Alternative Data Sources for Economic Development: Long-Term Economic Indicators
March 2021

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Summary

As a continuation of our series exploring alternative data sources for economic developers, this month’s issue focuses on the use of long-term and historic economic data to understand the DFW region.

Seeing trends unfold over several decades is essential for two reasons. Firstly, it allows policy makers and business leaders to see beyond the immediate term and understand the full scope of certain issues and trends. For example, although the Dallas-Fort Worth Metroplex is a critical part of the Texas economy, it appears that the market here has more similarities to the wider national economy and is less reliant on oil and gas than the rest of the state. We can infer this from the reaction of the 2015 crash in oil prices, which significantly hampered GDP growth in the state, but had a far lesser effect on the national and DFW economies. Understanding this helps determine the risk that certain changes to the economy pose for our region and can help drive smarter policy.

The second reason is that viewing historic trends allows us to better predict and plan for near-term changes. While our metro’s GDP growth is not strongly tied to oil prices, it does play a massive role in other factors such as retail sales and price increases. This is because high oil and gas prices tend to drive up near-term inflation and cause consumers to not just pay more at the pump, but also everywhere else as shipping prices skyrocket. For this reason, we here in 2022 can learn an important lesson from the past and use these findings to anticipate current or future changes and plan accordingly.
The Great Recession from 2007 to 2009 appears to mark a transition phase from the DFW marketplace, moving the overall trends to match those at the national level rather than the rest of Texas. This can likely be attributed to the financial ties that many businesses in the area have to the rest of the national economy, as well as a diversification of our local market away from the energy sector – which had an outsized impact on the Texas economy in 2015.

*Not seasonally adjusted.*

Source: Federal Reserve Bank of St. Louis, March 2022
In general, the DFW and Texas economies have many similarities in terms of their makeup. The above industries are a sample of some of the industries where there is a major difference between the metro and state. The most obvious is the share of the mining and related sectors industry – which is less than 0.8% of the DFW economy and 4.2% of Texas’ economy. Despite shares from both reducing drastically since 2010, this industry still holds a significant share of the state economy. In DFW the Information, Finance & Insurance, and Professional, Scientific, & Technical Services industries all hold a more significant share of our local economy.

Source: Bureau of Economic Analysis, March 2022
From the 1990s to the Great Recession, the Dallas-Plano-Irving area saw a massive boom in retail sales. From 2000 onwards the rate of growth rapidly declined and became more gradual as the region was built out. Two notable spikes occurred in 2008, which can be attributed to oil and gas prices drastically driving up inflation, and the other occurred immediately following the pandemic, which was a combination of a surge in demand from consumers coming out of shutdowns and global supply chain issues. In their blog post, the White House compares this most recent spike in inflation to the post-WWII inflationary episode which was caused by the elimination of price controls, supply shortages, and pent-up demand.

Note: Retail sales data for DFW only available quarterly.

Source: Federal Reserve Bank of Dallas, Federal Reserve Bank of St. Louis, March 2022.
Like many other economic factors, oil and gas prices are usually in the background for most consumers. When stable, they can gradually drive retail sales up or down depending on the price. Most of the time, the impact is absorbed by the system and seen in subtle ways, but certain events like the 2008 spike in oil prices can massively disrupt the economy. Here, the price of fuel led to a sharp increase in retail sales and inflation for several months. It is likely that we might see similar trends in Q1 of 2022 as the price continues to climb to almost $120 per barrel as of the time of this publication.

Note: Retail sales data for DFW only available quarterly.

Source: Federal Reserve Bank of Dallas, Federal Reserve Bank of St. Louis, March 2022.
Many workers in DFW have seen significant gains in their wages over the last two decades. Between Q1 of 2000 and 2020 the Average Weekly Wage saw an increase by 65% (or 72% for non-seasonally adjusted figures). During that same time, the Consumer Price Index saw an increase of roughly 49%, suggesting that the wages are in fact growing and outpacing local inflation in the long-term. This is also true for the short-term, with the non-seasonally adjusted growth of wages increasing by 2.8% from Q1 2020 to 2021 compared to the CPI growth of 1.5%. This could be potentially impacted by other factors such as gasoline prices or changing hours worked.
### Number of Private Establishments – Major Counties in DFW

<table>
<thead>
<tr>
<th>Change in No. of Establishments</th>
<th>Dallas County</th>
<th>Tarrant County</th>
<th>Collin County</th>
<th>Denton County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 1990 to Q1 2020: Total Change</td>
<td>32,830</td>
<td>24,967</td>
<td>24,756</td>
<td>13,440</td>
</tr>
<tr>
<td>Q1 1990 to Q1 2020: % Change</td>
<td>69.5%</td>
<td>118.5%</td>
<td>643.8%</td>
<td>411.5%</td>
</tr>
<tr>
<td>Q2 2020 to Q2 2021: Total Change</td>
<td>2,430</td>
<td>1,767</td>
<td>2,010</td>
<td>1,268</td>
</tr>
<tr>
<td>Q2 2020 to Q2 2021: % Change</td>
<td>3.0%</td>
<td>3.8%</td>
<td>7.0%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

*Not seasonally adjusted.*

Source: Federal Reserve Bank of St. Louis, March 2022
Questions?
Please contact Cody Gibbs at Cody.Gibbs@UTDallas.edu
or visit us at https://economicengine.utdallas.edu/

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