**THE 2014 STATUS OF THE PUERTO RICAN ECONOMY**

*This report provides a description of the situation of the Puerto Rican economy at the beginning of 2014. In order to provide a foundation for understanding the current situation, the report also traces the longer run development of the economy and of economic policies. An effort to understand the Puerto Rican economic situation, however, must take into account the status issue. The island’s status as a “territory of the United States” affects all aspects of economic development and economic policy. Trying to analyze the Puerto Rican economy without considering the status issue is like watching a 3D movie without the glasses. Readers should wear the “status implications glasses” as they consider this document.*

1. **KEY ISSUES**

**Current Context:** *The economy of Puerto Rico has been in severe recession since mid-2006.* The Government Development Bank’s Economic Activity Index dropped from its 2006 peak of 154.9 to an average of 124.7 in the first four months of FY2014, a decline of 19.5%. Unemployment has climbed above 15% of the labor force, and investment has fallen below 15% of GNP. The poor economic record of recent years has come after three decades of relatively slow growth. In spite of the long-lasting and severe recession, prices rose by 34% (2.95% annual average) in the 2003 to 2013 decade, while prices in this decade increased somewhat less in the United States—27% (2.45% annual average).

**Chronic Poor Performance:** *Because the Puerto Rican economy is so thoroughly connected to the states, the poor performance of the U.S. economy has had a magnified impact on Puerto Rico. Yet external conditions—either in the United States or in the world economy—are not the primary factors bringing about the severe decline in Puerto Rico*. Rather, the continuing Puerto Rican recession has emerged out of long-term poor economic performance in Puerto Rico. The era of rapid growth under the rubric of “Operation Bootstrap” gave out by the early 1970s, but Puerto Rican governments have continued to pursue the same sorts of policies that were no longer working—attempting to attract investment from external sources and seeking special favors from the federal government. They failed to develop the foundations for internally based investment and did little to build a strong social and physical infrastructure. When growth of the private sector has been weak, the governments have relied on public employment, financed by excessive borrowing.

**The Foundations of Fiscal Crisis:** *During the period of slow growth, accompanied by high levels of unemployment and low labor force participation rates, the government relied heavily on borrowing to maintain at least some expansion of the economy; and this borrowing paid for a relatively high level of government employment. Nonetheless, during the 1990s and into the first years of the new millennium, Puerto Rico’s public debt was roughly stable relative to GNP, with the debt-to-GNP ratio hovering around 60%. From 2003 onward, and especially as the recession emerged in 2006, public debt rose substantially, both absolutely and in relation to GNP; in 2012, the debt-to-GNP ratio had risen to 93%.*

By the end FY2013, the public debt of Puerto Rico was over $70 billion, far higher on a per capita basis than any state and far, far higher than any state in relation to per capita income. Following a series of downgrades by the rating agencies since the early 2000s, by the end of FY2013, the Puerto Rican General Fund bonds were rated BBB- by Standard & Poor’s, Baa3 by Moody’s, and BBB- by Fitch. In the fall of 2013, general fund bonds were selling at a 33% discount, and even those bonds with dedicated payments from the sales and use tax revenue were being downgraded.

**Short Term Policy:** *Puerto Rican governments of both parties have since 2008 attempted to deal with the government budget deficit, the high level of borrowing, and the declining bond ratings by sharp cuts in government employment, one-time actions to generate revenue, and, recently, some substantial tax increases.* Between FY2007 and FY2012, government employment fell by between 13.2% (establishment survey) and 22.4% (household survey); in this same period, the two surveys show total employment falling by 9.8% and 18.1%. During the first eight months of 2013, the new government reports that it decreased public sector employment by another 5,000 workers, about 2.5%. One time revenue-raising measures in 2013 have included privatization of the island’s major airport ($615 million) and a tax amnesty ($90 million). At the end of FY2013, several tax increases were put in place as further steps to raise more revenue. The largest of these were a corporate tax increase and an expansion of the base of the sales and use tax, projected to bring in an additional $880 million and $309 million, respectively, in FY2014. With these various measures, the government forecasts a reduction in the budget deficit from $1,290 million in FY2013 to $820 million in FY2014, even while expenditures increase by 11.5% due to debt service refinancing and increases in non-discretionary spending. The government projects a balanced budget by FY2016.

The Puerto Rican governments’ efforts since 2008 to handle immediate budgetary difficulties by attempting to move toward a balanced budget have been accompanied by the continuing decline in the overall economy, an experience consistent with that in several countries that have chosen austerity programs. Many of those countries—in particular, in Europe—have done so in order to obtain funds from the IMF and the European Central Bank. Puerto Rico, however, has had no recourse but the bond market.

**Background on Economic Performance:** *The Puerto Rican economy grew quite rapidly in the 1950s and 1960s, leading many observers to see it as a model of success for low income countries. However, from the mid-1970s onward, the economy has slowed, with incomes falling further and further behind those in the states.* Although there is wide agreement on many good economic policies that would improve the island’s economy, governments have failed to implement such policies: improvement of the schools and support for “high tech” investments; improvement of the physical infrastructure; reform of the tax system; inclusion of the island in federal programs designed to reduce poverty (most especially the Earned Income Tax Credit); better support for the tourist industry; and the list goes on. Instead, successive governments have continually failed to re-establish strong growth, and, like its predecessors, the current government touts old, failed policies of selective tax incentives and solicits special federal tax treatment for U.S. firms operating on the island.

**Complications of Poor Data and the GNP-GDP Gap.** Analysis of the Puerto Rican economic experience, as well as accurate appraisals of policy impacts and investment possibilities, is hampered by poor data. Inflation adjusted aggregates, for example, are presented in terms of 1954 prices and are not available in a timely manner (and thus the reliance above on the Government Development Bank’s Economic Activity Index rather than on GNP or Personal Income). The consumer price index underwent a major revision in 2010, after serious errors were uncovered, but the methods of collecting price data continue to be insufficient. The divergence between the employment counts in the household survey and the enterprise survey has never been adequately examined. Several other data needed for analysis, policy formation, and investment planning are similarly problematic.

Also, a different sort of data problem is represented by the large gap between GNP and GDP. This gap reflects the heavy dependence of Puerto Rico on firms based outside the island (mainly in the United States) and the gap consists largely of the profits of those firms. Recognition of the gap and its importance is an essential in analyzing the course of the Puerto Rican economy. Also, an understanding of this gap explains why this report generally relies on using GNP, rather than GDP, as an indicator of economic conditions in Puerto Rico and as a basis for comparing other variables (e.g., the public debt).

The data problems and the GNP-GDP gap are discussed in an appendix.

1. **Recent Economic Developments and the Macroeconomic Outlook**[[1]](#footnote-1)

After a period of relatively smooth expansion during the 1990s (but at only a 2.8% annual average), the Puerto Rican economy experienced two short declines—in the second half of 1999 and then throughout 2001—before expanding again to 2006. From 2006 onward, the economy has been in virtually continuous decline. Figure 1 traces the changes in the Government Development Bank’s Economic Activity Index by fiscal year averages, from the early 2000s through the beginning of 2014; the Index declined by 16.3% from FY2006 to FY2013 and continued to fall in the first months of FY2014.

This severe recession that began in 2006 is widely viewed as having been triggered by the government shutdown in May of that year. Facing a $740 million government budget deficit, with the governor and the legislature at odds over how to raise revenues, the government was shut down for two weeks, placing 100,000 public employees out of work. The immediate impact on political uncertainty and demand led into the recession. The return of the government to full operation did not alter the economy’s downward trajectory, suggesting that the economic problems of Puerto Rico went well beyond the immediate impact of the shutdown.

The deeper, and earlier developing, problems of the Puerto Rican economy are evident in the decline of the investment rate, which has been on-going since 2001. In 2001, the investment rate (gross domestic fixed investment as a percentage of GNP) stood at 26.5%. By 2006, it had fallen to 20.5%, and reached a low 13.9% in 2010. This decline of the investment rate is shown in Figure 2, along with the rise in the unemployment rate, which was relatively stable through 2008. What is especially unusual is that by 2010 the unemployment rate had climbed above the investment rate; the slight changes in the subsequent two years did not alter this relationship. An unemployment rate higher than an investment rate for three years—indeed, even for a single year—is a sign of an economy in deep distress.

As bad as the unemployment rate is, however, it does not indicate the full extent of the slack labor market because the labor force participation rate has fallen from 48.6% in 2006 and 2007 to 41.8% in 2012. (Puerto Rico’s labor force participation rate has not risen to 50% since the early 1950s.) Worse yet, the population of persons 16 years old and older (on which the participation rate is calculated) increased by only one-half of one percent between 2007 and 2012; and even this increase is an overstatement of the increase of the working age population, as those people emigrating have been disproportionately young adults (see below on population decline).[[2]](#footnote-2) It should be noted, however, that Puerto Rico has a large “informal” economy, perhaps accounting for as much as 25% of total production. If the data were to take full account of this “informal” activity, the labor force participation rate would surely be higher. Nonetheless, the direction of change revealed by the official data indicates the extent of the economic decline that has been occurring.

Perhaps the most dramatic sign of the severity of Puerto Rico’s economic decline in recent years is the sharp population decline, shown in Figure 3. After peaking in 2004 at 3,826,878, Puerto Rico’s population dropped by 5.5% to 3,615,086 in 2013, and the drop was especially sharp in 2013. This decline is largely accounted for by emigration to the states, as net migration to the states exceeded thirty thousand persons in most recent years.[[3]](#footnote-3) During the 2004 to 2012 period, however, the “natural rate” of population growth also declined from an annual rate of 0.55% to 0.30%; the birth rate fell from 13.2 per 1,000 people to 11.2 and the death rate rose from 7.7 per 1,000 people to 8.2.[[4]](#footnote-4) Although the decline of the birth rate is a continuation of a long term trend and the rise in the death rate may be partly explained by a change in the population structure due to emigration (as younger people have left at a higher rate), both changes probably also have been more directly affected by the worsening economic conditions in these years.[[5]](#footnote-5)

Puerto Rico’s population decline is not simply a sign of an economy in distress, but also portends the possibility of a long-term economic downward spiral. The net out-migration is disproportionately young people who are relatively highly educated—that is people who are in their most productive years and who could make a most important positive impact on productivity.[[6]](#footnote-6) Thus, poor economic conditions generate more out- migration; more out-migration tends to worsen economic conditions; worse economic conditions lead to more out migration; and so on.

**Chronic Poor Performance (Exacerbated by External Factors)**

As a small island economy, Puerto Rico is subject to events elsewhere, especially events in the United States, by far the island’s largest trading and investment partner. The poor U.S. record since 2000 and especially the Great Recession have had important negative impacts in Puerto Rico. Nonetheless, Puerto Rico’s economic difficulties of recent years cannot be seen simply as a result of the island’s external relations. In particular, the weak economic condition in the United States does not appear to have been the driving force behind the decline of the island’s economy.

Most importantly, the Puerto Rican decline began in 2006 and signs of decline appear in the Government Development Bank’s Economic Activity Index in late 2005. Growth in the U.S. economy, however, was positive until the first quarter of 2008.[[7]](#footnote-7) Demand for Puerto Rican exports was weak in the period after 2008. In current dollars, Puerto Rico’s merchandise exports dropped by less than one-half of one percent, but official constant dollar figures—which are of questionable reliability (see the appendix)—show a 9.6% decline.[[8]](#footnote-8) This fall off of exports, while a significant negative factor for the Puerto Rican economy, cannot be seen as the cause of Puerto Rico’s recession.

Table 1 compares Puerto Rico’s balance of payments in FY2008 (when the U.S. economy began to decline) with FY2012 (the most recent period for which data are available). The figures in the table are in current dollars; data adjusting the components of the balance of payments to real terms are not available. To estimate the change between these two years in real terms, it would seem appropriate to apply about a 10% reduction to the 2012 figures.

In addition to the point just noted regarding merchandise exports, the following several observations emerge from Table 1:

* Visitors’ expenditures dropped off substantially, by roughly 20% in real terms.
* Imports declined a good deal more than exports, in nominal terms by 4.6% as compared to 0.4%, but probably a good deal more in real terms, reflecting the decline of the Puerto Rican economy.[[9]](#footnote-9)
* Also reflecting the decline in the economy, the outflow of income on investments dropped off (more so in real terms)—though this figure is affected not only by immediate conditions in Puerto Rico but also by firms’ decisions regarding where to hold their earnings.
* Although a small part of the balance of payments story, private remittances dropped sharply, by over one-third in nominal terms.
* Perhaps the most outstanding figure in Table 1 is the large increase in federal government transfers to Puerto Rico, which rose by almost 50%—though perhaps by a bit less than 40% in real terms.
* The large cut-back in long-term investments in Puerto Rico is consistent with the lasting poor performance of the economy, as is the movement of Puerto Rican capital to off-island sites.
* Finally, the large amount of “unknown transactions” should add a note of caution to placing too great a reliance on the particular figures in the table.

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**Table 1: Puerto Rico: Balance of Payments and Major Elements, FY2008 and FY2012 (millions of current dollars)#**

FY2008 FY2012

Balance on Goods and Services (13,742.1) (12,515.4)

Merchandise Exports\* 68,055.5 67,767.1

Visitors’ Expenditures 3,535.0 3,192.9

Merchandise Import\* 53,487.3 51,105.9

Income on Investments 33,703.7 33,170.4

Balance on Goods and Services,

Government Interest, and

Unilateral Transfers (727.5) 6,255.7

Private Remittances 458.0 300.3

Federal Government Transfers 11,994.6 17,688.5

Net Change of Investment 9,931.9 2,279.3

In Puerto Rico

Long Term 13,312.6 2,355.6

Short Term (3,920.7) (76.2)

Net Change of Puerto (2,361.7) 1,652.7

Rican Investment Abroad

Long Term (2,159.1) 384.1

Short Term (202.6) 1,268.7

Unknown Transactions (6,302.7) (10,187.7)

# Not all items are shown.

\* Includes transportation.

Source: *Economic Report to the Governor 2012*, Appendix Table 18.

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**The Long-Term Context**

The recession in Puerto Rico, which is now in its seventh year, should be seen in the context of the long-term record of the island’s economy. Figure 4 and Table 2 show the growth of real GNP in Puerto Rico and the United States by decade from 1950 to 2000 and for 2000 to 2012. After the rapid growth of the 1950s and 1960s, the expansion of the Puerto Rican economy slowed a great deal, and from the 1980s onward economic activity has fallen further and further behind that of the states. The trend shifted from convergence between the island and the states in those earlier decades to divergence in more recent decades.[[10]](#footnote-10) Some of the factors behind this shift will be taken up below.

**Table 2: Real GNP Growth in Puerto Rico and the United States, 1950 to 2000,**

**Percent Change in the Decade, and Percent Change 2000 to 2012**

Puerto Rico United States

1950s 67.7 39.6

1960s 96.9 50.8

1970s 40.5 37.5

1980s 20.9 36.7

1990s 31.6 39.4

2000 - 2012 - 0.7 23.5

Sources: For Puerto Rico - 1950-1980: James L. Dietz, *Economic History of Puerto Rico.* Princeton: Princeton University Press, 1986, Table 5.1; 1990-2000: Planning Board of Puerto Rico (2002). *Economic Report to the Governor 2001*. San Juan; 2010 and 2001: Planning Board of Puerto Rico, <http://www.jp.gobierno.pr/>, Apéndice Estadístico. For the United States – 1950-1960, Economic Report of the President 1965; 1960-2010, U.S. Department of Commerce, Bureau of Economic Analysis (BEA), <https://www.bea.gov/scb/pdf/2011/06%20June/D%20pages/0611dpg_c.pdf>; 2011 and 2012, BEA, <http://www.bea.gov/national/txt/dpga.txt>.

1. **The Bond Crisis and Government Finance**

Through the summer and fall of 2013, a potential crisis of Puerto Rico’s public debt was widely recognized in the bond market. According to a December 10, 2013, report by *The Wall Street Journal*, “The price of Puerto Rico's 5.75% bond due 2041 has fallen 10% over the past month to 67 cents on the dollar, while the yield of the bond has risen to 9% from 8%, according to the Municipal Securities Rulemaking Board.”[[11]](#footnote-11)

The problems of Puerto Rico’s public debt and the likelihood of bond market difficulties have been emerging for several years. As shown in Table 3, between the ends of FY2003 and FY2012, total public debt rose by 118% while GNP rose by only 43% (both figures are current dollars); in relation to GNP, debt rose from 61.3% to 93.2%.[[12]](#footnote-12) (See below regarding the problems with the figures showing the breakdown of the public debt.)

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**Table 3: Puerto Rico: Gross Public Debt as of June 30 and General Fund Revenue for the Fiscal Year (millions of current dollars)**

2003 2012\* Percent Increase

Total $29,707.0 $64,760.3 118%

Public Enterprises $20, 865.7 $49,044.7 135%

Central Government $ 6,886.2 $11,844.1 72%

Municipalities $ 1,955.1 $ 3,871.5 98%

General Fund Revenue $ 7,814.7 $ 8,660.4 11%

GNP $48,492.2 $69,461.6 43%

Total Debt as % of GNP 61.2% 93.2%

\* Preliminary figures.

Source: Statistical Appendix of the *Economic Report for the Governor and Legislative Assembly*, Table 29 and Table 1, <http://www.gdb-pur.com/economy/documents/AE2012_T29.pdf>**.**

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By the end of FY2013, Puerto Rican public debt had risen another 8.2%, to $70,043 million.[[13]](#footnote-13) The paths of public debt and its major components from FY1990 to FY2012 are shown in Figure 5. Two points stand out in Figure 5. First, while debt as a percent of GNP was high in the 1990s, the debt-GNP relation was roughly stable at about 60% until 2003. From 2003 on, the debt rose much more rapidly. Second, most of the rapid debt increase appears to have been due to the debt of public enterprises.[[14]](#footnote-14)

The data on the breakdown of Puerto Rican public debt shown in Table 3 and Figure 5 are, however, problematic. They are not consistent with the breakdown of debt in the Puerto Rican government’s “Update on Fiscal and Economic Progress” presented on October 15, 2013 (an effort to assuage growing concerns in the bond markets).[[15]](#footnote-15) Table 4 compares the breakdown for 2012 shown in Table 3 with the breakdown for 2013 from the “Update.” What first stands out in Table 4 is the much smaller share of public enterprise debt in the “Update,” 36.5% as compared to 75.7%. The 36.5% figure is still large, but presents a very different picture of the situation than does the 75.7% figure. Second, COFINA debt is not shown separately in data from the standard government sources.[[16]](#footnote-16) Third, other categories of debt, not shown in the standard sources, would appear to be direct obligations of the central government, and they account for 21.1% of total debt (Commonwealth Guaranteed Debt, Limited Obligation/NonRecourse/POBs, and Appropriations Debt) while General Obligation Debt accounts for only 15.1% of the total.

Unfortunately, the ambiguities in the presentations of Puerto Rican debt data are not unusual. Puerto Rico’s economic data are rife with problems, as will be discussed in the appendix of this report.

In an important sense, the public debt figures understate the fiscal problems that have developed for the Puerto Rican government because they exclude a form of de facto borrowing that has been going on for several years. This is the failure of Puerto Rican governments to adequately fund the public pension systems. In effect, the governments have been borrowing from the pension systems.

Puerto Rico’s public pension funds were only 14% funded in FY2010, far less than in any of the states. (For example, Illinois, a state with an especially low level of pension funding, had 45% of its liabilities actually funded in 2010.)[[17]](#footnote-17) According to a 2012 report of the Municipal Securities Rulemaking Board, based on the 2010 situation, “the Employees Retirement System, the largest of the three [public] retirement systems would deplete its net assets…by fiscal year 2014 and its gross assets by fiscal year 2019.” The other public pension funds were projected to have depleted their assets by fiscal years 2020.[[18]](#footnote-18)

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**Table 4: Alternative Puerto Rican Government Debt Reports**

Column 1: As Reported in the Statistical Appendix of the Economic Report for the Governor and Legislative Assembly, Table 29: “Gross Public Debt of Puerto Rico” as of June 30, 2012 (preliminary figures), <http://www.gdb-pur.com/economy/documents/AE2012_T29.pdf>.

Column 2: As Reported in The Commonwealth of Puerto Rico “Update on Fiscal and Economic Progress *FY 2014 Q1 Investor Webcast -October 15, 2013,”* “Puerto Rico outstanding debt by category as of June 30, 2013), page 56, <http://www.gdb-pur.com/documents/UpdateonFiscalandEconomicProgressWebcast-Final.pdf>.

Figures in millions of current dollars

Designation Column 1 Column 2 Designation

Total $64,760.3 $70,043 Total

Public Enterprises $49,044.7 $25,575 Public Corps. & Agencies

- $15,224 Sales Tax/COFINA Debt

Central Government $11,844.1 $10,599 General Obligation Debt

- $ 5,634 Commonwealth

Guaranteed Debt

- $ 5,086 Limited Obligation/Non

Recourse/POBs

- $ 4,043 Appropriations Debt

Municipalities $ 3,871.5 $ 3,882 Municipalities

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In April 2013, however, the Puerto Rican government enacted Act 3, which “will raise the retirement age for some state workers to age 65, increase worker pensions contributions by nearly 2 percent and lower monthly pensions and benefits for some public workers.”[[19]](#footnote-19) By reneging on its pension commitments, the Puerto Rico government appears to have improved its ability to meet its bond commitments—yet there appears to be no indication in the bond market that Puerto Rico’s debt is viewed more favorably since Act 3 was signed and then upheld by the court in June 2013.[[20]](#footnote-20) Regardless of the impact of the pension changes on the bond market, the actions (or lack of actions) that led to the very large underfunding of the pensions underscores the manner in which Puerto Rican governments have handled their finances.

The Puerto Rican government has run deficits on its current account budget for several years.[[21]](#footnote-21) The official General Fund deficit figures for the past several years, presented in Table 5, show this practice. The data in Table 5, however, tell only part of

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**Table 5: Puerto Rico Government Budget Deficit, 2009 – 2013,**

**Fiscal Years ending June 30 (in millions)**

Total Total

Fiscal Year Revenues Expenditures Deficit

2009 $7,825 $10,689 $2,864

2010 $8,032 $10,756 $2,724

2011 $8,343 $10,144 $1,801

2012 $8,783 $11,158 $2,375

2013\* $8,697 $9,987 $1,290

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\* Preliminary and unaudited; subject to change.

Source: COMMONWEALTH OF PUERTO RICO, Financial Information and Operating Data Report, October 18, 2013, <http://www.gdb-pur.com/investors_resources/publications-reports/commonwealthfiodr/commonwealthreport.pdf>, p. 10.

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the story. While the deficits for the four years from 2009 to 2012 shown in Table 5 add to $9,764 million, the public debt in this period rose by $17,828 million, showing that there was much more to the actual government borrowing (and therefore the actual public deficit) than is indicated by the figures in Table 5.[[22]](#footnote-22) One factor is the debt incurred by the public enterprises, at least a part of which is guaranteed by the government. In addition there are various other expenditures and revenues that fall outside of the General Fund under the rubric of Special Funds that do not appear to be included in the governments’ deficit figures. Special funds are defined as follows:

*“Disbursements of Special Funds for operating purposes and for capital improvements.* For the most part, these do not require annual legislative authorization, because they are authorized by previous legislation or by the United States Congress. Federal grants constitute the major part of the resources of the Special Funds.”[[23]](#footnote-23)

As the deficits are presumably calculated on the basis of actual expenditures in a fiscal year and because at least a portion of Special Funds, regardless of the date of authorization, are for operating purposes, it would seem that they would contribute to the deficit of a year in which they are shown as spent.

Regardless of the deficit calculation, it is the expansion of the public debt that marks the difficulties of Puerto Rican public finance. Nonetheless, the sharp reduction in the deficit in FY2013, which is accounted for by the reduction in expenditures (some vital), is a significant change in fiscal practices. Moreover, a further reduction in the deficit is planned for FY2014 (to $820 million) and a balanced budget is planned for FY2016.[[24]](#footnote-24) When the 2013 expenditures figure is adjusted for inflation, the decline of expenditures between 2009 and 2013 is about 16%, with major reductions in expenditures on education, health, and welfare.[[25]](#footnote-25) If the 2016 balanced budget is attained, it will likely come at the cost of further reductions in these areas.

The expenditure reductions have in large part been accomplished by reductions in government employment. Central government employment dropped by 18.4% between 2006 and 2012, while overall employment declined by 11.2% in this period (according to the establishment survey).[[26]](#footnote-26) Reporting on events in FY 2013, the government made it clear that employment reductions have been a central part of its plan for deficit reduction, as was the case with the previous government. In particular, in October 2013, the government indicated that its 2014 budget calls for further reductions in government employment. The government, which came into office in January 2013, announced that government employment had on net been reduced by 5,310 people between January and August; 1,328 were accounted for in the Department of Education.[[27]](#footnote-27)

In its efforts to reduce the deficit, the government has also introduced some substantial tax increases and taken some one time actions to increase current revenues. The government projects that new tax measures will add $1,071 million of revenue in FY2014 and that an expansion of the sales and use tax base will bring in another $309 million. In FY2013, revenues were increased by privatization of the island’s principal airport ($615 million) and a tax amnesty ($90 million).[[28]](#footnote-28)

Insofar as the various deficit-reducing actions—spending reductions, pension system changes, and tax increases—have their intended impact, they should reduce the rate of increase in Puerto Rico’s public debt. Their impact, however, depends on the rate of growth of the economy. While the government has projected moderate growth for FY2014, growth is by no means assured. Indeed, the debt reducing actions of the government may have negative growth impacts—if not in FY2014, then in subsequent years. The spending reductions, tax increase, and pension changes are likely to have negative impacts on final demand. The airport sale and tax amnesty, which brought in revenue in 2013, are likely to reduce revenue in the future (the former by reducing income from the airport and the latter by leading to future tax evasion). All of these government actions may reduce the short run deficit, but their longer run impacts are another matter. To date, there is no indication that an increase in private sector activity is balancing the government’s reductions of employment and demand.

The record in several European countries, where austerity programs similar to the program being followed in Puerto Rico have been in force, portends limited success at best for the Puerto Rican actions. There are of course important differences between Puerto Rico and the European countries. While Puerto Rico has a similar difficulty in not controlling its own currency (and, like individual European countries, cannot use devaluation as policy to aid recovery), both the government and individuals on the island have continued to receive the stimulus of infusion of funds form the federal government throughout the long recession. For example, in 2010 federal transfers to Puerto Rico for retirement and disability were $7.951 billion, about 13% of personal income; all federal expenditures to Puerto Rico in that year were $21,118 million, about one-third of the island’s GNP.[[29]](#footnote-29) Although Puerto Rico has been receiving this infusion of funds from the federal government, the Puerto Rican government will still have to return to the bond market for any further borrowing. European governments, by contrast, are obtaining loans from the IMF and the European Central Bank in response to their austerity programs.

1. **The Longer Term Record and the Longer Term Outlook**

As previously noted, the Puerto Rican economy grew quite rapidly in the 1950s and 1960s, and then slowed from the mid-1970s onward, with incomes falling further and further behind those in the states. (The record is shown in Table 2 and Figure 4.) Although some observers saw the success of that earlier period as a model for low-income countries, by the 1990s it was apparent that Puerto Rico was unable to continue on a successful path.[[30]](#footnote-30) This shift from rapid growth to relative stagnation provides the context of the more recent and more severe economic decline on the island.

Puerto Rico’s economic success in the 1950s through the early 1970s was due to particular and ephemeral circumstances of the period—namely that the relatively low wages combined with preferred access to the U.S. market made Puerto Rico an attractive site for U.S. firms to locate their labor-intensive production of goods destined for U.S. consumers. Furthermore, under the rubric Operation Bootstrap (*Operación Manos a la Obra*), this success was also fueled by special tax treatment from both the federal and Puerto Rican governments. But neither of the particular circumstances at the base of this period’s economic success—low wages and preferred access to the U.S. market—would last. Success itself generated higher wages, and the increasingly liberalization of U.S. trade relations gave other areas—many low-wage parts of the world—access to the U.S. market.

Special federal tax arrangements were maintained—the continuation of Section 931 from the earlier era, then Section 936, and now the Controlled Foreign Corporations (CFC) status. Moreover, these incentives emanating from Washington have been complemented by tax incentives from the Puerto Rican government to attract U.S. firms to the island. The impact of federal and Puerto Rican tax incentives, however, has been limited in the era of the altered wage and trade environment. Their primary impact appears to have been on the profits of U.S. firms operating on the island, with limited impact on either employment or economic growth.[[31]](#footnote-31)

While these tax incentives appear to have resulted in substantial investment from external sources,[[32]](#footnote-32) they have shaped investment in a way that has not provided an effective foundation for economic growth in Puerto Rico. Although in the early era (through the 1960s) much of the activity of foreign/U.S. firms involved labor intensive production, this activity and the employment it generated waned in later years, the era of Section 936. In this later era, U.S. firms in Puerto Rico engaged in activity that generated relatively little employment relative to the tax expenditures that they received—the pharmaceuticals especially. According to a U.S. Treasury Department report, in 1987 it cost the U.S. government on average at least $1.51 in lost tax revenue for each $1.00 in wages paid in Puerto Rico by firms operating under the provisions of Section 936. Or, put another way, on average it cost at least $26,725 each year to maintain a job that was paying an annual salary of $17,725. For the pharmaceutical industry, the figures were $3.08 per $1.00 in wages, or $81,483 to maintain a job paying $26,471.[[33]](#footnote-33) Another study, using 1992 data, indicated that 936 firms were less integrated with the island’s economy than were non-936 firms—the former having a total multiplier effect of 1.7 as compared to 2.6 for the latter.[[34]](#footnote-34),[[35]](#footnote-35)

In spite of the poor growth and employment record of a policy based on tax incentives to attract external-source investment, this approach to economic development has continued to be the central feature of Puerto Rican governments’ economic development strategy for decades. Governments have continued to push for a creation of new federal tax provisions, which would be similar to the old Section 936 and have offered individual firms special treatment within the Puerto Rican tax code.[[36]](#footnote-36)

The weakness of this development strategy is apparent in several interconnected consequences:

* *Excessive reliance on manufacturing*. Aside from the tax incentives, Puerto Rico has no special conditions that make it a desirable manufacturing site, and the manufacturing firms attracted by the tax incentives have not been strong generators of employment and skills. (Although some of these firms—the pharmaceuticals, for example—are viewed as “high-tech,” most of their Puerto Rican activity involves relatively routine production and little research and development.)
* *Failure to build support for locally-based initiatives.* The reliance on external-source investment in manufacturing has drawn attention and resources away from building the foundation for indigenous entrepreneurial activity. The banking sector illustrates the problem. Not only has Puerto Rican banking been largely dominated by U.S. banks (and some other externally-based banks), but in addition commercial banks have allocated limited funds to economic development and have not generated sufficient local funds to support the capital formation needed for self-sustained development.[[37]](#footnote-37)
* *Lack of attention to areas of the economy where Puerto Rico has clear advantages.* Given Puerto Rico’s geography and climate, tourism is the outstanding example. Compared to the Dominican Republic, in 2010 Puerto Rico lagged behind on several measures (number of visitors, visitors’ spending, and total contribution to the economy). Most importantly, government spending supporting tourism was only 57% of that in the Dominican Republic.[[38]](#footnote-38)
* *Failure to develop the social and physical foundations of the economy.* Governments in Puerto Rico have issued many statements about the desirability of supporting the “new economy” of “high-tech” activity. Nonetheless, they have done little to support the schools, which are widely viewed as of generally low quality. Likewise, the information technology infrastructure has been weak, and by virtually all measures of scientific advance—e.g., patents, scientific publications, and PhDs—Puerto Rico has done poorly in relation to the states.[[39]](#footnote-39) Although Puerto Rico has an extensive road network, traffic congestion and the roughness of roads compare poorly with the states. Phone coverage, both land lines and wireless, has been low and fell behind as much of the rest of the world moved rapidly ahead. And, perhaps most severe, energy production facilities are old, inefficient, and high-cost.[[40]](#footnote-40)

All of these weaknesses in Puerto Rican economic policies and practice have created a context in which the recession of recent years developed and has become so severe. The current government continues to look for short term solutions to the island’s economic problems. Yet it has not given attention to the long-run weaknesses in the economy and to policies that might provide a basis for lasting recovery.

The inability of the Puerto Rican government to invest in the island’s social and physical infrastructure and to provide the funds that would support tourism or initiatives in other areas—such as specialized agriculture—creates a poor outlook for the coming period, regardless of any success in the bond market. The population decline, described above, demonstrates that Puerto Ricans are aware of this poor outlook, and their response of emigration might worsen the outlook. The government continues to see tax incentives and foreign-source investment as the basis for its long-run development strategy. Indeed, ignoring the record of the last several decades, the government places at the top of its “strategic priorities,” the imperative: “Defend traditional Pharmaceutical base.”[[41]](#footnote-41)

1. **Synthesis: Major Changes Are Needed**

To pull the Puerto Rican economy out of the current recession and onto a path of effective development, it is first necessary to recognize that the island’s problems run much deeper—and have existed much longer—than the recession. The recession grew out of and has been the full expression of Puerto Rico’s chronically poor economic performance. For more than three decades, Puerto Rico has experienced relative stagnation, with incomes diverging more and more from levels in the states.

Yet policy makers, governments of both major parties, have continued to advance the same policies that have failed for years. They seem to believe that tax breaks to individual firms by the Puerto Rican government, special favors, such as a new form of Section 936, from the federal government, and reliance on externally based manufacturing firms (e.g., the “traditional Pharmaceutical base”) can recreate the experience of the 1950s and 1960s. They ignore, however, that the world has changed since that era of Operation Bootstrap. In the age of ‘globalization,’ Puerto Rico is no longer a low-wage site with privileged access to the U.S. market. They ignore as well that Section 936 and the pharmaceutical firms were at the center of Puerto Rico’s decades of relative stagnation.

Finally, there remains the overriding issue of Puerto Rico’s status. Not only are the people of Puerto Rico in a limbo of uncertainty, but investors are inhibited by the continuing question of whether Puerto Rico will remain a territory of the United States, become a state, or become independent. Investors tend to plan for the relatively short-run and do not play an active role in pushing the development of stronger foundations for long-run stability and growth. Moreover, the status uncertainty combined with the policy of relying heavily on externally-based firms undermines the emergence of a strong set of Puerto Rican based businesses that might at long last form the foundation and fuel for a healthy 21st century economy.

Clearly, some major changes are needed.

**Appendix**

**Two Issues: The Official Data and the GNP-GDP Gap**

**The Official Data**

Any discussion of the performance of the Puerto Rican economy is seriously hampered by the poor quality of the official data. The poor quality of the data not only calls into question any statements about what has been happening to the economy; bad data also weaken economic performance. Furthermore, it has become increasingly clear that Puerto Rican governments have viewed economic data as a political tool, to be withheld or released—and perhaps distorted—according to their needs.

Some of the data problems have been noted earlier in this report—for example, the ambiguities with the public debt and government deficit data and the lack of data on sources of investment. Perhaps, however, the most obvious and most serious problem with the data is that 1954 prices are ostensibly[[42]](#footnote-42) used to calculate real (inflation adjusted) aggregates. Over a fifty or sixty year period, goods and services change dramatically, the “market basket” of goods that is consumed becomes very different, completely new products are introduced, and many old products no longer exist. Thus “real” calculations for today based on 1954 prices are not real at all.

As an example of the problematic consequences of using the 1954 prices to determine “real” aggregate figures, consider: in 2010, according to the official data, real consumption expenditures were one-and-a-half times as large as real GNP, and the real excess of imports over exports was virtually equal to GNP. In current prices, however, consumption was 90% of GNP and the excess of imports over exports was 22% of GNP. While these strange “real” results may reflect an accurate mathematical application of 1954 prices to 2010 conditions, they do not provide a useful picture of the condition of the 2010 economy.

A related problem is revealed by the large change in the Puerto Rican Consumer Price Index (CPI) that became available in 2010. The new CPI, calculated after serious errors were uncovered in the old index, presented a reduced and more plausible rate of inflation as compared with the old CPI. Although the new CPI represents a positive step, the sharp change of these figures, which underlie judgments about what has been happening to the island’s economy, increases general concern about the official data. Although the CPI was revised, it appears that the figures for earlier years based on the erroneous CPI have not been adjusted. Furthermore, the methods of collecting data for the CPI continue to be insufficient.

Another example of the data problems is provided by the divergence between the employment counts in the household survey and the enterprise survey. There is no reason that the two surveys should yield the same figures. (The enterprise survey would report both jobs held by a person working two jobs, while the household survey would register that person as only one employed person.) Yet there has been no examination or explanation of the discrepancy between the two surveys. And several other data needed for analysis, policy formation, and investment planning have similar deficiencies.

Beyond these problems with the available data, Puerto Rican governments have attempted to limit the availability of data. In 2010, for example, the government attempted to prevent the release of the new CPI. When the Director of the Instituto de Estadísticas ignored the government’s efforts and made the new CPI public, the government tried (unsuccessfully) to have him dismissed. As another example of the government’s efforts to suppress economic data, in April 2012 the following statement appeared on the home page of the Government Development Bank (GDB):

"In compliance with Act 78-2011 (Puerto Rico Electoral Code for the Twenty-First Century), during an election year and until the following day of the election event, the Government Development Bank for Puerto Rico may not publish certain information through the media, including its website, for the benefit of the general public. In order to keep our public informed and maintain our commitment of transparency with the investor community, we may provide updated information, per request. If you wish to receive updated economic information, please send us an email to [investorresources@gdb.pr.gov](mailto:investorresources@gdb.pr.gov)."

The problem, of course, lies in the establishment of Act 78-2011. Yet the application of the law by the GDB, a major source of economic information on the Puerto Rican economy, underscores its implications. (Shortly after it was generally noticed, the statement disappeared from the GDB web site.)

And in late 2013, the release of the Government Development Bank’s Economic Activity Index for September and October was substantially delayed without explanation. When the Index was released it showed mildly favorable improvements for those months. In the context of the government’s dealing with confidence in the bond markets, the release delay raised concerns and suspicions.

The problems with the data themselves—especially with price adjustments and calculations of “real” values—make it difficult to give much credence to data coming from official government sources. Adding the apparent view of the government that economic information released by official agencies is a political instrument, an observer must have limited confidence in the veracity of these data.

The issue, however, is not simply that one must have little confidence in the picture of the Puerto Rican economy that can be obtained from the official data—though of course this hampers efforts to develop accurate analyses. In addition, it undermines the government’s ability to formulate effective economic policy, the ability of rating agencies to know what is going on in Puerto Rico, and the confidence that private investors (internal or external) have in Puerto Rican conditions.

The President of the New York Federal Reserve Bank, William C. Dudley, speaking in Puerto Rico in 2010, both commented on the importance of good economic data and noted the existence of Puerto Rico’s shortcomings:

“The private and public sectors both need accurate, timely and comprehensive economic statistics to perform effectively. It is impossible to make good decisions without a solid factual basis for those decisions. For example, the government needs good economic information to develop effective fiscal, economic development and regulatory policy. Likewise, to make the best production, investment and pricing decisions, businesses need accurate and timely information on things such as wages, income and prices. Poor quality information increases uncertainly and this uncertainty inhibits well-considered risk-taking and investment decisions.

Although Puerto Rico’s statistical system was once a model for other countries, now there are major opportunities for improvement in comparison with the mainland and other countries.”[[43]](#footnote-43)

The poor quality of government economic data in Puerto Rico has created business for private consulting firms, as they sometimes generate estimates of data series to meet the needs of their clients. The work of Estudios Técnicos in building a consumer price index for Puerto Rico is a good example.

In spite of the serious problems with the official data, there is no option but to use them in this report. Yet the limits of the data should be recognized and conclusions based on the data should be viewed with caution.

**The GNP-GDP Gap**

A different sort of data problem with regard to analysis of the Puerto Rican economy is the gap that exists between Gross National Product (GNP) and Gross Domestic Product (GDP). The standard gauge of economic activity, GDP, yields a misleading picture of the economic well-being of the Puerto Rican people or how their conditions are changing over time. Moreover, behind the gap-numbers lie some long-term problems in the way Puerto Rican economic development has been organized.

The measurement matter itself is relatively straight forward. In order to gauge the level of development of a country (or region) and to determine how economic activity is progressing, the usual focus is GDP, which measures all the production of goods and services (for final use) that takes place in a country or region in a given period. The problem is that in Puerto Rico a great deal of the income from that production does not go to either Puerto Rican companies or Puerto Rican workers. It is the profit of companies that are based outside of the island, mostly in the United States. The share of Puerto Rican GDP that is attributable to off-shore firms grew substantially over the last several decades of the 20th century.

While GDP is the amount of production that takes place within a country or region, GNP is the amount of production that is attributable to the nationals of a country or region. GDP will be larger than GNP insofar as foreign workers or businesses are obtaining income within the country (i.e., insofar as output in the country is attributable to foreign labor and capital); GDP will be smaller than GNP insofar as national labor and capital are obtaining income abroad.

Puerto Rican economic development for several decades has been organized around firms from the mainland United States operating on the island. The profits of these firms, while counting as part of Puerto Rican GDP, do not count as part of Puerto Rican GNP. In some cases—936 or CFC companies—the income of firms operating in Puerto Rico has been much larger than would normally be associated with the amount of activity they undertake on the island. By the use of transfer pricing or by locating the ownership of a patent with their Puerto Rican subsidiaries, firms have been able to locate a large amount of their profits on the island and thus take advantage of tax laws to increase their total after tax profits.

As shown in Figure 6, in 1950, before the major influx of U.S.-based firms, GNP actually exceeded GDP by 4.2%, the difference accounted for by the income earned by Puerto Ricans working in the states, which was part of GNP but not part of GDP. In the next two decades, as rapid economic growth took place with a large role of U.S.-based firms, GNP fell off to 93.1% of GDP. Then, over the following three decades, as the performance of the economy slowed but as the U.S.-based firms were still central to the economy, GNP fell to 76.5% of GDP in 1980, 68% in 1990, 67.8% in 2000, and then roughly stabilized at that level through 2012.

To put these figures in some perspective, in 2004, out of 188 countries or territories for which data are available, for only 15 was GNP less than 90% of GDP, and for only 2 was GNP-GDP ratio less than 70%—Puerto Rico at 67% in that year, and Equatorial Guinea at 30%.[[44]](#footnote-44)

The GDP-GNP gap is a measure of the de-territorialization of the Puerto Rican economy (what would be called de-nationalization were Puerto Rico a nation). This de-territorialization is a measure of the degree to which the economy of the island is dependent on outside sources of capital and outside decision-making. While “outside” sources are not necessarily ‘bad,’ firms based outside of Puerto Rico are likely, in general, to operate in a different manner than firms based within Puerto Rico. The former face different sets of information and different sets of economic, political, and social connections than do the latter. While both the outside and inside firms may have the same set of goals (profits), they have different sets of ‘boundaries,’ different contexts or different scopes in which they make decisions. As a consequence, they are likely to behave differently. The long run economic growth and development of a region is generally enhanced when there is a substantial group of firms and individual investors that have a strong identity with and an interest in the local/national/territorial economy. The large GDP-GNP gap in Puerto Rico suggests that this group is significantly lacking.

Furthermore, the substantial GDP-GNP gap indicates that a large share of the profits generated in Puerto Rico is likely to be unavailable for investment in Puerto Rico. This is not to say that all of the profits accruing to firms based off the island are taken out; some undoubtedly remain in Puerto Rican financial institutions and some may even be reinvested locally. However, all of these profits are owned elsewhere and can be taken out. It is, further, likely that in the case of funds that have been kept in Puerto Rico to take advantage of tax benefits, they may be used elsewhere—e.g., as collateral for activities undertaken elsewhere.

The existence of the large GDP-GNP divergence means that GDP per capita is an even less meaningful measure of economic well-being in Puerto Rico than elsewhere. While it shows the output (or income) generated in Puerto Rico, it does not show the output (or income) that is in the hands of Puerto Rican firms and individuals and available for their use—GNP provides this latter form of information. Moreover, during the second half of the 20th century, GDP and GNP were growing at significantly different rates.

The GDP-GNP gap for Puerto also reflects the large amount of outside capital that has come to the island. At least at times, this outside capital has generated jobs and income growth. Nonetheless, the problems associated with the GDP-GNP gap are significant. Whatever favorable outcomes were generated by the inflow of funds to Puerto Rico in the past, it seems that things have changed substantially in recent decades. If Puerto Rico is to re-establish a more positive economic dynamic, it worthwhile to examine the GDP-GNP gap and what it represents.

1. The Government Development Bank’s Economic Activity Index (EAI) is used here to track the course of the Puerto Rican economy in recent years. The official real GNP and GDP figures are presented as using 1954 prices, and thus their meaning is, at best questionable; see the appendix. In any case, the EAI appears to correlate well with the movement of real GNP; see *August 2013: Economic Activity Index (“GDB – EAI”)*, available at <http://www.gdb-pur.com/economy/GDB-Economic-Activity-Index.html>. [↑](#footnote-ref-1)
2. More recent data indicate that the labor force has continued to decline into FY2014. In August 2013 the labor force was 1.2% below the level of August 2012. However, because population data are not available for people 16 years old and older, a labor force participation rate cannot be calculated for the period since FY2012. [↑](#footnote-ref-2)
3. See Idania R. Rodríguez-Ayuso, Kimberley Geerman Santana, and Mario Marazzi-Santiago, *Perfil del Migante 2011*, Instituto de Estadísticas de Puerto Rico, 16 de enero de 2013, <http://www.estadisticas.gobierno.pr/iepr/LinkClick.aspx?fileticket=9qCLtkwFQnc%3d&tabid=165> and Idania Rodríguez-Ayuso, *Pefil del Migrante 2010*, Instituto de Estadísticas de Puerto Rico, 28 de diciembre de 2011, <http://www.estadisticas.gobierno.pr/iepr/LinkClick.aspx?fileticket=7G4LjzMFoEM%3d&tabid=165>. [↑](#footnote-ref-3)
4. Government Development Bank of Puerto Rico, <http://www.gdb-pur.com/economy/statistical-appendix.html>. Data for 2013 on the birth rate and death rate are not yet available. [↑](#footnote-ref-4)
5. Some perspective on the Puerto Rican population decline is provided by experiences of the states. Among the states, only Michigan—the epicenter of deindustrialization—and Rhode Island experienced population decline in the 2004 to 2013 period—and only 1.6% and 2.2%, respectively, as compared to Puerto Rico’s 5.5% decline. (Each of these states experienced slightly rising population in the most recent years.) [↑](#footnote-ref-5)
6. See Rodríguez-Ayoso et al. as cited above. [↑](#footnote-ref-6)
7. The change in the Puerto Rican economy is most apparent in the Government Development Bank’s Economic Activity Index, as presented elsewhere, but also appears in the official GNP figures that are presented in constant 1954 dollars. Quarterly U.S. data are from the Bureau of Labor Statistics: <http://www.bea.gov/national/index.htm>. [↑](#footnote-ref-7)
8. *Economic Report to the Governor 2012*, Appendix Table 3. [↑](#footnote-ref-8)
9. Official figures, presented in terms of 1954 prices, show imports as virtually unchanged in real terms between FY2008 and FY2012; see *Economic Report to the Governor 2012*, Appendix Table 3. This does not seem credible, and the data issue will be discussed in the appendix. [↑](#footnote-ref-9)
10. A comparison of per capita GNP would be somewhat more favorable for Puerto Rico because of slower population growth on the island than in the states, due in part to migration to the states. Between 1950 and 2012, while Puerto Rico’s population rose by two-thirds, the U.S. population doubled. A comparison of personal income would also be somewhat more favorable to Puerto Rico because of the federal income transfers to persons in Puerto Rico—e.g., Social Security and Supplemental Nutritional Assistance (“food stamps”). [↑](#footnote-ref-10)
11. Matt Wirz and Al Yoon, “Puerto Rico Dips Into Cash to Repay Loan: Decision Marks Latest Sign of Island's Travails Funding Itself,” *The* *Wall Street Journal*, on line at <http://online.wsj.com/news/articles/SB10001424052702303560204579250503880005812>. [↑](#footnote-ref-11)
12. As is always the case, there are two sides to every market. While the Puerto Rican government was eager to find funds to finance its operations, bond buyers, especially in the states, were eager to buy Puerto Rican debt because the interest on Puerto Rican bonds is exempt from local, state, and federal taxes; and even before the current crisis yields have been relatively high. As a consequence, many investment funds have invested heavily in Puerto Rican bonds, and thus the plunge in their value (to say nothing of a possible default) has had impacts far beyond the island. [↑](#footnote-ref-12)
13. GNP figures for FY2013 are not yet available for a comparison. However, given the decline of the Government Development Bank’s Economic Activity Index of (EAI) through much of FY2012 and the close correlation in past years between the EAI and GNP and that inflation was no more than 2%, it seems likely that the debt has risen above 100% of GNP. [↑](#footnote-ref-13)
14. These public enterprises include the Puerto Rico Public Power Authority, the Puerto Rico Aqueduct and Sewer Authority, the Puerto Rico Ports Authority, and the Puerto Rico Highways and Transportation Authority. [↑](#footnote-ref-14)
15. The Commonwealth of Puerto Rico, “Update on Fiscal and Economic Progress FY 2014,” Q1 Investor Webcast -October 15, 2013,

    <http://www.gdb-pur.com/documents/UpdateonFiscalandEconomicProgressWebcast-Final.pdf>. [↑](#footnote-ref-15)
16. COFINA is described on the web page of the Government Development Bank (<http://www.bgfpr.com/principalsubsidiaries/sales-tax-financing-corporation.html>) as follows:

    “The Puerto Rico Sales Tax Financing Corporation (COFINA, as the agency is known by its Spanish acronym)—one of the Government Development Bank’s subsidiary’s—is an independent corporation created in 2007 for the purpose if [*sic*] issuing bonds or using other financing mechanisms to pay off the Commonwealth’s extra-constitutional debt existing as of June 30, 2006 and its interest, by using as a source of funds the one percent of the sales and use tax.

    The funds are deposited in a Dedicated Sales Tax Fund to make sure the extra-constitutional debt is paid off accordingly.

    COFINA was created for the purpose of issuing bonds and may use other financing mechanisms to pay or refinance, directly or indirectly, all or part of the appropriations debt, and the interest thereof, using as a source of repayment the portion of the tax deposited in the Dedicated Sales Tax Fund.

    As an independent corporation, COFINA has the same powers, rights and faculties as the GDB under its Constitutional Charter.

    The Dedicated Sales Tax fund is funded each year with one percent of the funds generated from the Sales and Use Tax.” [↑](#footnote-ref-16)
17. Merritt Research Services, LLC, as cited in Breckinridge Capital Advisory, Special Commentary, Puerto Rico, March 2012, <http://www.breckinridge.com/pdf/whitepapers/March_2012_Puerto_Ricos_Challenge.pdf>. [↑](#footnote-ref-17)
18. March 7, 2012*, Official Statement for Commonwealth of Puerto Rico Public Improvement Refunding Bonds, Series 2012A, p. 6,* <http://emma.msrb.org/EP611148-EP478117-EP878493.pdf>. [↑](#footnote-ref-18)
19. Reuters, “Puerto Rico senators approve public pension system overhaul,”

    <http://www.reuters.com/article/2013/04/05/puertorico-debt-pension-idUSL2N0CS01220130405>. [↑](#footnote-ref-19)
20. Though subject to several legal challenges, Act 3 was upheld by Puerto Rico’s highest court on June 26, 2013, reasoning, according to the report of Moody’s Investor Service, that the pension changes were “necessary to preserve the retirement system’s solvency, allowing the pension reform to move forward, a credit positive.” *Puerto Rico’s Supreme Court Upholds Pension Reform, a Credit Positive for the Commonwealth,* <http://www.gdb-pur.com/documents/MCOPensionReformUpheld6_27_13.pdf>. [↑](#footnote-ref-20)
21. Unlike virtually all the states, Puerto Rico is not bound by a constitutional provision requiring a balanced current account budget. It does have provisions in its constitution requiring repayment of bond obligations, but it is not clear which bonds are covered by this constitutional provision and which are not. The relatively small amount of debt categorized as “guaranteed debt” (shown in Table 4) raises the question of what is included in this constitutional provision. [↑](#footnote-ref-21)
22. The public debt figures are from the source indicated for Table 3. In general, the changes in the public debt between two periods will not be equal to the sum of the deficits between those years due to various payments and other adjustments. However, these normal discrepancies cannot account for the almost 100% discrepancy in this case. [↑](#footnote-ref-22)
23. Commonwealth of Puerto Rico, *Financial Information and Operating Data Report October 18, 2013*, p. 138. [↑](#footnote-ref-23)
24. “Update…” of October 15, as cited above, p. 5. [↑](#footnote-ref-24)
25. See Commonwealth of Puerto Rico, *Comprehensive Annual Financial Report Year Ended June 30, 2010*, p. 33, and *Comprehensive Annual Financial Report Year Ended June 30, 2013*, p. 140. [↑](#footnote-ref-25)
26. Statistical Appendix of the *Economic Report for the Governor and Legislative Assembly*, <http://www.gdb-pur.com/economy/documents/AE2012_T29.pdf>, Table 34. The household survey, which does not separate central government employment from total government employment (including federal and municipal), reports a total employment decline between the 2007 peak and 2012 by 18.1%, while total government employment declined by 22.4%. [↑](#footnote-ref-26)
27. “Update…” of October 15, as cited above, p. 25. [↑](#footnote-ref-27)
28. These actions are set out in “Update…” of October 15, as cited above, various pages. The funds from the sale of the airport will not enhance the revenues of the General Fund but will go onto the balance sheet of the Puerto Rico Ports Authority. [↑](#footnote-ref-28)
29. *Consolidated Federal Funds Report for Fiscal Year 2010, State and County Areas*, U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, Issued September 2011, Tabl1. [↑](#footnote-ref-29)
30. Perhaps the best example of the misguided interpretation of the Puerto Rican experience is an article by William J. Baumol and Edward N. Wolff, suggesting that Puerto Rico might be viewed in the same category as the so-called “Asian Tigers.” See “Catching Up in the Postwar Period: Puerto Rico as the Fifth ‘Tiger’?” *World Development*, Vol. 24, No. 5. 1996. Part of the problem with the Baumol-Wolff analysis is that it was based on the growth of GDP instead of GNP; see the appendix for more on this point. See the appendix for a discussion of the GNP-GDP gap. [↑](#footnote-ref-30)
31. This different impact of tax incentives on the fortune of U.S. firms operating in Puerto Rico and on employment and growth appears in the widening gap between GDP and GNP. In 1960, GNP and GDP were virtually equal; in 1970, GNP was 93% of GDP; by 1980, the ratio had fallen further to 76.5%; in 1990, GNP was only two-thirds as large as GDP, a ratio that has stayed relatively stable since then. Again, see the appendix on this issue. [↑](#footnote-ref-31)
32. Although it is generally recognized that a large share of investment in Puerto Rico has come from foreign sources and the role of foreign investment is evident in the large GDP-GNP gap, for the past 30 years the government has not published a breakdown of the data that would show the extent of external-source investment—the data problem again. [↑](#footnote-ref-32)
33. U.S. Department of the Treasury, “U.S. Possessions Corporations Returns, 1987,” Tables 1 and 2, as cited by J. Tomas Hexner et al., *Puerto Rican Statehood: A Precondition to Sound Economic Growth*, Second Edition, Hex, Inc. Cambridge, 1993, p. 27. The ratios of cost to wage benefits are excessively conservative as they are based on the assumption that the persons employed in the 936 industries would otherwise be unemployed. [↑](#footnote-ref-33)
34. Angel L. Ruíz and Edwin Meléndez, “The Economic Impact of Repealing Section 936 on Puerto Rico’s Economy, “ in *Economic Impacts of the Political Options for Puerto Rico*, edited by Edwin Meléndez and Angel L. Ruíz, Universidad Interamericana de Puerto Rico, San Germán, Puerto Rico, 1998, p. 135. The 1.7 multiplier for 936 firms means that a $1 increase in final demand for 936 firms generated $1.70 in increased output. [↑](#footnote-ref-34)
35. Not only was 936 a poor job-creating mechanism; it also was costly for the U.S. Treasury. In the late 1980s and early 1990s, when the program was at the center of economic policy in Puerto Rico, annual costs were running between $2 billion and $2.5 billion. In terms of 2011 dollars, this would amount to between $3.5 billion and $4.3 billion. [↑](#footnote-ref-35)
36. See Commonwealth of Puerto Rico*, Economic Incentives for the Development of Puerto Rico Act* (Act No. 73 of May 28, 2008) for numerous examples of the tax incentives provided by the Puerto Rican government. [↑](#footnote-ref-36)
37. Rita Maldonaldo-Bear and Ingo Walter, “Financing Economic Development,” in *The Economy of Puerto Rico: Restoring Growth*, edited by Susan Collins, Barry Bosworth, and Miguel A. Soto-Class, Center for the New Economy, San Juan, and the Brookings Institution, Washington, 2005, p. 454. [↑](#footnote-ref-37)
38. World Travel & Tourism Council, Economic Data Search, <http://www.wttc.org/>. Specialized agriculture might provide another example. [↑](#footnote-ref-38)
39. See *Science and Engineering Indicators 2010* and other years, National Science Board. Arlington, VA: National Science Foundation (NSB 10-01). [↑](#footnote-ref-39)
40. Barry P. Bosworth and Susan M. Collins, “Economic Growth,” in Collins, Bosworth, and Soto-Class, as previously cited, p. 50. Data on energy costs are available at <http://www.prepa.com/spanish.asp?url=http://www.aeepr.com/AVISOS.ASP>. [↑](#footnote-ref-40)
41. “Update,” as cited above,p. 28*.* [↑](#footnote-ref-41)
42. “Ostensibly” because it is alleged by people who have worked with the data that, in fact, other methods are used to determine real aggregates. Even if correct, this is hardly reassuring, as it suggests that no one outside of the Junta de Planificación knows how the computations are actually accomplished—which, in itself, makes the data virtually useless. [↑](#footnote-ref-42)
43. William C. Dudley, “The Challenges Ahead,” Remarks at the Center for the New Economy 2010 Conference, San Juan, Puerto Rico, February 19, 2010,

    <http://www.newyorkfed.org/newsevents/speeches/2010/dud100219.html>. [↑](#footnote-ref-43)
44. Alan Heston, Robert Summers and Bettina Aten, Penn World Tables 6.2,

    <http://datacentre2.chass.utoronto.ca/pwt62/alphacountries.html>. [↑](#footnote-ref-44)