



COMMONWEALTH OF  
PUERTO RICO

Government Development Bank  
for Puerto Rico

April 2015

# Economic Activity Index (“GDB-EAI”)

# Clarification about the interpretation of the GDB-EAI figures

The GDB-EAI is an indicator of the general economic activity, not a direct measurement of the real GNP. The annual growth rate of the EAI **is not** the same as the annual growth rate of the real GNP.

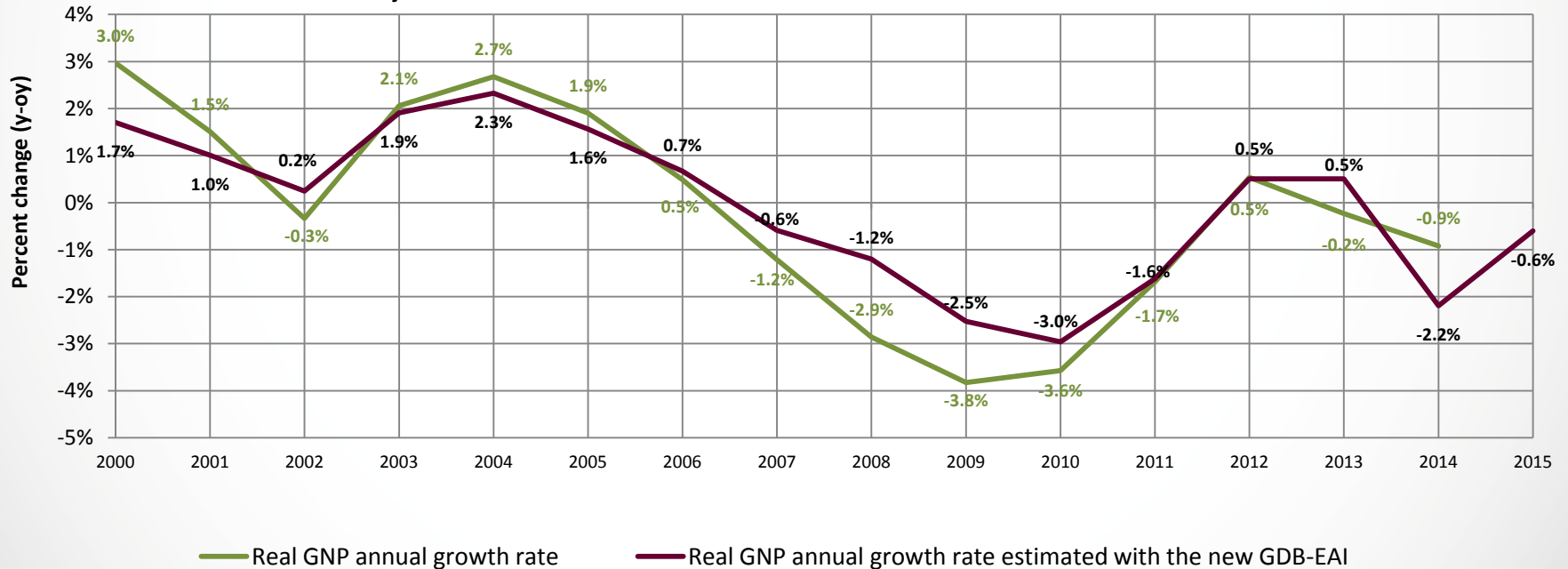
Fiscal Year	New GDB-EAI annual growth	Real GNP annual growth estimated using the new GDB-EAI	Actual real GNP annual growth
2002	-0.4%	0.2%	-0.3%
2003	1.7%	1.9%	2.1%
2004	2.2%	2.3%	2.7%
2005	1.3%	1.6%	1.9%
2006	0.1%	0.7%	0.5%
2007	-1.5%	-0.6%	-1.2%
2008	-2.3%	-1.2%	-2.9%
2009	-4.0%	-2.5%	-3.8%
2010	-4.5%	-3.0%	-3.6%
2011	-2.8%	-1.6%	-1.7%
2012	-0.1%	0.5%	0.5%
2013	-0.1%	0.5%	-0.2%
2014	-3.6%	-2.2%	-0.9%
2015	-1.5%	-0.6%	

- Nevertheless, notice that with some exceptions, the real GNP growth estimates coming from the new EAI are relatively close (although not identical) to the actual real GNP growth figures.
- The annual growth for FY2015 was estimated using the average of the first ten months of the index, and compared it to the average value for FY2014.
- With FY2014 data of the new GDB-EAI, the real GNP growth estimate shows a larger reduction than the actual figures published by the Planning Board, while the estimates for FY2015 would reflect a decline of 0.7%.

# Clarification about the interpretation of the new GDB-EAI figures (2)

Here is a comparison graph of the actual real GNP figures and the estimates of the annual growth of the real GNP using the figures coming from the new GDB-EAI.

## Annual Growth Rate Comparisons: Real GNP, and real GNP estimated with the new GDB-EAI



Real GNP data source: Puerto Rico Planning Board

# General Commentary - April 2015

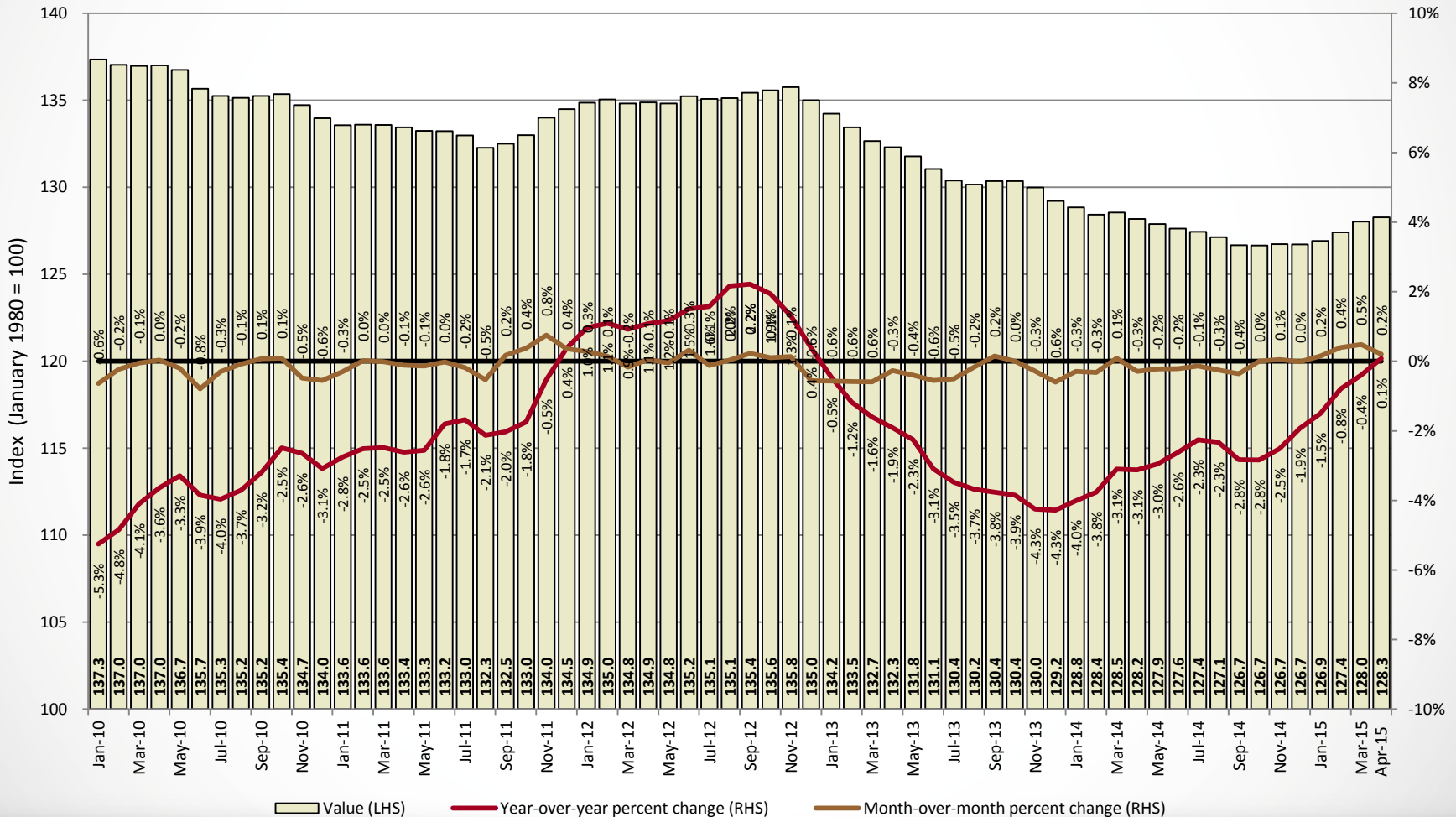
In April 2015, the new GDB-EAI registered a 0.1% year-over-year (y-o-y) increase, and a month-over-month (m-o-m) increase of 0.2%.

- The April 2015 figure for the **new** EAI was 128.3, a 0.1% increase compared to April 2014, and an increase of 0.2% compared to March 2015. On a year-to-date basis (July-April) the new EAI shows a reduction of 1.7% with respect the same period of the previous year.
- On the other hand, the April 2015 figure for the **previous** EAI was 124.3, a 1.0% reduction compared to April 2014, and remaining flat compared to March 2015. Moreover, the FY2015 YTD (July-April) EAI showed a reduction of 2.3% with respect to the corresponding figure for FY2014.
- Total non-farm payroll employment for April 2015 averaged 912,100, an annual increase of 0.1%. On a YTD, total non-farm payroll employment has declined by 1.4%.
- Electric power generation for April 2015 totaled 1,690.7 million kWh, an annual reduction of 1.3%. On a YTD basis, electric power generation has declined by 2.7%.
- The preliminary number for gasoline consumption\* in April 2015 was 82.2 million gallons, 6.0% above April 2014. On a YTD basis, gasoline consumption has increased by 1.0%.
- Cement sales for April 2015 totaled 1.15 million bags, registering an annual decrease of 10.9%. On a YTD basis, cement sales were down by 11.0%.

\* The monthly gasoline consumption is estimated by the GDB from the Treasury Department's monthly gasoline excise tax collections paid by importers which are transferred to P.R. Highways and Transportation Authority. These collections fluctuate due to changes in inventories and purchases, which do not necessarily reflect the actual monthly consumption reported by retailers.

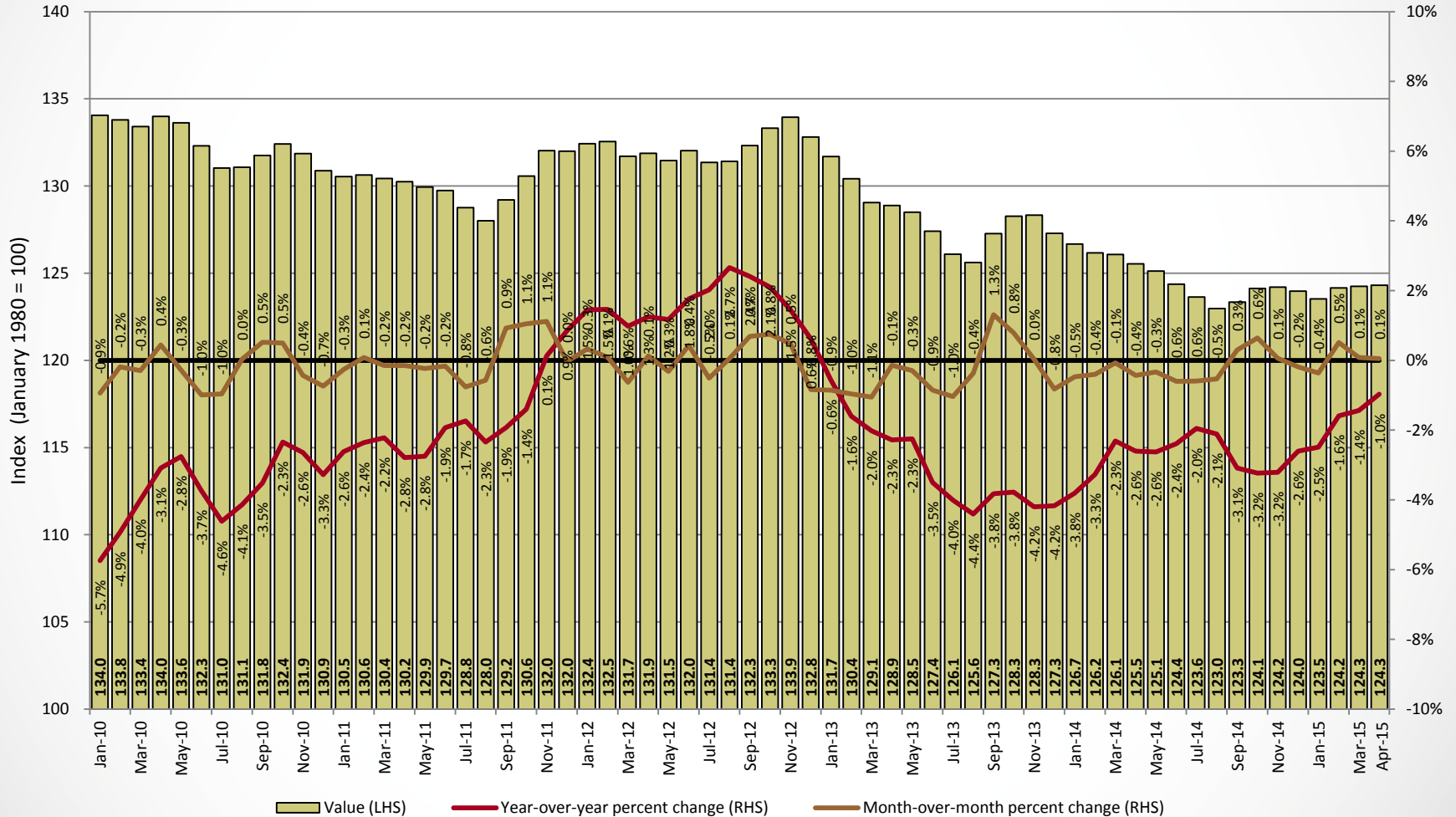
- The new GDB-EAI registered a 0.1% year-over-year increase in April, after showing a 0.4% y-o-y decrease in March 2015. On a month-over-month basis, the new GDB-EAI increased by 0.2% in April 2015, after an increase of 0.5% in March.

## New GDB Economic Activity Index



- The previous GDB-EAI registered a 1.0% year-over-year reduction in April, after showing a 1.4% y-o-y decrease in March 2015. On a month-over-month basis, the previous GDB-EAI remained flat in April 2015, after an increase of 0.1% in March.

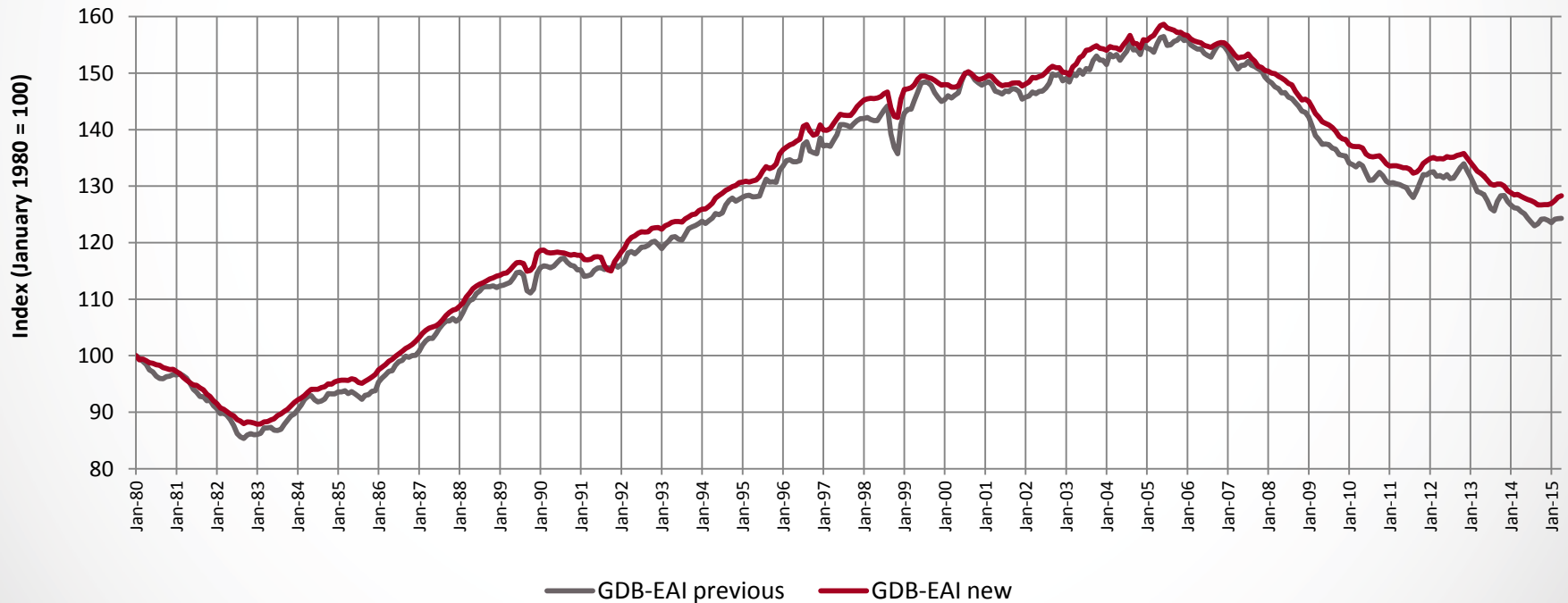
## Previous GDB Economic Activity Index



# Changes to the new GDB-EAI

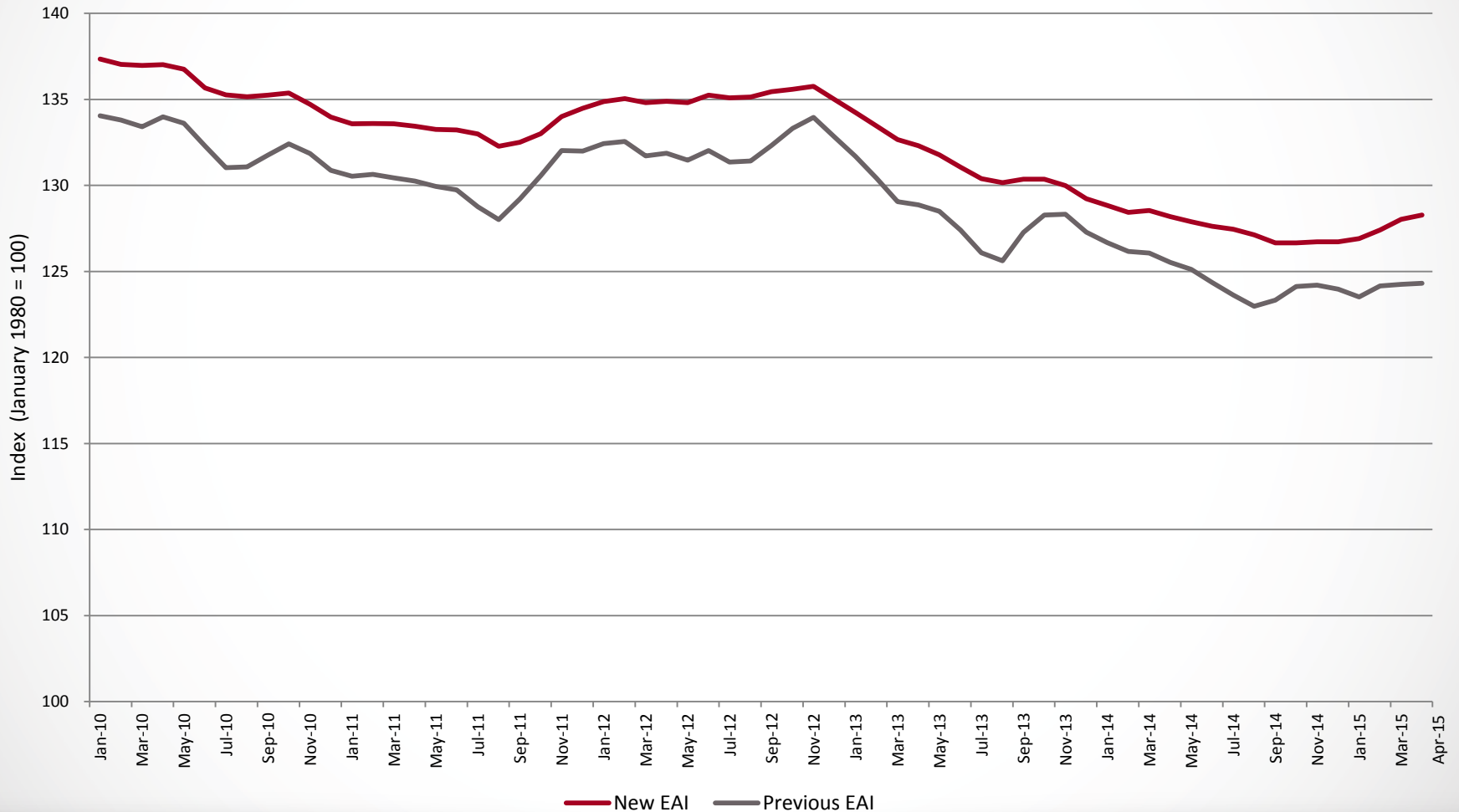
The level of the new index increased slightly.

## GDB Economic Activity Index (Previous and New Version)



- The previous GDB-EAI registered a 1.0% year-over-year reduction in April, after showing a 1.4% y-o-y decrease in March 2015. The new GDB-EAI shows an increase of 0.1% y-o-y in April, after a reduction of 0.4% y-o-y in March 2015.

## Comparison of the GDB-EAI: Previous and New



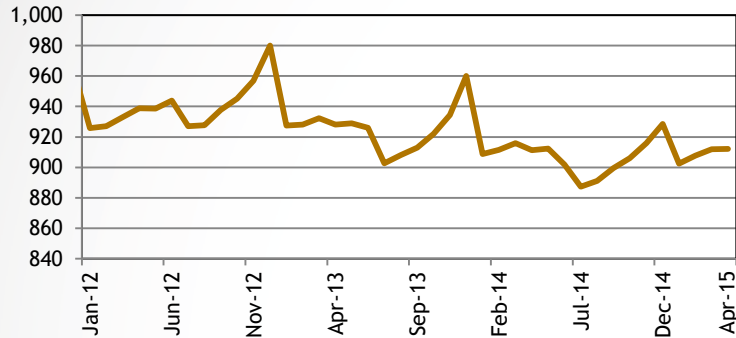




# GDB Economic Activity Index Components

## Total Non-Farm Payroll Employment\*

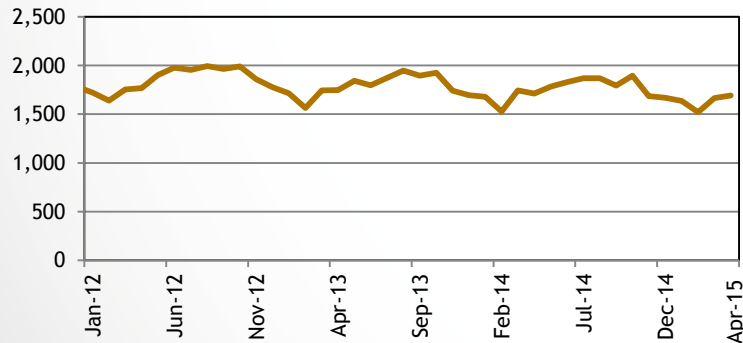
(Thousands of jobs)



- Total non-farm payroll employment for April 2015 averaged 912,100, an annual increase of 0.1%.

## Electric Power Generation\*

(Millions of kWh)



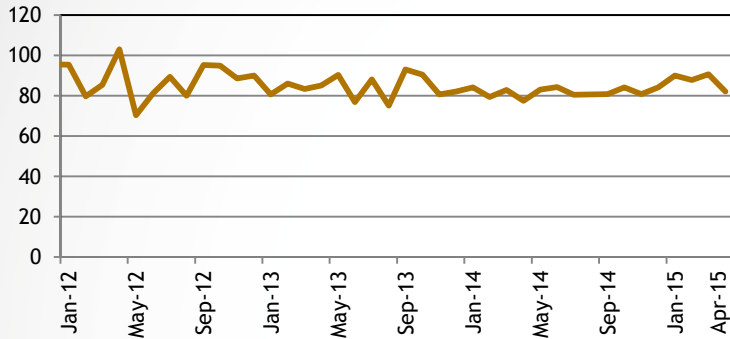
- Electric power generation for Apr 2015 averaged 1,690.7 million kWh, an annual decrease of 1.3%.

Sources: BLS and PREPA  
\* Not seasonally adjusted.

# GDB Economic Activity Index Components

## Gasoline Consumption\*

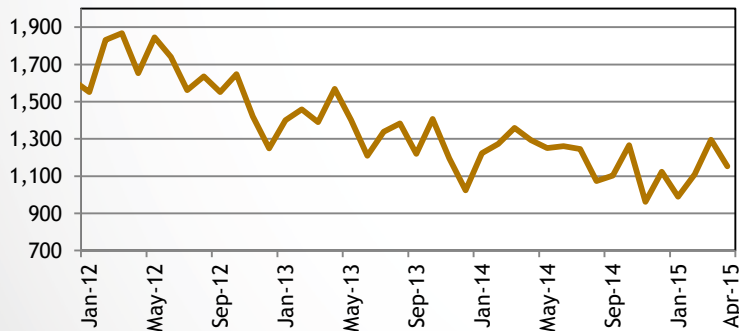
(Millions of gallons)



- The preliminary estimate of gasoline consumption for April 2015 was 82.2 million gallons, for an annual increase of 6.0%.

## Cement Sales\*

(Cement bags sold, in thousands)



- Cement Sales for April 2015 totaled 1.15 million bags, an annual decrease of 10.9%.

\*The monthly gasoline consumption is estimated by the GDB from the Treasury Department's monthly gasoline excise tax collections paid by importers which are transferred to P.R. Highways and Transportation Authority.

Sources: PRHTA and GDB  
\* Not seasonally adjusted.

# **Description of the GDB-Economic Activity Index**

# GDB Economic Activity Index Highlights and Composition

## Advantages of the new GDB-EAI:

- Readily available
- Highly correlated to Puerto Rico's real GNP
- Reliable tool to monitor actual trend of Puerto Rico economy
- **Month-over-month comparisons are now more reliable**

## The GDB-EAI is made up of 4 indicators:

- Total Payroll Employment (Establishment Survey/ Thousands of employees)
- Total Electric Power Generation (Millions of kWh)
- Cement Sales (Millions of bags)
- Gas Consumption (Millions of gallons)

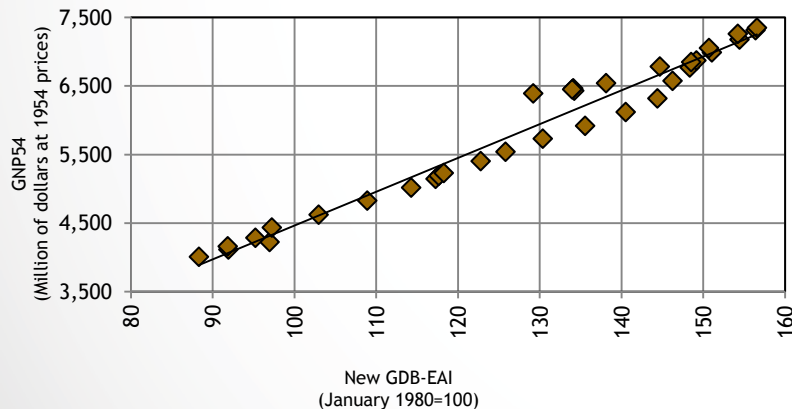
# Description of the New GDB-EAI

- The new GDB-EAI is a coincident index for the economic activity of Puerto Rico. It is highly correlated to Puerto Rico's real GNP not only on the levels, but also on the annual growth rates.
- This index was developed following the methodology similar to that used by The Conference Board in their coincident index. This methodology follows a standard procedure to adjust the data for seasonality and volatility factors.

## Real Gross National Product as a function of the New GDB Economic Activity Index

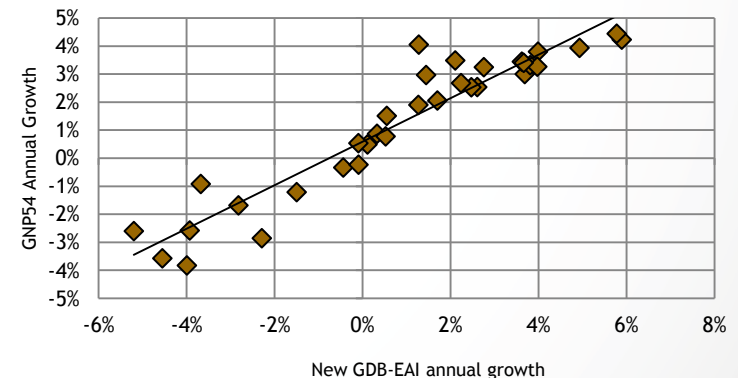
Relationship on the levels: FY1981-FY2014

$$y = 49.324x - 469.42 \quad R^2 = 0.9681$$



Relationship on the growth rates: FY1982-FY2014

$$y = 0.7789x + 0.0058 \quad R^2 = 0.8974$$



Sources: GDB

# Disclaimer

The GDB-EAI and its indicators are subject to revisions. While the information comprising the GDB EAI has been obtained from sources GDB believes to be reliable, GDB is not responsible for any errors or omissions, or for the results obtained from the use of this information.