DEPARTMENT OF TREASURY
COMMONWEALTH OF PUERTO RICO

FTA 2007 Revenue Estimation and Tax Research Conference

Estimating Revenues
Puerto Rico
New Sales and Use Tax

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Agenda

I. Overview of Puerto Rico's Economy

II. Tax System comparison with United States

III. Objective of Tax Reform

IV. Sales and Use Tax Base

V. Estimating Sales Tax Revenues

- A. Model Structure
- B. Data Base
- C. Problems Estimating Revenue

VI. Results and Conclusions

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I. Overview of Puerto Rico's Economy

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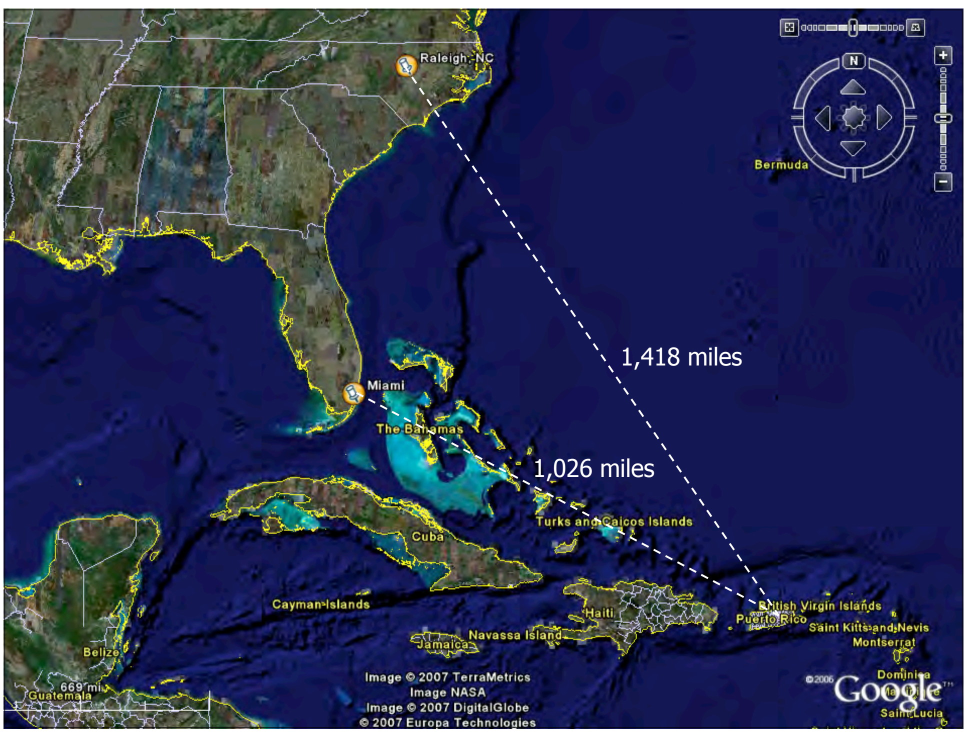

Puerto Rico Overview

- Puerto Rico is the fourth largest of the Caribbean Islands. Is located 1,000 miles south-east of Florida. It is about 3,500 square miles.
- Since 1898, after the end of Spanish-American War, Puerto Rico became a non incorporated territory of United States. A Commonwealth Constitution was approved by the people of Puerto Rico in 1952.
- The Puerto Rican government has autonomy for fiscal policy, which imply the development of collection mechanism from internal sources.

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II.Tax System comparison with United States

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Puerto Rico Economic Indicators 2006

Index	Amount	US Rank
Gross National Product	$56.6 billions	48
General Funds Revenues	$8.5 billions	
Population	3.9 millions	27
Per- Capita Income	$12,997	51

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Retail Performance in Puerto Rico

- The vast majority of major US retailers have stores in Puerto Rico:*
  - Puerto Rico is one of the leaders in sales of some stateside chains stores such as: Walmart, K-mart, Macy's, Pep Boy's, Sam's Club, Costco and Home Depot.
  - JC Penney and Sears stores located in Puerto Rico are the nationwide leaders in volume and profitability.
  - Two of Western Auto's top US outlets as well as Marshall's have two of their top stores in Puerto Rico.
  - Walgreens and Rooms To Go stores have also achieved number one positions in sales.

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*Source: Caribbean Business- March 8, 2007.

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Puerto Rico Tax Structure

- Tax Revenue is derived from three mayor sources: personal income, corporate and excise taxes.
- Puerto Rico generates more revenue from its corporate income tax (as a percentage of total revenue) and less from excise taxes, as compared with the average US state.
- Taxes, as a percentage of total income, are higher in Puerto Rico than in a typical US state. However, it is comparable with some foreign countries.

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Taxes Distribution - 2002

Categories	U.S. National Average %	Puerto Rico %
Individual	22.4	37.2
Corporate	3.1	33.0
Sales and Gross Receipts	35.8	12.8
Property	30.8	0.0
Motor Vehicle	1.9	6.5
Others	5.0	10.5

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Source: The Economy of Puerto Rico, Restoring Growth, Center for the New Economy and Brookings Institution 2006 and Puerto Rico Treasury Department.

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III. Objective of Tax Reform

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Fiscal Goals of the Tax Reform

- **Improve the financial health of the Commonwealth Government**
- **Broaden the tax base**
- **Reduce tax evasion**
- **Shift tax burden from income to consumption**
- **Provide income tax relief to most taxpayers**
- **Make the tax system more convergence with economic growth**

Fiscal policy to comply with these fiscal goals resulted in the approval of a broad-based consumption tax.

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Act. 117 of July 2006 – known as the "Tax Justice Act of 2006"

- Provide income tax benefits to individuals.
- Introduced a Commonwealth-wide Sales and Use Tax ("SUT")
- 7% tax rate of SUT:
  - 4.5% is assigned to General Fund
  - 1% is for repayments of debt to GDB, and
  - 1.5% is allocated to Municipalities
- Simultaneously a 5% General Excise Tax was repealed.

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IV. Sales and Use Tax Base

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Tax Base: Sales and Use Tax vs. General Excise Tax

- Applies to a comprehensive range of goods and services, as compared with the General Excise Tax.

- The taxable price on articles that were subject to the General Excise Tax was based on imports and manufacturing costs. On the other hand, the SUT applied on final sales price to consumers.

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Sales and Use Tax Base

- The SUT is imposed on the sales, use, consumption, and storage of taxable items, which include tangible property, taxable services, and admission rights.

- In general, the SUT excludes articles and services: merchandise acquired for resale, items purchased by manufacturing plants, goods and services for export, prescription drugs, leases of real property, food, financial services, and health services.

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V. Estimating Sales Tax Revenues

A. Model Structure

B. Data Base

C. Problems Estimating Revenue

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Estimating Sales Tax Revenues (Simple Method)

- Use the information from the National Income Accounts related with personal consumption expenditures.
- From the total consumption expenditures, it was subtracted the amounts attributable to exempted goods (e.g., health, financial services, public transport). Then, it was multiplied the resulting tax base by the applicable tax rate.
- In practice, no jurisdiction ever reaches 100% compliance. We considered 65% as a reasonable figure.
- Total tax revenues from this analysis amounted to $829 million.

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Estimating Sales Tax Revenues from Personal Consumption

Simple Method	$ millions
Personal Consumption Expenditures	42,905
Less: Exempted Goods and Services	30,334
Consumption Tax Base	12,571
Tax Rate 5.5% @ 65% compliance (FY04)	691
Growth Factor for FY 2007 = 1.20	829
Source: P.R. Planning Board	

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Model Structure

- The Treasury Department, for the calculations, uses a general equilibrium model developed by BearingPoint.
- The Consumption Tax Model (CTM) is an input-output-based model
  - The model is a snapshot of the circular flow of incomes and expenditures in the economy.
  - It provides a detailed data-consistency framework for analyzing revenue.
  - Also, simulates the effect of proposed changes in the current tax structure.

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Data base

- Economic data used to prepare the CTM.
  - 94-sector industry x industry Input-Output table for FY 1992.
  - 2002 - Income and Product Accounts from P.R. Planning Board.
  - Data from U.S. Census Bureau.
  - P.R. Treasury Department – indirect tax collection data.
- Input-Output matrix was updated using RAS methodology.
- Results were extrapolated to FY 2007 using a compound consumption growth rate.

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Problems of Estimating Sales Tax Revenues

- However, there are limitations with the data that affect the estimation.
- These difficulties are related with the measuring of imports to define tax base and compliance.
- This is relevant because Puerto Rico is an open economy.

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Estimating Sales Tax Revenues

- There are two ways of calculating imports:
  - The "direct method": relies on direct measurement of "registered imports".
  - The "implicit method": works backwards from final demand to the imported inputs necessary to produce this final demand. This is known as "adjusted imports".
- There is a gap between these two methods of 15% or $6 billions in 2004.
  - This figure is identified as "other adjustments" in the Balance of Payments Accounts.

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Estimating Sales Tax Revenues

- Even we are confident about the level of domestic compliance, there are still uncertainty about sales tax collections, which depend on the quantity of "adjusted imports".
- Considering the uncertainty of the size of imports and the policies that would be followed with respect to implementation; we prepared three scenarios rather than a single estimate.

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Alternative Estimate for 5.5% Sales Tax Collections

Scenarios - 2007

Estimated	Lower	Medium	Upper
Collections (millions)	$780	$890	$1,050
Import Compliance			
Registered	65%	85%	85%
Adjusted	0%	0%	85%
Domestic Compliance	65%	65%	65%

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Estimating Sales Tax Revenues

- Medium and upper estimates are higher than the simple estimate derived from personal consumption expenditure.
  - The divergence is due to taxes paid by businesses with imports classified as "adjusted" (imports inputs necessary to produce final demand).

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Monthly Distribution of SUT Estimate

- For 2007, SUT collections include 7.5 months (Nov 15 to- June 30). The annual estimate was distributed in monthly basis using a seasonal index.
  - The index was based in the monthly retails sales survey between 1995 and 2004.
- The 7.5 months represents 63% of annual collections.
  - $1,050 * .63 = $662 millions

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VI. Concluding Remarks

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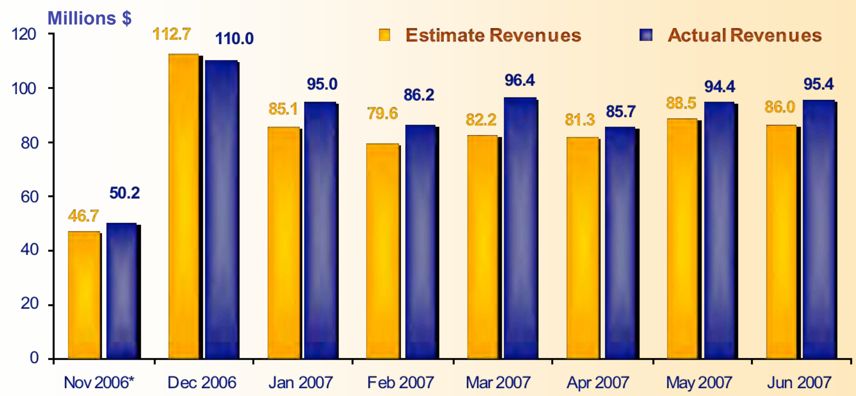
Estimate Revenue vs. Actual Collection

General Fund (November - June)



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* SUT only during 15 days of Nov.

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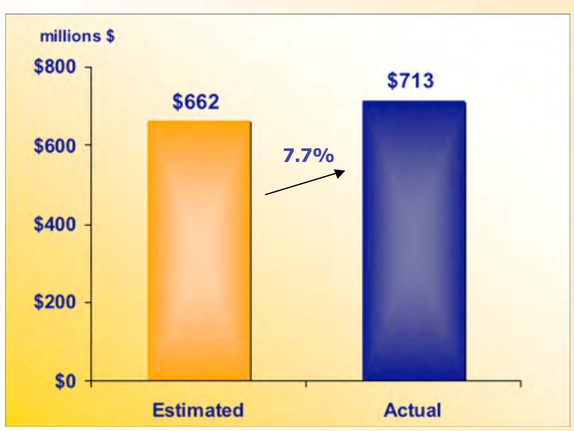
Sales and Use Tax Revenue (Nov. – Jun. 2007)



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5.5% original estimate

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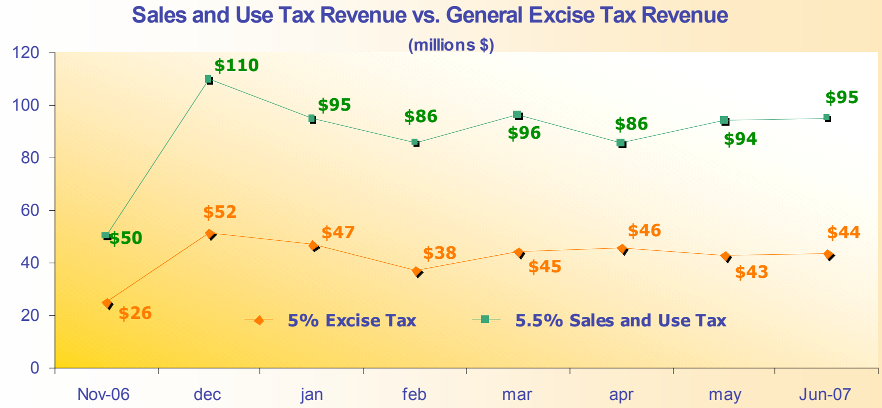
Actual Collections



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NOTE: Excise Tax collection belongs to 2006.

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Concluding Remarks

- With lack of historical data, the Department of the Treasury was able to prepare accurate projections of sales tax collections.
- By using figures of personal consumption, the estimates were lower relative to actual value.
- Nevertheless, projections of sales tax were significantly accurate when used the model of adjustment of imports.
- Finally, the monthly retail sales were an excellent indicator to predict monthly collections on sales tax.

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