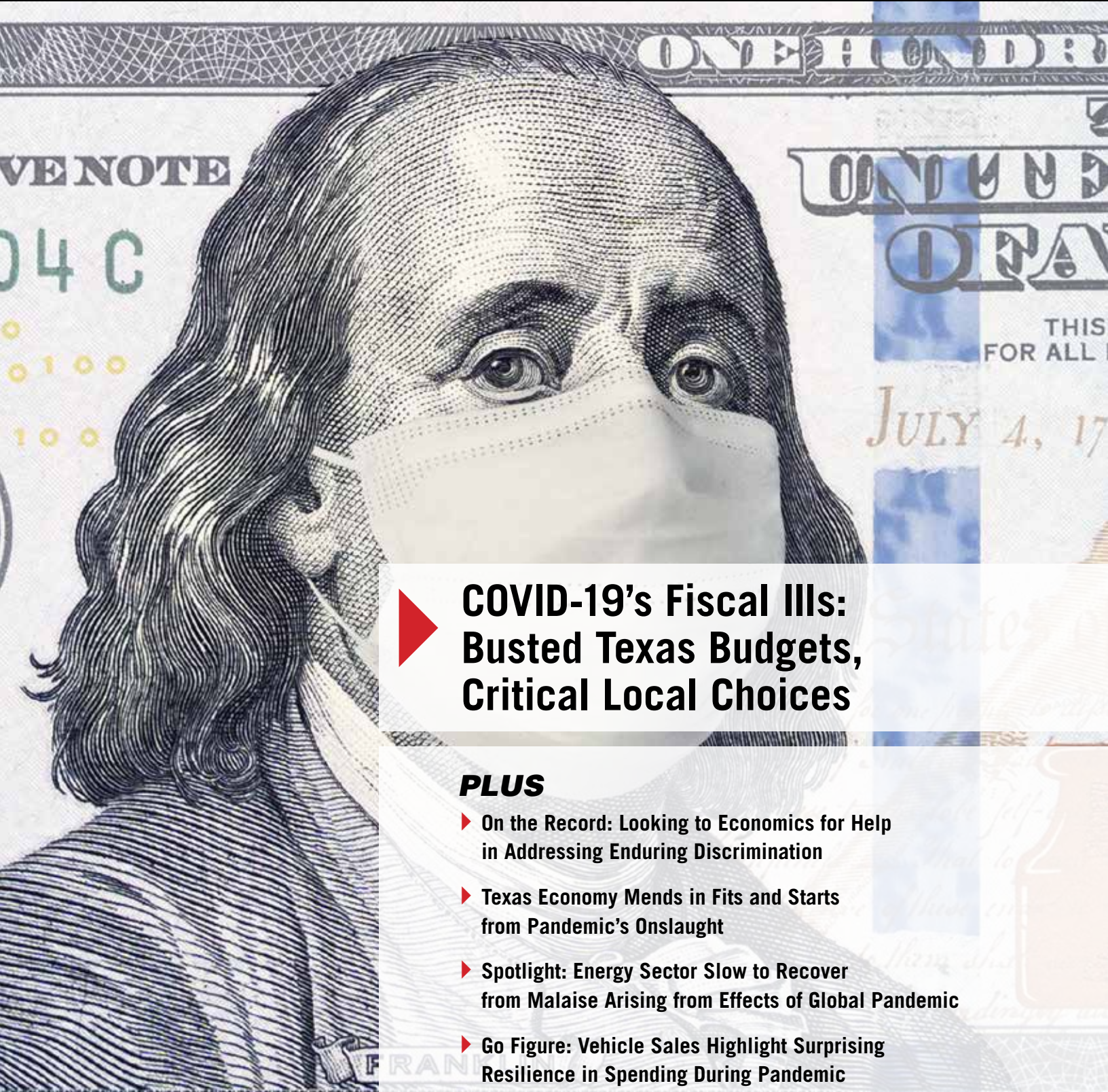




Southwest Economy



COVID-19's Fiscal Ills: Busted Texas Budgets, Critical Local Choices

PLUS

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President's Perspective

Rob Kaplan, president and CEO of the Dallas Fed, regularly speaks and writes on the factors that affect economic growth in the nation and Eleventh District. Here are some of his recent thoughts on key issues:

On the Fed Adopting Average Inflation Targeting

“This is not a formula; it’s not a commitment. We’re not going to use an arithmetic average. It simply means to me [that] as we get down to lower levels of unemployment, I’m going to look at a whole range of circumstances and factors. And if I think inflation is likely to be muted, I’m willing to take a little bit more risk and have a little more tolerance for a modest overshoot.”

Interview with CNBC—Aug. 27, 2020

On Providing Additional Forward Guidance

“I would prefer to wait. I would prefer to get more clarity on the path of the [COVID-19] virus. I think we’ve already given quite a bit of forward guidance. Through our Summary of Economic Projections, we have already said that rates are going to stay low for the rest of this year and all of next year, and I would prefer to show some restraint here. I think we’ve done quite a bit.”

Interview with Bloomberg TV—Aug. 28, 2020

On the Need for Additional Fiscal Policy

“I believe the economy needs a continuation of the unemployment benefits. It may not need to be in the same form as it currently is, but we need a continuation when you’ve got 17 million out of work and another several million who are working part time and would like to work full time and need some income support. The second part is aid to state and local governments that are needing to cut back because they have a fiscal hole and they have to balance their budgets—and we’re looking to them to help get schools back, reopened.”

Interview with CNN—Aug. 5, 2020

On the Importance of Mask Wearing

“[At] the forefront of this economy is the virus. And that starts with the whole ecosystem at the front end—all of us wearing masks. And it became clear to me talking to epidemiologists ... the light went on where I realized we could actually manage this. We could substantially mute the transmission of this disease where the public could reengage in a broad range of activities. And we could recover faster if we all wore masks.”

Interview with The Wall Street Journal—July 17, 2020



COVID-19's Fiscal Ills: Busted Texas Budgets, Critical Local Choices

By Jason Saving

ABSTRACT: COVID-19 and related economic shutdowns have raised concerns that state and local government revenues will fall short of expectations just as demand for services soars. Based on experiences from the Great Recession, the last such downturn, it appears that difficult times for local jurisdictions will likely extend into 2021 and that Texas and its cities will face belt-tightening in the months ahead.

Texas tax revenue on a year-over-year basis plunged by an alarming 49 percent in April, the first month to fully reflect the economic impact of COVID-19. While tax collections have since partially recovered, the state comptroller forecasts a \$4.6 billion shortfall for the 2020–21 budget cycle. Many localities, also dependent on the sales tax, project significant belt-tightening.

The budgetary woes pose potentially dire implications for individuals seeking government services and for firms whose survival depends not only on consumers' current health, but also on who bears the tax burden.

Texas' Tax Structure

The Texas budget had anticipated expenditures of about \$125 billion, with about half of the money expected to come from state taxes and the rest from other sources such as license fees, lottery proceeds and federal transfers.

The state raises its revenue primarily by taxing consumption (*Chart 1*). Roughly three-fifths of tax dollars come

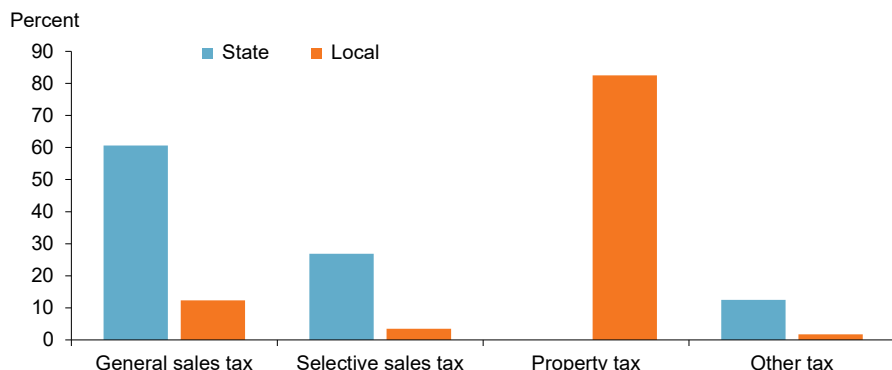
from a single source: the general sales tax of 6.25 percent that is assessed on most retail transactions.¹ Another quarter comes from selective sales taxes on goods such as motor fuel and automobile purchases, and most of the remainder (one-eighth) from business taxes such as the franchise tax.

The sales tax is less important to local governments. Cities, counties and other taxing authorities raise more than 80 percent of their revenue from the property tax and most of the rest (12.3 percent) from the general sales tax.²

The remainder (5.2 percent) comes from a variety of sources, including hotel taxes and utility taxes, which are important for certain jurisdictions though they constitute only a small part of total revenue.

While there are differences in how state and local governments raise revenue in Texas, one area in common is the lack of an income tax. Such a tax provides about a quarter of state and local revenue in other states but is subject to greater revenue volatility in tough economic times, potentially leading to

CHART 1 Sales Taxes Fund Most State Operations; Property Taxes Go to Local Entities



NOTES: The chart depicts shares of state/local revenue by source. "Selective sales" includes taxes on motor fuel and automobiles.

SOURCES: 2017 Census of Governments; author's calculations.

larger fiscal adjustments than would be expected in Texas.³ Yet, no tax system can fully guard against recession.

Great Recession Lessons

When an economy enters recession, two things simultaneously happen. Demand for government services rises as people find themselves with less income because they are working fewer hours or no hours at all. At the same time, the revenue available to fund those services falls because those reduced personal earnings translate directly to a reduction in taxes paid.

Countries typically handle these kinds of shortfalls by running deficits during difficult times. However, this avenue is not available to U.S. states because (with the exception of Vermont) they are required to balance their budgets. Similarly, cities are generally required either by state law or their own charters to run balanced budgets on a yearly basis.⁴

Thus, lawmakers must make fiscal adjustments to close the gap between expected revenues and necessary expenditures, often with distinct consequences for those dependent on local government services and for the taxpayers who fund the services.

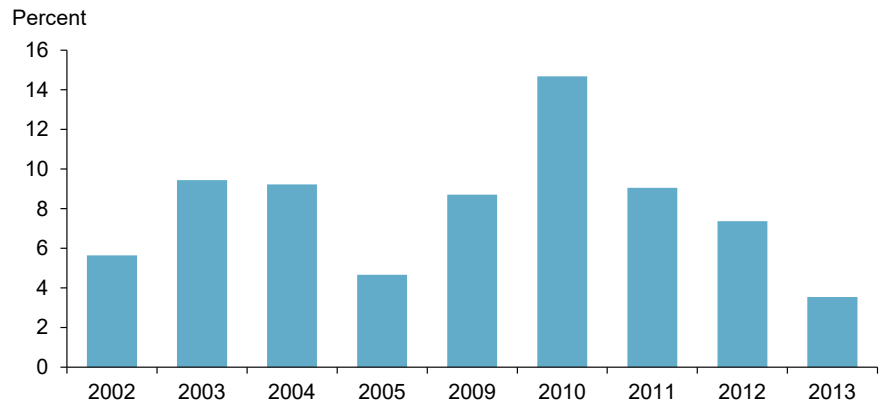
While it's unclear what that adjustment will look like in the COVID-19 era, a look at the Great Recession reveals what can happen. State lawmakers across the U.S. were required to close an 8.5 percent budget shortfall in 2009 through a combination of spending cuts and tax increases (*Chart 2*).

Officials initially hoped they could reverse those cuts in the next fiscal year. Instead, they faced an additional 14.5 percent shortfall in 2010 and a 9 percent gap in 2011, leading to deep cuts in areas such as education.⁵ Such reductions can hurt struggling families in the short run and likely reduce economic growth over the long run.⁶

How did U.S. tax revenue change as the Great Recession took hold? Between 2008 and 2009, state sales and gross receipts taxes on all products fell 3.9 percent, to \$345 billion. State individual income tax revenue fell much more, down 11.9 percent to \$245 bil-

CHART 2

State Shortfalls Averaged Almost 15 Percent of General Revenue in Year After Great Recession



NOTES: The chart shows cumulative budget shortfalls confronted by the 50 states as a share of general revenue. They are covered by some combination of higher taxes, lower spending, rainy-day withdrawals and federal transfers. The Great Recession occurred from December 2007 to June 2009. Data are unavailable for 2006–08. SOURCES: Center on Budget and Policy Priorities; Census Bureau; author's calculations.

lion, and corporate income tax revenue declined 22.6 percent to \$38 billion.

By comparison, local property taxes rose 3.8 percent over the period, though home price declines would later take a fiscal toll on localities.

Overall, state income tax revenue fell about four times faster than sales tax revenue, prompting fiscal crises in states such as California and New York that rely heavily on income taxes. This is consistent with economic research documenting the relative volatility of such tax revenue and suggests income-tax-reliant states might have a tougher time dealing with the economic impact of COVID-19 despite federal income support programs to mitigate income declines.⁷

While all states are facing revenue shortfalls, those with a high dependence on income taxes are projecting truly prodigious revenue shortfalls (*Chart 3*).⁸ California's legislative analyst office projects a deficit of 16 to 21 percent in the new fiscal year, which began July 1. New Jersey's treasury department says the state will run 18 percent below budgeted levels, while New York anticipates a 12 percent gap.

Separate estimates from the Center on Budget and Policy Priorities reinforce these general conclusions. The nonprofit research institute finds that, nationwide, real state budget shortfalls for fiscal 2020–21 will be about 10

percent larger than during the Great Recession years of 2009–10, a sobering prospect for many.⁹

Texas Tax Receipt Slump

Texas started its current fiscal year on an upbeat note. Halfway through fiscal 2020—at the end of February—tax revenue was 5.6 percent ahead over the same period in the year prior.

However, revenue declined 10.6 percent in the second half of the fiscal year compared with the same period in 2019 as COVID-19's economic impact emerged. Sales tax collections alone fell 4.7 percent (\$816 million) during the period.

Consumption often falls during recessions as people find themselves with less disposable income, putting at risk the three-fifths of state tax revenue that the sales tax provides.

If anything, social-distancing policies aimed at limiting COVID-19 spread may have exacerbated sales tax losses because the additional obstacles to conducting in-person transactions have been only partially offset by online or internet alternatives.

While diminished sales tax receipts are certainly part of the story, total state tax revenue slipped just over \$3 billion in the second half of the fiscal year. That disappearing \$800 million, while significant, represents only one-quarter of the state's total tax revenue loss.

That means other, smaller taxes have declined far more than the sales tax (Chart 4).

Levies on gasoline (down 13.3 percent), alcohol (off 41.0 percent) and hotels (down 52.6 percent) have been a key contributor to the shortfall. These taxes all correspond to the leisure and hospitality activities that have been dramatically curtailed because of social-distancing behavior, lockdown regulations and consumer health concerns.

Generating revenue from these taxes depends on how quickly individuals resume normal activities and policy-makers permit businesses—which are themselves dependent on the level of COVID-19 cases—to fully reopen.

Another important contributor is the tax on oil production and extraction, a sector that was just beginning to recover from the late-2018 price slump and uneven recovery in 2019 when the pandemic struck.¹⁰ Oil-tax revenue fell slightly last fall and rose 33 percent in the winter before abruptly plummeting by half during the ensuing months.

This can be contrasted with the less-meaningful tax on natural gas, where COVID-19 exacerbated difficulties in an already soft market.

One of the few taxes moving in the other direction is the franchise tax—Texas’ main tax on business revenue—which actually rose 3.4 percent in the second half of fiscal 2020. However,

firms’ 2020 franchise-tax payments reflect revenue earned in 2019, in much the same way individuals pay income taxes on what they earned the previous year. As a result, the 3.4 percent increase is not reflective of current economic conditions, though it helps mitigate the revenue declines.

Unequal Metro Performance

While available local government data are mostly dated—largely collected before COVID-19—the recent Texas tax revenue developments shed light on what is happening in the state’s larger metropolitan areas.

The Dallas Fed publication *At the Heart of Texas* examines major metros in the Federal Reserve’s Eleventh District and highlights their key industries, several of which correspond directly to soft spots in the tax data.¹¹

For example, the large decline in social/travel tax revenue at the state level can be expected to disproportionately affect San Antonio, whose economy is substantially based on tourism. Declines in the retail sector can be expected to disproportionately impact cities such as McAllen that are regional retail hubs and destinations of significant (but now much diminished) traffic from Mexico. And the ongoing decline in severance-tax revenue stems from energy sector woes that would disproportionately touch Houston and especially Midland/Odessa, whose

economy is less diversified than Houston’s and, thus, even more vulnerable to energy slowdowns.

More generally, year-to-date sales tax revenue by city provides insight into the impact on metros of social-distancing behavior and related regulations. Very few other comprehensive local-government data sources are available on a timely basis.

In the COVID-19 era, one might reasonably suspect that consumption in smaller towns would hold up better than in larger cities because the virus would spread more rapidly in densely populated areas and people residing in rural or suburban areas would be less prone to travel to nearby large cities for social outings.

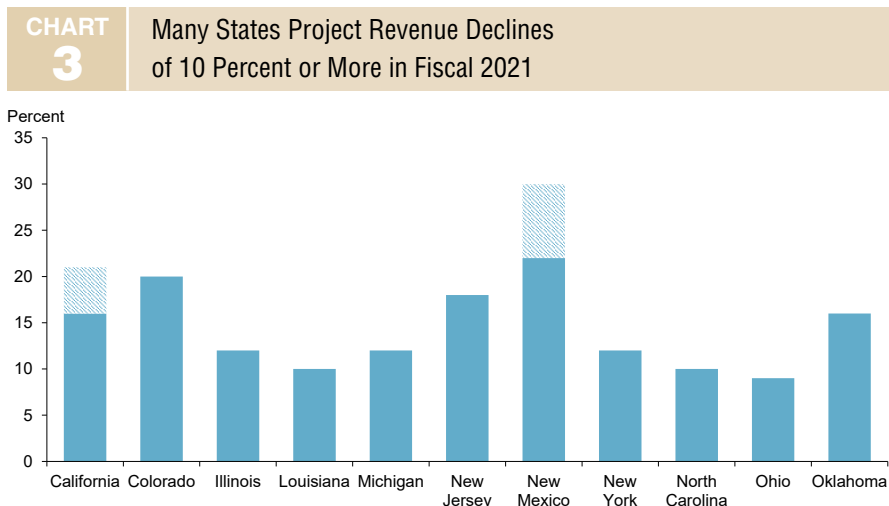
This is borne out in the data, with 73 percent of the state’s municipalities showing sales-tax growth for fiscal 2020, which began Sept. 1, 2019. However, the five largest cities are all down for the year. Whether this might lead to a longer-term shift toward less-densely-populated living or simply a brief social-distancing blip remains unclear, but it will be critically important to localities in the years to come.

Federal Government Aid

Overall, the decline in Texas tax revenue illustrates the many and varied ways in which COVID-19 has directly or indirectly affected the state government’s fiscal situation. Many local governments are struggling as well, especially in the hardest-hit larger cities.

Because both the state and its major municipalities are bound by balanced-budget requirements, they can resolve their current fiscal disparities—assuming the jurisdictions are left to their own devices—with a combination of tax increases and spending cuts.

That means Texas and its constituent parts face the unpalatable choice of either raising taxes during soft economic times or reducing services in areas such as health and education whose provision is, arguably, particularly important during the crisis. The state at least has access to its \$8.5 billion rainy-day fund, which could soften the fiscal blow, but localities don’t typically have

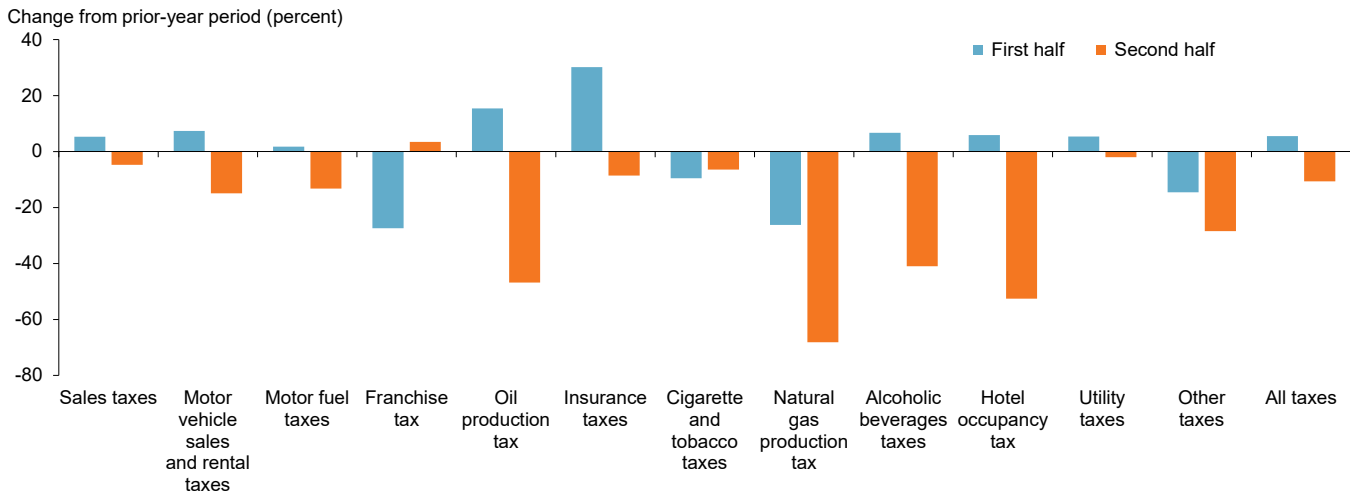


NOTE: The shaded blue area indicates the projected range for a state’s budget decline. Texas is expected to incur a 10 percent revenue decline during its 2020–21 biennial budget period.

SOURCE: National Conference of State Legislatures.

CHART
4

Texas Sales Tax Revenue Dips in Second Half of Fiscal 2020; Most Other State Taxes Plunge



SOURCES: Texas Comptroller of Public Accounts; author's calculations.

similar fund balances and, in many cases, were fiscally stretched even before COVID-19 began.^{12,13}

To mitigate those developments, Congress has provided some fiscal support to state and local governments, such as the \$150 billion Coronavirus Relief Fund, which was created as part of the Coronavirus Aid, Relief, and Economic Security Act enacted in March to defray unplanned expenditures made necessary by the impact of COVID-19.¹⁴

Additionally, the Federal Reserve's Municipal Liquidity Facility is providing credit to some cash-strapped state and local governments around the country. However, the Fed backing is in the form of loan guarantees, not gifts, so it is best viewed as adding fiscal leeway rather than actually bailing out affected localities.

While these measures provide a degree of respite for state and local officials, they can only go so far to relieve the stress of COVID-19. A safe return to more-normal business operations is a necessary prerequisite to generate the robust state and local tax revenue on which social services ultimately depend.

Saving is a senior economist in the Communications and Outreach Department at the Federal Reserve Bank of Dallas.

Notes

¹ Local jurisdictions can add 2 percentage points, bringing the total rate assessed on many transactions to 8.25 percent.

² For more on property taxes in Texas, see "Texas Property Taxes Soar as Homeowners Confront Rising Values," by Jason Saving, Federal Reserve Bank of Dallas *Southwest Economy*, Third Quarter, 2018, www.dallasfed.org/~media/documents/research/swe/2018/swe1803c.pdf.

³ These taxes also differ in their regressiveness. For more information, see "Texas Taxes: Who Bears the Burden?" by Jason Saving, Federal Reserve Bank of Dallas *Southwest Economy*, Third Quarter, 2017, www.dallasfed.org/~media/documents/research/swe/2017/swe1703b.pdf.

⁴ "Public Budgets," National League of Cities, www.nlc.org/public-budgets, accessed Aug. 5, 2020.

⁵ For more on the lasting legacy of these cuts, see "A Punishing Decade for School Funding," by Michael Leachman, Kathleen Masterson and Eric Figueroa, Center on Budget and Policy Priorities, November 2017, www.cbpp.org/research/state-budget-and-tax/a-punishing-decade-for-school-funding.

⁶ For an overview of how funding affects outcomes, see "Does Money Matter in Education?" by Bruce D. Baker, Albert Shanker Institute, April 2019, www.shankerinstitute.org/resource/does-money-matter-second-edition.

⁷ Much of the federal support provided during the pandemic, such as the \$1,200 stimulus checks, are not taxable income and, thus, don't directly contribute to state income tax revenue.

⁸ Fiscal years typically extend from July 1 to June 30. However, Texas' fiscal year runs from Sept. 1 to Aug. 31.

⁹ See "States Continue to Face Large Shortfalls Due to COVID-19 Effects," by Elizabeth McNichol and Michael Leachman, Center on Budget and Policy Priorities, July 2020, www.cbpp.org/research/state-budget-and-tax/states-continue-to-face-large-shortfalls-due-to-covid-19-effects.

¹⁰ For more on the relationship between energy prices and the state budget, see "Lingering Energy Bust Depresses, Doesn't Sink State Budget," by Jason Saving, Federal Reserve Bank of Dallas *Southwest Economy*, Fourth Quarter, 2016, www.dallasfed.org/~media/documents/research/swe/2016/swe1604b.pdf.

¹¹ For more information, see *At the Heart of Texas: Cities' Industry Clusters Drive Growth*, Federal Reserve Bank of Dallas, December 2018, www.dallasfed.org/research/heart.aspx.

¹² For more on Texas' relative lack of health coverage pre-COVID-19, see "Texas Health Coverage Lags as Medicaid Expands in U.S.," by Jason Saving and Sarah Greer, Federal Reserve Bank of Dallas *Southwest Economy*, Fourth Quarter, 2015, www.dallasfed.org/~media/documents/research/swe/2015/swe1504b.pdf.

¹³ During the 2011 downturn, budget cuts particularly fell on K-12 education. For an analysis of their impact, see "2011 Budget Cuts Still Hampering Schools," by Kiah Colliar, *Texas Tribune*, Aug. 31, 2015. www2.texastribune.org/2015/08/31/texas-schools-still-feeling-2011-budget-cuts/?_ga=2.195810351.2035883035.1595450240-1483400013.1563834301.

¹⁴ Among the Texas jurisdictions receiving Coronavirus Relief Fund proceeds are Austin, Dallas, El Paso, Fort Worth, Houston and San Antonio and Bexar, Collin, Dallas, Denton, El Paso, Fort Bend, Harris, Hidalgo, Montgomery, Tarrant, Travis and Williamson counties.

A Conversation with Gary A. Hoover

Looking to Economics for Help in Addressing Enduring Discrimination

Gary A. Hoover holds a President's Associates Presidential Professorship and is chairman of the Economics Department at the University of Oklahoma in Norman. He specializes in policy analysis of income distribution and poverty, public finance and ethics in economics. He is the founding editor of the Journal of Economics, Race and Policy.

Q. What does economic research broadly show about racial discrimination in the labor market?

Most of the work around this topic deals with the persistent differences between Blacks and whites in employment or wages in the U.S. labor market. Economists have used many variables to explain away these differences, from skill levels—which includes training and education—to tenure on the job, to age and even IQ.

The research has explored certain sectors of the economy, from manufacturing to the public sector to higher education, to see if these racial differences are present.

Yet, despite all of these compounding factors, differences persist that can only be explained by employer race-based preference. The literature has shown that such behavior on the part of employers can only be explained if race-based preferences are somehow being included in a maximizing equation.

However, under no form of profit maximization can such behavior be accepted where valuable human resources are not fully utilized.

Q. What impediments do Black workers face finding a job? Do they earn less because they are Black?

The impediments begin for Blacks seeking employment from the very

outset. Some research has shown that non-Black job applicants of equal ability receive 50 percent more callbacks than Blacks.

To further amplify on the issue, some research has shown that Black males without criminal records receive the same rate of callbacks for interviews as white males just released from prison when applying for employment in the low-wage job market.

With such handicaps existing from the start, it is no surprise that a wage gap exists. Some estimates show that gap to be as large as 28 percent on average and as large as 34 percent for those earning in the highest end (95th percentile) of the wage distribution.

Q. Besides employer discrimination, are there other systemic factors hurting the labor market outcomes of Black workers?

There are disparities that exist in the areas of education and health. Employers want workers who are trainable and present.

Black workers, who have been poorly trained or suffer inferior health outcomes, will suffer disproportionately.

In addition, the impacts of the criminal justice system cannot be overlooked. Some recent research has shown that for the birth cohort born between 1980 and 1984, the likelihood of incarceration transition for Blacks was 2.4 times great-

er than for their white counterparts. Given this outsized risk of incarceration, the prospects of long-term unemployment are dramatically increased.

Q. Do you think recent attention to racial disparities will have an impact?

It remains to be seen whether recent events will have impacts that are sustaining. The good news, without question, is that we are having these conversations. The differences have been longstanding, but only recently have they drawn this much intense attention. Thus, we have an opportunity to revisit the literature and update old and outdated models and ways of thinking.

What needs to happen is that more research should take place, with race being more than a convenient indicator variable entered at the back of some regression analysis.

Q. What about other racial and ethnic groups? In what way does racial discrimination affect Hispanics?

The United States is interesting in that it is a mixture of a great many racial/ethnic groups, all uniquely contributing to the fabric of the economy and the culture. Hispanic labor market outcomes have been woefully understudied. In most cases, the research centers around males. As Rhonda Sharpe, president of the Women's Institute for Science, Equity and Race, has famously said, "We must disaggregate the data."

Hispanic women in both low- and high-wage employment categories face discriminatory impacts far different from their male counterparts. Critically important to this discussion, but often overlooked, are issues of remittances, legal status and migration patterns.

Q. How do economists measure discrimination? What are factors that may make it hard to identify and measure?

Typically, these discussions start from the premise of *ceteris paribus*, or all things equal. Thus, for example, if



▶ We, as economists, know that incentives matter in changing behavior. It [strategy of providing incentives] is not necessarily effective in changing the thoughts or feelings of people. Thus, we want an outcome where people do not "act" on their aberrant feelings.

we take two workers of the same age, educational background, gender, etc., we should expect that their wages be comparable.

However, this sets up a false narrative from the beginning in assuming that all things are equal. For instance, Trevon Logan of Ohio State University has done some very interesting work on "Black-sounding names," which might exclude a group of candidates from ever being interviewed or given a job.

What makes this difficult to uncover is that research over the past 20 years has shown that there are statistically significant differences in wages across gender and race even after accounting for observable characteristics like education and training. What also complicates matters is that research has shown that wage privacy policies make it difficult for Black workers to realize that they are not receiving equal pay for equal work. This also holds true across gender.

More recent research using experimental designs has yielded promising results [showing the nature of underlying discriminatory practices]. David Neumark at the University of California-Irvine did a great job in a recent *Journal of Economic Literature* piece surveying all of the techniques, both in the lab and field, which have been employed over the last few decades.

Q. How much does discrimination cost the U.S. economy? Which regions bear an outsized part of that burden?

Despite the fact that engaging in racial discrimination in the labor market is not profit-maximizing, it still persists. In a

recent paper ("The Price of Prejudice") in the *American Economic Journal: Applied Economics*, [Morten Storling] Hedegaard and [Jean-Robert] Tyran provided some interesting conclusions. In particular, they found that those engaging in discrimination were willing to give up 8 percent of their earnings to avoid working with someone of a different ethnicity.

The work was done in Denmark, so how much of it translates to the U.S. job market is not clear. One thing that is overlooked often in these discussions is the human cost of such interactions. Black workers subjected to these injustices might be less inclined to look for further employment opportunities for fear of more psychological scarring. As alluded to earlier, having this much productive human capital sitting on the sidelines is foolish.

Q. What is the solution to racism in the labor market? Do we need more regulation and enforcement?

It would appear that racism in the labor market is a reflection of racism in the society. It would seem that using economic tools would be the best solution. We, as economists, know that incentives matter in changing behavior. It [strategy of providing incentives] is not necessarily effective in changing the thoughts or feelings of people. Thus, we want an outcome where people do not "act" on their aberrant feelings.

Regulation seems shortsighted because, as I alluded, these items are not always easily detectable. However, they rarely can happen in a vacuum without

others knowing. Thus, incentivizing whistleblowers would help. It has been proven effective in other areas of the workforce where criminal or life-threatening behavior has been occurring.

Another idea, which has been proposed by William Darity Jr. of Duke University, is that of a "baby bond," which would be issued to a child at birth and held in trust until the child turns 18. At that point, the endowment could be used to pay for college, buy a house or start a business.

If the problem in the labor market is that a demographic group is being systematically shut out, then nothing shakes up markets like competition. If these underrepresented minorities are that talented, as we believe they are, then giving them the capital to become competitors to those engaging in discriminatory behaviors would cause elimination of the discriminators or changes in practices that would make them become more inclusive.

Q. You have a broad research agenda, including several studies on economic freedom and inequality. What are some of your findings as they apply to minority groups in the labor market?

[James] Gwartney, [Robert] Lawson and [Walter] Block stated in their 1996 paper ("Economic Freedom of the World: 1975-1995") that "Individuals have economic freedom, when (a) property they acquire without the use of force, fraud or theft is protected from physical invasions by others and (b) they are free to use, exchange or give away their property as long as their ac-

tions do not violate the identical rights of others.”

This ideal seems noble. Some of my earlier research found that the implementation of such ideals could, under certain circumstances, lead to faster economic growth. However, later work by me and others found that the benefits were not uniform for the entire income distribution.

There is a string of economics known as “stratification economics,” which shows that Black median income would occupy the 32nd percentile of the white distribution. Since Blacks primarily occupy the lower rungs of the income distribution, they cannot fully enjoy the perceived benefits of economic freedom.

Furthermore, one proposition of economic freedom is that economies need defined and functioning court systems. It makes sense given that no two agents will be willing to enter into a contract for goods or services if there is no way to later adjudicate disputes. However, minorities are more likely to interact with the criminal court system, while others will mostly interact with the civil court system. The difference is striking.

Q. You have been very successful in a profession where Blacks are woefully underrepresented. What can economists do more broadly to be more diverse as a profession?

Although I have been successful in economics, it has not come without some amount of psychological trauma. When I arrived at the University of Alabama in 1998, the economics department had never hired a Black faculty member. Sadly, that is still the case at more economics departments than not. I would not call those initial years hostile, but they were not inviting either.

I stuck to my plan, which was to publish articles to the best of my ability and teach good classes. The pressures were there to mentor Black students, serve on countless committees to “diversify” things and be a role model. I took on the extra tasks but never lost track of my goal. I saw so many of my Black

▶ *When I arrived at the University of Alabama in 1998, the economics department had never hired a Black faculty member. Sadly, that is still the case at more economics departments than not.*

counterparts fall into the trap. They had outsized service burdens compared to their peers, which they took on with the encouragement of the administration. However, when promotion and tenure evaluation time arrived, they were dismissed for not “meeting the high standards of the unit.”

The answer for economics departments wanting to diversify our profession is rather simple: use economics! We, as economists, know that incentives matter. Yet, when it comes to issues of diversity, we seem to be at a loss for what to do. However, we have clearly defined metrics of what qualifies as good research, teaching and service. We then tie promotions, salaries and funding to those metrics, which incentivizes others to engage in those activities. Do the same for diversity and watch the landscape of our profession change overnight.

Q. You are co-chair of the American Economic Association’s (AEA) Committee on the Status of Minority Groups in the Economics Profession. Has the committee made progress in recommending changes to the AEA?

In June 2020, the AEA put out a statement about diversity and inclusion. I, along with my co-chair at the time, Ebonya Washington of Yale University, were opposed to statements that had no action plans attached. Thus, the committee proposed six concrete actionable items that the AEA could/should do to be a leader in setting the tone for the profession. Five of those six items were adopted. As of this time, I am not at

liberty to discuss them in any detail, as they have not been publicly released.

Q. By 2045, the U.S. will be a majority-minority nation where non-Hispanic whites will make up less than half of the population. Are you optimistic that the economy will evolve quickly enough to ensure the success and prosperity of minority groups?

I think that I must be optimistic about the future. What employers are yet to realize, but will have to come to grips with, is that successful market outcomes for minority groups mean success for them also. By that I mean, this is not a zero-sum game where one group will only improve at the expense of the other.

In fact, history has shown us the opposite.

Once minorities are fully utilized and integrated in the labor force, the economy as a whole will enjoy a different type of prosperity than has ever been experienced in the U.S. Once again, we must remember the introductory idea we teach to our college freshmen about the circular flow of the economy in that those fully engaged minority employees become fully engaged consumers.

Texas Economy Mends in Fits and Starts from Pandemic's Onslaught

By Christopher Slijk

ABSTRACT: A resurgent COVID-19 outbreak in Texas has stymied a state economic recovery, according to the Texas Business Outlook Surveys and high-frequency data that document activity on a more granular level. Future viral spread and the extent of federal aid to labor-intensive businesses and the unemployed will help determine Texas' economic outlook through year-end.

The COVID-19 pandemic brought about the steepest and fastest drop in Texas economic activity in modern history. Measuring this decline in real time proved very difficult, as the pace of change in response to the pandemic shifted on a weekly and sometimes daily basis.

Real-time data from the Texas Business Outlook Surveys (TBOS), combined with other high-frequency measurements, have helped provide a timely and comprehensive look at the scale of impacts to the state economy during the first half of the year. In light of the surge in COVID-19 cases in June and July, these indicators have helped inform an outlook for the second half of the year; they suggest the state likely won't regain its prepandemic strength by year-end.

Eclipsing the Great Recession

Heading into 2020, Texas employment expanded slightly below its long-term pace of 2.0 percent, in part

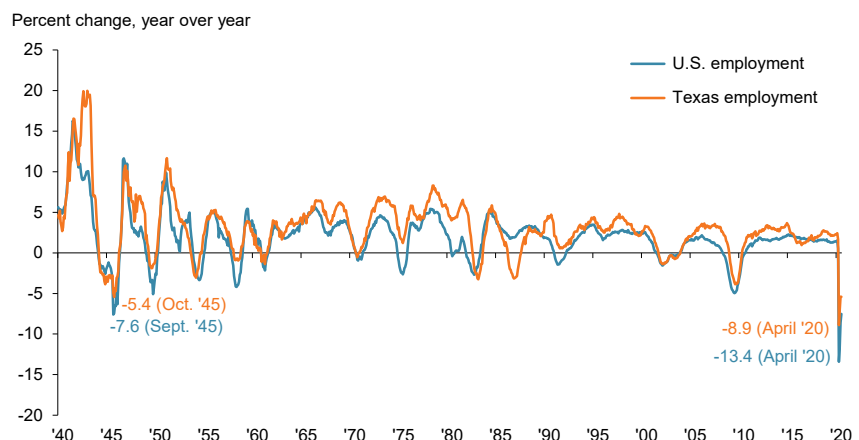
due to softness in the energy and manufacturing sectors. Nevertheless, the state faced its tightest labor market in decades, with unemployment rates bottoming out at a historically low 3.5 percent. Business activity remained steady in the service sector and was beginning to improve in manufacturing at the start of 2020.

There was little sense that a decline of the scale and speed brought on by COVID-19 was about to hit.

As the virus took hold in Texas in early March, businesses rapidly pulled back to slow its spread. Many municipalities issued shelter-in-place orders, and these were subsequently extended statewide April 2. Economic activity plunged in the second half of March and into April, and businesses designated as nonessential closed or reduced operations. Others experienced evaporating demand as customers stayed at home.

Adding to the impact in Texas, energy exploration and production col-

CHART 1 Pandemic Prompts Record Employment Declines in Texas, U.S. in April



SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; Federal Reserve Bank of Dallas.

lapsed, diminishing significant shares of state exports and output. Notably, near-term West Texas Intermediate futures briefly traded at negative prices on April 20; producers *paid* buyers to take their oil amid concerns that a glut would leave no place to store supplies.

The wide-ranging economic collapse in Texas came as the nation experienced an even broader and steeper decline. The state and the U.S. observed the greatest economic fall-off since as far back as data are available (*Chart 1*). On a year-over-year basis, employment in Texas fell almost 9.0 percent in April, with the previous steepest monthly drop being a 5.4 percent decline following the end of World War II. The nationwide employment decline was even more pronounced, -13.4 percent in April.

As a result, the Texas jobless rate surged to a record high of 13.5 percent in April.

Confounding Typical Forecasting

In the midst of the pandemic, tracking the Texas economy's decline in real time, along with estimating a recovery, became even more difficult due to the lagged timing of the indicators typically used to monitor regional growth. The full depth of the decline in April was unknown until late May. By then, some businesses had begun reopening, and a nascent recovery had begun.

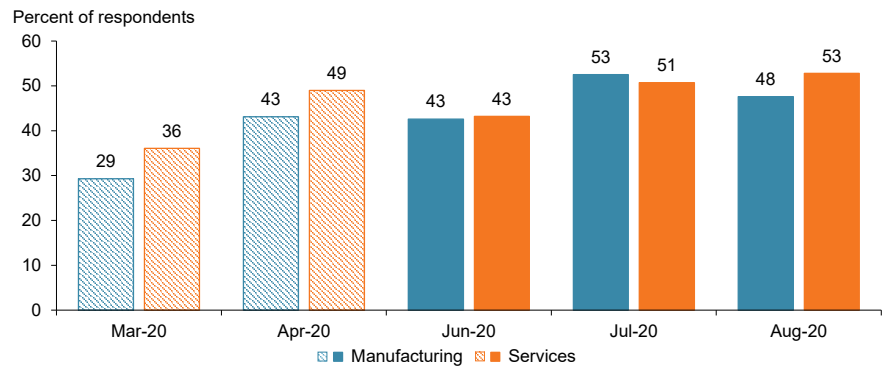
The Texas Leading Index (TXLI), an indicator the Dallas Fed uses to forecast job growth over the upcoming 12 months, proved too slow to catch the rapid shut-in of activity from February to April.

Previously, during the Great Recession, the TXLI peaked a full year before the beginning of the economic downturn in Texas, while in the prior three recessions, the TXLI peaked five to 15 months before the onset of a recession.

However, the TXLI provided no forewarning of the 2020 downturn, and by the time it registered a drop of any significance, the economy was already in freefall. Similarly, as the index began to increase in May—with data released in June—a recovery was already underway.

CHART 2

Majority of Texas Firms Had Cut Employment by July



NOTES: March and April values are shares of Texas Business Outlook Surveys (TBOS) respondents noting a negative impact on employment due to COVID-19. June, July and August values are shares of respondents noting head count below February levels. May is excluded due to lack of comparable data.

SOURCE: Federal Reserve Bank of Dallas, TBOS.

TBOS Captures the Decline

As the impacts of the COVID-19 outbreak spread across the state economy, TBOS not only provided a more rapid, real-time picture of the decline but also helped capture its scope. The service sector survey, along with its subcomponent retail outlook survey, reported unprecedented declines across almost all indicators in March and April, plunging to levels well below those experienced during the depths of the Great Recession.

The manufacturing survey, while also registering steep declines, did not weaken to the same extent. Typically, downturns in the business cycle are led by cyclically sensitive industries in manufacturing, but the relative performance of this sector provided an early sign that the compositional impact of the COVID-19 recession would be unlike past downturns. Declines steepened in April across the surveys—particularly in manufacturing—pointing to a widening negative impact that would ultimately touch every industry.

TBOS special questions also provided an early sense of how many firms were furloughing and laying off workers. Between March and April, the share of firms noting falling employment due to COVID-19 rose nearly 15 percentage points in manufacturing and services, with about half of

services firms reporting employment reductions by April (*Chart 2*).

Further highlighting the disparity among industries, only 24 percent of manufacturers expected not to rehire those employees taken off payrolls; for services, the share exceeded 50 percent.

By May, signals emerged that the economy had hit a bottom. While the TBOS survey headline indexes of production and revenue remained in contractionary territory, they pointed to a much slower pace of decline than the prior two months. An unambiguous resumption of growth appeared in June, as both the manufacturing and service sector survey headline indexes rebounded to positive territory. Similarly, the shares of firms reporting layoffs had plateaued, suggesting that the worst of the economic impacts from the crisis had likely passed.

Unprecedented Policy Response

Quick and broad fiscal support to firms and individuals during the depths of the crisis contributed to the economic upturn after the initial plunge. The federal Paycheck Protection Program (PPP), which targeted firms with fewer than 500 employees, figured prominently. The program distributed loans of up to 2.5 times a firm's average monthly payroll costs. The loans were forgivable if the recipient

maintained or restored its February-level head count and did not cut employee salaries by more than 25 percent.¹

Individuals benefited from government stimulus checks distributed in April. Additionally, pandemic unemployment benefits that supplemented state benefits with an additional \$600 weekly federal payment provided support to a broad base of recipients. This included many self-employed and “gig economy” workers not typically covered by state unemployment programs.

Data from the May TBOS surveys show widespread PPP participation among Texas firms, with about 60 percent reporting seeking a loan and more than 90 percent of those applicants receiving funding.

More than 75 percent of firms that obtained a loan said the funds helped them prevent furloughs and layoffs, and two-thirds reported that it helped prevent wage reductions. Broader data from the Small Business Administration confirmed the PPP loans’ usefulness, as over 400,000 firms—nearly 60 percent of all private establishments in Texas—received a loan of some kind. These firms, taken together, account for about 34 percent of state employment.

PPP uptake was not uniform across industries, however. Looking at employment among firms supported by PPP loans as of early August, lending was particularly notable in seven industries in which at least half of employment was supported by PPP. Recipient firms largely operated in

personal-care services, civic and religious work, real estate and construction (*Chart 3*).

Industries requiring a high degree of human contact or with a low share of employee ability to work from home were more likely to have taken PPP funds. Recipients were most prevalent in the restaurant and bar industry, accounting for more than 560,000 Texas jobs. While it is unclear how many layoffs would have occurred absent PPP, additional comments from TBOS suggest that a great many firms retained employees that they otherwise may have dismissed.

At the same time, a number of firms suggested that they could not stay afloat without rapidly improving demand because PPP loans offered only short-term relief. These companies indicated they would be forced to implement layoffs once the PPP forgiveness period expired.

Thus, the support from the PPP appears somewhat fragile among some sectors—such as the hard-hit restaurants and personal-care services—which are less likely to maintain staffing beyond the forgiveness period. Others, such as construction, real estate and professional services have largely regained their footing and retained employees.

Recovery Wanes in July

The apparent turnaround in June gave way to a more mixed economic picture in July, as COVID-19 cases

surged across the state. TBOS data indicated manufacturing gains continued, as production and forward-looking indicators, such as new orders, accelerated.

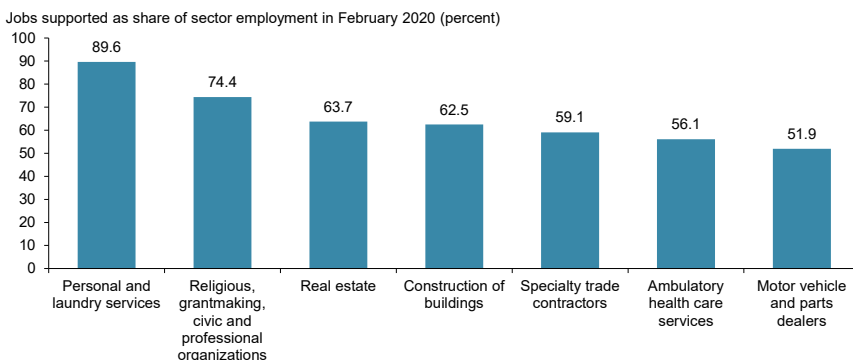
The service sector, on the other hand, experienced renewed contraction in July. Authorities ordered some businesses to close, such as bars, though there wasn’t a repeat of the broader lockdowns instituted in March and April. A mask mandate implemented to slow viral spread helped lower the rate of infection from its peak in July. Consumers appeared to retrench somewhat as the Dallas Fed’s Mobility and Engagement Index declined from a relative high in late June. COVID-19 deaths, which had been largely steady between April to June, began rising sharply in mid-July.

TBOS special questions in July highlighted particular weakness in sectors relying on face-to-face contact. These same sectors previously signaled recovery as consumer mobility had started increasing. Most notable were respondents engaged in leisure and hospitality, which includes restaurants and hotels, as well as other labor-intensive industries. They reported revenue declined almost 50 percent during July relative to a typical July (*Chart 4*). Other services, such as personal care and civic organizations, noted a nearly 25 percent revenue decline.

These highly impacted industries were similarly pessimistic when asked to gauge their likelihood of permanently shutting down over the coming year. More than one-quarter of leisure and hospitality firms reported a “some-what” or “very” likely possibility of permanently closing within the next 12 months given their current outlook.²

That could change with an improvement in the public health situation and a broad-based state-sanctioned reopening of businesses such as restaurants, bars and other high-contact services. However, with the unpredictability of the virus’ spread, it is unclear whether a resumption in activity will occur soon enough to keep firms from failing.

CHART 3 Share of PPP-Supported Jobs Highest in Businesses Reliant on In-Person Activities

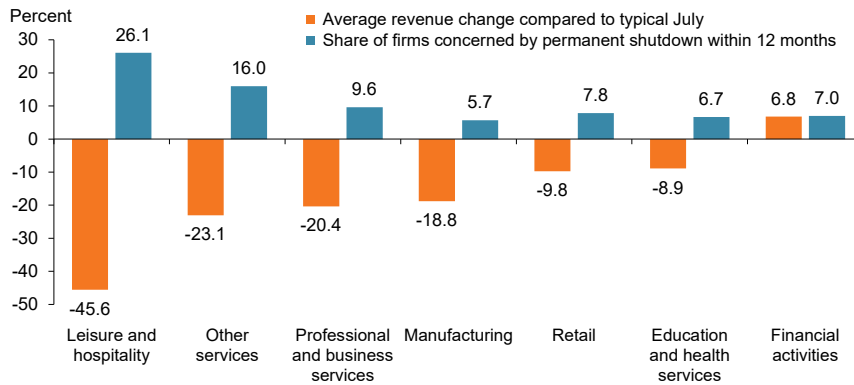


NOTES: Data refer to jobs supported through Paycheck Protection Program (PPP) loans made to companies in Texas. Only industries that noted retention of over 100,000 jobs are included. Data are through August.

SOURCES: Bureau of Labor Statistics; Small Business Administration; Texas Workforce Commission.

**CHART
4**

Industries Reporting Steepest Revenue Declines Have Firms at Higher Risk of Failure



NOTES: During the July survey, firms were asked: "How do your firm's current revenues compare with a typical July?" in calculating average demand. They were also asked, "Given your current outlook, how likely is it that your business will permanently shut down within the next 12 months?" in calculating the share reporting concern of permanent shutdown.

SOURCE: Federal Reserve Bank of Dallas, Texas Business Outlook Surveys (July).

High-Frequency Measures

With the myriad changes buffeting the regional economy since January, traditional measures of activity provide little clarity on how things will look at year-end. However, high-frequency indicators provide clues regarding what is in store in the near term and help guide forecasting.

The Dallas Fed's Texas Weekly Employment Estimate (TWEET) is an aggregation of six data sources shown to be reliable indicators of economic activity, particularly during the recent downturn.³

In line with TBOS indicators and official employment data, the TWEET signaled a decline in July as mobility decreased and business reopenings were rolled back. By August, the weekly measure along with other high-frequency indicators suggested that while COVID-19 case growth remained elevated, its impact had slowed notably from the July peak, helping provide some economic momentum heading into the fall (see Snapshot in this issue).

Incorporating the recent improvements in TWEET readings into a modified employment forecast suggests that growth through the end of the year will be over 3 percent—well above the state's long-term average of 2 percent. Nevertheless, given the earlier slump, this would leave the level of employ-

Economic uncertainty in the second half of the year remains heightened due to a number of factors beyond the direct effects of the virus. A reduction or elimination of many of the largest federal stimulus programs looms as a potential short-term headwind.

ment at year-end nearly 5 percent below the December 2019 reading and more than 600,000 jobs short of the pre-COVID-19 peak.

Risks to the Outlook

Economic uncertainty in the second half of the year remains heightened due to a number of factors beyond the direct effects of the virus. A reduction or elimination of many of the largest federal stimulus programs looms as a potential short-term headwind. On the consumer side, mixed prospects

for the federal unemployment subsidy threaten to curtail otherwise robust spending that has continued to sustain revenues for many firms during the pandemic.

For businesses, the winding down of the spring PPP effort is likely to force many to look more closely at cutting expenditures, particularly those related to labor costs and real estate leases.

An additional issue that remains very fluid is the state of schools, particularly elementary schools, in the coming academic year.

Many large school districts started predominantly online. With the infection rate still elevated in Texas, lack of full in-person learning is likely to hamper a return to work for some of the 33 percent of households participating in the labor force and that have a grade-school child at home.

Longer term, the impacts of reduced collections of sales taxes, oil and gas severance taxes, hotel occupancy taxes and other revenue sources have left significant gaps in state and many municipal budgets. Already, the number of state and local government jobs has declined more than 5 percent since February. This shortfall is likely to continue to be a drag on growth in many large cities and the state as a whole.

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Notes

¹ For more information, see "Small Business Hardships Highlight Relationship with Lenders in COVID-19 Era" by Wenhua Di, Nathaniel Pattison and Chloe Smith, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter 2020, www.dallasfed.org/research/swe/2020/swe2002/swe2002b.aspx.

² For more information, see "Insights from Dallas Fed Surveys: Uneven Economic Recovery Likely in Texas," by Emily Kerr and Christopher Slijk, Federal Reserve Bank of Dallas *Dallas Fed Economics*, Aug. 11, 2020, www.dallasfed.org/research/economics/2020/0811.

³ For more information, see "Texas Weekly Employment Estimate Provides New, Early Economic Insights," by Jesus Cañas, Keith R. Phillips and Carlee Crocker, Federal Reserve Bank of Dallas *Dallas Fed Economics*, Aug. 18, 2020, www.dallasfed.org/research/economics/2020/0818.

Energy Sector Slow to Recover from Malaise Arising from Effects of Global Pandemic

By Emma Marshall and Pia Orrenius

After absorbing a big hit from the COVID-19 pandemic, the energy sector may take until 2022 to recover. An upswing in petroleum consumption provides hope that the worst has passed, as economic activity gradually increases from April lows.

While crude oil prices have bounced back, they aren't sufficiently high to spur new drilling. The price of benchmark West Texas Intermediate crude oil has stabilized at near \$40 per barrel after averaging \$38 in June and \$17 in April. The demand slump was most notable on April 20, when producers were forced to *pay* buyers \$38 per barrel as the price of the expiring near-term oil contract price collapsed on worries that there was no place to store deliveries.

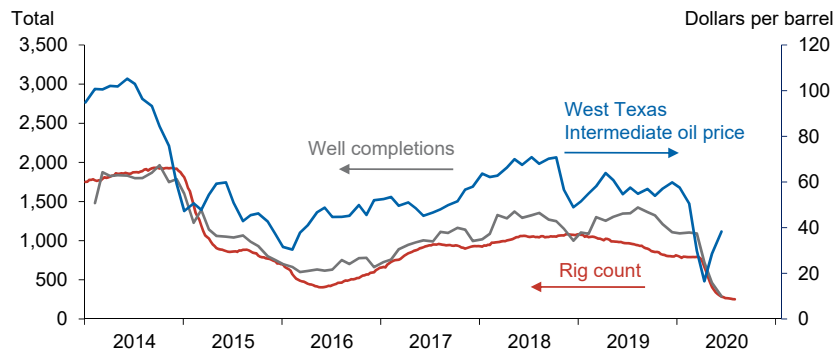
Even at current levels, prices barely cover operating expenses. The average price per barrel needed to cover operating costs is \$23–\$36, while profitably drilling a well requires prices of \$46–\$52, according to the Dallas Fed Energy Survey in early 2020.¹

With improved prices, the drop in exploration has slowed, as evidenced by the rig count decline, and well completions are expected to rise in coming months (*Chart 1*). The number of rigs declined across the U.S. at a rate of 12 percent per week at the end of April. The pace slowed to less than 1 percent per week in June, with around 260 rigs in service. Well completions dropped to 290 completions per month from January to June—a 73 percent decline. Completions are expected to pick up as producers, who have reopened shut-in wells, resume work on new wells.

Rising Supplies amid Glut

Crude oil demand fell faster than drilling and completion activity during the COVID-19 pause in U.S. economic activity from late March through April. In a one-month period from mid-March to mid-April, consumption of diesel fuel declined 37 percent, while

CHART 1 Rig Count Reaches Low as Benchmark Oil Price Firms at Mid-Year 2020



NOTE: Prices are average monthly closing spot prices for West Texas Intermediate crude oil.

SOURCES: Baker Hughes; Energy Information Administration.

gasoline fell 48 percent, and jet fuel tumbled 80 percent.²

In April, during the lowest point of consumption, Americans used only 14.7 million barrels of oil per day, 73 percent of forecasted levels. Consumption has since risen, reaching 85 percent of previously predicted levels in June.

During the demand decline, a price war between Saudi Arabia and Russia flooded global oil markets, pushing U.S. crude inventories 20 percent higher from January to June and prompting the worries of inadequate storage capacity.³ Storage capacity never ran out, as producers quickly shut in wells, OPEC cut production and demand picked up in May and June.

The U.S. energy sector is still reckoning with widespread market uncertainty. Total U.S. crude oil and petroleum product exports—many of them handled through Texas ports—decreased 15 percent from January to June, to an average of 7.4 million barrels per day. Sixty energy companies sought bankruptcy protection from January through June. Relief is difficult given the industry's limited access to new capital.

In response, energy companies are cutting workers, even as some other sectors of the economy are showing

signs of recovery. Texas oil and gas companies laid off 61,000 employees through June, approximately 26 percent of the workforce they employed before the impact of COVID-19. Further cuts are likely, as evidenced by oilfield services company Schlumberger of Houston, which announced plans to dismiss approximately one-fifth of its 100,000 global workforce.

Looking Toward 2022

Before the pandemic, the U.S. energy sector had been expected to produce more than 13 million barrels per day. It may not reach 11 million barrels per day by year-end 2021. However, with supply so greatly curtailed, a return to more normal demand levels could aid a price recovery in 2022.

Notes

¹ Dallas Fed Energy Survey, Federal Reserve Bank of Dallas, March 2020.

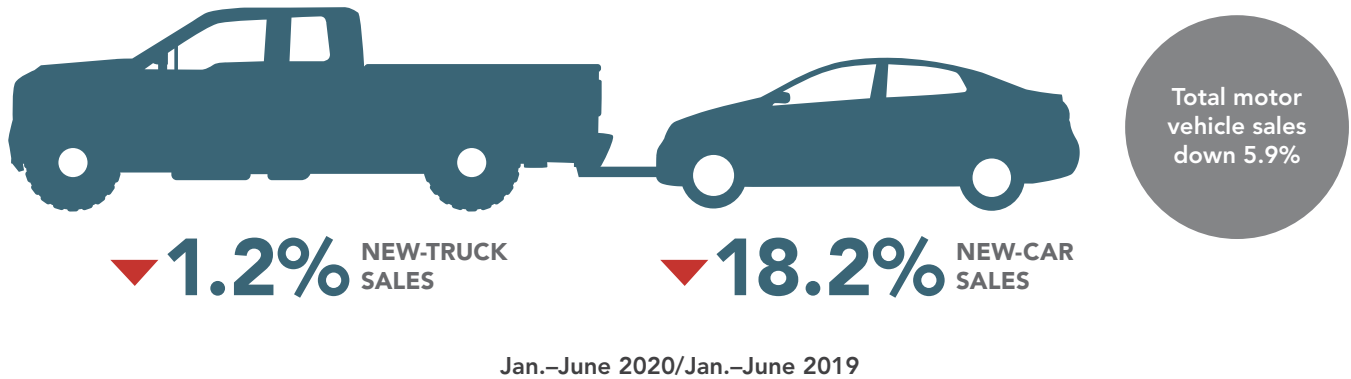
² "Go Figure: COVID-19 Tanks U.S. Fuel Consumption, Prices," by Olu Eseyin and Jesse Thompson, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter, 2020.

³ "How the Saudi Decision to Launch a Price War Is Reshaping the Global Oil Market," by Lutz Kilian, Federal Reserve Bank of Dallas *Dallas Fed Economics*, April 2, 2020.

Vehicle Sales Highlight Surprising Resilience in Spending During Pandemic

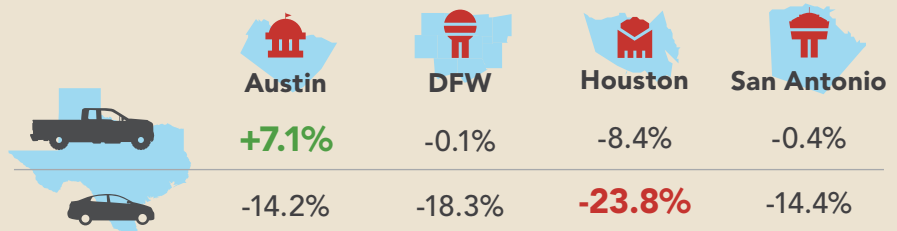
Design: Olu Eseyin; Content: Christopher Slijk, Chloe N. Smith

Texas truck/SUV sales held steady while car sales declined steeply amid the recession caused by COVID-19.



Percent change, Jan.-June 2020/Jan.-June 2019

New-truck sales in Austin increased; new-car sales fell the most in Houston.



Texas consumer spending appears far more resilient than during the Great Recession.

	Retail sales	Vehicle sales
Pandemic (Jan.-June) Compared with Jan.-June 2019	+1.5%	-5.9%
Great Recession (2009) Compared with 2008	-11%	-30.8%

Contributing to the surprising strength in consumer spending are:



Low interest rates



Stimulus payments



Expanded unemployment benefits

NOTE: Retail sales data for 2020 are estimated based on monthly sales tax rebate data.
SOURCES: AutoCount; Texas Comptroller of Public Accounts; adjustments by the Federal Reserve Bank of Dallas.

SNAPSHOT

Texas Employment Estimate Debuts

The Federal Reserve Bank of Dallas' new Texas Weekly Employment Estimate (TWEE) is a timely tool to monitor evolving economic conditions while awaiting release of the U.S. Bureau of Labor Statistics' establishment survey of employment. Most of the data used in the weekly estimate come from private high-frequency sources, providing daily and weekly measurements based on things such as credit card transactions and cell phone mobility.

The TWEE contracted in July but showed considerable improvement in August (*Chart 1*). As daily new COVID-19 cases began increasing at the beginning of the summer—reaching new highs from early June to mid-July—jobs appear to have declined. However, COVID-19 cases have decreased markedly since the July highs, and employment growth has been steady.

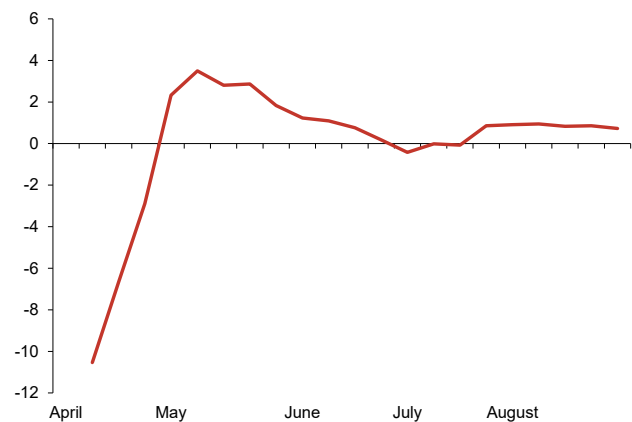
The latest TWEE data should help the public anticipate what official releases will subsequently show.

—Adapted from *Dallas Fed Economics*, Aug. 18, 2020, by Jesus Cañas, Keith R. Phillips and Carlee Crocker

CHART 1

Texas Weekly Employment Estimate Grows Consistently Throughout August

Four-week growth, percent change



NOTE: Weekly data are depicted, with labels falling on the first week of the month.
SOURCES: Texas Workforce Commission; OpenTable; Homebase; Baker Hughes; Affinity Solutions; Dallas Fed.



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