

The Puerto Rico Economic Activity Index ("EDB-EAI")

October 2020

Prepared by the Office of Economic Studies
Economic Development Bank for Puerto Rico

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- Any future actions taken or not taken by the United States government related to Medicaid or the Affordable Care Act;
- The amount and timing of receipt of any distributions from the Federal Emergency Management Agency and private insurance companies to repair damage caused by Hurricanes María and Irma;
- The amount and timing of receipt of any amounts allocated to Puerto Rico and provided under the Community Disaster Loans Program;
- The amount and timing of receipt of any additional amounts appropriated by the United States government to address the funding gap described herein;
- The timeline for completion of the work being done by the Puerto Rico Electric Power Authority (“PREPA”) to repair PREPA’s electric system and infrastructure and the impact of any future developments or issues related to PREPA’s electric system and infrastructure on Puerto Rico’s economic growth;
- The impact of the measures described herein on outmigration; and
- The impact of the resolution of any pending litigation in the Title III cases

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Definitions

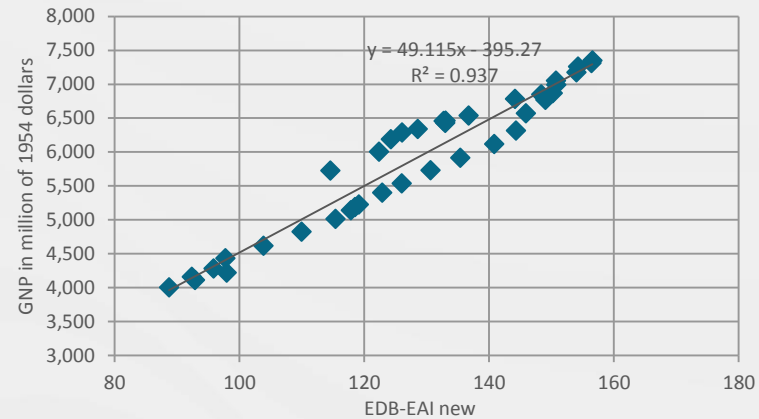
EDB	Economic Development Bank for Puerto Rico
GDB	Government Development Bank for Puerto Rico
EAI	Economic Activity Index
FY	Puerto Rico's Fiscal Year
TCB	The Conference Board is a Company that promotes the understanding of business practices and economic cycles and supports and undertake nonpartisan analysis and research.
GNP	Puerto Rico's Gross Product
GNP54	Puerto Rico's Real Gross Product
BLS	Bureau of Labor Statistics of the United States Department of Labor and Human Resources
PRTHA	Puerto Rico Highways and Transportation Authority
PREPA	Puerto Rico Electric Power Authority
kWh	Kilowatts hour
s. a.	Seasonally adjusted
y-o-y	Year-over-year
m-o-m	Month-over-month
COFINA	Puerto Rico Sales Tax Financing Corporation (Spanish acronym)
ARRA	American Recovery and Reinvestment Act of 2009

Description of the EDB-EAI

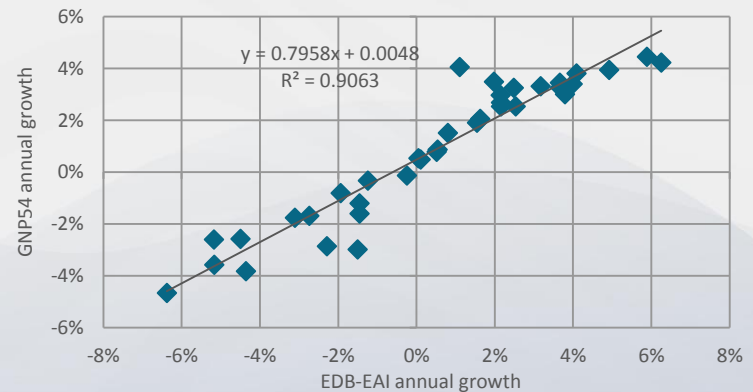
- The EDB-EAI is a coincident index for the economic activity of Puerto Rico. It is highly correlated to Puerto Rico’s real GNP in both level and annual growth rates.
- This index’s methodology is similar to that used in TCB’s coincident index of the US economy. This methodology follows a standard procedure to adjust the data for seasonality and volatility factors.

Real Gross National Product as a function of the EDB Economic Activity Index

Relationship on the levels: (FY1981-FY2018)



Relationship on the growth rates (FY1982-FY2018)



EDB-Economic Activity Index Composition

EDB Economic Activity Index Highlights

- **Advantages of the EDB-EAI:**
 - Readily available in a monthly basis to the financial community.
 - Highly correlated measuring tool of Puerto Rico's real GNP.
 - Reliable tool to monitor current trends in Puerto Rico's economy for economists, investors and multiple players among the financial community.
- **The EDB-EAI is made up of 4 indicators:**
 - **Total Payroll Employment** (Establishment Survey/ Thousands of employees). This variable is provided by the Bureau of Labor Statistics of the US Department of Labor and Human Resources (BLS) on a monthly basis. The establishment survey provides employment, hours, and earnings estimates based on payroll records of business establishments in Puerto Rico.
 - **Total Electric Power Generation** (Millions of kWh). This variable is provided by the Puerto Rico Power Authority (PREPA) on a monthly basis. This indicator includes the electric power generation produced by petroleum, natural gas, coal and renewable energy sources. The renewable energy is supplied by utility-scale solar photovoltaic generating capacity, two wind farms and landfill gas sources.
 - **Cement Sales** (Millions of 94lb. bags). This variable is provided by CEMEX Puerto Rico & Argos Puerto Rico LLC on a monthly basis. The data is compiled and converted by the EDB.
 - **Gas Consumption** (Millions of gallons). This variable is provided by Puerto Rico Highways and Transportation Authority (PRHTA) on a monthly basis. The EDB adjusts the series with a 3-month moving average.

Interpretation of the EDB-EAI

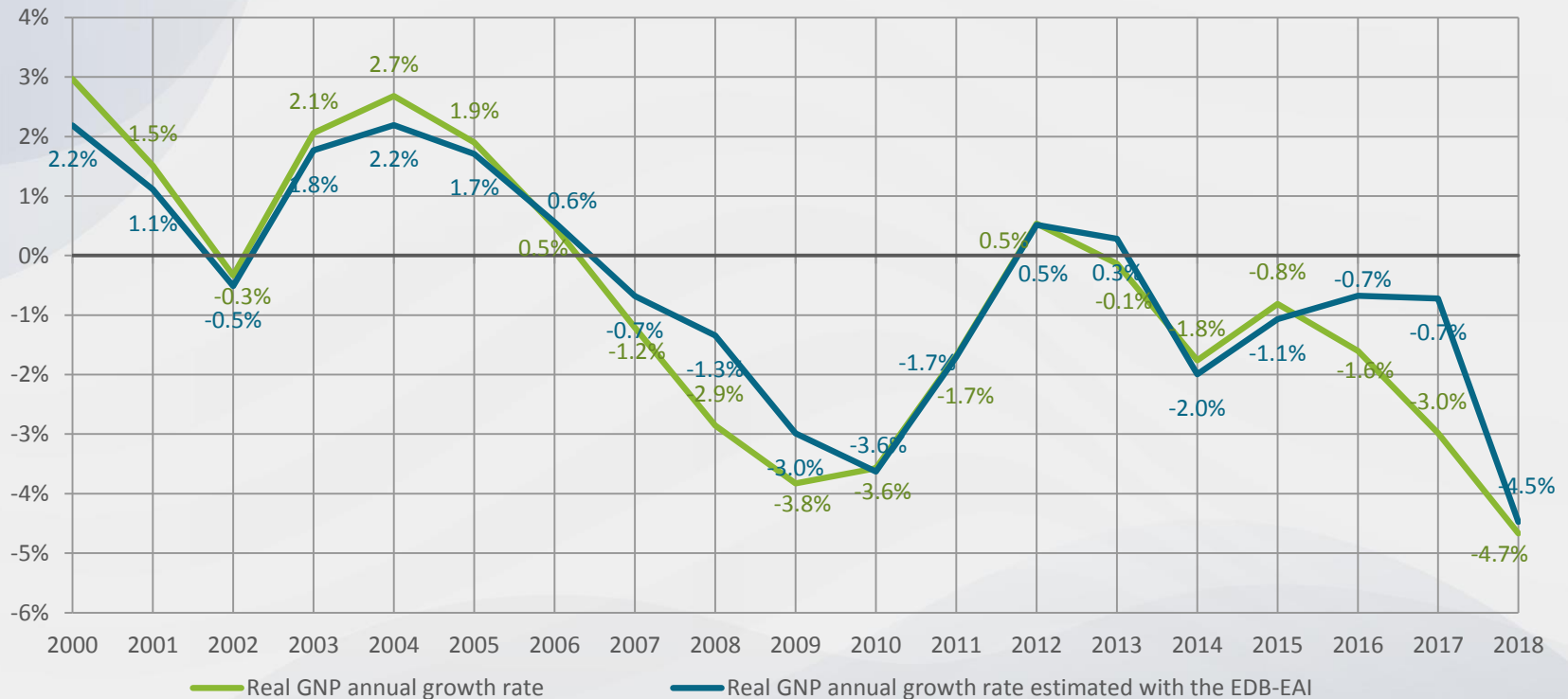
The EDB-EAI is an indicator of general economic activity, **not** a direct measurement of Puerto Rico's real GNP. The annual growth rate of the EAI **is not** the same as the annual growth rate of the Island's real GNP. The EAI **does not** include all the economic sectors that comprise the GNP.

- When annualized, the **level** of the **EAI** is highly correlated with the **level** of the **real GNP** (with a Pearson correlation coefficient of 0.9680; i.e. 97% for FY1981-FY2018).
- The annual **growth rates** of both variables are also highly correlated (with a Pearson correlation coefficient of 0.9520; i.e. 95% for FY1982-FY2018).
- Nevertheless, the annual growth rate of the EAI **IS NOT** the same as the annual growth rate of the real GNP, since being highly correlated does not mean being identical.
- In order to calculate an approximate of the real GNP trend from the EAI annual growth, the EDB estimates a linear regression model relating both variables.
- Plugging-in the EAI annual growth rates into the resulting equation produces real GNP annual growth rate estimates relatively comparable to the real GNP annual growth figures published by the Puerto Rico Planning Board.

Interpretation of the EDB-EAI

The graph compares actual real GNP growth rates with estimated real GNP growth rates based on the EDB-EAI.

Real GNP vs. Real GNP estimated with the EDB-EAI*



* The EDB-EAI is an indicator of general economic activity, **not** a direct measurement of real GNP. The annual growth rate of the EAI **is not** the same as the annual growth rate of the real GNP. The EAI **does not include** all the economic sectors that comprise the GNP.

Sources: Puerto Rico Planning Board and EDB.

Interpretation of the EDB-EAI

The EDB-EAI is an indicator of 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. The EAI **does not** include all the economic sectors that comprise the GNP.

- Real GNP growth estimates based on the EAI have been relatively close (**although not identical**) to the actual real GNP growth figures, though they do maintain the same trend.
- The real GNP growth for **FY2017** was estimated at minus **0.7%** using a regression equation with the growth of the EAI as the independent variable, while the P.R. Planning Board reported a decline of **3.0%**.
- But then, for **FY2018**, the index-based estimate for the real GNP growth was **-4.6%** compared to the **-4.7%** current Planning Board’s estimate for that year.
- On a methodological note, the index’s annual growth is calculated as the annual percentage change of its twelve-month average.

Fiscal Year	EDB-EAI annual growth	Real GNP annual growth estimated using the EDB-EAI	Current real GNP annual growth
2002	-1.2%	-0.5%	-0.3%
2003	1.6%	1.8%	2.1%
2004	2.2%	2.2%	2.7%
2005	1.5%	1.7%	1.9%
2006	0.1%	0.6%	0.5%
2007	-1.5%	-0.7%	-1.2%
2008	-2.3%	-1.3%	-2.9%
2009	-4.4%	-3.0%	-3.8%
2010	-5.2%	-3.6%	-3.6%
2011	-2.7%	-1.7%	-1.7%
2012	0.0%	0.5%	0.5%
2013	-0.2%	0.3%	-0.1%
2014	-3.1%	-2.0%	-1.8%
2015	-1.9%	-1.1%	-0.8%
2016	-1.5%	-0.7%	-1.6%
2017	-1.5%	-0.7%	-3.0%
2018	-6.4%	-4.6%	-4.7%

Sources: Puerto Rico Planning Board and EDB.

EDB-EAI Overview – October 2020

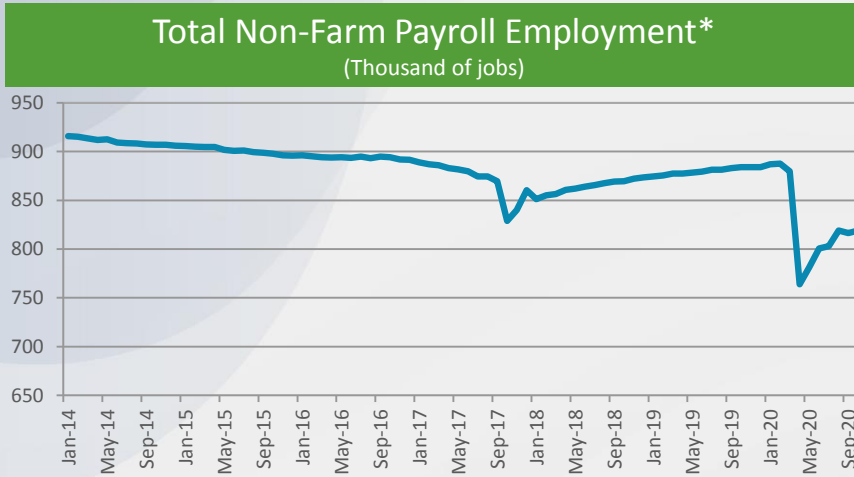
The EDB-EAI fell by 6.4% in October when compared to the previous year, while it increased by 0.4% in a m-o-m basis.

Sources: BLS, PREPA, PRHTA and EDB.

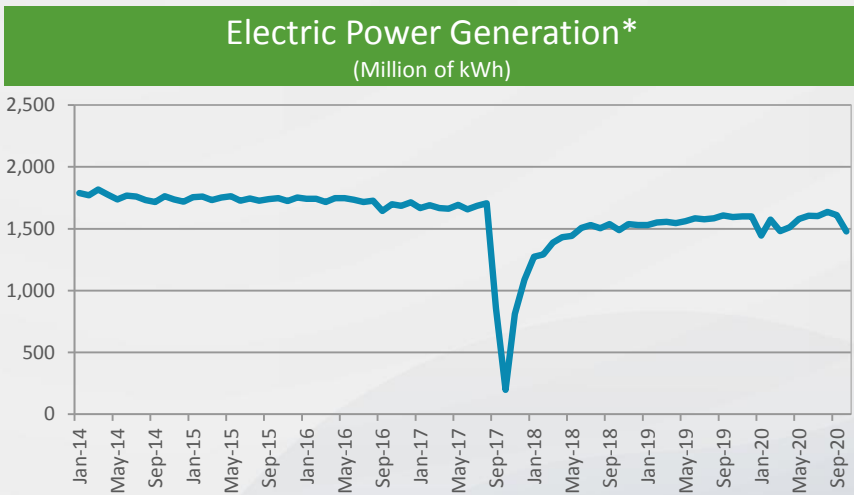
* EDB applies a 3-month moving average adjustment to the gasoline consumption data.

- The **EDB-EAI, s. a.**, changed to **115.5** points in **October**: a 6.4% shrinkage when compared to October 2019; **the eighth reduction after 20 y-o-y consecutive increments**. Conversely, it increased by **0.4%** when compared to the previous month. To reach pre-pandemic levels, the economic activity requires a consistent multi-sector recovery pace, a challenging assumption that is currently dependent on finding ways to invigorate the economy without furthering the COVID-19 spread.
- During fiscal year 2020, the **EDB-EAI, s. a.**, decreased by 2.0% when compared to fiscal year 2019, and dropped **7.1%** during the **July – October period of fiscal year 2021**. However, an increment of 1.6% was registered during 2019, the second consecutive annual positive growth after five years of uninterrupted reductions, though it contracted by **5.8%** during the **January – October period of 2020**.
- **Total non-farm payroll employment, s. a.**, averaged 819,000 employees for October 2020; which implies an advance of 0.3% in a m-o-m basis, and an annual decrease of 7.3%.
- **Electric power generation, s. a.**, for October 2020, totaled 1,479.2 million kWh, dropping by 8.1% in a m-o-m basis, and an annual reduction of 7.2%.
- The preliminary estimate for **gasoline consumption*, s. a.**, in October 2020 totaled 59.6 million of gallons, showing a fall of 9.1% with respect to September, and a 23.2% cut when compared to October 2019.
- **Cement sales, s. a.**, totaled 1.4 million of 94lb. bags for October 2020, which remained close to the previous month level, with a decline of 0.1% in a m-o-m basis, and a 17.6% rise when compared to October 2019.

EDB-EAI Monthly Components (1/2014 to 10/2020)



- **Total non-farm payroll employment, s. a.**, averaged **819,000** employees in **October**. This represents an upturn of 0.3% when compared against the previous month. While, it decreased by 7.3% in a y-o-y basis.



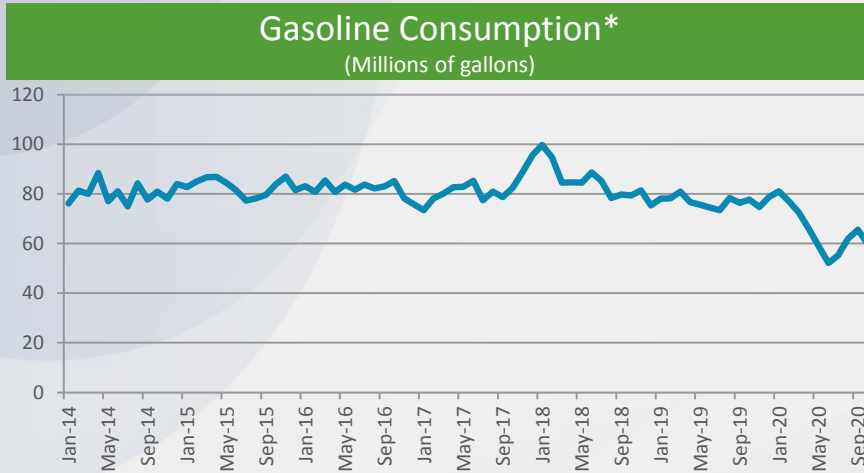
- **Electric power generation**, s. a.**, for **October 2020**, totaled **1,479.2** million kWh; an 8.1% reduction in a m-o-m basis, and an annual drop of 7.2%.

* Seasonally adjusted with TRAMO-SEATS Method.

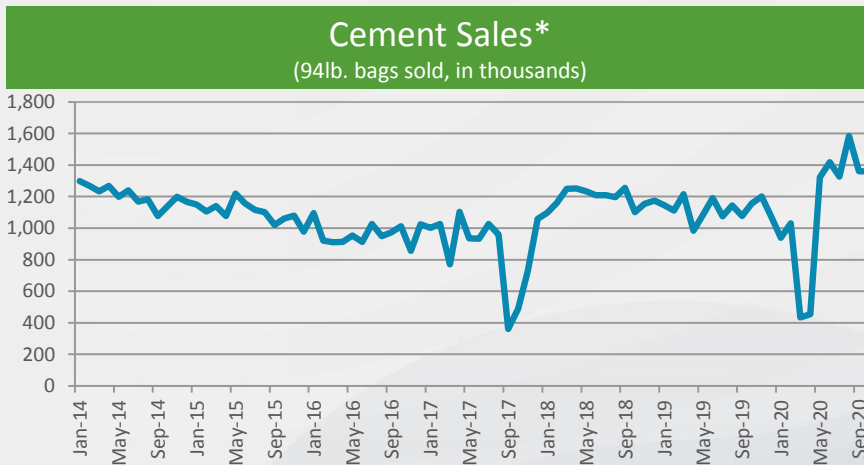
** The monthly electric power generation indicator includes: energy produced by petroleum, natural gas, coal and renewable energy sources. The renewable energy is supplied by utility-scale solar photovoltaic generating capacity, two wind farms and landfill gases sources.

Sources: BLS and PREPA.

EDB-EAI Monthly Components (1/2014 to 10/2020)



- The preliminary estimate of **gasoline consumption****, s. a., for **October 2020** was **59.6** million gallons, or 9.1% below the previous month, while the annual change shrank by 23.2%.



- Cement sales**, s. a., totaled **1.4** million of 94 lb. bags indicating a downturn of 0.1% in a m-o-m basis for **October 2020**, whereas the annual change increased by 17.6%.

* Seasonally adjusted with TRAMO-SEATS Method.

** The EDB applies a 3-month moving average adjustment to the gasoline consumption data.

Sources: PRHTA and EDB.

EDB Economic Activity Index* 2011-2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	132.5	134.9	130.4	127.0	126.4	124.5	122.2	122.3	122.3	111.7
AUGUST	132.1	134.5	130.3	127.2	125.6	124.3	122.0	122.3	122.7	113.7
SEPTEMBER	132.3	134.5	130.2	126.4	125.1	124.2	115.9	122.2	122.8	115.1
OCTOBER	132.8	134.2	130.3	126.7	125.3	124.2	103.9	121.6	123.3	115.5
NOVEMBER	133.9	134.3	130.1	126.3	125.6	123.5	98.8	122.0	123.4	
DECEMBER	134.2	134.1	129.8	126.8	125.6	123.4	103.0	121.7	123.5	
JANUARY	134.1	134.0	129.1	126.9	125.5	122.5	114.3	122.1	122.7	
FEBRUARY	134.3	133.5	128.6	127.1	124.8	122.8	118.6	121.9	122.5	
MARCH	134.2	132.9	128.5	127.2	124.7	122.0	119.8	122.6	119.6	
APRIL	134.2	132.1	128.9	127.2	124.1	122.5	120.4	122.3	113.7	
MAY	134.4	131.5	128.4	127.3	124.3	122.4	120.9	122.2	109.7	
JUNE	135.0	130.7	128.1	126.9	124.1	122.9	121.7	122.0	108.8	

YEAR OVER YEAR PERCENTAGE CHANGE

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	-1.5	1.7	-3.3	-2.6	-0.5	-1.5	-1.8	0.0	0.0	-8.6
AUGUST	-1.6	1.9	-3.2	-2.3	-1.3	-1.0	-1.9	0.2	0.4	-7.3
SEPTEMBER	-1.4	1.7	-3.2	-2.9	-1.0	-0.7	-6.7	5.4	0.5	-6.3
OCTOBER	-1.3	1.1	-2.9	-2.8	-1.1	-0.9	-16.3	17.1	1.4	-6.4
NOVEMBER	-0.2	0.3	-3.1	-2.9	-0.6	-1.6	-20.0	23.5	1.1	
DECEMBER	0.3	-0.1	-3.2	-2.3	-1.0	-1.7	-16.5	18.2	1.5	
JANUARY	0.6	-0.1	-3.7	-1.7	-1.1	-2.4	-6.7	6.8	0.5	
FEBRUARY	0.7	-0.6	-3.7	-1.2	-1.8	-1.7	-3.4	2.8	0.5	
MARCH	0.6	-0.9	-3.3	-1.0	-2.0	-2.1	-1.8	2.3	-2.4	
APRIL	0.9	-1.6	-2.4	-1.3	-2.5	-1.2	-1.8	1.6	-7.0	
MAY	1.4	-2.1	-2.4	-0.8	-2.4	-1.5	-1.2	1.1	-10.2	
JUNE	1.9	-3.2	-2.0	-0.9	-2.2	-1.0	-0.9	0.2	-10.8	

SUMMARY DATA

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
FISCAL YEAR *										
AVERAGE	133.7	133.4	129.4	126.9	125.1	123.3	115.1	122.1	119.6	
DIFFERENCE	0.0	-0.2	-4.1	-2.5	-1.9	-1.8	-8.1	7.0	-2.5	
% CHANGE	0.0	-0.2	-3.0	-1.9	-1.5	-1.5	-6.6	6.1	-2.0	
JUL-OCT										
AVERAGE	132.4	134.5	130.3	126.8	125.6	124.3	116.0	122.1	122.8	114.0
DIFFERENCE	-2.0	2.1	-4.2	-3.5	-1.2	-1.3	-8.3	6.1	0.7	-8.8
% CHANGE	-1.5	1.6	-3.1	-2.7	-1.0	-1.0	-6.7	5.2	0.6	-7.1
CALENDAR YEAR										
AVERAGE	134.4	131.3	127.7	126.4	124.3	116.7	120.6	122.6		
DIFFERENCE	1.4	-3.1	-3.6	-1.3	-2.0	-7.6	3.9	2.0		
% CHANGE	1.0	-2.3	-2.8	-1.0	-1.6	-6.1	3.3	1.6		
JAN-OCT										
AVERAGE	134.4	131.6	127.9	126.5	124.5	119.9	120.4	122.4	115.3	
DIFFERENCE	1.6	-2.8	-3.7	-1.4	-2.0	-4.6	0.5	2.0	-7.1	
% CHANGE	1.2	-2.1	-2.8	-1.1	-1.6	-3.7	0.4	1.7	-5.8	

* Runs from July of the previous year to June current year.

Source: EDB. *Base period: January 1980=100.

Total Non-Farm Payroll Employment, s. a., (000's) 2011-2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	925.2	941.2	924.1	908.6	901.0	894.8	874.6	865.5	881.5	803.1
AUGUST	923.2	941.7	924.3	908.3	899.5	893.1	874.3	867.4	881.3	819.1
SEPTEMBER	925.1	942.6	921.1	907.4	898.8	894.9	869.5	869.1	882.9	816.5
OCTOBER	926.2	941.8	920.1	907.0	897.9	894.0	828.8	869.5	883.9	819.0
NOVEMBER	930.3	939.9	918.9	906.9	896.0	891.7	840.1	872.3	883.9	
DECEMBER	928.7	939.6	918.2	906.0	895.9	891.4	860.5	873.6	884.0	
JANUARY	934.0	936.1	915.9	905.5	896.0	888.8	851.2	874.6	886.8	
FEBRUARY	933.9	934.9	915.2	905.1	895.0	887.0	855.3	875.6	887.7	
MARCH	935.1	933.7	913.6	904.8	894.2	886.0	856.6	877.6	879.8	
APRIL	938.6	930.2	912.0	904.6	894.0	882.9	860.6	877.4	763.9	
MAY	938.4	929.3	912.5	901.7	894.0	881.5	862.0	878.5	781.4	
JUNE	941.1	928.2	909.3	900.8	893.6	879.7	864.0	879.3	800.8	

YEAR OVER YEAR PERCENTAGE CHANGE

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	-0.3	1.7	-1.8	-1.7	-0.8	-0.7	-2.3	-1.0	1.8	-8.9
AUGUST	-0.6	2.0	-1.9	-1.7	-1.0	-0.7	-2.1	-0.8	1.6	-7.1
SEPTEMBER	-0.2	1.9	-2.3	-1.5	-0.9	-0.4	-2.8	-0.1	1.6	-7.5
OCTOBER	0.2	1.7	-2.3	-1.4	-1.0	-0.4	-7.3	4.9	1.6	-7.3
NOVEMBER	0.8	1.0	-2.2	-1.3	-1.2	-0.5	-5.8	3.8	1.3	
DECEMBER	0.6	1.2	-2.3	-1.3	-1.1	-0.5	-3.5	1.5	1.2	
JANUARY	1.4	0.2	-2.2	-1.1	-1.1	-0.8	-4.2	2.7	1.4	
FEBRUARY	1.3	0.1	-2.1	-1.1	-1.1	-0.9	-3.6	2.4	1.4	
MARCH	1.4	-0.1	-2.2	-1.0	-1.2	-0.9	-3.3	2.4	0.3	
APRIL	1.7	-0.9	-2.0	-0.8	-1.2	-1.2	-2.5	2.0	-12.9	
MAY	1.8	-1.0	-1.8	-1.2	-0.9	-1.4	-2.2	1.9	-11.0	
JUNE	2.1	-1.4	-2.0	-0.9	-0.8	-1.6	-1.8	1.8	-8.9	

SUMMARY DATA

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
FISCAL YEAR *										
AVERAGE	931.7	936.6	917.1	905.6	896.3	888.8	858.1	873.4	858.2	
DIFFERENCE	7.8	5.0	-19.5	-11.5	-9.2	-7.5	-30.7	15.2	-15.2	
% CHANGE	0.8	0.5	-2.1	-1.3	-1.0	-0.8	-3.5	1.8	-1.7	
JUL-OCT										
AVERAGE	924.9	941.8	922.4	907.8	899.3	894.2	861.8	867.9	882.4	814.4
DIFFERENCE	-1.9	16.9	-19.5	-14.5	-8.5	-5.1	-32.4	6.1	14.5	-68.0
% CHANGE	-0.2	1.8	-2.1	-1.6	-0.9	-0.6	-3.6	0.7	1.7	-7.7
CALENDAR YEAR										
AVERAGE	939.0	926.6	910.2	901.0	893.9	871.2	863.9	880.0		
DIFFERENCE	14.8	-12.4	-16.4	-9.2	-7.1	-22.7	-7.2	16.1		
% CHANGE	1.6	-1.3	-1.8	-1.0	-0.8	-2.5	-0.8	1.9		
JAN-OCT										
AVERAGE	938.8	928.2	911.0	902.0	894.4	875.3	862.1	879.2	825.8	
DIFFERENCE	15.7	-10.7	-17.2	-9.0	-7.6	-19.0	-13.2	17.1	-53.4	
% CHANGE	1.7	-1.1	-1.9	-1.0	-0.8	-2.1	-1.5	2.0	-6.1	

* Runs from July of the previous year to June current year.

Source: EDB.

Electric Energy Generation, s. a., (mm kWh) 2011-2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	1,838.6	1,855.2	1,767.8	1,759.3	1,744.4	1,715.0	1,684.8	1,528.8	1,577.3	1,603.5
AUGUST	1,802.7	1,842.1	1,804.8	1,732.5	1,726.2	1,727.0	1,705.3	1,502.9	1,585.3	1,634.9
SEPTEMBER	1,858.3	1,887.3	1,815.7	1,716.3	1,739.7	1,643.0	856.0	1,537.6	1,607.3	1,608.9
OCTOBER	1,858.2	1,854.5	1,790.9	1,763.8	1,748.3	1,697.5	197.5	1,488.4	1,593.9	1,479.2
NOVEMBER	1,859.5	1,890.3	1,781.3	1,736.0	1,723.4	1,684.4	810.4	1,538.4	1,600.9	
DECEMBER	1,844.7	1,844.7	1,753.5	1,718.4	1,751.8	1,713.4	1,087.1	1,529.1	1,600.1	
JANUARY	1,841.9	1,826.8	1,789.4	1,755.0	1,740.8	1,667.6	1,274.4	1,530.3	1,445.7	
FEBRUARY	1,832.6	1,809.0	1,769.6	1,759.2	1,742.3	1,690.6	1,292.9	1,549.7	1,572.8	
MARCH	1,826.2	1,819.6	1,816.9	1,731.8	1,714.9	1,666.9	1,387.7	1,555.5	1,480.5	
APRIL	1,838.9	1,811.4	1,775.2	1,753.2	1,746.8	1,663.1	1,430.7	1,546.5	1,512.1	
MAY	1,848.4	1,792.1	1,737.5	1,761.8	1,747.3	1,692.6	1,442.6	1,561.6	1,579.5	
JUNE	1,908.6	1,739.8	1,767.8	1,727.2	1,733.0	1,655.5	1,507.8	1,585.0	1,604.2	

YEAR OVER YEAR PERCENTAGE CHANGE

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	-4.9	0.9	-4.7	-0.5	-0.8	-1.7	-1.8	-9.3	3.2	1.7
AUGUST	-7.6	2.2	-2.0	-4.0	-0.4	0.0	-1.3	-11.9	5.5	3.1
SEPTEMBER	-3.4	1.6	-3.8	-5.5	1.4	-5.6	-47.9	79.6	4.5	0.1
OCTOBER	-2.8	-0.2	-3.4	-1.5	-0.9	-2.9	-88.4	653.8	7.1	-7.2
NOVEMBER	-0.2	1.7	-5.8	-2.5	-0.7	-2.3	-51.9	89.8	4.1	
DECEMBER	-0.1	0.0	-4.9	-2.0	1.9	-2.2	-36.6	40.7	4.6	
JANUARY	-2.6	-0.8	-2.1	-1.9	-0.8	-4.2	-23.6	20.1	-5.5	
FEBRUARY	-2.4	-1.3	-2.2	-0.6	-1.0	-3.0	-23.5	19.9	1.5	
MARCH	-2.8	-0.4	-0.1	-4.7	-1.0	-2.8	-16.8	12.1	-4.8	
APRIL	-1.4	-1.5	-2.0	-1.2	-0.4	-4.8	-14.0	8.1	-2.2	
MAY	0.5	-3.0	-3.0	1.4	-0.8	-3.1	-14.8	8.2	1.1	
JUNE	2.6	-8.8	1.6	-2.3	0.3	-4.5	-8.9	5.1	1.2	

SUMMARY DATA

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
FISCAL YEAR *										
TOTAL	22,158.7	21,972.8	21,370.4	20,914.5	20,859.0	20,216.6	14,677.1	18,453.7	18,759.5	
DIFFERENCE	-481.9	-185.9	-602.4	-455.9	-55.5	-642.4	-5,539.5	3,776.6	305.8	
% CHANGE	-2.1	-0.8	-2.7	-2.1	-0.3	-3.1	-27.4	25.7	1.7	
JUL-OCT										
TOTAL	7,357.8	7,439.0	7,179.2	6,972.0	6,958.5	6,782.5	4,443.5	6,057.6	6,363.9	6,326.4
DIFFERENCE	-361.6	81.3	-259.9	-207.2	-13.4	-176.1	-2,339.0	1,614.1	306.3	-37.5
% CHANGE	-4.7	1.1	-3.5	-2.9	-0.2	-2.5	-34.5	36.3	5.1	-0.6
CALENDAR YEAR										
TOTAL	22,270.7	21,512.7	21,082.7	20,922.0	20,605.4	16,377.4	17,461.1	18,893.4		
DIFFERENCE	-3.9	-758.0	-429.9	-160.8	-316.5	-4,228.1	1,083.8	1,432.3		
% CHANGE	0.0	-3.4	-2.0	-0.8	-1.5	-20.5	6.6	8.2		
JAN-OCT										
TOTAL	18,535.7	17,977.9	17,628.4	17,446.7	17,207.6	14,479.8	14,393.6	15,692.5	15,521.0	
DIFFERENCE	-34.7	-557.8	-349.5	-181.7	-239.1	-2,727.8	-86.2	1,298.9	-171.5	
% CHANGE	-0.2	-3.0	-1.9	-1.0	-1.4	-15.9	-0.6	9.0	-1.1	

* Runs from July of the previous year to June current year.

Source: EDB.

Gasoline Consumption*, s. a., Million of Gallons 2011-2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	89.7	85.1	85.3	75.1	77.3	83.7	77.4	85.3	73.5	55.2
AUGUST	87.2	83.2	81.6	84.3	78.3	82.2	81.0	78.4	78.3	62.0
SEPTEMBER	88.0	83.1	81.9	77.7	79.7	83.0	78.7	79.7	76.4	65.6
OCTOBER	88.3	83.0	87.1	80.9	83.9	85.2	82.4	79.4	77.7	59.6
NOVEMBER	85.0	84.9	84.7	78.1	86.9	78.3	88.8	81.4	74.7	
DECEMBER	83.3	88.1	85.2	84.1	81.6	75.8	95.6	75.3	78.9	
JANUARY	86.5	87.3	76.2	82.8	83.1	73.4	99.8	78.1	81.0	
FEBRUARY	87.0	84.8	81.3	85.0	80.8	78.2	94.7	78.2	77.1	
MARCH	84.1	85.5	80.1	86.7	85.4	80.1	84.5	80.9	72.6	
APRIL	85.7	80.9	88.4	86.9	80.8	82.8	84.7	76.6	66.1	
MAY	86.3	85.8	77.1	84.5	83.8	82.8	84.6	75.6	59.0	
JUNE	83.0	83.3	81.1	81.5	81.7	85.3	88.6	74.5	52.1	

YEAR OVER YEAR PERCENTAGE CHANGE

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	3.1	-5.2	0.3	-12.0	3.0	8.3	-7.6	10.3	-13.9	-24.9
AUGUST	-3.2	-4.6	-1.9	3.3	-7.2	5.0	-1.5	-3.2	-0.1	-20.9
SEPTEMBER	-3.3	-5.6	-1.4	-5.2	2.6	4.1	-5.2	1.3	-4.1	-14.2
OCTOBER	-7.9	-6.0	5.0	-7.2	3.8	1.6	-3.3	-3.7	-2.1	-23.2
NOVEMBER	-6.7	-0.2	-0.3	-7.8	11.4	-10.0	13.5	-8.4	-8.2	
DECEMBER	-5.1	5.8	-3.3	-1.3	-2.9	-7.2	26.2	-21.2	4.7	
JANUARY	0.3	0.9	-12.7	8.7	0.4	-11.7	35.9	-21.7	3.8	
FEBRUARY	-0.5	-2.5	-4.2	4.6	-5.0	-3.1	21.0	-17.4	-1.5	
MARCH	-2.4	1.7	-6.4	8.3	-1.6	-6.2	5.5	-4.2	-10.4	
APRIL	3.8	-5.7	9.2	-1.7	-7.0	2.4	2.3	-9.5	-13.8	
MAY	-0.3	-0.6	-10.1	9.6	-0.8	-1.1	2.1	-10.6	-22.0	
JUNE	-9.3	0.3	-2.6	0.5	0.2	4.4	4.0	-15.9	-30.1	

SUMMARY DATA

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
FISCAL YEAR *										
TOTAL	1,034.2	1,014.8	989.8	987.3	983.1	970.7	1,040.7	943.6	867.4	
DIFFERENCE	-29.2	-19.4	-25.1	-2.4	-4.2	-12.5	70.0	-97.1	-76.2	
% CHANGE	-2.7	-1.9	-2.5	-0.2	-0.4	-1.3	7.2	-9.3	-8.1	
JUL-OCT										
TOTAL	353.2	334.3	335.9	317.9	319.1	334.1	319.5	322.8	305.9	242.4
DIFFERENCE	-10.8	-18.9	1.6	-18.0	1.2	15.0	-14.7	3.4	-16.9	-63.5
% CHANGE	-3.0	-5.4	0.5	-5.4	0.4	4.7	-4.4	1.1	-5.2	-20.8
CALENDAR YEAR										
TOTAL	1,020.0	1,013.3	964.0	995.0	983.6	986.4	1,016.4	923.6		
DIFFERENCE	-22.1	-6.7	-49.2	30.9	-11.4	2.8	30.0	-92.8		
% CHANGE	-2.1	-0.7	-4.9	3.2	-1.1	0.3	3.0	-9.1		
JAN-OCT										
TOTAL	847.0	843.5	801.9	826.4	829.6	802.0	859.6	770.0	650.3	
DIFFERENCE	-26.8	-3.5	-41.6	24.5	3.1	-27.6	57.6	-89.7	-119.7	
% CHANGE	-3.1	-0.4	-4.9	3.1	0.4	-3.3	7.2	-10.4	-15.5	

* Runs from July of the previous year to June current year.

Source: EDB.

*The EDB applies a three (3)-month moving average adjustment to the gasoline consumption data.

Cement Sales, s. a., (000's of 94lb. Bags) 2011-2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	1,529.6	1,577.2	1,262.2	1,167.7	1,115.5	1,027.2	1,026.5	1,209.6	1,074.9	1,326.0
AUGUST	1,230.6	1,552.1	1,393.6	1,182.7	1,102.1	948.6	959.7	1,197.5	1,144.9	1,583.5
SEPTEMBER	1,527.0	1,702.7	1,283.4	1,077.5	1,019.2	974.4	361.5	1,256.1	1,077.9	1,360.9
OCTOBER	1,868.5	1,494.9	1,267.3	1,138.4	1,060.2	1,011.1	489.3	1,100.9	1,156.8	1,359.9
NOVEMBER	1,688.8	1,475.6	1,338.8	1,198.1	1,079.9	855.6	726.0	1,153.8	1,201.2	
DECEMBER	1,808.1	1,517.9	1,181.5	1,167.0	977.7	1,025.2	1,058.6	1,173.9	1,073.8	
JANUARY	1,755.3	1,490.2	1,298.8	1,150.0	1,095.7	1,001.1	1,098.0	1,145.8	939.4	
FEBRUARY	1,691.9	1,453.1	1,267.2	1,106.2	921.0	1,026.6	1,160.9	1,110.7	1,029.9	
MARCH	1,626.9	1,420.7	1,233.4	1,140.5	911.6	771.3	1,249.0	1,214.5	433.0	
APRIL	1,719.4	1,375.6	1,268.7	1,077.8	912.1	1,103.6	1,250.7	982.7	454.3	
MAY	1,689.2	1,253.3	1,198.0	1,218.4	952.9	935.8	1,233.0	1,085.0	1,322.6	
JUNE	1,720.2	1,285.2	1,239.5	1,156.6	911.9	933.1	1,208.8	1,190.6	1,417.7	

YEAR OVER YEAR PERCENTAGE CHANGE

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JULY	4.8	3.1	-20.0	-7.5	-4.5	-7.9	-0.1	17.8	-11.1	23.4
AUGUST	-18.5	26.1	-10.2	-15.1	-6.8	-13.9	1.2	24.8	-4.4	38.3
SEPTEMBER	4.0	11.5	-24.6	-16.0	-5.4	-4.4	-62.9	247.4	-14.2	26.3
OCTOBER	20.8	-20.0	-15.2	-10.2	-6.9	-4.6	-51.6	125.0	5.1	17.6
NOVEMBER	7.4	-12.6	-9.3	-10.5	-9.9	-20.8	-15.1	58.9	4.1	
DECEMBER	17.9	-16.1	-22.2	-1.2	-16.2	4.9	3.3	10.9	-8.5	
JANUARY	1.6	-15.1	-12.8	-11.5	-4.7	-8.6	9.7	4.4	-18.0	
FEBRUARY	1.8	-14.1	-12.8	-12.7	-16.7	11.5	13.1	-4.3	-7.3	
MARCH	5.0	-12.7	-13.2	-7.5	-20.1	-15.4	61.9	-2.8	-64.4	
APRIL	1.7	-20.0	-7.8	-15.0	-15.4	21.0	13.3	-21.4	-53.8	
MAY	16.5	-25.8	-4.4	1.7	-21.8	-1.8	31.8	-12.0	21.9	
JUNE	25.4	-25.3	-3.6	-6.7	-21.2	2.3	29.5	-1.5	19.1	

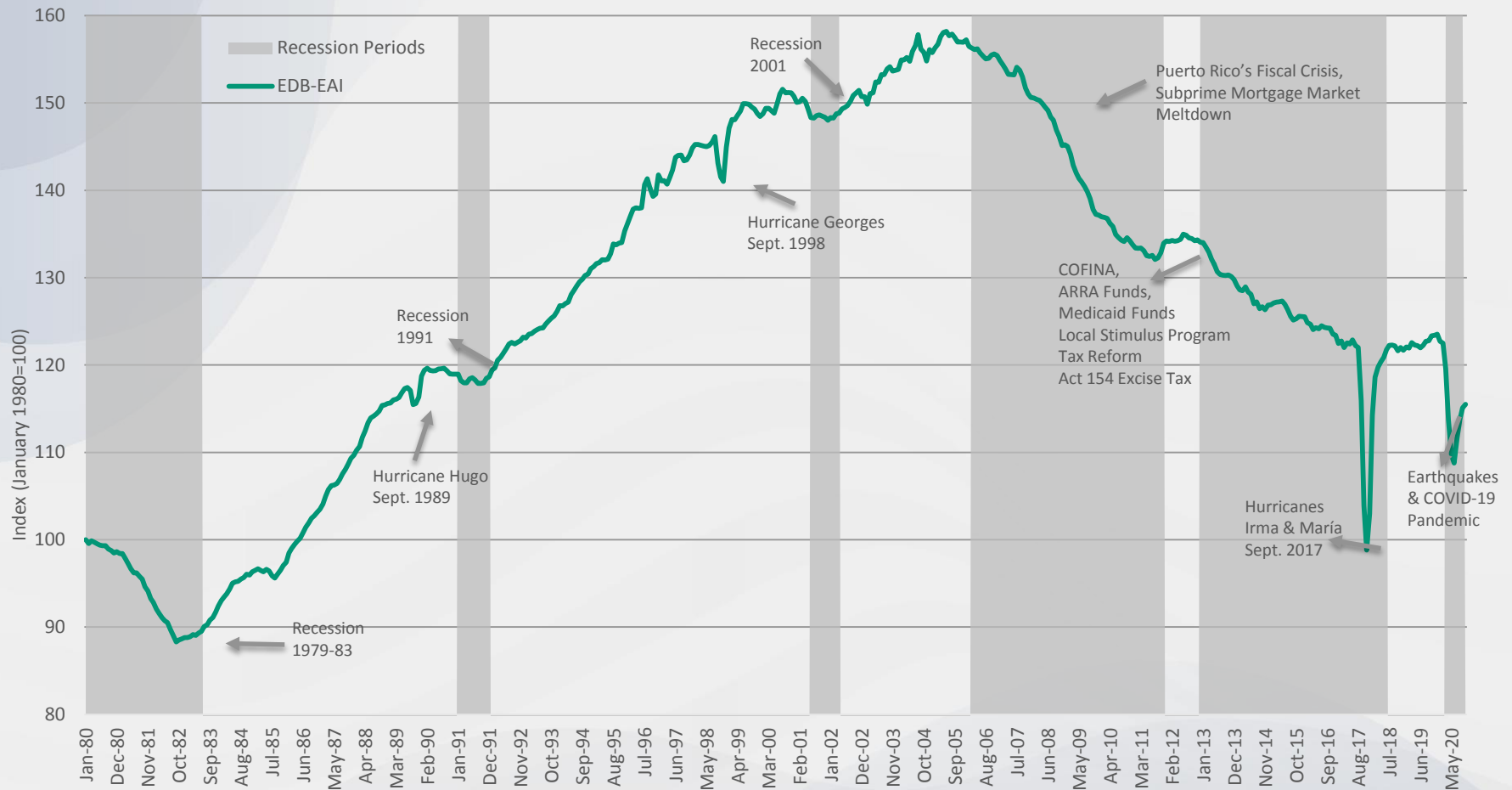
SUMMARY DATA

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
FISCAL YEAR *										
TOTAL	19,855.5	17,598.2	15,232.5	13,781.0	12,060.0	11,613.4	11,821.9	13,821.2	12,326.4	
DIFFERENCE	1,315.0	-2,257.3	-2,365.7	-1,451.5	-1,721.0	-446.6	208.6	1,999.3	-1,494.8	
% CHANGE	7.1	-11.4	-13.4	-9.5	-12.5	-3.7	1.8	16.9	-10.8	
JUL-OCT										
TOTAL	6,155.7	6,326.8	5,206.6	4,566.4	4,297.1	3,961.2	2,837.0	4,764.1	4,454.5	5,630.3
DIFFERENCE	171.5	171.1	-1,120.2	-640.2	-269.3	-335.9	-1,124.2	1,927.2	-309.6	1,175.8
% CHANGE	2.9	2.8	-17.7	-12.3	-5.9	-7.8	-28.4	67.9	-6.5	26.4
CALENDAR YEAR										
TOTAL	19,523.2	16,004.8	14,437.1	13,204.2	11,547.3	10,393.0	14,292.2	13,458.9		
DIFFERENCE	420.3	-3,518.3	-1,567.7	-1,232.9	-1,656.9	-1,154.3	3,899.1	-833.3		
% CHANGE	2.2	-18.0	-9.8	-8.5	-12.5	-10.0	37.5	-5.8		
JAN-OCT										
TOTAL	16,529.7	13,484.6	12,072.1	11,146.6	9,666.5	8,608.3	11,964.4	11,183.8	11,227.2	
DIFFERENCE	923.8	-3,045.1	-1,412.5	-925.5	-1,480.2	-1,058.1	3,356.1	-780.6	43.4	
% CHANGE	5.9	-18.4	-10.5	-7.7	-13.3	-10.9	39.0	-6.5	0.4	

* Runs from July of the previous year to June current year.

Source: EDB.

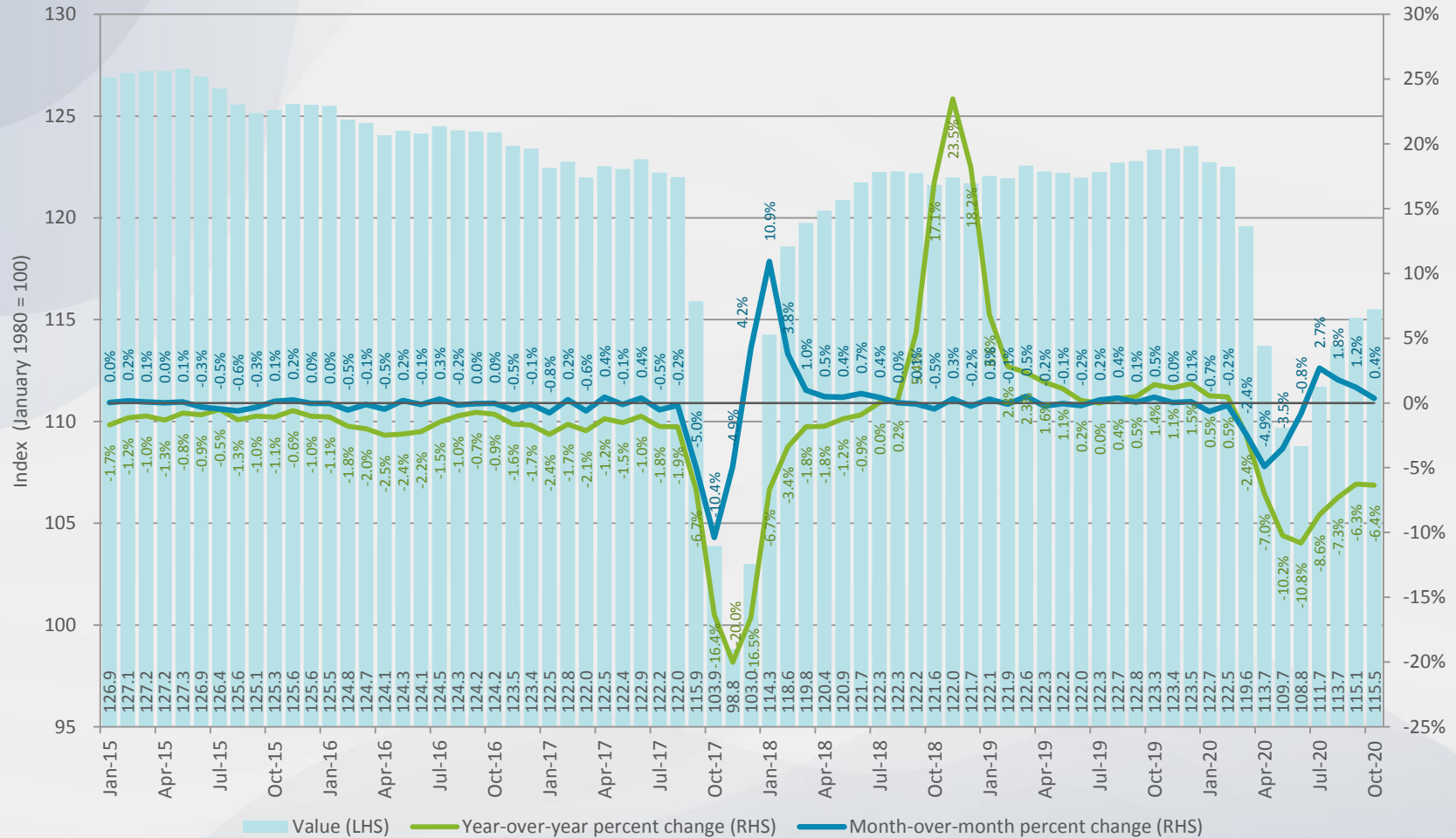
EDB Economic Activity Index Historical Graph from January 1980 to October 2020



The complete series of the EAI concurs with the economic cycles of the Puerto Rico's economy. It starts in January 1980 and exhibits the recession of FY1979 to FY1983, the subsequent recuperation period, the mild recession of FY1991 with its expansion phase, and the recession of 2001. It also shows the downward path of the Index since the beginning of the 2006 recession with a recuperation episode in 2012, after which the EAI resumed its descendent trend in 2013. The collapse experienced after hurricanes Irma and Maria struck the Island in September 2017, and the subsequent effect of the recovery efforts are also displayed. The last drop corresponds to the January 7th, 2020 earthquakes and its related aftershocks, compounded by the burdens that the COVID-19 global pandemic emergency stresses on the economic activity.

Source: EDB.

EDB Economic Activity Index Growth Rates Comparison From January 2015 to October 2020



In October 2020, the EDB-EAI decreased by 6.4% in a y-o-y basis, while it grew by 0.4% when compared to the previous month.

Source: EDB.

Conclusions

- The EDB-EAI y-o-y percent change for **October 2020** was **-6.4%**. Conversely, when compared to September, the Index advanced by **0.4%**.
- The EDB-EAI decreased **2.0%** during **fiscal year 2020 (July – June)**, and dropped by **7.1%** during the period (**July – October**) of **fiscal year 2021**. Likewise, it fell by **5.8%** during the **January – October 2020** period. All the percent changes are the result of a y-o-y comparison.
- **The EDB-EAI y-o-y percent change grew for 20 consecutive months**, in tandem with the recovery efforts that followed hurricanes Irma and Maria, and up until **March of 2020**, when the stricter containment measures to halt the spread of the COVID-19 pandemic were put into effect.
- Consequently, the EDB-EAI shows eight consecutive months with annual decreases since **March 2020**.
- It is important to highlight that during **October 2020**, **one of the Index's four components registered annual growth**: cement sales (**17.6%**); meanwhile, the other three components declined: total non-farm payroll employment (**-7.3%**), electric power generation (**-7.2%**) and gasoline consumption (**-23.2%**).
- When compared against the previous month (**September 2020**), only one component increased: total non-farm payroll employment (0.3%). Gasoline consumption, electric power generation, and cement sales showed reductions of 9.1%, 8.1% and 0.1%, respectively.

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