

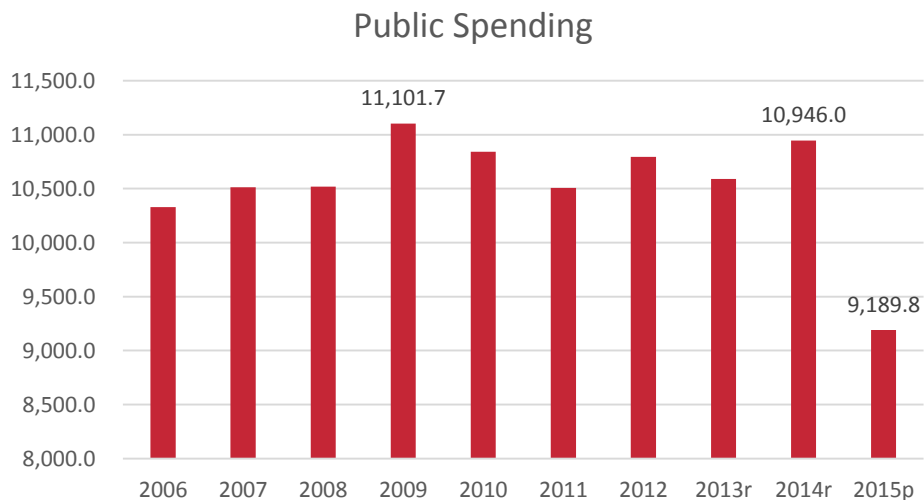
**CONFIDENTIAL**

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## Economic Impact of Reducing the General Fund Budget

The fiscal situation forces the Government to cut expenses in order to comply with obligations with creditors and, at the same time maintain, essential services. That being so, it's important to gauge the economic impacts of cuts in order to take steps that minimize negative consequences of such cuts.

In 2015 Government consumption was reduced by 16.0%, and given actual conditions, similar reductions are expected in 2016. Nevertheless, Government consumption was still 13.4% of nominal GNP in 2015. Between 2006 and 2014, it was 16.6% of GNP on average, a reflection of the importance of government expenditures in the economy.



Source: Puerto Rico Planning Board, Statistical Appendix 2015. Table 2

This brief report evaluates the impacts of a reduction of \$525.7 million in Government expenditures, of which \$151.3 million (28.8% of the total cut) would be payroll. Impacts on income and fiscal revenues as well as additional expenses in the social welfare programs such as unemployment benefits and the Nutritional Assistance Program.

## Methodology

Two scenarios were constructed: 1) a reduction in working areas (hours), and 2) a reduction in the number of Government workers. The most recent multipliers calculated by the PR Planning Board were used and the data came from the 2015 Economic Report to the Governor. It was assumed that impacts would be felt in fiscal 2017.

The impact on direct employment is a result of the payroll reduction of \$151.3 million. Indirect and induced impacts were calculated from the total \$525.7 million in cuts, including both payroll and non-payroll cuts. The total \$525.7 million in cuts will have an impact on indirect and induced employment, but only the \$151.3 million in payroll reductions will impact direct employment.

Direct job losses are probably underestimated because some would be impacted by non-payroll reductions in services. However, the job losses due to contract cancellations or service reductions will be reflected in the indirect and induced impacts. One of the most affected sectors is that of public health services. Additional impact estimates for this sector were calculated.

For estimating direct job impacts an average salary in Government of \$50,146<sup>1</sup> was assumed, while for the indirect and induced impacts Puerto Rico's average salary of \$27,097 in 2014 was used.<sup>2</sup> This salary was used since it is our opinion that the Community Survey estimate is not correct and overestimates average salary.

## Impact on Taxes

The impact on income tax revenues was estimated by multiplying the estimated payroll reduction by an average tax rate, taking into account that the initial \$20,000 of income is exempt. The IVU/IVA impact was estimated based on disposable personal income, as defined below:

**Personal Disposable Income** = Total wage bill, net of social security, Medicare and income taxes.

Personal Disposable Income was multiplied by the applicable percentage of consumption to which IVU/IVA apply, to the result the 11.5% tax was applied. Based on

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<sup>1</sup> Average salary of public employees that could be affected by the reduction in spending. Provided by OMB.

<sup>2</sup> US Bureau of Labor Statistics, Quarterly Census of Employment & Wages. Average annual salary for all employment in Puerto Rico.

our estimates 50% of all goods and services consumed pay the tax. The other 50% includes automobile, gasoline, and other items are subject to other taxes. Given data limitations it was not possible to estimate the impact on those other taxes. This is why it is felt that the estimate of lost fiscal income is very conservative.

### *Additional Impacts*

In addition to the previous impacts, the impact on unemployment and the Nutritional Assistance Program were estimated. Although unemployment insurance has contributions from both employees and employers and the benefits from the Nutrition Program is, in effect, a federal subsidy, employees affected by austerity measures will add pressure on these programs; also the likelihood that they will migrate increases.

Unemployment benefits were estimated using the average payment, which is \$70 weekly.<sup>3</sup> This amount was applied to all lost jobs, including direct, indirect and induced. Nutritional Plan benefits were estimated at \$112 monthly, the amount received by students.<sup>4</sup> This is probably an underestimation since impacted employees have families and thus would be eligible for a higher benefit from the Program.

The estimate on job losses in the health insurance sector was also made using the information from the 2014 Annual Report. The relation between total income<sup>5</sup> and those employed in the sector was used to establish the parameter for estimating the impact of a reduction in funds allocated to the health reform program<sup>6</sup>. The proportion was applied to the \$121 million that would be cut as part of the overall reduction in the General Fund Budget.

### *Scenario descriptions*

Both scenarios assume a cut of \$525.7 million in the General Fund Budget, of which \$151.3 million are payroll expenses. Since impacts are estimated using industrial multipliers, indirect and induced impacts will be the same. The difference is limited to the direct employment impact, with the reduction in actual employment having the largest impact, which is the case also on the impact on social programs.

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<sup>3</sup> The Department of Labor and Human Resources pays between \$7 and \$133 monthly for unemployment insurance.

<sup>4</sup> Acquired from an article in El Nuevo Día on June 16, 2015, "Estudiantes universitarios pueden beneficiarse del PAN".

<sup>5</sup> Net income in premiums and other income as reported by the 2014 Annual Report published by the Office of the PR Insurance Commissioner.

<sup>6</sup> US Bureau of Labor Statistics, Quarterly Census of Employment & Wages.

The two scenarios are:

1. Scenario 1- The reduction in the Budget would come exclusively from cuts in working hours, not reductions in employed persons. As in Scenario2, the impact of the reduction in services was also estimated.
2. Scenario 2- The cuts would come from laying off employees. Other reductions of \$374.4 million would be from non-payroll related services and other expenditures. This would have direct, indirect and induced impacts on employment, income and fiscal income.

## Economic Impact Estimates

### Scenario 1

Should a reduction of \$525.7 million be implemented by reducing hours worked rather than laying off employees, 1,714 indirect jobs would be impacted and 5,462 induced jobs for a total loss of 7,175 jobs. The total salary loss would be \$368 million; lost fiscal income would be \$17.5 million in income taxes and \$22.4 million in sales tax receipts, for a total loss of some \$39.9 million.

Impact on Employment				
Indicator	Direct	Indirect	Induced	Total
Employment	0	1,714	5,462	7,175
Total Wage	\$173,521,361	\$46,435,892	\$147,996,602	\$367,953,856
Income tax	\$16,500,458	\$1,414,789	\$4,509,098	\$22,424,346
Sales Tax Revenue (11.5%)	\$7,502,148	\$2,384,454	\$7,599,531	\$17,486,133

Source: Puerto Rico Planning Board, Interindustrial Multipliers; BLS Quaterly Census of Employment & Wages; American Community Survey. Estudios Técnicos, Inc estimates.

Unemployment benefits would total \$2.2 million monthly and \$13.1 million in 26 weeks. Nutritional Assistance Program benefits would be \$803,648 monthly, and \$4.8 million in 26 weeks.

Unemployment & Other Benefits		
Program	One Month	26 Weeks
Unemployment	\$2,174,871	\$13,059,274
Food Stamps	\$803,648	\$4,821,885.68
<b>Total</b>	<b>\$2,978,519</b>	<b>\$17,881,159</b>

Source: PR Department of Labor and Human Resources; ADSEF; Estudios Técnicos, Inc estimates.

GNP would lose \$829.8 million or, 1.2% of 2015 GNP, of which \$304.1 are reductions in personal consumption and \$525.7 million in government expenditures.

Impact on GNP		
Indicador	Amount	% of 2015 GNP
Personal Consumption	\$304.1	0.5%
Government Expenditures	\$525.7	5.7%
<b>GNP</b>	<b>\$829.8</b>	<b>1.2%</b>

Source: Puerto Rico Planning Board, Statistical Appendix 2015. Table 2

### Scenario 2

The loss of direct jobs<sup>7</sup> is estimated at 3,460, in addition to 1,714 indirect and 5,462 induced jobs for a total loss of 10,636 jobs. These jobs generate \$368 million in wages, and pay an estimated \$22.4 million in income taxes. The loss in IVU receipts would be \$17.5 million (11.5%). General Fund income would fall by as much as \$39.9 million in fiscal 2017 from the cuts.

Impact on Employment				
Indicator	Direct	Indirect	Induced	Total
Employment*	3,460	1,714	5,462	10,636
Total Wage	\$173,521,361	\$46,435,892	\$147,996,602	\$367,953,856
Income tax	\$16,500,458	\$1,414,789	\$4,509,098	\$22,424,346
Sales Tax Revenue (11.5%)	\$7,502,148	\$2,384,454	\$7,599,531	\$17,486,133

Source: Puerto Rico Planning Board, Interindustrial Multipliers; BLS Quarterly Census of Employment & Wages; American Community Survey. Estudios Técnicos, Inc estimates.

\*The effect on direct employment is less, as only 24% of the expected reduction is in payroll

The impact on General Fund receipts would be larger if loss of income in government suppliers is incorporated in the analyses, since this would entail losses from the various taxes, primarily income and sales. A major impact on social programs would also result.

If unemployment benefits are \$70 weekly, monthly payments to those that have lost jobs either directly or indirectly could amount to \$3.2 million monthly. Should unemployment benefits be received for the maximum allowable time, the program would have to pay some \$19.4 million. Nutritional Assistance Program payments would be \$1.2 million monthly and \$7.1 million in a six month period.

<sup>7</sup> Jobs lost by program presented in Appendix 1.

<b>Unemployment &amp; Other Benefits</b>		
Program	One Month	26 Weeks
Unemployment	\$3,223,699	\$19,357,083
Food Stamps	\$1,191,205	\$7,147,231
<b>Total</b>	<b>\$4,414,904</b>	<b>\$26,504,314</b>

Source: PR Department of Labor and Human Resources; ADSEF; Estudios Técnicos, Inc estimates.

The impact on GNP was estimated at \$829.8 million, or 1.2% of 2015 GNP. Personal consumption would fall by \$304.1 million<sup>8</sup> or 0.5% of 2015 total personal consumption. Government would see reduced expenditures of \$525.7 million, or 5.7% of 2015 total government expenditures. The estimate for personal consumption may be on the high side since it is assumed that 100% of income is consumed. However, the fact that some consumption is paid for by incurring in loans or credit card charges may compensate for the above.

<b>Impact on GNP</b>		
Indicador	Amount	% of 2015 GNP
Personal Consumption	\$304.1	0.5%
Government Expenditures	\$525.7	5.7%
<b>GNP</b>	<b>\$829.8</b>	<b>1.2%</b>

Source: Puerto Rico Planning Board, Statistical Appendix 2015. Table 2

### *Impact on Health Insurance*

The Government's health insurance program would be cut by \$78 million. In addition, taking into account the fact that the federal government covers 55% of funds assigned by the Government, ASES would lose \$43 million in federal funds. Thus, ASES would see a reduction in its funding of \$121.0 million. This would leave 86,000 persons without health insurance. This result is the same for both scenarios presented above.

<sup>8</sup> Estimate is the result of subtracting the income tax, Social Security, and Medicare deductions from the base salary.

Since the scenarios did not include the loss of \$43.0 million in federal funds an additional impact is calculated below. A total of 205 jobs would be lost in the health insurance sector, of which 132 would result from the \$78 million cut (and is included in the scenarios)<sup>9</sup> and 73 lost jobs are from the \$43.0 million in federal funds (not included in the scenarios).

<b>Impact on Health Insurance Sector</b>	
<b>Reduction in Mi Salud</b>	<b>Jobs Lost</b>
\$78.0 million	132
\$43.0 million	73
<b>Total</b>	<b>205</b>

Source: Office of the PR Insurance Commissioner, 2014 Annual Report; Estudios Técnicos, Inc estimates.

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<sup>9</sup> The 132 employees are already contemplated in scenario 1 and 2.

## Conclusions and Recommendations

- In order to reduce the economic and social impacts of a reduction in government expenditures, it is preferable to reduce working hours rather than lay off employees. The latter would have a greater economic and social impact.
- Jobs losses range from 7,175 to 10,636. Under both scenarios, GNP would lose 1.2% (in 2015 dollars). General Fund income would fall by \$39.9 million.
- A reduction in jobs would put a great deal of pressure on government social programs such as the Nutritional Assistance Program, the health reform and others.
- Out migration would be much more likely from those laid off than it would be if reduction in hours is used. With a private sector that is unable to generate jobs to absorb those laid off, the likelihood of migration increases, and with increased migration government fiscal income is reduced.
- It is also assumed that those that would be laid off are those with less seniority. Younger workers are not only those with recently acquired knowledge from their studies, but are also those most likely to migrate.
- A major impact would be eliminating from the health reform some 86,000 persons. Again, the most likely result would be an increased stimulus for migrating.



## Appendix 1

### Loss of Employment by Government Program Area

The following table presents direct jobs lost in scenario 2 by government program. Social Welfare is expected to lose 805 jobs, while Education would see a reduction of 789. As mentioned earlier, this estimates is part of scenario 2, and considers that the reduction in payroll is reflected completely on Jobs not on working hours.

<b>Reduction in Direct Employment</b>	
Government Program Area	Reduction in Direct Employment
Legislative Assembly	46
Labor Relations	66
Social Welfare	805
Culture	272
Economic Development	101
Education	789
Management	821
Infrastructure	529
Municipal	4
Ombudsman	28
<b>Total</b>	<b>3,460</b>

Source: Office of Management and Budget, (2016).