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WHAT'S INSIDE

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The Pandemic Recession Has Given Way to a K-Shaped U.S. Economic Recovery

By Vivekanand Jayakumar, Ph.D.

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As concerns regarding COVID-19 coronavirus intensified in March, policymakers and local officials across the U.S. were forced to impose lockdowns and enact social distancing measures in order to protect the health of individuals, and to avoid overburdening hospitals and other healthcare facilities. Heightened uncertainty and anxiety surrounding the spread and virulence of COVID-19 also led many to voluntarily adopt stay-at-home behavioral modifications. Unsurprisingly, the U.S. economy fell into a self-induced coma in March and April. The sharp reduction in economic activity resulted in a decline in U.S. real GDP (quarter-over-quarter change on an annualized basis) of 5% during 2020Q1 and 31.4% during 2020Q2 (see Figure 1.1). Weekly initial jobless claims rose to unprecedented levels as large parts of the economy shutdown in March and April, and, six months later, initial weekly claims (averaging well over 700,000 in October) and continuing claims (around 7.29 million in the week ending October 24) remain at elevated levels. The COVID-19 pandemic produced severe economic disruptions of a magnitude rarely observed in modern history, and, even with a sharp mechanical rebound in 2020 Q3 (preliminary estimates indicate that the real GDP rebounded strongly at a 33.1% quarter-over-quarter rate on an annualized basis), it will likely be late 2021 before aggregate economic activity and employment return to their pre-pandemic levels (see Figure 1.2 and Figure 1.3).

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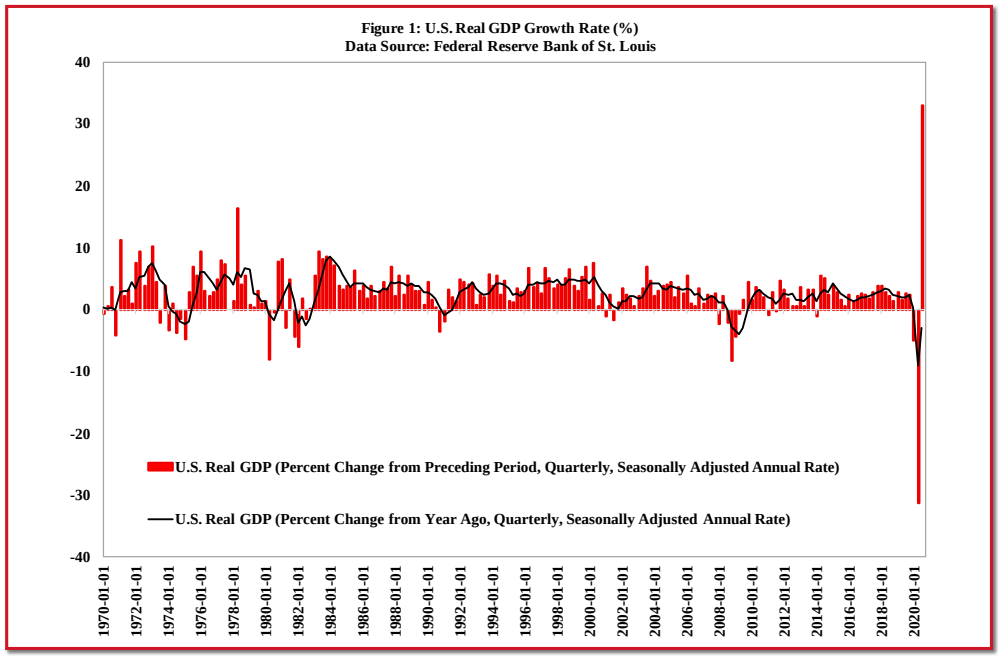

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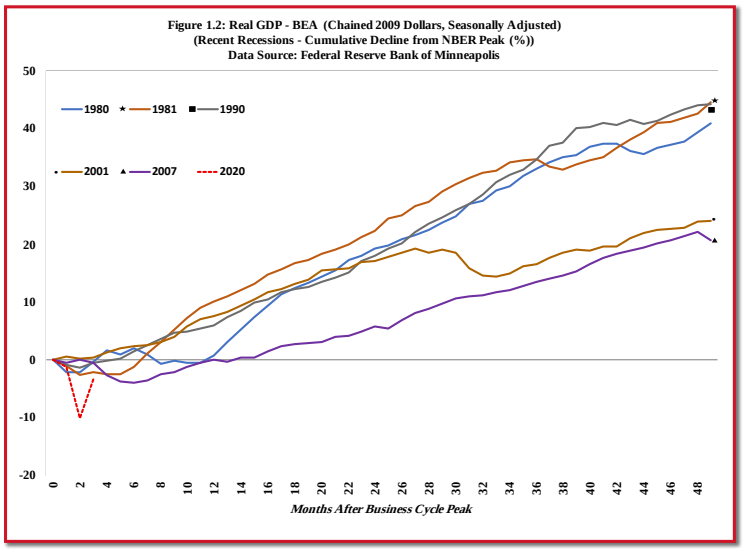

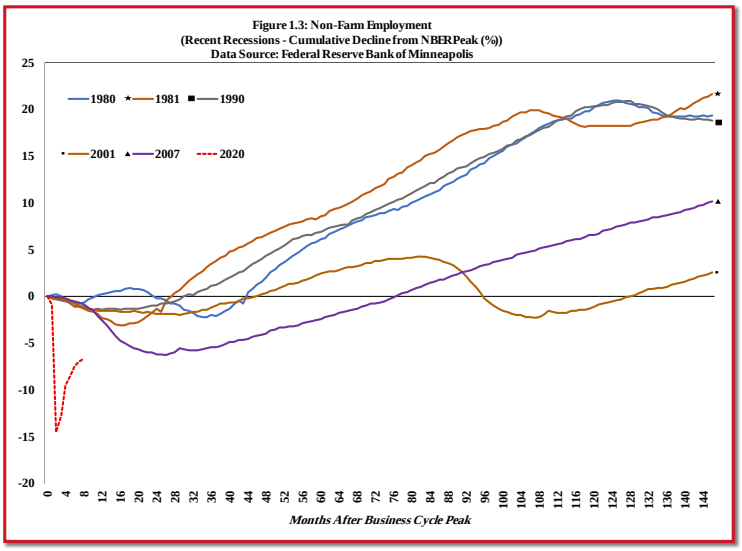

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The Pandemic Recession Has Given Way to a K-Shaped U.S. Economic Recovery

Starting in May, as the economy was gradually reopened, attention turned towards the recovery process. An intense debate emerged in the popular press and amongst economists regarding the potential shape of the economic recovery, with V, U, L, W, and "swoosh-shape" as the leading candidates.

"Despite some sporadic turbulence (triggered by periodic emergence of fresh virus hotspots), it has become increasingly apparent that the U.S. is actually experiencing an uneven economic recovery that could best be characterized as K-shaped."

The pandemic recession and the early stages of the recovery impacted American households and businesses in a very unequal manner. Those at or near the top of the income and wealth ladder have mostly or even fully recovered from the shock while those at the bottom have encountered a depression-like shock to their economic and financial well-being and face an extremely uncertain future. Some businesses (mostly large and well-established ones) have recovered or even flourished while others (primarily small businesses) have struggled or even been decimated by the pandemic recession and the subsequent K-shaped recovery.

In the ongoing two-track economic recovery, those who are well-educated and/or wealthy and those who can work and conduct business remotely have come out of the pandemic recession largely unscathed ((Buckman, et al., (2020), Morath, et al., (2020)). According to analysis of data from two surveys (American Time Use Survey (ATUS) and National Longitudinal Survey of Youth 1979 (NLSY79)) undertaken by economists at the *Bureau of Labor Statistics* (Dey, et al., 2020), there is a significant difference in the ability to undertake telework between those with a bachelor's degree or higher level of education and those with a high school diploma or less, reflecting underlying structural job vulnerabilities (see Table 1.1). Digitally oriented or tech savvy businesses along with firms that cater to the needs of the well-off have largely recovered and some have even seen their fortunes improve during the pandemic. They represent the upper arm of the K. Meanwhile, the bottom arm of the K reflects the fortunes of the less educated and poorer households that have experienced a massive setback and continue to face significant uncertainties. It also captures the reality faced by businesses engaged in providing contact-intensive services directly to customers.

Contact-intensive service sectors (such as travel and leisure, arts and entertainment, education, and hospitality sectors) were hit very hard by the pandemic recession and they continue to encounter tremendous hurdles. Meanwhile, sectors capable of taking advantage of the shift to remote work (such as professional and business services, computer software and hardware, and information and communication technology sectors) and stay-at-home behavioral alterations (e-commerce and delivery service providers, groceries, gaming and streaming content developers and distributors) have seen their fortunes improve. The pandemic has also had a disparate impact on the real estate market. Corporate real estate and rental property owners are facing severe challenges as many clients and renters are unable to meet their lease or rental obligations. On the other hand, households (especially, those with high-skilled workers able to engage in remote work) with strong balance sheets are taking full advantage of historically low mortgage rates to seek out large single-family homes in the suburbs or low-density vacation spots. This has created a strange dichotomy. Even as downtown office spaces lie empty and many low-income households face evictions from their apartments, new and existing single-family home sales are booming (resulting in a spike in home prices). From a geographical standpoint, tourism dependent areas, densely populated cities and downtowns consisting largely of business districts are struggling while suburbs and less densely populated areas with excellent telecommunication infrastructure are thriving.

The pandemic-induced bifurcation of the U.S. economy has also resulted in an unusual level

Table 1.1: Telework Statistics, by Educational-Level and Occupational Breakdown
Source: Bureau of Labor Statistics
bls.gov/opub/mlr/2020/article/ability-to-work-from-home.htm

Category	ATUS			NLSY79		
	Ability-to-telework rate	Classification error rate	Take-up rate	Ability-to-telework rate	Classification error rate	Take-up rate
All	43.6	3.9	24.7	44.8	5.6	21.6
Breakdown by Educational Attainment						
Less than a high school diploma	10.7	0.4	7.7	17.0	4.4	3.7
High school diploma, no college	24.5	1.4	11.3	30.3	4.0	12.8
Some college or associate's degree	36.4	3.0	16.3	42.5	5.0	18.2
Bachelor's degree and higher	67.5	10.8	31.4	70.5	11.3	28.7
Breakdown by Occupation						
Management, business and financial occupations	86.6	13.6	29.7	86.5	22.0	23.4
Professional and related occupations	64.4	8.2	28.1	64.3	7.7	28.5
Service occupations	7.9	2.0	7.0	13.4	4.2	6.3
Sales and related occupations	31.9	4.3	29.2	30.1	8.4	36.4
Office and administrative support occupations	59.2	5.9	10.4	61.5	4.6	7.7
Farming, fishing and forestry occupation	0.0	0.9	—	0.0	0.0	—

of disconnect between the stock market and the real economy. As a consequence of the divergent fortunes resulting from the K-shaped economic recovery, so-called growth stocks (especially the stocks of companies operating in the technology and e-commerce space) surged and reached new highs in early September while the laggards (energy, financials and industrials) still remain well below their pre-pandemic levels. Given the inherent selection biases associated with the construction of stock indices, the outperformance of mega-cap stocks (in early September, Facebook, Amazon, Apple, Alphabet (Google's parent company) and Microsoft, referred to as the "FAAAM" stocks, accounted for nearly 25% of the total market capitalization of the entire S&P 500) created the illusion of a very strong rebound in the overall equity market. The reality was that a few winners (beneficiaries of the uneven recovery) accounted for the lion's share of the surge in stock indices.

Three additional factors also contributed to the strong performance of the U.S. stock market. First and foremost, it was fueled by a surge in central bank liquidity (the Federal Reserve's balance sheet rose by around $3 trillion between February and September of 2020) and an ultra-accommodative monetary policy stance (the Federal Reserve has committed to keeping policy rates near zero until the end of 2023). Second, unprecedented levels of fiscal stimulus cushioned the economic blow from the pandemic and prevented a collapse in consumer spending by providing a temporary surge in income to low- and middle-income households (the *CARES Act* provided $1200 stimulus checks to those making $75000 or less, and offered an extra $600 per week to recipients of unemployment insurance until July 31). Third, the entry of new stock traders (entranced by the availability of convenient and zero-commission trading platforms – a phenomenon referred to as the "Robin Hood effect") also provided a fillip to the stock market. Consequently, U.S. stock markets experienced a sharp V-shaped recovery (see Figure 1.4) between April and September even as sections of the economy continued to underperform and many workers continued to struggle. Given that stocks ownership is still highly concentrated in the hands of the richest 10% of U.S. households, the benefits arising from the strong equity market recovery has largely accrued to those least affected by the pandemic shock.

"The pandemic-induced recession and the lopsided recovery is unusual in several respects when compared to previous downturns."

During previous recessions, the durable goods sector often suffered the most as households postponed purchases of big-ticket items. Also, in past downturns, the services sector was mostly insulated and typically experienced only a modest decline in sales. Interestingly, the durable goods sector has performed much better than the services sector during the pandemic (see Figure 1.5). Stuck at home, consumers have shifted their spending

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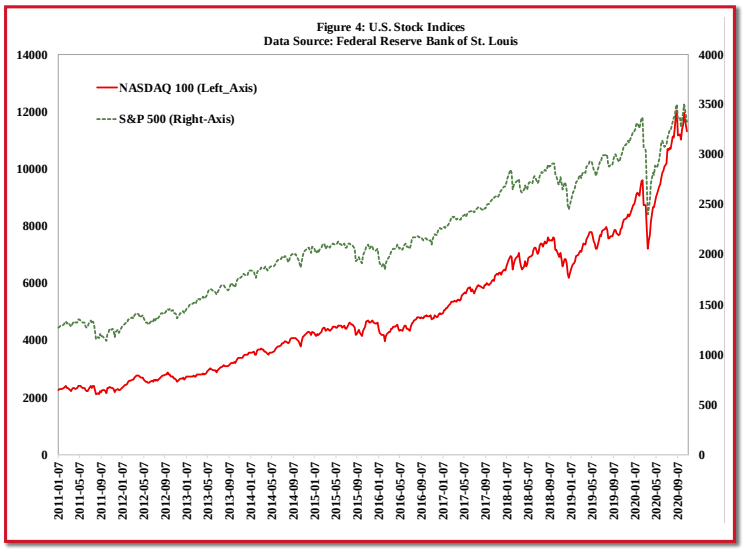

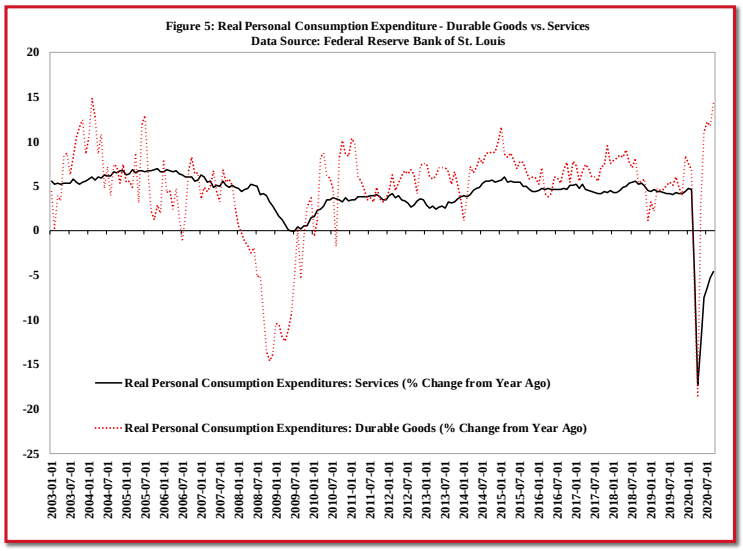

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The Pandemic Recession Has Given Way to a K-Shaped U.S. Economic Recovery

patterns dramatically. They have upgraded home offices and boosted expenditures on items that enhance the domestic living space (such spending and behavioral changes have reduced the need for trips to gyms/yoga studios, restaurants, and schools). Specifically, spending on personal exercise equipment, home office equipment and furniture, home appliances, gaming and entertainment systems, and home schooling/remote learning pods have surged. Meanwhile, reduced spending on travel and leisure activities, indoor dining, and other such activities has had a devastating impact on low-wage service sector employment.

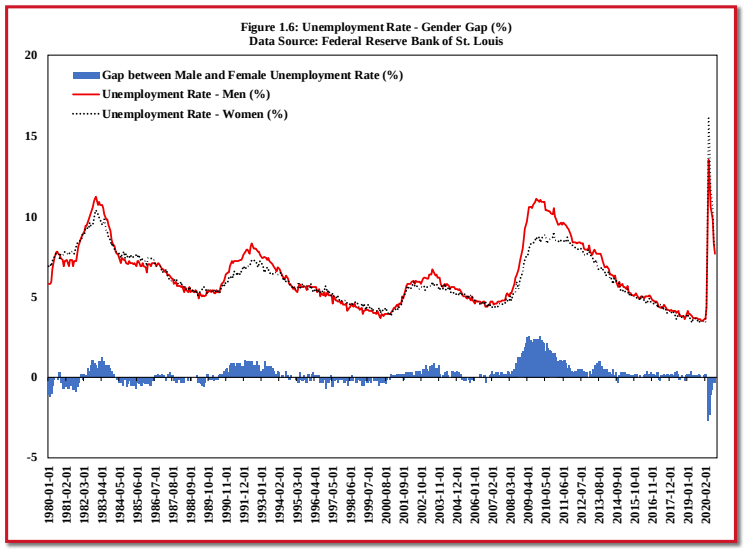
An underappreciated aspect of the shift of household expenditure away from services and towards goods is that many durable goods purchases are not likely to be repeat purchases in the short or even medium term. Once a consumer buys a laptop, a Peloton exercise bike or a home office desk this quarter, he or she is unlikely to buy another such durable item again in the next quarter. On the other hand, many services sector purchases (restaurant meals, movie/theater visits, etc.) involve frequent and repeat purchases. There is a possibility that we may have brought forward demand for many durable goods items to 2020, and, consequently, future demand for big ticket items may lag.

The above noted shifts have proven to be extremely harmful to women and minority workers, who are typically overrepresented in restaurant, retail and hospitality sectors. According to a recent *Washington Post* analysis, not only did the pandemic-induced job losses primarily affect low-wage, minority workers, but the recovery has seen Black women, Black men and mothers of school-age children face the toughest path in regaining employment (Long, et al., 2020). More generally, given that manufacturing and construction have recovered faster than services, the impact on male employment has been somewhat less severe than on female employment (see Figure 1.6). This has led some to suggest that this is the first female recession (Rockeman, et al., 2020).

The longer-term labor market impact of the pandemic is also likely to be quite significant. Two important structural features that have played a key role in the evolution of the U.S. labor market over the past few decades are job polarization and jobless recoveries. According to economists Nir Jaimovich and Henry Siu, *"job polarization refers to the increasing concentration of employment in the highest- and lowest-wage occupations as jobs in middle-skill occupations disappear. Jobless recoveries refer to periods following recessions in which rebounds in aggregate output are accompanied by much slower recoveries in aggregate employment"* (Jaimovich and Siu, 2020, pg. 129). Furthermore, they note that *"the disappearance of per capita employment in routine occupations associated with job polarization is not simply a gradual phenomenon; the loss is concentrated in economic downturns…jobless recoveries in the aggregate can be accounted for by jobless recoveries in the routine occupations that are disappearing"* (Jaimovich and Siu, 2020, pg. 129).

The pandemic may exacerbate the job polarization trends observed over the past few decades. High-skilled workers who could undertake remote work and retain or even boost their productivity have benefited whereas those employed in lower-skilled contact-intensive service industries have borne the brunt of the job losses. Furthermore, the pandemic has speeded up the adoption of various new technologies. The rapid adoption of remote communication technology and contactless payment systems, along with the widespread transition to online shopping and e-commerce activities is likely to have a lasting effect on certain sectors. For instance, it is hard to imagine that business travel and the conference/convention circuits will ever fully return to their pre-pandemic levels. Also, the already struggling brick-and-mortar retail sector has been dealt a serious blow by the pandemic. Looking ahead, the pandemic-induced increase in demand for (and the resultant surge in investment) in autonomous delivery vehicles and robotic process automation will result in further labor market dislocations. The potential for some

of the temporary layoffs to turn into permanent job losses exists and poses a long-term threat to the U.S. economy (Irwin, 2020). Ultimately, new jobs and new industries will be created but, in the near- to medium-term, the impact on those who suffer permanent job losses and find it difficult to transition to different or newly emerging industries will be severe.



Looking ahead, the recovery speed will be dependent on the pace of development of vaccine and therapeutics (promising early results for a COVID-19 vaccine being jointly developed by Pfizer Inc. and BioNTech SE. gave a fillip to stock markets worldwide in the second week of November and led to a sharp rotation from growth to value stocks). It will also depend on the extent and nature of fresh fiscal stimulus. If winter weather keeps people indoors and brings about a larger than expected second wave of coronavirus infections, it could derail the economic recovery and make a mockery of current economic projections. With the recent surge in coronavirus cases, there is rising fear that the U.S. economy will struggle to maintain its recovery momentum in the near term. The resurgence of COVID-19 in Europe and the U.S. since October has already led to a lowering of forecasts for 2020 Q4 GDP growth. Even with a record rebound in the third quarter, U.S. real GDP was 3.5% below the level observed at the end of 2019, and, with an expected cooling of the economy in 2020 Q4, the economy at the end of this year will still be about 2 to 2.5% smaller than it was at the end of last year.

Furthermore, the longer-term sustainability of the economic recovery may be handicapped somewhat by the record high levels of non-financial corporate sector debt and public debt. Even prior to the pandemic, corporate and federal government borrowings were at elevated levels and the debt situation has dramatically worsened in recent quarters. While historically low interest rates and persistent demand for safe assets imply minimal short-term risks, even modest future rate increases would pose a threat to financial stability given the enormous debt load on corporate and government balance sheets.

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The Economic Impact of COVID-19 on the Tampa Bay Economy

By John R. Stinespring, Ph.D.


John R. Stinespring, Ph.D.

How severe has the COVID-19 shock been to our local economy? In this update, we look at the pandemic's impact on local economic indicators from the Tampa Bay metropolitan area (consisting of Hernando, Hillsborough, Pasco, and Pinellas counties combined). The shock is evident in labor markets, housing markets, and measures of aggregate spending. Over the March to September 2020 period, the Tampa Bay economy (TBE) appears to have performed better than many other economies. To illustrate, we compare the TBE's performance to the U.S., and the Orlando-Kissimmee metropolitan area (Orlando).

First consider the labor market. **Figure 2.1** shows that unemployment's historically-long decrease beginning in December 2009, bottomed out near 2.9% for the TBE before the pandemic. At the same time, Orlando's unemployment rate had bottomed at 2.8%; the U.S., 3.6%. Starting in March 2020, stay-at-home orders and social distancing measures were enacted throughout the country in an effort to slow the rate of infection. Unemployment shot up to 13.5% in the TBE and 14.7% in the U.S. Around August, most areas had re-opened and unemployment fell to 6.6 in the TBE and 8.4 percent in the U.S. Though these lockdown unemployment rates were unprecedented in their speed and magnitude, they paled in comparison to Orlando's experience. Unemployment rates peaked at 21% in the Orlando MSA in April. Though the rate declined by August, it remained elevated at 10.7%.

The unemployment peaks are mirrored by the year-over-year monthly payroll troughs in **Figure 2.2**. The payroll decline from February to April 2020 was precipitous. In April 2020, U.S. payrolls were 13% below April 2019 while the TBE's were 10% below. Orlando's payroll decline only reached its bottom in May at an abysmal 16% below its previous year payrolls. By September, the decline in payrolls slowed to a negative 4.5, 6.4, and 9.6 percent, for the TBE, US, and Orlando, respectively.

What explains the stark difference between the Orlando and Tampa MSAs? The main factor may be the different reliance upon tourism and hospitality, denoted by "leisure and hospitality" in **Figures 2.3** and **2.4**. This data shows each MSA's average location quotient (LQ) for various sectors in 2019 along with each sector's share of total local employment. LQs represent employment shares by sector relative to the U.S., where ratios above one indicate sectors in which an MSA specializes relative to the U.S. While Tampa's leisure and Hospitality LQ was 1.14 and the sector employed 12.42% of the labor force, Orlando's LQ was 1.95 and employment was 21.34%. The sector in Orlando comprised nearly double the U.S. average and it employed 1 in 5 workers; the sector for the TBE was only 14% more than the US and employed approximately 1 in 10 workers.

The damage to the labor market impacted retail sales growth. The spikes in monthly unemployment caused cliff-dropping declines in gross sales, our proxy for aggregate demand in our MSAs. The movements in gross sales in the TBE are representative of both MSAs. Orlando's sales movements are quite similar and overlap those of the TBE. Thus, only the TBE sales and sales forecast are plotted in **Figure 2.5**. To illustrate the pandemic impact, a forecast was created using pre-COVID data that is extrapolated to December 2020. The forecast trends up with local expansions amid seasonal spikes in December, March, June and September. The COVID shock is first evident in March sales being below their forecasted values by approximately $1.3 billion. April and May showed even larger deviations from the forecast at $2.6 billion and $1.5 billion, respectively. These represent year-over-year declines of 20.5% and 11.6%, respectively. By July, retail sales had improved enough to produce a $222 million deviation below its trend.

We finish our market study with a focus on housing in the TBE. Signs of a deceleration in growth are more subtle in the housing market. This market is particularly important as it serves as a leading indicator to predict the future direction of the economy. Sustained increases in housing

Figure 2.1 Unemployment Rate (%) for U.S., TBE, FL, and Orlando, Dec 2009 – Aug 2020
Source: U.S. Bureau of Labor Statistics (Seasonally-Adjusted)

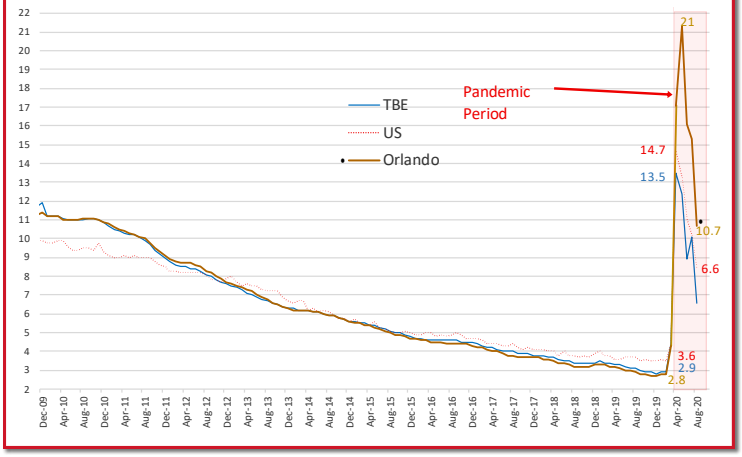
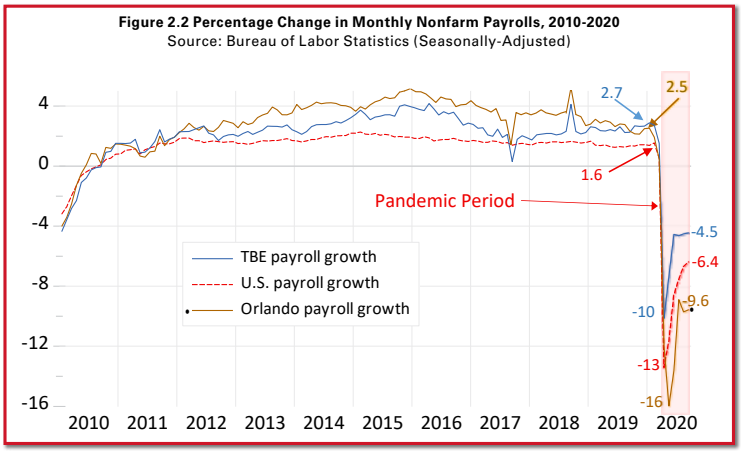
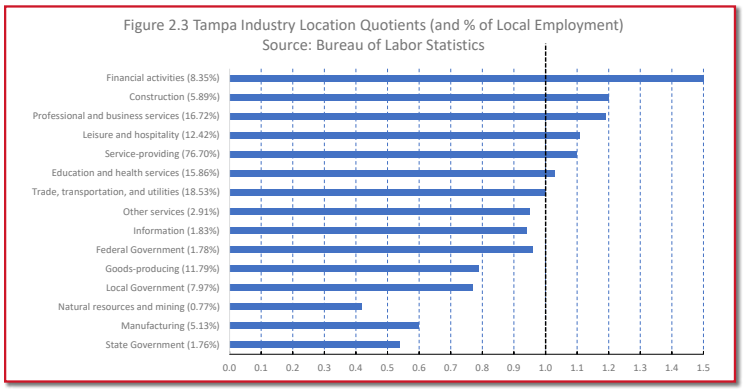
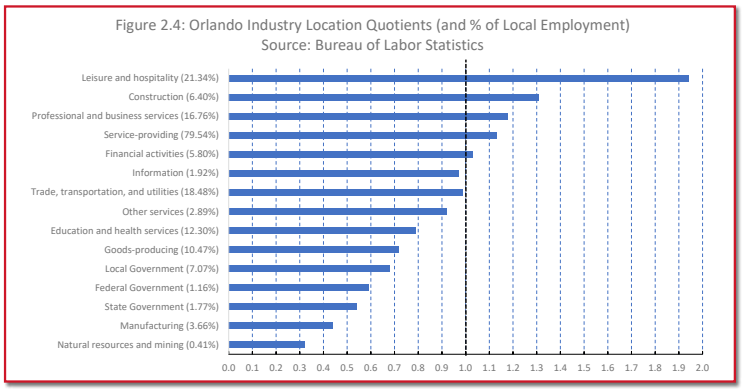


Figure 2.2 Percentage Change in Monthly Nonfarm Payrolls, 2010-2020
Source: Bureau of Labor Statistics (Seasonally-Adjusted)







construction foretell economic expansions and sustained declines presage recessions. First consider the supply side of our local economy's housing market as shown in building permits for new single-family residential construction shown in **Figure 2.6**. To illustrate the impact, we again use a forecast through the end of 2020 using only pre-COVID data and then superimpose it on actual permit data. Though volatile, the data follow a clear upward trend with seasonal spikes. The greater deviations from trend that appear after 2017 were part of a general slowing of the economy-wide growth rate starting in 2017. The COVID shock appears in the contra-seasonality in May, June and July, followed by the largest deviation from trend in August 2020. To quantify these deviations, these four months fell below their forecast values by 21%, 22%, 17%, and 38%, respectively. The most surprising data point was September's spike of 15% above the forecast.

Unlike all other data presented, housing prices over the COVID period did not deviate much from their previous trends. In fact, average home prices increased in all price ranges for the TBE. **Figure 2.7** shows the Case-Shiller Home Price Index (indexed to 100 in the year 2000) for low-, middle- and high-tier homes since June 2009. For perspective, consider that prices for the low-, middle- and high-tiers reached their peak values of 278, 245, and 226, respectively, during the housing bubble of 2006. The plot reveals that only the low tier has exceeded its peak, and that the others may soon if the appreciation continues. This seems likely given that low-tier homes appreciated by 4.9%, mid-tier by 3.7% and high-tier by 3.4% from February through August 2020. Though a modest slowdown of price appreciation occurred for all tiers from April to July, a subsequent acceleration occurred in August. We might speculate that this pattern in pricing explains part of the pattern in housing permits, simply lagged one month. Whatever the pattern, home price appreciation has been the one positive in our update that appears incredibly resilient to the pandemic.

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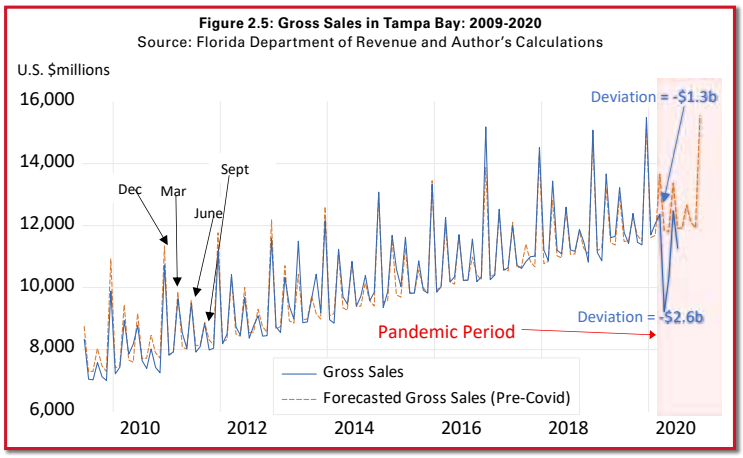

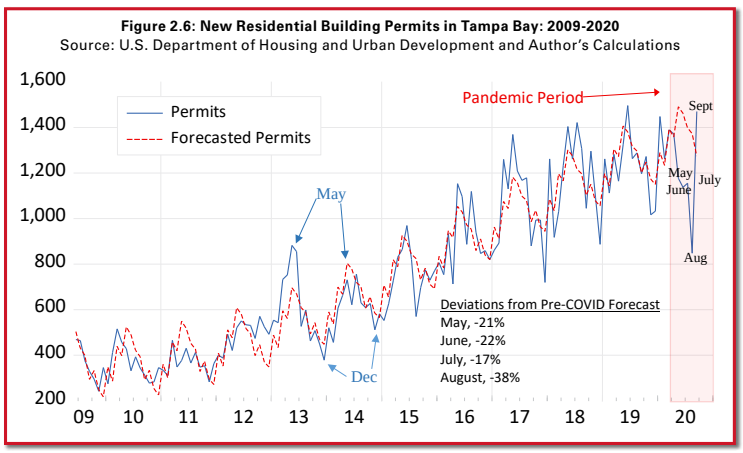

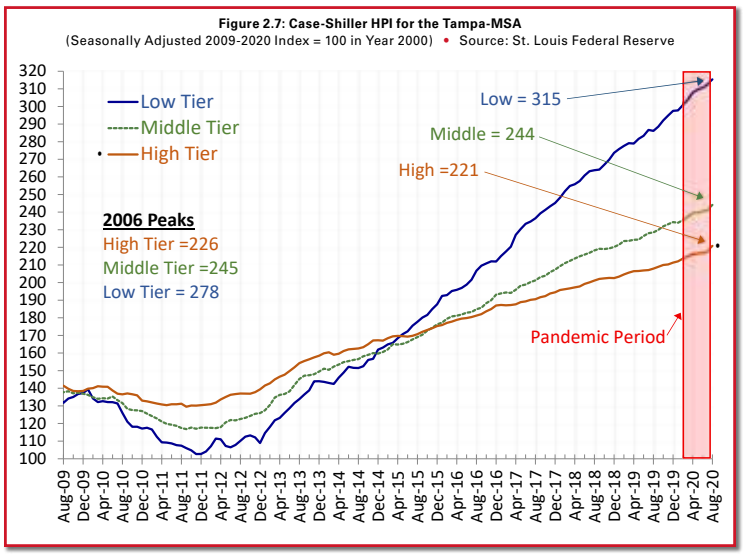

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