



Economics and Finance

FY21-22 Third Quarter

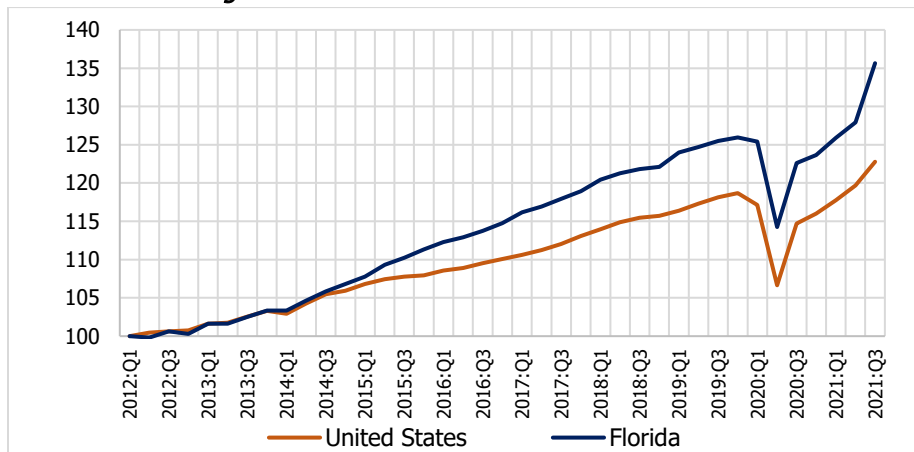
The Florida Department of Financial Services



January 21st, 2022

Florida **Real Gross Domestic Product** (GDP) (in millions of chained 2012 dollars) has been outperforming USA GDP since the second quarter of 2014 (Real GDP by State in millions of chained 2012 dollars; indexed 2012=100). Since average Real GDP growth in the USA has been 6.4 percent annually, whereas growth in Florida has been 9.8 percent annually. The set-back due to the Covid-19 pandemic in 2020:Q2 data, has been severe between the two parties namely at minus 8.9 percent for the quarter. Recuperation has been 15.1 percent and 18.7 percent for the USA and Florida respectively, or 9.8 and 12.1 percent respectively, six quarters annualized. Simply stated Florida's economic recovery in the wake of the pandemic has been stronger than the same of the nation as a whole.

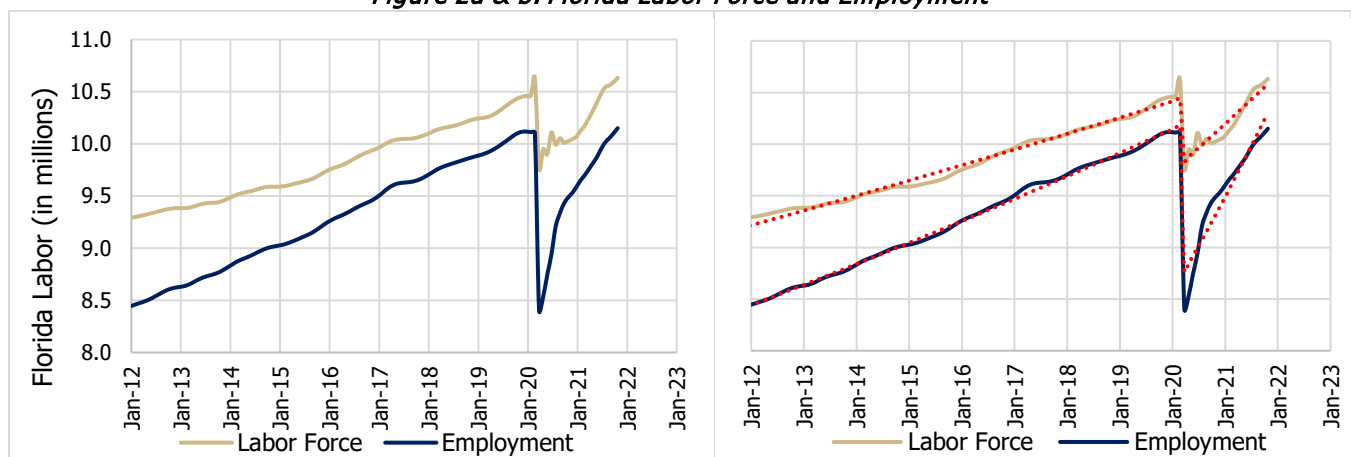
Figure 1. Florida and USA Real GDP Indexed



Source: BEA

Regarding its **Labor Market** Florida has been doing relatively well too, as depicted in Figures 2a and 2b. Labor force growth from 2012 till the pandemic has been 1.5 percent on an annual basis (using growth rate results on the rate induced interrupted time-series best OLS fit on the right-hand side Figure 2b). Since the pandemic, it has more than doubled to 4.7 percent on an annual basis (recuperation). Employment growth was 2.3 percent, while since the pandemic it is 10.7 percent, annualized. Unemployment as per November 2021 was 4.5 percent, still a tad higher than the pre-pandemic low of 3.2 percent, but a significant improvement over the 14.2 percent low in May 2021. The participation rate didn't score significant changes.

Figure 2a & b. Florida Labor Force and Employment

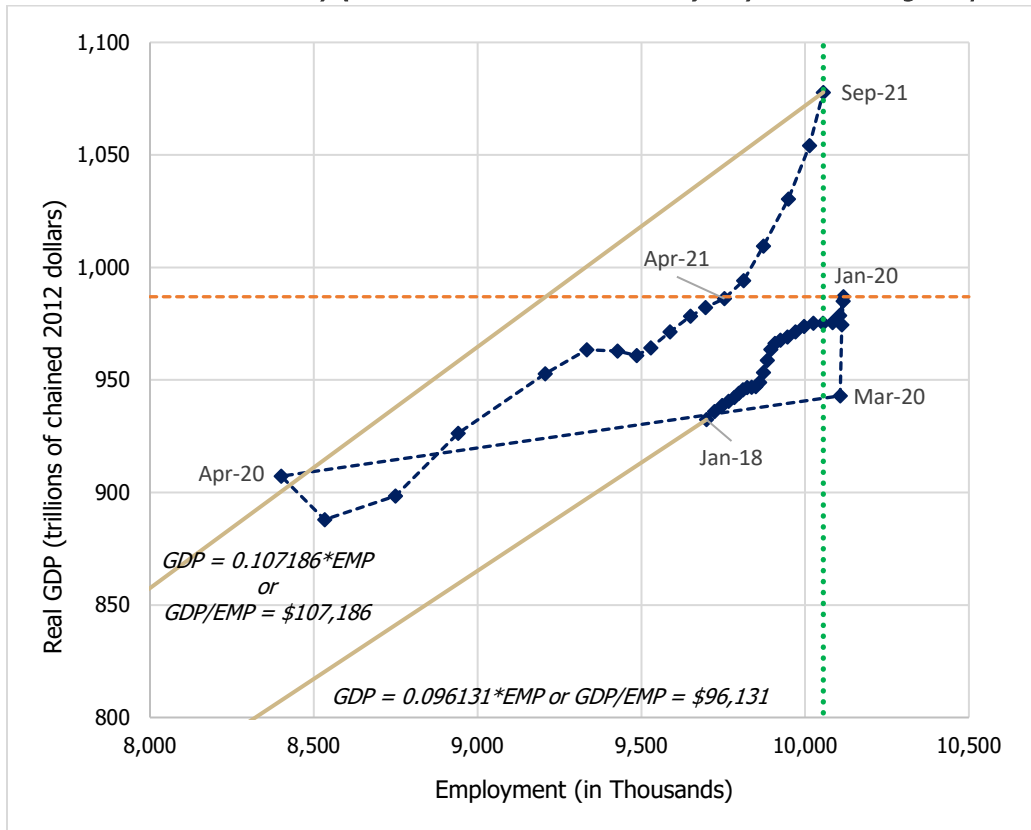


Source: BLS

True some accelerated recuperation took place, and true we are still some 0.6 percent short in total employment with regards to the pre pandemic highs, but the perceived gap is closing rather fast. Unemployment, the difference between the two lines, both pre- and post see significant reductions as well, dropping on average 0.8 percent pre-, and 6.0 percent post-pandemic.

How did Florida fair during the pandemic may be derived from the Figure 3, which shows the combined Real GDP (in millions of chained 2012 dollars) and Employment from Figures 1 and 2, *i.e.*, in **Labor Productivity** (defined as: Real GDP/Employment). The successive monthly datapoints (blue diamonds) show a “pathway” starting at January 2018 followed by a timely high in January 2020. Next a pandemic related drop in March/April/May, and the subsequent recovery towards April 2021. By April 2021 (fourteen months in), Real GDP loss was fully recovered (dashed horizontal red line), *i.e.*, Real GDP shows comparable values with pre-pandemic highs, this however with still 3.6 percent fewer employed. Hence, pandemic displaced labor found employment in more productive occupations/industries. Since, this pattern seems to hold, as we see an additional growth in Real GDP of 9.3 percent (in six months!) towards September 2021,¹ while still shy of pre-pandemic employment highs (compared to Jan 2020, dotted green vertical line). Next, both starting point Jan 2018 and end point of the labor productivity series is linked with the origin using a position vector (solid gold lines). The parameter differences between the first and second line indicate a rise in labor productivity of 11.5 percent in forty five months. In 2012 dollar values, the rise was from \$96,131 to \$107,186 per employee on average, which makes for a 2.95 percent on average annualized (this regardless of the pandemic impact).

Figure 3. Florida Labor Productivity (Real in chained 2012 dollars) July-2017 through September 2021



Source: BEA, BLS

Yes, the Covid-19 pandemic did have an impact on the State finances, as may be taken from Tables 1, and 2. **State General Fund Revenues** comprise Sales Tax, Corporate Income Tax, Gaming/Lottery, and Other. Values in both Tables are not adjusted for inflation or change in dollar values.^{2,3} Seemingly all main rows seem to grow gradually, Hence, relative comparisons are in order.⁴

¹ Real GDP data form BEA for 2021:Q3 is still preliminary.

² Data used is taken from the National Association of State Budget Officers (NASBO), Fiscal Survey of States reports. See: <https://www.nasbo.org/mainsite/reports-data/fiscal-survey-of-states/fiscal-survey-archives>

³ As a gauge the average CPI estimates at approximately 1.776% per annum for 2010 through 2022, this using the Oregon State University Consumer Price Index (CPI) Conversion Factors for Dollars. Data retrieved from: <https://liberalarts.oregonstate.edu/spp/polisci/faculty-staff/robert-sahr/inflation-conversion-factors-years-1774-estimated-2024-dollars-recent-years/individual-year-conversion-factor-table-0>

⁴ Percentages are calculated using a rate induced regression, e.g., $REV = C_{t-1} * \left(1 + \frac{r}{100}\right)$; C_0 and r estimated using OLS.

Table 1. Florida: Fiscal State General Fund, Actual (Millions), FY 2009 through FY 2022

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Beginning Balance	\$631	\$1,573	\$746	\$1,509	\$2,892	\$2,581	\$2,540	\$1,892	\$1,515	\$1,646	\$2,490	\$6,352	\$13,236
Revenues	\$22,165	\$22,960	\$24,039	\$26,095	\$26,604	\$27,966	\$28,534	\$29,945	\$31,962	\$34,106	\$31,486	\$36,281	\$36,901
Adjustments											\$6,438	\$7,391	\$210
Total Resources	\$22,796	\$24,533	\$24,786	\$27,604	\$29,495	\$30,547	\$31,074	\$31,836	\$33,477	\$35,752	\$40,414	\$50,024	\$50,347
Expenditures	\$21,223	\$23,787	\$23,277	\$24,712	\$26,914	\$28,008	\$29,182	\$30,322	\$31,830	\$33,262	\$32,870	\$33,795	\$43,023
Adjustments											\$1,191	\$2,993	
Ending Balance	\$1,573	\$746	\$1,509	\$2,892	\$2,581	\$2,540	\$1,892	\$1,515	\$1,646	\$2,490	\$6,352	\$13,236	\$7,324
Rainy Day Fund Balance	\$275	\$279	\$494	\$709	\$925	\$1,139	\$1,354	\$1,384	\$1,417	\$1,483	\$1,574	\$1,674	\$2,724

Source: NASBO, Annual Fall Reports

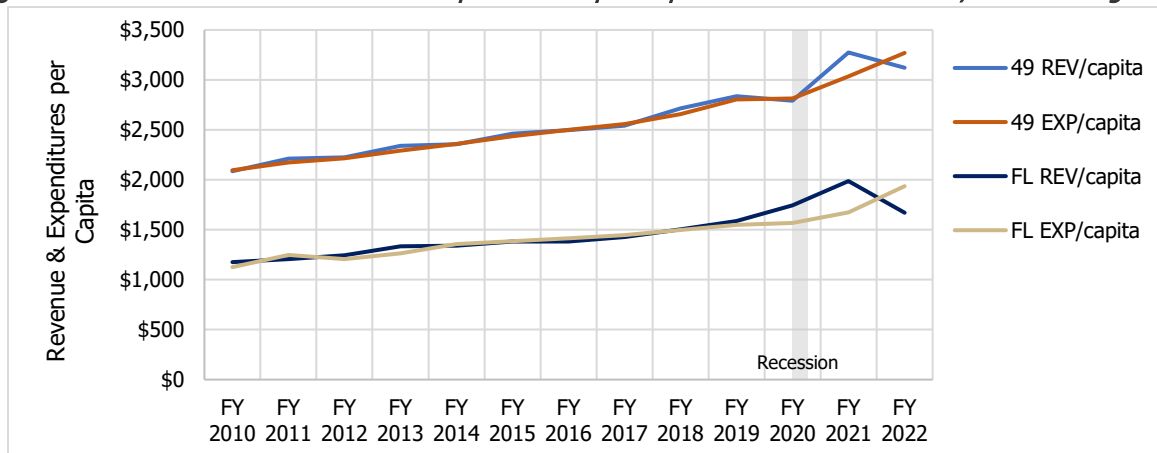
Table 2. 49-States: Fiscal State General Fund, Actual (Millions), FY 2009 through FY 2022

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Beginning Balance	\$9,550	\$6,673	\$17,641	\$20,756	\$34,533	\$33,842	\$42,086	\$40,539	\$35,348	\$53,018	\$62,985	\$55,857	\$129,352
Revenues	\$587,705	\$627,187	\$645,091	\$690,301	\$703,676	\$738,643	\$751,619	\$769,154	\$810,775	\$856,373	\$843,581	\$965,548	\$938,386
Adjustments	\$18,303	\$20,021	\$10,586	\$3,390	\$(470)	\$1,441	\$3,349	\$3,543	\$18,487	\$14,110	\$15,781	\$44,548	\$26,967
Total Resources	\$615,558	\$653,881	\$673,317	\$714,447	\$737,740	\$773,926	\$797,054	\$813,237	\$864,610	\$923,501	\$922,347	\$1,065,953	\$1,094,709
Expenditures	\$602,171	\$621,387	\$643,528	\$669,823	\$698,752	\$729,728	\$755,214	\$778,074	\$791,348	\$834,991	\$860,170	\$897,902	\$975,286
Adjustments	\$6,714	\$14,853	\$9,033	\$10,091	\$5,146	\$2,111	\$1,301	\$(186)	\$20,245	\$25,525	\$6,321	\$38,699	\$35,618
Ending Balance	\$6,673	\$17,641	\$20,756	\$34,533	\$33,842	\$42,086	\$40,539	\$35,348	\$53,018	\$62,985	\$55,857	\$129,352	\$83,801
Rainy Day Fund Balance	\$20,759	\$24,372	\$33,814	\$40,577	\$46,794	\$46,644	\$50,232	\$54,005	\$66,566	\$77,557	\$75,312	\$111,034	\$97,431

Source: NASBO, Annual Fall Reports (50-States Total minus Florida)

Florida Total Resources (now including Adjustments) or Revenues (REV) rose by 5.4 percent annually, whereas Total Revenue for the 49-States (50 States minus Florida) grew at a pace of 4.1 percent annually. At the same time **Total Expenditures** (incl. Adj.) (EXP) grew at 5.4 and 4.1 respectively. This leaves a balance of approximately 0.03 for each; but positive for Florida and negative for the other States. Of course, both Florida and other States service a different population;⁵ a population which grew 1.5 percent annually in Florida, whereas the population in the other states grew 0.5 percent annually. Hence, Florida's population grew a bit over 2.7 times faster than elsewhere. Expressing Total Resources and Expenditures in terms of **per capita** therefor shows a different picture. Florida Total Resources per capita rose by 3.9 percent annually, while Expenditures rose 3.8 on average annually. The same for the other states are 3.5 and 3.6 percent for Total Resources and Expenditures respectively. For both Florida and the other States these percentages are about double the change in inflation or dollar values. Expressed in actual values Florida Revenue per capita the perception is rather different as depicted in Figure 4. The gray shaded area denotes a recession. The essence being that Total Florida Resources per capita versus the other states runs quite lower namely \$910 difference in FY 2010 to \$1,453 in FY 2022.

Figure 4. Florida Total Resources and Expenditures per capita versus Other States, 2010 through 2022

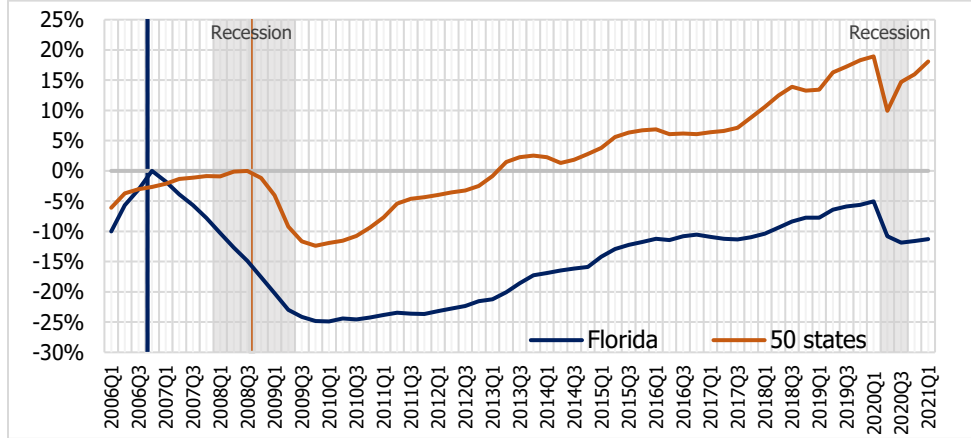


Source: NASBO

⁵ For population estimates, data from the Bureau of Economic Analyses (BEA) is used. Extrapolations are calculated using Cubic Spline.

From a different perspective, Figure 5 shows the change in **Tax Revenue** (only) with each series Florida and the USA based on the great recessions-era peak.⁶ The USA series is added for comparative purposes. The great recession caused a clear decline or setback in revenues (relative to each series highs). Florida in particular saw a drop in revenues of approximately 25 percent. Both Florida's as well as the 50-States median tax revenues recovered, but for the difference that USA tax revenues were recovered plus some, while Florida at present is still setback by over ten percent.

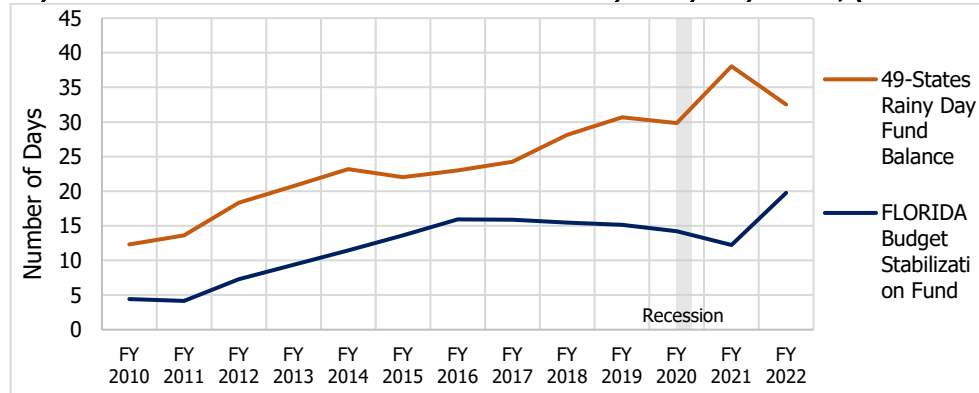
Figure 5. Percent Difference in Tax Revenue from Great Recession-era Peak, Florida State and 50-State Median (2006:Q1 through 2021:Q1)



Source: PEW Trust

Figure 6 depicts Days' worth of Florida expenditures held in **Budget Stabilization Fund** or Rainy Day Funds. Both Florida State and the 50-State median reached approximately 17 days at the time the great recession hit (not shown). Funds, in terms of days' worth dropped to 5 and 6 days respectively (not shown), after which both funds recovered gradually, till FY 2016. Since, Florida's rainy days stayed at a level of approximately 16 days whereas the 49-States indicator reached 30-day levels and up.

Figure 6. Days Florida and Other 49-Sates Could Run on Only Rainy-Day Funds, (FY 2010 - FY 2022)



Source: NASBO

Lat but not least, a quote on **Florida's Debt**. "Florida's debt is the second-lowest in the country (ed. next to Texas). With total liabilities coming out to \$66.8 billion and total assets coming out to \$163.2 billion, Florida's net position is \$97.6 billion. This means that Florida's debt ratio is 40.9%. While Florida's debt has decreased in recent years, it is expected to increase over the next two years."⁷ Florida's Debt Per Capita in FY 2021 is \$1,313.48.⁸

⁶ PEW Charitable Trust, Fiscal 50: State Trends and Analysis, Data from: <https://www.pewtrusts.org/en/research-and-analysis/data-visualizations/2014/fiscal-50#ind0>

^{7,8} World Population Review, see: <https://worldpopulationreview.com/state-rankings/debt-by-state>

