergovernmental revenues, interest and investment earnings, and other. Excludes proceeds from debt issues.

(3) Includes current expenditures and capital outlays but excludes amortization payments.

(4) Equals "Transfers in" minus "Transfers out".

(5) Equals non-interest revenues minus non-interest expenditures plus net interfund transfers.

(6) Equals primary fiscal balance minus interest expenditures.

(7) As updated by the PRPB 2015.

In our view, and perhaps contrary to the popular perception, Puerto Rico's chronic primary deficits are not the product of runaway government spending. As we show in the table above, between fiscal years 1998 and 2013 non-interest spending grew at a compound annual growth rate ("CAGR") of 4.5%, while nominal GNP grew at a CAGR of 4.6%. However, non-interest revenues grew at a significantly lower CAGR of 3.4% during the same period. This lower growth rate can be attributed to lax enforcement of the tax laws, the legislation of a plethora of tax exemptions, credits, and deductions, and a shrinking economy.

We also would like to point out that interest expenditures over this period increased at a CAGR of 7.9%, significantly exceeding the growth rates of both GNP and total government revenues.

Consistently running a primary deficit has real consequences over the long run, especially for a country that cannot print its own currency. As shown in the table below, Puerto Rico, just like most governments facing this situation, eventually ended up issuing large amounts of debt, at ever-higher costs, just to cover the payment of existing debts, a situation that eventually becomes simply unsustainable.

Sources and Uses of Funds

Sources:	
Principal amount of the Bonds	$3,500,000,000
Original Issue Discount	(245,000,000)
Total Sources	$3,255,000,000
Uses:	
Repayment of GDB lines of credit and deposit to Redemption Fund	$1,896,072,196
Repayment of COFINA BANs	342,365,760
Refinancing of the Refunded Bonds*	466,574,005
Termination amounts for certain interest rate exchange agreements†	90,417,100
Payment of interest on the Bonds	422,749,408
Underwriting discount, legal, printing and other financing expenses	36,821,531
Total Uses	$3,255,000,000

* Includes capitalized fees.
† Includes fees related to the termination of the interest rate exchange agreements.

Source: Offiicial Statement, March 11, 2014, p. 24, Commonwealth General Obligation Bonds, 8% coupon, priced at 93%, due July 1, 2035

According to the information provided in the Official Statement, and set forth above, Puerto Rico issued $3.5 billion worth of long-term general obligation bonds in March 2014, at a tax-exempt coupon of 8% and a discount of 7%, simply to pay other debts, including some $90 million to terminate interest rate swaps or, in the clinical legal language of the Official Statement, "certain interest rate exchange agreements".

At some point the game of financial musical chairs stops. This is where Puerto Rico is right now. The fiscal consolidation required to eliminate the primary deficit is approximately 1.1% of GNP and to obtain an overall fiscal balance is approximately 3.8% of GNP. These amounts may not seem high to non-economists but they imply both a massive retrenchment in government spending and significant tax increases, this in an economy that is currently *contracting*, in real terms, at a rate of 1.2%.

It simply boggles the mind that notwithstanding its dismal economic situation, the island managed to *triple* its public debt from $24 billion in 2000 to $72 billion in 2015. Indeed, during this period Puerto Rico's public indebtedness grew at a compound annual rate of 7.6%, while its income (GNP) grew at a nominal rate of only 3.6%.[3]

[3] In Puerto Rico, GNP, which measures income earned by residents or by locally-owned production factors, is a more accurate measure of economic activity than GDP due to distortions induced by the transfer pricing practices of multinational companies operating in the island. For a technical analysis of the GNP/GDP gap in Puerto Rico see "Economic Growth" by Barry P. Bosworth and Susan M. Collins in *The Economy of Puerto Rico: Restoring Growth*, (Brookings Institution Press: Washington, DC, 2006), p. 17-81.

Puerto Rico Public Debt and GNP

(US$BN)

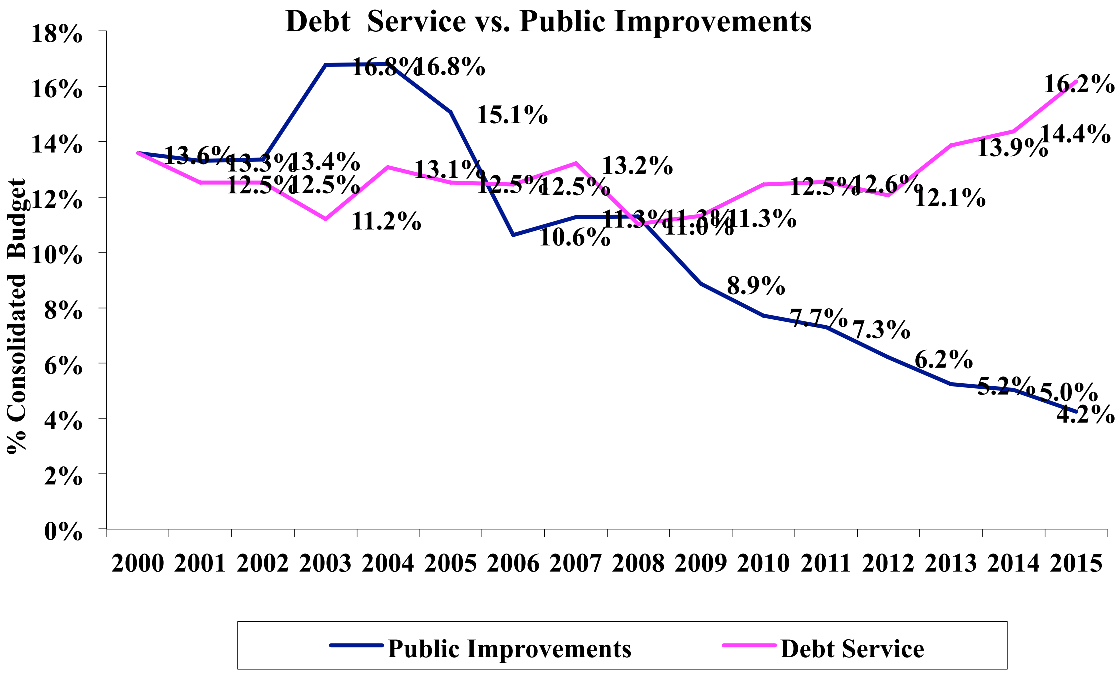
FY	Debt	%Δ	GNP	%Δ	PD/GNP
2000	24.19	--	41.42	--	58.40%
2001	27.16	12.28%	45.10	8.89%	60.22%
2002	30.03	10.58%	46.00	1.99%	65.29%
2003	32.53	8.30%	48.49	5.42%	67.07%
2004	37.43	15.09%	51.83	6.88%	72.23%
2005	40.27	7.57%	54.86	5.86%	73.40%
2006	43.14	7.12%	57.85	5.45%	74.56%
2007	46.18	7.06%	60.64	4.82%	76.16%
2008	53.39	15.61%	62.70	3.40%	85.15%
2009	58.41	9.40%	63.62	1.46%	91.82%
2010	62.21	6.49%	64.29	1.06%	96.75%
2011	64.28	3.33%	65.72	2.22%	97.81%
2012	69.95	8.82%	68.09	3.60%	102.73%
2013	70.04	0.14%	68.77	1.00%	101.85%
2014	72.27	3.17%	69.20	0.63%	104.43%
2015*	72.20	-0.09%	70.08	1.26%	103.04%
CAGR	**7.56%**		**3.57%**		

* As of March 31, 2015

Source: GDB, PRPB, and CNE Analysis

Given that Puerto Rico's indebtedness grew at an average annual rate two times faster than the growth rate of its GNP during the past fifteen years, it should not be surprising that Puerto Rico's public debt currently exceeds its GNP. To be fair, however, for decades the borrowed money was put to good use to finance the construction of public schools, hospitals, highways, and other essential infrastructure. The problem is that during the last twenty years or so, a large portion of the money borrowed by issuing long-term debt was used to finance budget deficits, operating expenses, and classic pork-barrel spending.

For example, if we compare the share of the consolidated budget set aside for debt service with the share dedicated to public improvements it is evident that most of the indebtedness incurred since 2006 has been used to finance deficits and other current expenses instead of public works. Indeed, while 16% of the consolidated budget for fiscal year 2015 is dedicated to debt service, only a meager 4.2% is assigned for public improvements or investment.



Source: Puerto Rico Office of Management and Budget and CNE Analysis

Given this state of affairs, it should not be surprising that in February 2014, the three principal rating agencies downgraded the Commonwealth's debt, as well as debt issued by several of its agencies and instrumentalities, to speculative or non-investment grade.

The rating downgrades had a material adverse effect on the Commonwealth's finances because they essentially shutdown its access to the capital markets, at least at reasonable rates. This, at a time when the central government is still running a sizeable budget deficit, several of the Commonwealth's agencies and instrumentalities face significant maturities in the near term, the economy is contracting at an estimated annual rate of 1.2%, liquidity is running extremely tight, and net outmigration has increased to levels not seen since the 1960s.

Is Puerto Rico's Debt Sustainable?

According to the IMF framework for analyzing debt sustainability, debts will be serviceable as long as the growth rate of debt does not exceed the growth rate of output. This requires a primary surplus—keeping expenditure (net of the cost of debt service) below revenue. Thus, revenue growth combined with cheap borrowing can lead to a favorable outcome even if debts continue to increase.

In general terms, the IMF expresses the relationship as follows:

$$\Delta d_t = pd_t + \frac{(r_t - g_t)}{(1+g_t)} d_{t-1}$$

where Δd is the change in the debt as a percentage of GDP, r is the (nominal) rate of interest, g is the growth rate of GDP, and pd is the primary deficit as a percentage of GDP. In essence, the increase in the debt to income ratio equals the current period primary deficit plus the interest on previous period debt, adjusted by the growth rate of the economy.

The problem is that the growth rate of Puerto Rico's debt between 2000 and 2014 has been twice the growth rate of its output. In addition, Puerto Rico has also been running substantial primary budget deficits during this period.

Therefore, both factors point to a significant increase in the debt stock, both in absolute terms and as a percentage of GNP, which is what has actually happened since 2000. Indeed, Puerto Rico's public debt to GNP ratio has increased from a relatively manageable 58.4% in 2000 to a potentially unsustainable 103% in 2015.

Reversing this trend will require a combination of at least two of the following:

(1) Running a primary budget surplus—that is, keeping expenditures (net of the cost of debt service) below revenues—on a regular basis for many years into the future;

(2) Puerto Rico's GNP to grow at a nominal rate that consistently exceeds the interest rate on Puerto Rico's debt; or

(3) Obtaining some form of debt relief.

Other Contingencies

In addition to the economic and fiscal problems described above, the Commonwealth faces several contingencies that may arise in connection with (1) its dependence on a small number of taxpayers for approximately a fifth of all general fund revenues; (2) large unfunded pension liabilities; (3) insolvent state-owned enterprises; and (4) a government health insurance plan that is financially unsustainable.

Act 154 – a special temporary excise tax imposed by Act 154- 2010, as amended ("Act 154"), has become one of the Commonwealth's principal sources of tax revenues. For fiscal years 2012, 2013 and 2014, the revenues produced by Act 154 represented approximately 21.6%, 19.7%, and 20.3%, respectively, of the Commonwealth's General Fund revenues. During fiscal year 2014, the special temporary excise tax was paid by 35 companies of which eight companies accounted for approximately 85% of collections.

To the extent that any of these taxpayers reduces its operations in Puerto Rico or moves its operations to a different jurisdiction, the Commonwealth's tax base would be reduced and its revenues would be adversely affected. Factors that can cause a reduction in the level of Act 154 revenues include a reduction in the level of local economic activity of the corporations that pay the Act 154 taxes, which might occur as a result of general economic conditions or factors affecting individual companies, any difficulties in the transition, after December 31, 2017, from the Act 154 temporary excise tax to the modified source of income rule under Act 154, and any action by the U.S. Treasury Department to reduce or eliminate the federal income tax credit available with respect to the Act 154 temporary excise tax.

Public Pensions – A significant component of the Commonwealth's budget is the cost of its retirement systems (the "Retirement Systems"). The three principal pension systems of the Commonwealth (the Employees Retirement System, the Teachers Retirement System and the Judiciary Retirement System) had an aggregate unfunded actuarial accrued liability of $33.7 billion and a combined funding ratio of 7.4%, as of June 30, 2013.

Although the Commonwealth enacted legislation in 2013 that attempts to reform the Retirement Systems by, among other measures, reducing benefits, increasing employer and employee contributions, and replacing most of the defined benefit elements of the system with a defined contribution system, these reforms were only designed to address the Retirement Systems' cash flow needs in a manner that would permit them to make benefit payments when due. As a result, even after giving effect to these reforms, the Retirement Systems will continue to have a large unfunded actuarial accrued liability and a low funding ratio for several decades.

It is anticipated that, as a result of the enacted reforms and other legislation enacted in 2011, the Commonwealth will have to provide significant additional annual funding to meet the Retirement Systems' annual pension obligations. In addition to the gradual increase in employer contribution rates that was legislated in 2011 and certain other supplemental contributions established by the reform laws, the reforms provide for the payment of an additional annual contribution from the employer at levels to be determined by the actuaries.

It is currently projected that the additional annual contribution required to be made by employers to the Employees Retirement System through fiscal year 2032 is approximately $120 million, of which approximately $78 million was allocable to the central government for fiscal year 2014 and the balance was allocable to the municipalities and participating public corporations. In the case of the Employees Retirement System, however, the Commonwealth, municipalities and participating public corporations were not able to make the required additional annual contribution in full for fiscal years 2014 and 2015.

State-Owned Enterprises – The government of Puerto Rico owns several large corporations, among them the Puerto Rico Aqueduct and Sewer Authority ("PRASA"), the Puerto Rico Electric Power Authority ("PREPA"), the Puerto Rico Highways and Transportation Authority ("PRHTA"), and the Puerto Rico Ports Authority. These government-owned companies have been the main driver of public infrastructure investment in Puerto Rico over the last sixty or seventy years.

In theory, these "public corporations" are supposed to be financially self-sufficient and administratively independent from the regular departments and agencies of the Commonwealth's executive branch bureaucracy. In practice, however, instead of reducing red tape, public corporations have added dozens of new bureaucratic layers to government and instead of limiting political intervention in government, public corporations have become important sources of political patronage as they provide ample employment opportunities for loyal party members and generous contracts for politically-connected suppliers.

Financial self-sufficiency has also turned out to be a chimera as many public corporations rely on the central government to help them cover their operational deficits and in some cases the central government has been obligated to assume their debt servicing obligations in order to avoid a default.

Commonwealth of Puerto Rico
Outstanding Debt of Public Corporations
March 31, 2015
(in thousands)

	Bonds			Notes			Total Bonds and Notes		
	With Guaranty	Without Guaranty	Total	With Guaranty	Without Guaranty	Total	With Guaranty	Without Guaranty	Total
Aqueduct and Sewer Authority	$677,360	$3,364,565	$4,041,925	$462,176	$274,507	$736,683	$1,139,536	$3,639,072	$4,778,608
Convention Center District Authority	-	408,530	408,530	-	145,285	145,285	-	553,815	553,815
Electric Power Authority	-	8,322,405	8,322,405	-	731,838	731,838	-	9,054,243	9,054,243
Highways and Transportation Authority	-	4,717,127(1)	4,717,127	-	1,812,981	1,812,981	-	6,530,108	6,530,108
Housing Finance Authority	-	92,823(2)	92,823	-	169,944	169,944	-	262,767	262,767
Industrial Development Company	-	175,490	175,490	-	86,325	86,325	-	261,815	261,815
Infrastructure Financing Authority(3)	-	1,889,303	1,889,303	-	295,042	295,042	-	2,184,345	2,184,345
Port of the Americas Authority	233,056	-	233,056	-	1,700	1,700	233,056	1,700	234,756
Ports Authority(4)	-	-	-	-	275,222	275,222	-	275,222	275,222
Public Buildings Authority	4,138,264	-	4,138,264	-	177,724	177,724	4,138,264	177,724	4,315,988
Public Finance Corporation	-	1,090,740 (5)	1,090,740	-	-	-	-	1,090,740	1,090,740
Sales Taxes Financing Corp. (COFINA)	-	15,223,821	15,223,821	-			-	15,223,821	15,223,821
University of Puerto Rico	-	470,775(6)	470,775	-	85,186	85,186	-	555,961	555,961
Others(7)	-	-	-	-	2,757,170	2,757,170	-	2,757,170	2,757,170
Total(8)	$5,048,680	$35,755,579	$40,804,259	$462,176	$6,812,924	$7,275,100	$5,510,856	$42,568,503	$48,079,359

Source: Commonwealth of PR Quarterly Report, 7 May 2015

As shown in the table above, many of these state-owned enterprises are heavily indebted and many of them cannot generate the cash flow necessary to service its debt.

Puerto Rico Health Insurance Administration – The Commonwealth, through its Health Insurance Administration ("PRHIA"), provides health insurance coverage to approximately 1.6 million qualifying (generally low-income) residents of Puerto Rico. The cost of this health insurance program is very significant. A substantial portion of this cost is currently paid by the federal government and funded principally by non-recurring funding provided pursuant to the federal Patient Protection and Affordable Care Act (the "Affordable Care Act" or "ACA"), as well as recurring Medicaid and Children's Health

Insurance Program ("CHIP") funds, which in the case of the Commonwealth are capped at a level lower than that applicable to the states (which are not capped).

The Commonwealth budget for the health insurance program totals $2.647 billion for fiscal year 2015, an increase of $152 million over its cost for fiscal year 2014, which was $2.495 billion. The cost of the program for fiscal year 2014 represented an increase of $160 million compared to its cost for fiscal year 2013, which was $2.335 billion. The fiscal year 2015 budget for the health insurance program includes an appropriation of $885 million from the General Fund and approximately $1.5 billion in federal funds (which correspond to the federal fiscal year that commenced on October 1, 2014). Federal funds include $1.030 billion of non-recurring ACA federal funds, $305 million of recurring capped Medicaid funds, $140 million of funds from the Children's Health Insurance Program (CHIP), and $44 million from the prescription drug program. During fiscal year 2014, $885 million of the cost of the Government Health Plan, was paid from the General Fund, $1.284 billion were paid from federal funds, and the remaining $292 million was paid from municipal, internal and other sources.

Upon exhaustion of the non-recurring ACA funds, currently estimated to occur in 2018, and absent Congressional action to renew this non-recurring funding, the amount of federal funds available for this health insurance program will revert to the recurring capped Commonwealth Medicaid and CHIP allocations, which would result in significantly higher requirements of Commonwealth funding, unless benefits or eligibility or both are reduced significantly. Although the Commonwealth can take various measures to address the imbalance, including reducing coverage and limiting eligible beneficiaries, federal regulations may prohibit or limit the application of these measures.

If the availability of ACA funds is not renewed through Congressional action and if no changes to benefits, co-pays or eligibility are made, the annual deficit of the health insurance program (which the General Fund may be required to fund) could rise to as much as $2.0 billion by fiscal year 2019, from $59 million on fiscal year 2014.

Policy Options and Recommendations

Given the magnitude and multiplicity of challenges faced by Puerto Rico it should be obvious that there are no quick fixes to solve the island's fiscal and economic problems. Congress needs to implement a comprehensive program, remove some of the disadvantages imposed on Puerto Rico under the current political arrangement, and eliminate some long-standing inequitable and discriminatory policies. The current situation simply does not allow for piecemeal action by Washington, a wide-ranging plan is needed.

In the short-term the most pressing issue is Puerto Rico's deteriorating liquidity situation. If the cash flow projections made by Conway MacKenzie are accurate, then

Puerto Rico will not have enough cash on hand to meet all its obligations as soon as December of this year.[4]

In that event, in the absence of either (1) access to an emergency liquidity facility or (2) forbearance from bondholders, the probability of a disorderly default is quite high, given that the current administration has already stated its firm intention to keep essential government operations running and Puerto Rico cannot avail itself of relief under Chapter 9 of the U.S. Bankruptcy Code.

Given the short time window, the policy options at the federal level boil down to (1) providing short-term financing to Puerto Rico to avoid a default or (2) enacting legislation extending the application of Chapter 9 to Puerto Rico.

In our view, it is clear that Puerto Rico needs to obtain some debt relief. After years of relying on accounting gimmicks, forward refundings; back-loaded "scoop and toss" refinancings, capitalized interest payments, and other short-term, expensive liquidity fixes, the clock has run out.

While it is true that Puerto Rico's capacity to repay its debt ultimately depends on restoring economic growth in the island, there can be no economic recovery without debt sustainability and that, in turn, is not possible without significantly restructuring at least some of the debt.

According to a recent paper by Carmen Reinhart and Christoph Trebesch "'kicking the can down the road' via cash flow relief and debt rescheduling does not facilitate economic recovery in debtor countries. In protracted crises, growth only picks up after deeper debt relief, such as after the Brady plan."[5]

Analyzing 35 debt relief episodes in 30 middle and high-income countries during period between 1978 and 2010, these researchers found (1) that "sovereign debt relief averaged…16% of GDP and 36% of external debt in the middle- high-income emerging markets [crises]" during that period and (2) emerging market countries "that received significant debt relief reported, on average, an 11% increase in per capita income during the five years following "decisive debt relief".

They conclude that "softer forms of crisis resolution, such as debt rescheduling, temporary payment standstills, and bridge lending operations were not generally followed by higher growth and better ratings. [And] These crisis resolution tools were ineffective in solving debt crises that had been dragging on for several years."[6] Therefore, obtaining significant debt relief for Puerto Rico appears to be a necessary condition to restore economic growth in the island.

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[4] Conway MacKenzie, *Commonwealth of Puerto Rico Liquidity Update*, August 25, 2015.

[5] Carmen M. Reinhart and Christoph Trebesch, *Sovereign Debt Relief and Its Aftermath*, Faculty Research Working Paper Series, John F. Kennedy School of Government, RWP 15-028 (June 2015), p. 33.

[6] Id. at p. 34.

Chapter 9 could be a useful mechanism to obtain that much needed debt relief, but there are caveats. The first thing to notice is that Puerto Rico's debt is spread across of variety of debtors (18 issuers in total) representing a complex web of claims in an uncertain regulatory and legal framework. This situation makes it very difficult for creditors to work as a class because one set of creditors will worry that any relief they provide the island will simply make it easier for a different set of creditors to recover a larger amount of their claims.

In game theory terms, Puerto Rico faces a game in which there are multiple players, which sometimes have common and sometimes-opposing interests, and not making a deal leaves everyone worse off. In this type of game the final outcome could be one of any number of possible "Nash equilibria", which would generate sub-optimal results for all parties involved.

Congress could help Puerto Rico figure a way out of this conundrum by approving legislation to authorize the Puerto Rican government to allow its distressed agencies, instrumentalities, and municipalities to file for bankruptcy under Chapter 9 of the U.S. Bankruptcy Code.

This congressional act would remedy an inexplicable historical oversight, as Puerto Rico is currently treated as a state for purposes of all other sections of the federal Bankruptcy Code; would not cost the federal government a single cent; and allow Puerto Rican government agencies and instrumentalities to avail themselves of a coherent, well-structured process to negotiate debt adjustment plans with their respective creditors.

However, while we support allowing Puerto Rico to avail itself of Chapter 9 procedures to adjust its debt and believe it would provide a helpful framework for addressing existing coordination and information failures, we also stress that it is by no means a complete or perfect solution to all of Puerto Rico's troubles.

Assuming Congress allows Puerto Rico to avail itself of Chapter 9 under the same terms and conditions as the fifty states, the first hurdle to clear is procedural. Only "municipalities" can file for relief under Chapter 9. The term "municipality", in turn, is defined as a political subdivision, public agency, or instrumentality of a state.

Thus, at the outset, this limitation would preclude Puerto Rico from filing a petition for adjustment with respect to its general obligation bonds because such bonds are issued by the central government of the Commonwealth of Puerto Rico, which by definition is not a "municipality".

In addition, a municipality must: (1) be specifically authorized by a state law to file for relief under Chapter 9; (2) be insolvent (usually on a cash flow basis); (3) be willing to put in effect a plan to adjust its debts; and (4) either (a) have obtained the agreement of creditors holding at least a majority in the amount of claims of each class that the municipality intends to impair or (b) have attempted to negotiate in good faith, but was unable to do so, or it has determined that (i) it was impractical to negotiate with its creditors, or (ii) one or more of its creditors is improperly attempting to obtain a preference over other creditors.

Now, even if a Puerto Rico issuer cleared all the procedural hurdles, that does not imply the road is clear for a Puerto Rico issuer to negotiate a plan of adjustment with its creditors. The reason is that certain kinds of municipal bonds receive special treatment or protection under Chapter 9. In specific, a bundle of complicated legal issues—with respect to debt guaranteed by the Commonwealth, special revenue bonds (PREPA), and debt secured by statutory liens (COFINA)—would remain open.

Nonetheless, in our opinion, negotiations between Puerto Rico and its creditors under a Chapter 9 framework, however imperfect it may be, are certainly preferable to a legal battle royale, in which merely disposing of the preliminary trial motions to resolve issues related to jurisdiction, forum, venue, and applicable law could easily take one year or more.

As we have already mentioned, another significant problem on the fiscal side is the cost of the Government Health Plan, which is one of the principal drivers of Puerto Rico's non-interest expenditures.[7] Providing Puerto Rico equal treatment under federal healthcare programs, such as Medicare, Medicaid, and the Affordable Care Act would provide the Commonwealth with some much-needed fiscal space and address a long-standing injustice inflicted on Puerto Ricans. For the truth of the matter is that Puerto Rican workers and employers pay the same payroll taxes as workers and employers in the mainland, yet benefits to Puerto Rico are unfairly rationed by federal legislation.[8]

For its part, the government of Puerto Rico can take the following actions in the short-term to stabilize its finances: (1) increase tax revenues by improving enforcement efforts, closing down ineffective tax loopholes, and modernizing its property tax system; (2) cracking down on government corruption and rent-seeking behavior; and (3) significantly improving financial controls and its Byzantine and unduly opaque financial reporting.

On the economic growth side of the equation, in the short-term, we recommend extending the federal Earned Income Tax Credit ("EITC") program to Puerto Rico. The federal EITC is the most effective anti-poverty program in the United States. Recent research also shows that it encourages work, promotes savings, helps poor families smooth out the effect of unexpected financial shocks, and builds a strong sense of future

[7] *Commonwealth of Puerto Rico Quarterly Report,* dated May 7, 2015, p. 20-21 and 37-40.
[8] See United States Government Accountability Office, *U.S. Insular Areas: Multiple Factors Affect Federal Health Care Funding,* GAO-06-75, (October 2005), and *Puerto Rico: Information on How Statehood Would Potentially Affect Selected Federal Programs and Revenue Sources,* GAO-14-31, (March 2014).

orientation among recipients.[9] Extending this program to Puerto Rico, which would provide a significant wage supplement to low-income Puerto Rican working families, could be expected to stimulate aggregate demand in the short-run.

Economic Growth is a Complicated Process

Sustaining economic growth over the long-term, however, is a more complicated undertaking. Ever since the days of Adam Smith, economists have struggled to understand the process of economic growth. While this effort has produced a better understanding of the sources of growth, the subject has proven elusive and many puzzles remain unsolved. At the beginning of the 21st century it has become clear that there is no "silver bullet" or "cookbook recipe" solution to the problem of economic growth. Rather, the process of growth is quite complex, involving the interplay of many factors and variables that must be present if a country is to succeed.

A survey of the most recent research in this area indicates that the story of economic growth revolves around four main themes:

First, the *accumulation of capital*—financial, physical and human—is important, but it only accounts for a fraction of the variation across countries in income per capita levels and their rate of growth. This means that other factors are also at play.

The second theme is the efficiency with which inputs are utilized in the production process. Economists refer to this element as *total factor productivity* (TFP). Differences in TFP growth play a major role in accounting for the observed cross-country variation in income per worker and patterns of economic growth. However, the determinants of TFP growth constitute one of those puzzles that remain unsolved in this field.

What we do know is that capital in all its forms is subject to diminishing returns and, thus, the mere accumulation of it will not sustain high rates of growth over the long term. In contrast, TFP growth appears to be largely a function of technological progress and innovation, which are not subject to diminishing returns. Therefore, technological progress, the principal driver of TFP growth, must be at the heart of sustaining economic growth over the long term.

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[9] See Bruce D. Meyer, "The Effects of the Earned Income Tax Credit and Recent Reforms" in *Tax Policy and the Economy*, Volume 24, Jeffrey R. Brown, ed., (University of Chicago Press, 2010); Sara Sternberg Greene, *The Broken Safety Net: A Study of Earned Income Tax Credit Recipients and a Proposal for Repair*, New York University Law Review, Vol. 88, No. 2, May 2013; V. Joseph Hotz, Charles H. Mullin, and John Karl Scholz, *Examining the Effect of the Earned Income Tax Credit on the Labor Market Participation of Families on Welfare*, NBER Working Paper 11968, (National Bureau of Economic Research: Cambridge, MA, 2006); and Chuck Marr, Chye-Ching Huang, and Arloc Sherman, *Earned Income Tax Credit Promotes Work, Encourages Children at School, Research Finds*, (Center on Budget and Policy Priorities: Washington, DC, 2014), among others.

Third, the degree of *openness to the world* has become increasingly important because knowledge flows across national borders and foreign trade and investment affect the incentives to innovate, to imitate, and to use new technologies.

Finally, during the past two decades economists noted that countries that start with similar labor and capital endowments can follow dramatically different developmental paths, even after accounting for differences in investment, trade patterns, and technological change. This puzzle led some scholars to hypothesize that the differences in growth rates across countries are caused by differences in *institutional structures*, because institutions affect incentives to innovate and develop new technologies, the incentives to reorganize production in order to exploit new opportunities, and the incentives to accumulate physical and human capital.

The Puerto Rican Experience

In terms of *physical capital accumulation*, Puerto Rico has made enormous gains during the last fifty years. The public sector has spent a massive amount of resources in roads, ports, sewers, electric power lines, telephone service and other physical infrastructure.

In terms of *human capital*, the progress has been truly remarkable. For example, in 1950 the average Puerto Rican had 3.7 years of schooling, compared with 11 years in 2000.

In terms of *financial capital*, the effects of the recent Great Recession have been disastrous. According to recent estimates, wealth lost due the fall of housing prices is estimated at $27 billion, while the reduction in the market capitalization of Puerto Rican financial institutions is estimated to have inflicted losses of approximately $11 billion on local investors. Rebuilding this loss of domestic wealth will take decades.

In sum, several challenges remain: most of Puerto Rico's physical infrastructure, while relatively good, is starting to show its age; there are signs that the quality of its education is not up to par; and there is a need to recapitalize the private sector. Nonetheless, in comparison to other jurisdictions, Puerto Rico has done relatively well in terms of capital accumulation.

The story with *regards to TFP* is not as cheerful. During the 1950-75 period, Puerto Rican TFP experienced growth at a healthy clip. Since 1975, TFP has grown at a less rapid pace and by some measures it was negative during the 1990-2003 period. The reasons for this slowdown are not entirely clear, but it is worthy of note that it coincided with an explosion in government transfers and a substantial increase in government payroll. It is also important to mention that R&D expenditures in Puerto Rico traditionally have been low. However, further research is needed to fully understand the behavior of Puerto Rico TFP growth.

In terms of *engagement with the world*, Puerto Rico historically has been an open economy and currently it is one of the most open to trade, as measured by the ratio of the sum of exports and imports to GDP and by the amount of foreign direct investment it receives. However, Puerto Rico has not been sufficiently assertive in its engagement with the world. Puerto Rico has not used its industrial incentives to promote the transfer of foreign knowledge to local resources, to license new technologies, or to bring R&D operations to the island. In addition, Puerto Rico's lack of sovereign powers means that the island cannot directly defend its interests in the international forums where these issues are debated and negotiated, nor is the island allowed to negotiate them on a bilateral basis.

Finally, Puerto Rico experienced a period of substantial economic and political *institution building* during the 1940s and 50s. Many of the formal rules and regulations, as well as many of the organizations (the Planning Board, PRIDCO, GDB) that currently govern economic life in Puerto Rico all came into being during this period. By and large, this institutional framework provided the right incentives for economic growth in Puerto Rico during the 25-year period between 1950 and 1975.

However, institutions that are good for one period are not necessarily good for another. From an economic perspective, good institutions ensure at least two desirable outcomes: first, they guarantee that there is relatively equal access to economic opportunity, what is commonly referred as a "level playing field"; and second, they ensure that those who provide labor and capital are appropriately rewarded and their property rights are protected. Puerto Rico may be reaching the outer limits of its institutional framework, as the economic playing field is increasingly tilted in favor of those with political connections *and the providers of both labor and capital are concerned about the protection of their respective rights*. Simply put, our institutions have to evolve in order to reignite economic growth in the island.

In this context we strongly recommend that any savings derived from a reduction in debt service be dedicated *exclusively* to develop and implement a new industrial policy for Puerto Rico based on (1) a set of coherent horizontal policies such as reforming an unnecessarily complicated permitting and licensing system that stifles innovation, lowering energy and other costs of doing business in the island, and substantially improving educational standards; (2) restructuring obsolete institutions; (3) discovering new sectorial opportunities through a process of dialogue and consultation with key stakeholders in the private and civic spheres; and (4) "identifying spillovers, externalities, and other areas where [Puerto Rican] society could learn more."[10]

This new learning, in turn, would lead to: new investment in R & D, increased productivity, identifying new areas of comparative advantage for Puerto Rican firms,

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[10] Joseph E. Stiglitz and Bruce C. Greenwald, *Creating a Learning Society: A New Approach to Growth, Development, and Social Progress*, (Columbia University Press: New York, 2014), p. 489.

higher economic growth and the creation of high-quality jobs, which is what will categorically end Puerto Rico's economic stagnation. We at the Center for a New Economy are currently working with experts from Columbia, Brown, MIT, and Brookings, among other institutions, to develop this medium to long-term industrial policy.

In closing, it is important to note that just as a Boeing 747 four-engine jet plane can fly with only three or two functioning engines even if its performance is considerably less than optimal, the Puerto Rican economy can continue to crawl along in the absence of these policy changes. However, it should not surprise us then, if Puerto Rico's economic performance is not strong enough to support the quality of life that all Puerto Ricans deserve and desire.

Conclusion

Puerto Rico has been under severe economic and financial stress during the past nine fiscal years. During that period the Commonwealth has enacted a series of austerity and fiscal consolidation measures. Yet, in contrast with other jurisdictions that could complement those policies with either (1) a currency devaluation to boost exports or (2) loans from emergency liquidity facilities negotiated with international multilateral institutions, Puerto Rico, due to institutional constraints, cannot devalue its currency nor does it have access to such emergency liquidity facilities.

Therefore, in our opinion, putting on an IMF policy straitjacket without receiving any of the scant benefits that usually accompany IMF conditionality programs does not make any sense and enacting these kind of policies may, in a perverse way, *decrease* Puerto Rico's short and medium-term capacity to pay its debt by amplifying an already prolonged economic contraction.

In the short-term, Puerto Rico needs either to obtain access to some sort of emergency liquidity facility or the ability to avail itself of relief under Chapter 9 of the U.S. Bankruptcy Code in order to avoid a disorderly default. In addition, the enactment of other short-term policies at the federal level, like providing Puerto Rico equal treatment under federal healthcare programs, such as Medicare, Medicaid, and the Affordable Care Act would provide the Commonwealth with some much-needed fiscal space.

In terms of economic growth, extending the federal EITC to Puerto Rico, which would provide a significant wage supplement to low-income Puerto Rican working families, could be expected to stimulate aggregate demand in the short-run. However, sustaining economic growth over the long-term is a more complicated undertaking. In this context we strongly recommend that any savings derived from a reduction in debt service be dedicated *exclusively* to develop and implement a new industrial policy for Puerto Rico.

Finally, we note that any new economic strategy for Puerto Rico, no matter how nuanced, sophisticated, or brilliantly conceived, is bound to fail if it ignores the fact that Puerto Rico has reached the limits of its development within the constraints imposed by its subordinate political status, which is both humiliating to Puerto Ricans and unworthy of the United States.[11]

[11] Neither a sovereign country nor a state of the union, Puerto Rico has no authority to negotiate international treaties, no access to emergency financing from multilateral institutions, no monetary policy instruments, limited fiscal policy tools, nominal representation in Congress, and the U.S. Supreme Court has determined it is constitutionally permissible for Congress to discriminate against Puerto Rico in the application of federal programs as long as there exists a "rational basis" for doing so.

Puerto Rico Fiscal Balance 1998-2013

Sergio M. Marxuach
Policy Director
Center for a New Economy
22 October 2015

Puerto Rico Fiscal Balance 1998-2013

Trends in Puerto Rico's Fiscal Balance (1)	Fiscal Years																
($U.S. Thousands)	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**CAGR**
Revenues (2)	9,830,784	10,342,439	10,854,821	11,208,442	11,658,874	12,183,423	12,099,666	13,681,709	14,155,224	14,988,612	13,572,589	14,676,309	15,266,436	15,463,887	15,812,086	15,985,930	
Interest Revenue	116,030	97,880	91,525	67,020	90,940	85,565	58,914	116,686	117,080	176,674	160,926	114,699	56,145	28,529	28,659	(6,230)	
Non-Interest Revenues	**9,714,754**	**10,244,559**	**10,763,296**	**11,141,422**	**11,567,934**	**12,097,858**	**12,040,752**	**13,565,023**	**14,038,144**	**14,811,938**	**13,411,663**	**14,561,610**	**15,210,291**	**15,435,358**	**15,783,427**	**15,992,160**	3.4%
Total Expenditures (3)	9,382,657	8,731,896	9,663,259	9,900,315	13,217,832	14,596,201	14,648,379	16,033,758	15,510,239	16,253,409	16,134,376	17,713,069	17,604,942	17,403,585	19,163,860	18,870,467	
Non-Interest Expenditures	**8,787,604**	**8,289,282**	**9,218,664**	**9,355,314**	**12,603,485**	**13,437,452**	**13,910,877**	**15,299,827**	**14,688,005**	**15,438,686**	**15,097,240**	**16,618,927**	**16,235,497**	**15,801,598**	**17,480,058**	**17,009,212**	4.5%
Interest Expenditures	595,053	442,614	444,595	545,001	614,347	1,158,749	737,502	733,931	822,234	814,723	1,037,136	1,094,142	1,369,445	1,601,987	1,683,802	1,861,255	
Net Interfund Transfers (4)	(1,040,397)	(1,848,663)	(1,620,151)	(2,107,827)	187,183	279,060	203,258	492,776	242,642	342,743	309,815	251,170	265,852	230,551	219,794	246,908	
Primary Fiscal Balance (5)	(113,247)	106,614	(75,519)	(321,719)	(848,368)	(1,060,534)	(1,666,867)	(1,242,028)	(407,219)	(284,005)	(1,375,762)	(1,806,147)	(759,354)	(135,689)	(1,476,837)	(770,144)	
Overall Fiscal Balance (6)	(708,300)	(336,000)	(520,114)	(866,720)	(1,462,715)	(2,219,283)	(2,404,369)	(1,975,959)	(1,229,453)	(1,098,728)	(2,412,898)	(2,900,289)	(2,128,799)	(1,737,676)	(3,160,639)	(2,631,399)	
Nominal GNP (7)	35,110,700	38,281,200	41,418,600	45,102,400	45,999,700	48,492,200	51,826,500	54,861,900	57,854,300	60,642,700	62,703,100	63,617,900	64,294,600	65,720,700	68,085,700	68,768,200	4.6%
Primary Fiscal Balance/GNP (%)	**-0.3%**	**0.3%**	**-0.2%**	**-0.7%**	**-1.8%**	**-2.2%**	**-3.2%**	**-2.3%**	**-0.7%**	**-0.5%**	**-2.2%**	**-2.8%**	**-1.2%**	**-0.2%**	**-2.2%**	**-1.1%**	
Overall Fiscal Balance/GNP (%)	-2.0%	-0.9%	-1.3%	-1.9%	-3.2%	-4.6%	-4.6%	-3.6%	-2.1%	-1.8%	-3.8%	-4.6%	-3.3%	-2.6%	-4.6%	-3.8%	

Source: CAFR 2005, 2012 and 2013; GNP is from the PRPB

(1) Includes the central government and certain blended component units, notably COFINA and PBA, but excludes other public corporations.

(2) Includes taxes, charges for services, intergovernmental revenues, interest and investment earnings, and other. Excludes proceeds from debt issues.

(3) Includes current expenditures and capital outlays but excludes amortization payments.

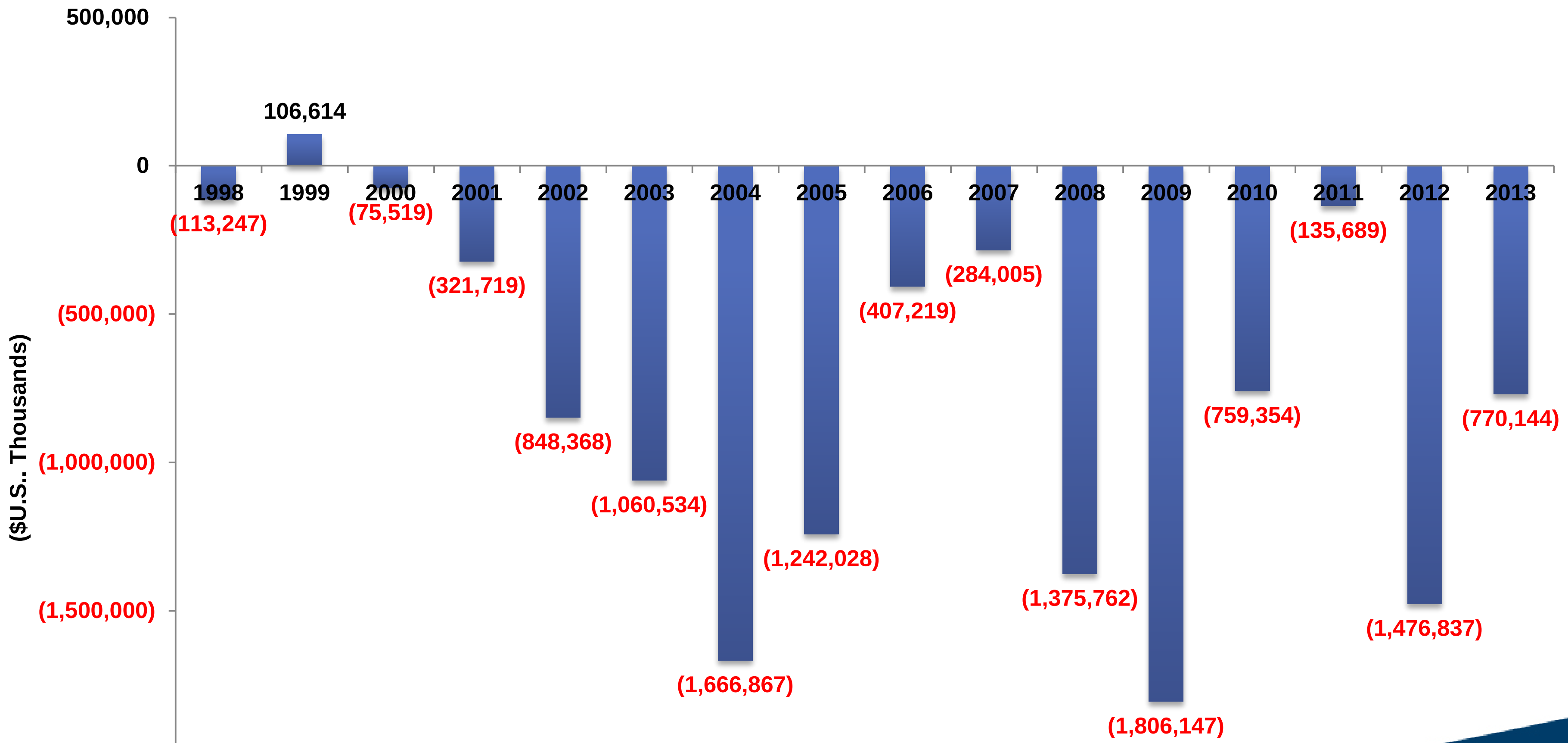
(4) Equals "Transfers in" minus "Transfers out".

(5) Equals non-interest revenues minus non-interest expenditures plus net interfund transfers.

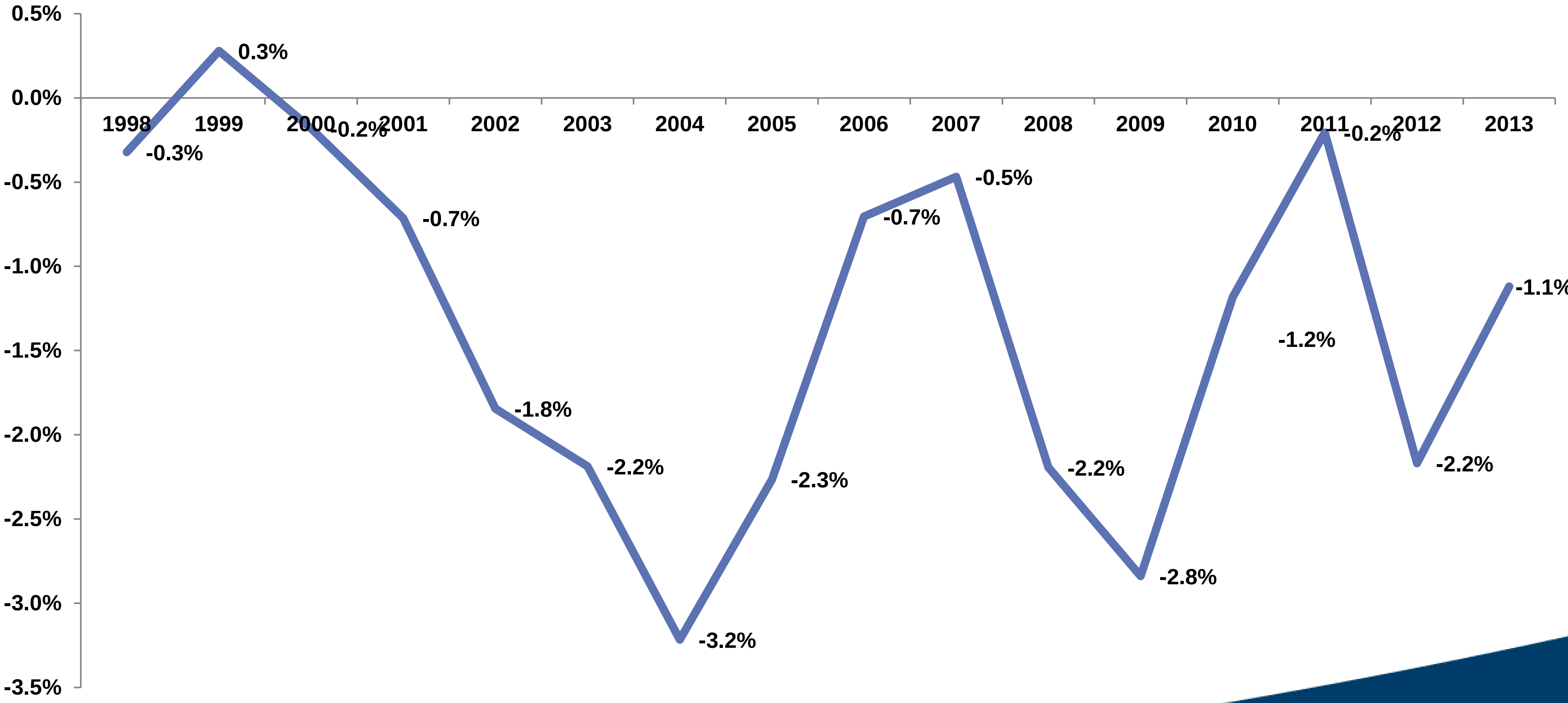
(6) Equals primary fiscal balance minus interest expenditures.

(7) As updated by the PRPB 2015.

Primary Fiscal Balance 1998-2013



Primary Fiscal Balance/GNP (%)



CNE

Overall Fiscal Balance/GNP (%)