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**Establishing Reliable Economic Data  
for Puerto Rico**

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## **Establishing Reliable Economic Data for Puerto Rico**

### **Foreword**

With the looming threat of default temporarily off the table because of the passage of PROMESA (Puerto Rico Oversight, Management, and Economic Stability Act) in June 2016, the real work of revitalizing Puerto Rico's failing economy is only beginning. But in order to forge a path toward improvement, policy makers need to know not only where they are going, but where they are and where they have been. The following paper, "Establishing Reliable Economic Data for Puerto Rico", examines the gaps and inconsistencies of Puerto Rico's economic data systems. Without intense reform, it will be improbable if not impossible to gauge any real improvement in the economy.

Puerto Rican official economic data are seriously deficient. The inflation adjusted aggregate data—figures on GNP, GDP, Personal Consumption, etc.—are so poor as to be virtually meaningless. Reliable data on the large informal economy are non-existent. The data problem makes it difficult to gain knowledge of the condition of the economy, undermines the formulation of policy, and creates a degree of uncertainty that inhibits private investment. It is necessary to integrate Puerto Rican data collection and presentation with federal agencies—especially, but not only, the Treasury Department, the Bureau of the Census, the Bureau of Labor Statistics, and the Bureau of Economic Analysis. Data collection and reporting requirements for Puerto Rico should be the same as for the fifty states. This reform of the Puerto Rican economic data systems is a foundation for the implementation and effectiveness of PROMESA.

The Heller school has had a long-standing interest in Puerto Rico and there are several reasons why this paper fits with the examination of exclusion and inequality at the Heller School and in the Center for Global Development and Sustainability. First, in the winter of 2001 SID decided to offer a course on Puerto Rico as part of its Country Development Studies Program. The idea of the Country Development Studies Program was to examine a broad range of topics—social, political, cultural, economic—that affected the development of a country or region. The current paper updates some of the findings from SID's early work on Puerto Rico. Second, though part of the USA, the commonwealth of Puerto Rico displays many of the attributes of a developing nation—low income, high unemployment, migration, brain drain, and linguistic and cultural barriers—that make it hard for Puerto Rico to achieve the quality of life that one might expect from a region in the USA. Like other excluded regions and groups of interest to the Center for Global Development and Sustainability, Puerto Rico is a region that has been excluded from development by its better-off neighbor. Puerto Rico illustrates in a microcosm many of the larger themes central to international economic development. Third, Puerto Rico has remained the poorest region of the United States since the Spanish-American War, 1898, with no signs that it is converging to the standard of living in the mainland of the USA. Exclusion tends to persist, unless these myths about what's best for Puerto Rico's economy are addressed. Last, the paper matters because it redresses the shortage of information about Puerto Rico in the media and in academia.

# Establishing Reliable Economic Data for Puerto Rico

Arthur MacEwan and J. Tomas Hexner<sup>1</sup>

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In the congressional discussion prior to the passage of PROMESA, the availability and quality of the Puerto Rican government’s financial data was a recurring issue of concern. Only in February 2016, almost two years after the end of Fiscal Year 2014, did the Puerto Rican government release its comprehensive annual financial report (CAFR) for FY2014—and this release was a “draft” and unaudited. Most states have their CAFR’s prepared within five to twelve months after the end of a fiscal year.

Ultimately, of course, PROMESA was enacted in spite of the limitations of the available data. This experience with Puerto Rico’s financial data, however, was only a particular example of a much broader problem with Puerto Rico’s economic data, which are seriously deficient as a foundation for understanding the territory’s situation and for formulating appropriate policy—including policies for unraveling the debt crisis. Also, the unreliable data, by obscuring information about the economy, inhibit private investment.

## Measuring Performance of the Puerto Rican Economy

A standard measure of the performance of a country’s or territory’s economy is the change in aggregate output from year to year adjusted for inflation—either real Gross National Product (GNP) or real Gross Domestic Product (GDP). For Puerto Rico, the appropriate measure is real GNP.<sup>2</sup>

For determining Puerto Rico’s real GNP and its components, 1954 prices are ostensibly<sup>3</sup> used. That is, all real economic aggregates are presented in 1954 prices. This procedure makes the figures virtually meaningless. Over a 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 are no longer produced. Thus the “real” (i.e., inflation adjusted) figures for today based on 1954 prices are not real at all.

An example of the problematic consequences of using 1954 prices to determine “real” aggregate figures appears in the data for 2014 (the most recent available). In that year, according to official data, real personal 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 real GNP. In current prices, however, personal consumption was 90% of GNP, and the excess of imports over exports was 20% of GNP. While the strange “real” figures may represent an accurate mathematical application of 1954 prices to 2014 conditions, they clearly provide nothing useful about the actual condition of economic relationships in the 2014 economy.<sup>4</sup>

A related problem was revealed by the very large revision of the Puerto Rican Consumer Price Index (CPI) in 2010. The new CPI presented a radically reduced and more plausible rate of inflation, as compared to the old CPI. Although the new CPI represented a positive step, the sharp change of these figures, which underlay judgments about what had been happening to the island’s economy, increase general concern about the official data. Furthermore, although the CPI figures for 2010 forward were revised, it appears that none of the figures for the preceding several years have been altered.

### **The Informal Sector**

An additional, but somewhat separate issue concerning data problems in Puerto Rico is the lack of systematic examination of the so-called “informal” sector (or, alternatively, the “underground” economy). It is widely assumed that at least 25% of economic activity in Puerto Rico is “off the books” and is not measured by official data. The existence of this large informal sector has the practical impact of substantially reducing tax collections (and, of course, one of the reasons for the existence of this activity is businesses’ and individuals’ efforts to avoid taxes).

The collection of data on the informal sector would be a first step in raising taxes from this activity. But also of importance, data on this activity is needed to gain an accurate understanding of the status and change of the economy. For example, as the economy has declined in recent years, it is likely that many people have moved into the informal sector. Insofar as this is the case, official data overstate the decline of total output, provide insufficient information on the composition of output, and understate the labor force participation rate. Without reliable data on this substantial part of the Puerto Rican economy, it is difficult to obtain a clear picture of what is happening and to formulate effective policy.

### **Implications**

The issue, however, is not simply that there is little reason for 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, as emphasized here, the poor quality of official data (to say nothing of the delays in their availability) 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 Federal Reserve Bank of New York, 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 prices decisions, businesses need accurate and timely information on things such as wages, income and prices. Poor quality information increase uncertainty and 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.”<sup>5</sup>

### **What Can Be Done?**

Ultimately, the reasons for the poor economic data in Puerto Rico lie in the lack of priority that Puerto Rican governments have given to providing widely available accurate economic information. For example, the agencies responsible for gathering price data, the foundation for the CPI, have not been provided with sufficient funding (a problem existing before the current economic crisis). Also, there appears to be a reticence on the part of officials in various government agencies to be transparent about the processes involved in data calculations and presentation, and data in some agencies are not readily available or are available only with long delays. There seems to be little pressure, either from government authorities or the private sector, on agency officials to change their practices.

The only action that is likely to alter this situation will be to thoroughly integrate the collection and presentation of Puerto Rican economic data with federal agencies—especially, but not only, the Treasury Department, the Bureau of the Census, the Bureau of Labor Statistics, and the Bureau of Economic Analysis. At the least, data collection and reporting requirements for Puerto Rico should be the same as for the fifty states. It may be necessary, further, for federal agencies to directly oversee the data processes in Puerto Rico until they have been put on a sound footing, both in terms of collection and presentation. Moreover, the availability and timeliness of availability are essential, as is transparency of the processes behind the data.

Reform of the economic data systems in Puerto Rico is necessary for the Oversight Board and the Revitalization Coordinator to understand the situation; to make judgments about appropriate fiscal, financial, and investment policies; and to evaluate the impacts of their decisions. There will be no way to appraise the impact of PROMESA without better data. Accordingly, data reform should be given high and immediate priority.

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<sup>2</sup> GDP growth, not GNP growth, is the standard by which a country's or a region's economic expansion is usually gauged. However, in Puerto Rico since the 1970s, GDP has grown more rapidly than GNP because GDP, unlike GNP, includes the profits of U.S. based firms (and other off-island based firms). Section 936 was a major factor accounting for this more rapid growth of GDP, and by 2000 and in subsequent years GDP has been roughly fifty percent higher than GNP. The growth of GNP, however, is a much better measure of the improvement of the Puerto Rican economy—of the activity and the condition of the Puerto Rican people and of firms based in Puerto Rico—than is the growth of GDP. This is especially the case because much of the earnings of the firms based outside of Puerto Rico has been a result of the ownership of their patents being located in Puerto Rico and of transfer pricing, both designed to locate profits, but not real activity, in Puerto Rico.

<sup>3</sup> “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.

<sup>4</sup> Data are from *Informe Económico al Gobernador Puerto Rico, 2015*, Apéndice Estadístico, Tabla 2 and Tabla 3, [http://gis.jp.pr.gov/Externo\\_Econ/Informes%20Econ%C3%B3micos%20al%20Gobernador/IEG%202015%20Publicaci%C3%B3n\\_Fe%20errata.pdf](http://gis.jp.pr.gov/Externo_Econ/Informes%20Econ%C3%B3micos%20al%20Gobernador/IEG%202015%20Publicaci%C3%B3n_Fe%20errata.pdf).

<sup>5</sup> William C. Dudley, “The Challenges Ahead,” Remarks as the Center for the New Economy 2010 Conference, San Juan, Puerto Rico, February 10, 2010, <http://www.newyorkfed.org/newsevents/speeches/2010/dud100219.html>