CITY OF TYLER
CITY COUNCIL COMMUNICATION

Agenda Number: M-6

Date: May 12, 2021

Subject: Request that the City Council consider reviewing and accepting the Investment Report for the quarter ending March 31, 2021.

Page: Page 1 of

Item Reference:

The City of Tyler Investment Portfolio Summary includes all of the core information required under the Public Funds Investment Act plus some additional supporting information that has been prepared to assist the City Council in the quarterly review process. Please reference the attachment labeled as Investments held on March 31.

RECOMMENDATION:
It is recommended that the City Council consider reviewing and accepting the Investment Report for the quarter ending March 31, 2021.

ATTACHMENTS:
Investment Portfolio 2021 03 31
Federal Reserve Bank of Dallas 1st Quarter Report 2021
Investments_held_on_March_31

Drafted/Recommended By:
Department Leader

Keidric Trimble, CFO

Edited/Submitted By:
City Manager

INVESTMENT PORTFOLIO SUMMARY

For the Quarter Ended

March 31, 2021

Prepared by

Valley View Consulting, L.L.C.

The investment portfolio of the City of Tyler is in compliance with the Public Funds Investment Act and the Investment Policy.

Chief Financial Officer

Accounting Manager

Treasury Manager

Disclaimer: These reports were compiled using information provided by the City. No procedures were performed to test the accuracy or completeness of this information. The market values included in these reports were obtained by Valley View Consulting, L.L.C. from sources believed to be accurate and represent proprietary valuation. Due to market fluctuations these levels are not necessarily reflective of current liquidation values. Yield calculations are not determined using standard performance formulas, are not representative of total return yields and do not account for investment advisor fees.

Summary

Quarter End Results by Investment Category:

City Funds

Asset Type	December 31, 2020 Ave. Yield	December 31, 2020 Book Value	December 31, 2020 Market Value	March 31, 2021 Ave. Yield	March 31, 2021 Book Value	March 31, 2021 Market Value
Pools/Bank	0.50%	$ 37,014,125	$ 37,014,125	0.50%	$ 39,103,022	$ 39,103,022
Securities/CDs	1.46%	70,177,411	70,177,411	0.95%	79,243,762	79,243,762
Totals	1.13%	**$ 107,191,536**	**$ 107,191,536**	0.80%	**$ 118,346,784**	**$ 118,346,784**

Current Quarter Average Yield *(1)*
Total Portfolio 0.80%

Fiscal Year-to-Date Average Yield *(2)*
Total Portfolio 0.96%

Interest Earnings

Quarterly Interest Income	$ 265,589	Approximate
Year-to-date Interest Income	$ 568,007	Approximate

Bank Fees Offset

Quarterly Bank Fees Offset	$ 9,737
Year-to-date Bank Fees Offset	$ 19,543

Revenue Bond

Asset Type	December 31, 2020 Ave. Yield	December 31, 2020 Book Value	December 31, 2020 Market Value	March 31, 2021 Ave. Yield	March 31, 2021 Book Value	March 31, 2021 Market Value
Pools/Bank	0.31%	$ 12,724,684	$ 12,724,684	0.23%	$ 9,624,208	$ 9,624,208
Securities/CDs	0.00%	–	–	0.00%	–	–
Totals	0.31%	**$ 12,724,684**	**$ 12,724,684**	0.23%	**$ 9,624,208**	**$ 9,624,208**

Current Quarter Average Yield *(1)*
Total Portfolio 0.23%

Fiscal Year-to-Date Average Yield *(2)*
Total Portfolio 0.27%

Interest Earnings

Quarterly Interest Income	$ 8,080	Approximate
Year-to-date Interest Income	$ 22,535	Approximate

Total Portfolio

Current Quarter Average Yield *(1)*

Total Portfolio	0.76%
Rolling Three Month Treasury	0.06%
Rolling Six Month Treasury	0.09%
TexPool	0.02%

Fiscal Year-to-Date Average Yield *(2)*

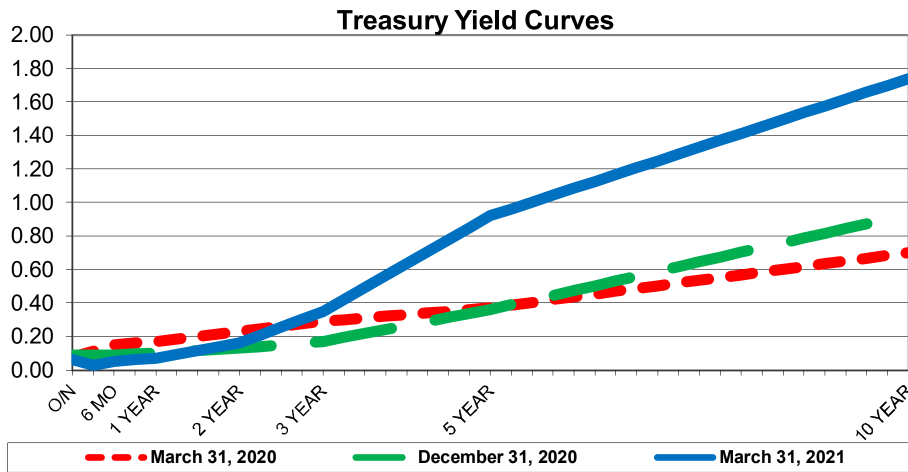
Total Portfolio	0.90%
Rolling Three Month Treasury	0.08%
Rolling Six Month Treasury	0.10%
TexPool	0.05%

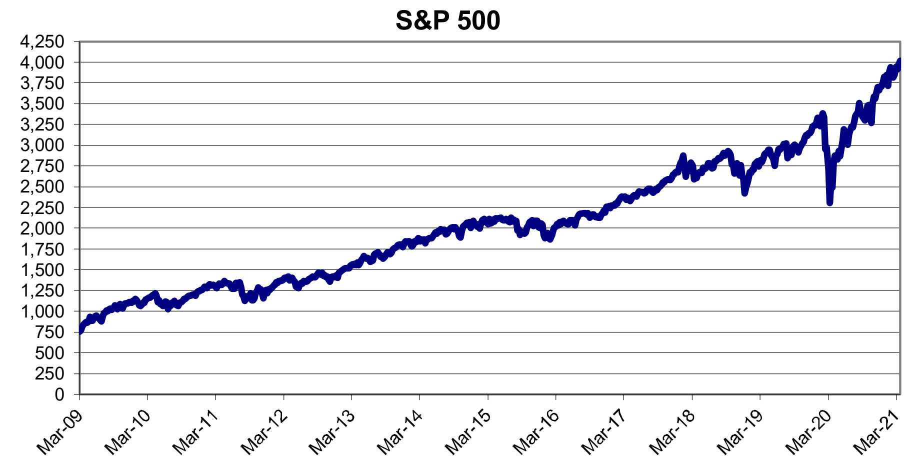
(1) **Current Quarter Weighted Average Yield** - calculated using quarter end report yields and adjusted book values; does not reflect a total return analysis, realized or unrealized gains/losses, or account for investment advisory fees. The yield for the reporting month is used for bank, pool, and money market balances.

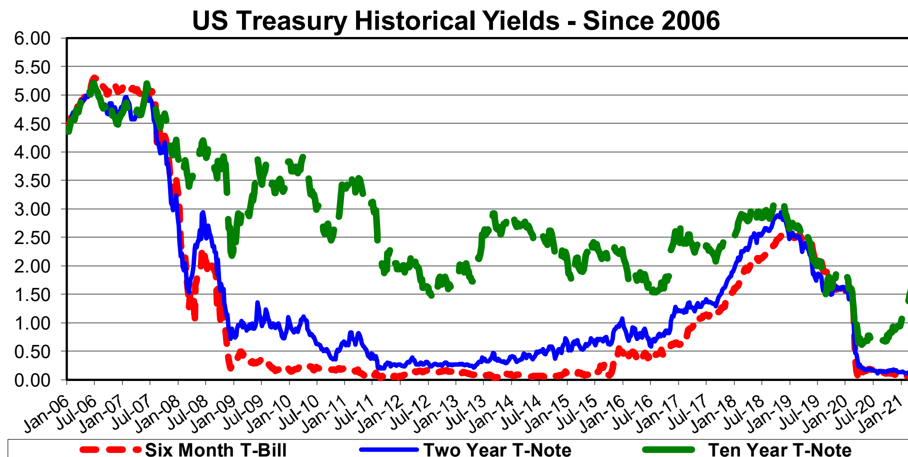
(2) **Fiscal Year-to-Date Weighted Average Yields** - calculated using quarter end report yields and adjusted book values and does not reflect a total return analysis or account for advisory fees.

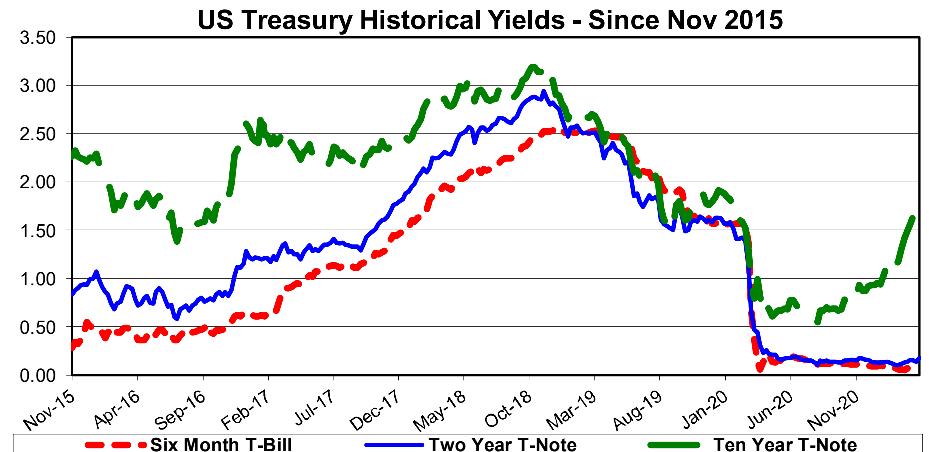
Economic Overview **3/31/2021**

The Federal Open Market Committee (FOMC) maintained the Fed Funds target range at 0.00% to 0.25% (Effective Fed Funds are trading <0.10%), and projected that reduced rates could remain into 2023 or longer. Fourth Quarter GDP finalized at +4.3%. March Non Farm Payroll added 916k and Unemployment declined to 6.0%. Crude oil traded above $60 per barrel. The Stock Markets reached new highs. Housing, Industrial Production, Durable Goods, Consumer Spending, and other indicators showed solid gains. An additional $1.9 trillion stimulus package passed Congress and was signed by the President. The Yield Curve continued steepening on longer maturities.









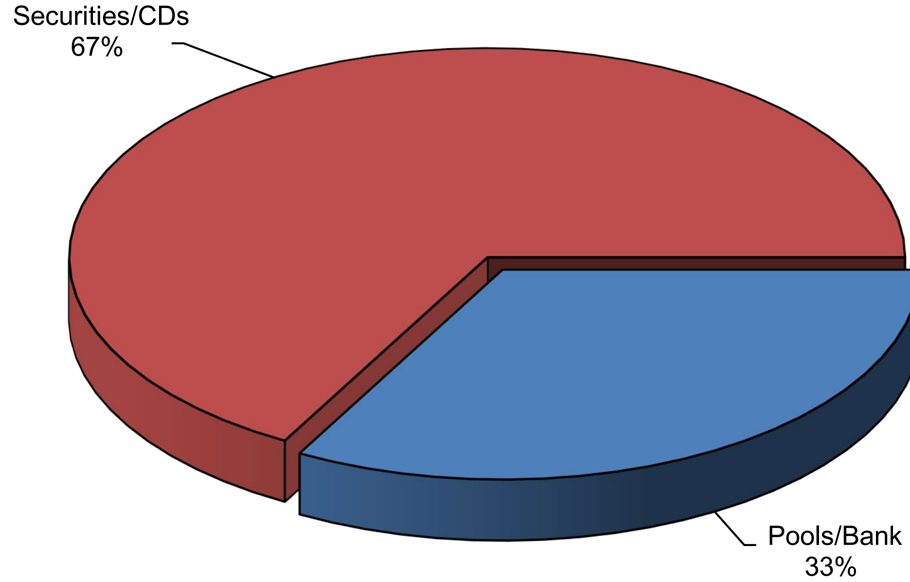
Investment Holdings
March 31, 2021

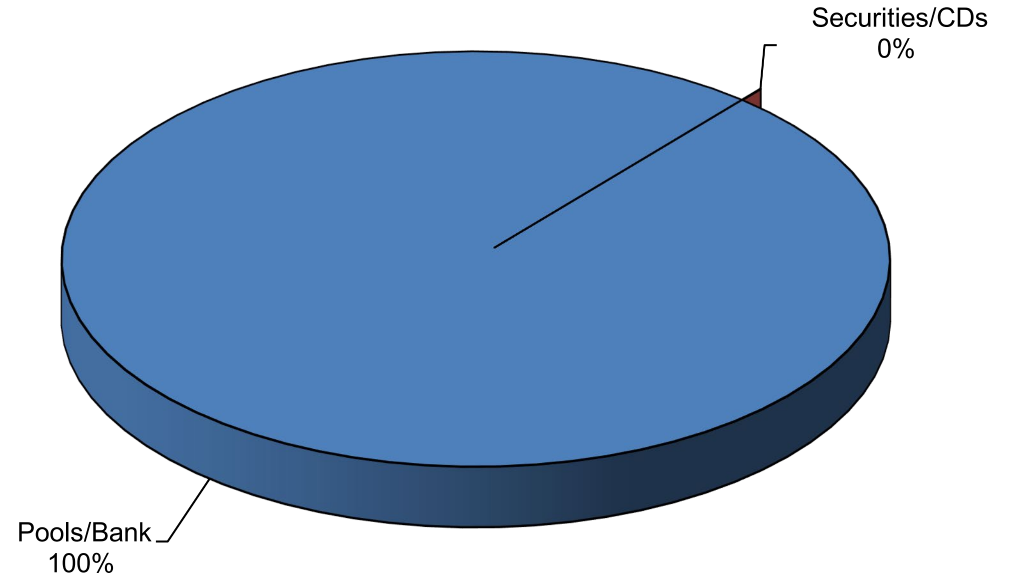
Description	Ratings	Coupon/ Discount	Maturity Date	Settlement Date	Par Value	Book Value	Market Price	Market Value	Life (days)	Yield
City Funds										
Cash - Pooled (3)		0.52%	04/01/21	03/31/21	$ 7,875,985	$ 7,875,985	1.00	$ 7,875,985	1	0.52%
NOW		0.50%	04/01/21	03/31/21	30,897,478	30,897,478	1.00	30,897,478	1	0.50%
InterBank MMA		0.50%	04/01/21	03/31/21	113,515	113,515	1.00	113,515	1	0.50%
TexPool	AAAm	0.02%	04/01/21	03/31/21	216,043	216,043	1.00	216,043	1	0.02%
East West Bank CD		2.53%	04/12/21	04/12/19	3,153,514	3,153,514	100.00	3,153,514	12	2.56%
WallisBank CD		2.50%	05/07/21	05/07/19	3,134,430	3,134,430	100.00	3,134,430	37	2.52%
Bank OZK CDARS		2.51%	06/06/21	06/06/19	3,128,249	3,128,249	100.00	3,128,249	67	2.51%
Bank OZK CDARS		2.10%	07/25/21	07/25/19	3,107,091	3,107,091	100.00	3,107,091	116	2.10%
East West Bank CD		2.04%	08/05/21	08/05/19	3,103,173	3,103,173	100.00	3,103,173	127	2.06%
East West Bank CD		1.69%	11/18/21	11/18/19	3,069,840	3,069,840	100.00	3,069,840	232	1.69%
Third Coast Bank CD		1.65%	01/10/22	01/10/20	3,048,987	3,048,987	100.00	3,048,987	285	1.66%
Prosperity Bank CD		0.20%	02/24/22	02/24/21	3,000,460	3,000,460	100.00	3,000,460	330	0.20%
Prosperity Bank CD		1.45%	03/18/22	03/18/20	3,198,734	3,198,734	100.00	3,198,734	352	1.46%
Allegiance Bank CD		0.75%	05/18/22	05/18/20	4,223,864	4,223,864	100.00	4,223,864	413	0.76%
Bank OZK CD		0.65%	06/03/22	06/03/20	3,014,639	3,014,639	100.00	3,014,639	429	0.65%
Prosperity Bank CD		0.75%	06/30/21	06/26/20	3,197,908	3,197,908	100.00	3,197,908	91	0.75%
Prosperity Bank CD		0.75%	07/11/22	07/09/20	3,011,324	3,011,324	100.00	3,011,324	467	0.75%
Bank OZK CD		0.40%	08/24/22	08/25/20	4,009,326	4,009,326	100.00	4,009,326	511	0.40%
Prosperity Bank CD		0.50%	09/22/22	09/22/20	6,014,869	6,014,869	100.00	6,014,869	540	0.50%
Prosperity Bank CD		0.40%	10/20/22	10/20/20	3,193,670	3,193,670	100.00	3,193,670	568	0.40%
Prosperity Bank CD		0.40%	11/28/22	11/27/20	3,192,667	3,192,667	100.00	3,192,667	607	0.40%
Bank OZK CD		0.24%	12/15/22	03/15/21	3,000,000	3,000,000	100.00	3,000,000	624	0.24%
Prosperity Bank CD		0.30%	01/25/23	01/25/21	6,002,910	6,002,910	100.00	6,002,910	665	0.30%
Prosperity Bank CD		0.25%	02/24/23	02/24/21	6,325,395	6,325,395	100.00	6,325,395	695	0.25%
Bank OZK CD		0.26%	03/15/23	03/15/21	6,112,713	6,112,713	100.00	6,112,713	714	0.26%
City Funds - Sub Total					**$ 118,346,784**	**$ 118,346,784**		**$ 118,346,784**	**281**	**0.80%**
									(1)	**(2)**

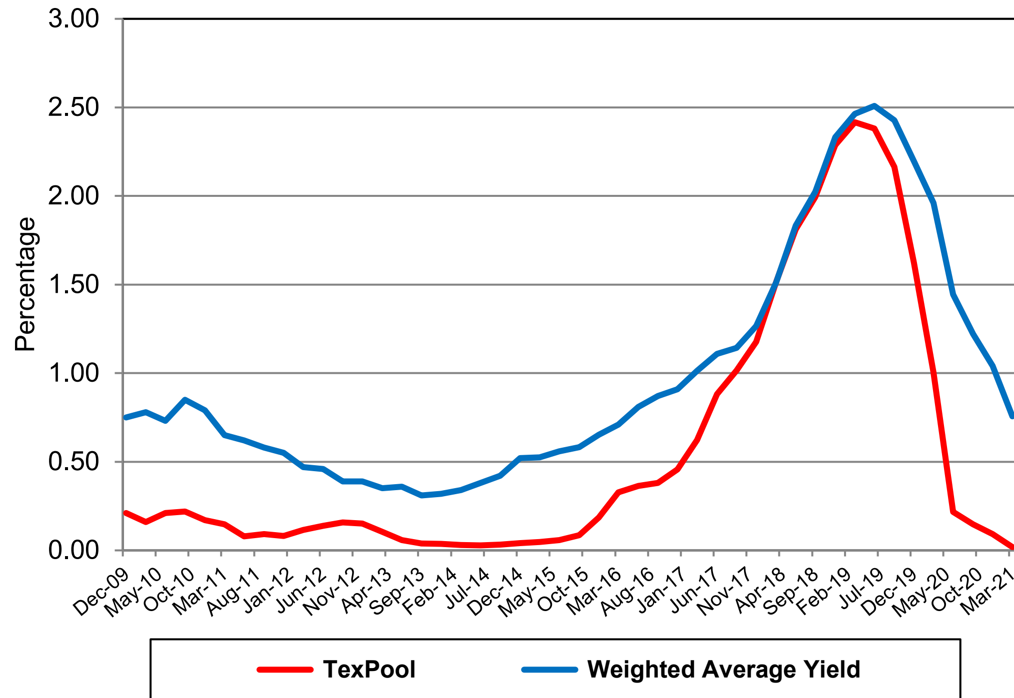
Investment Holdings
March 31, 2021

Description	Ratings	Coupon/ Discount	Maturity Date	Settlement Date	Par Value	Book Value	Market Price	Market Value	Life (days)	Yield
Revenue Bond										
InterBank MMA - Bond		0.50%	04/01/21	03/31/21	$ 341,602	$ 341,602	1.00	$ 341,602	1	0.50%
NOW #2		0.22%	04/01/21	03/31/21	9,282,606	9,282,606	1.00	9,282,606	1	0.22%
Revenue Bond - Sub Total					**$ 9,624,208**	**$ 9,624,208**		**$ 9,624,208**	**1**	**0.23%**
									(1)	**(2)**
Total Portfolio					**$ 127,970,992**	**$ 127,970,992**		**$ 127,970,992**	**260**	**0.76%**
									(1)	**(2)**

(1) Weighted average life - For purposes of calculating weighted average life, TexPool, TexSTAR, and bank account investments are assumed to have a one day maturity.
(2) Weighted average yield to maturity - The weighted average yield to maturity is based on adjusted book value, realized and unrealized gains/losses and investment advisory fees are not considered. The yield for the reporting month is used for TexPool, TexSTAR, and bank account investments.
(3) Cash - Pooled funds are used as compensating balances to offset bank service charges and do not generate hard interest.


Portfolio Composition - City Funds
Securities/CDs
67%
Pools/Bank
33%


Portfolio Composition - Revenue Bond Funds
Securities/CDs
0%
Pools/Bank
100%


Total Portfolio Performance
Percentage
3.00
2.50
2.00
1.50
1.00
0.50
0.00
Dec-09
May-10
Oct-10
Mar-11
Aug-11
Jan-12
Jun-12
Nov-12
Apr-13
Sep-13
Feb-14
Jul-14
Dec-14
May-15
Oct-15
Mar-16
Aug-16
Jan-17
Jun-17
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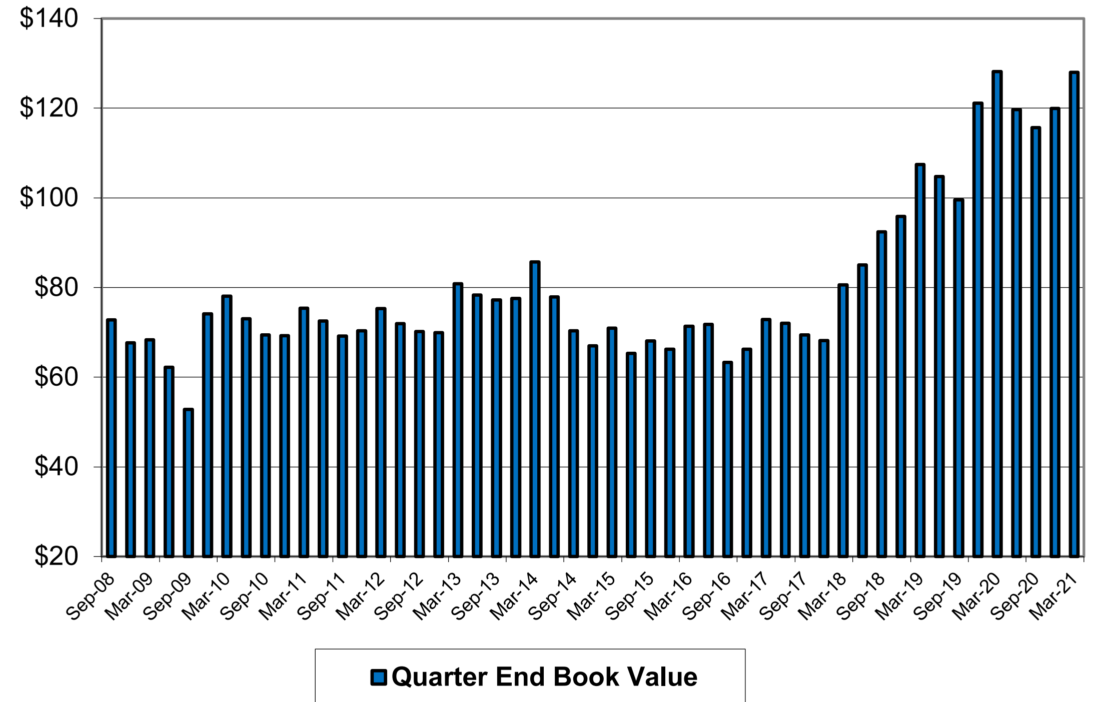
Jul-19
Dec-19
May-20
Oct-20
Mar-21
TexPool
Weighted Average Yield


Total Portfolio (Millions)
$140
$120
$100
$80
$60
$40
$20
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
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Sep-19
Mar-20
Sep-20
Mar-21
Quarter End Book Value

Book & Market Value Comparison

Issuer/Description	Yield	Maturity Date	Book Value 12/31/20	Increases	Decreases	Book Value 03/31/21	Market Value 12/31/20	Change in Market Value	Market Value 03/31/21
Cash - Pooled	0.52%	04/01/21	$ 10,443,617	$ –	$ (2,567,632)	$ 7,875,985	$ 10,443,617	$ (2,567,632)	$ 7,875,985
NOW	0.50%	04/01/21	26,354,490	4,542,988	–	30,897,478	26,354,490	4,542,988	30,897,478
NOW #2	0.22%	04/01/21	12,270,127	–	(2,987,521)	9,282,606	12,270,127	(2,987,521)	9,282,606
InterBank MMA	0.50%	04/01/21	–	113,515	–	113,515	–	113,515	113,515
InterBank MMA - Bond	0.50%	04/01/21	454,556	–	(112,955)	341,602	454,556	(112,955)	341,602
TexPool	0.02%	04/01/21	216,018	25	–	216,043	216,018	25	216,043
Origin Bank CD	2.82%	01/23/21	3,151,279	–	(3,151,279)	–	3,151,279	(3,151,279)	–
East West Bank CD	1.74%	02/18/21	3,058,867	–	(3,058,867)	–	3,058,867	(3,058,867)	–
Prosperity Bank CD	2.73%	02/19/21	3,243,267	–	(3,243,267)	–	3,243,267	(3,243,267)	–
Bank OZK CD	1.73%	03/15/21	6,086,846	–	(6,086,846)	–	6,086,846	(6,086,846)	–
East West Bank CD	2.53%	04/12/21	3,133,903	19,611	–	3,153,514	3,133,903	19,611	3,153,514
WallisBank CD	2.50%	05/07/21	3,114,802	19,628	–	3,134,430	3,114,802	19,628	3,134,430
Bank OZK CDARS	2.51%	06/06/21	3,112,259	15,990	–	3,128,249	3,112,259	15,990	3,128,249
Bank OZK CDARS	2.10%	07/25/21	3,091,209	15,882	–	3,107,091	3,091,209	15,882	3,107,091
East West Bank CD	2.04%	08/05/21	3,087,603	15,570	–	3,103,173	3,087,603	15,570	3,103,173
East West Bank CD	1.69%	11/18/21	3,057,150	12,690	–	3,069,840	3,057,150	12,690	3,069,840
Third Coast Bank CD	1.65%	01/10/22	3,036,665	12,322	–	3,048,987	3,036,665	12,322	3,048,987
Prosperity Bank CD	0.20%	02/24/22	–	3,000,460	–	3,000,460	–	3,000,460	3,000,460
Prosperity Bank CD	1.45%	03/18/22	3,187,329	11,405	–	3,198,734	3,187,329	11,405	3,198,734
Allegiance Bank CD	0.75%	05/18/22	4,215,894	7,970	–	4,223,864	4,215,894	7,970	4,223,864
Bank OZK CD	0.65%	06/03/22	3,009,805	4,834	–	3,014,639	3,009,805	4,834	3,014,639
Prosperity Bank CD	0.75%	06/30/21	3,192,005	5,903	–	3,197,908	3,192,005	5,903	3,197,908
Prosperity Bank CD	0.75%	07/11/22	3,005,656	5,668	–	3,011,324	3,005,656	5,668	3,011,324
Bank OZK CD	0.40%	08/24/22	4,005,364	3,962	–	4,009,326	4,005,364	3,962	4,009,326
Prosperity Bank CD	0.50%	09/22/22	6,007,462	7,407	–	6,014,869	6,007,462	7,407	6,014,869
Prosperity Bank CD	0.40%	10/20/22	3,190,523	3,147	–	3,193,670	3,190,523	3,147	3,193,670
Prosperity Bank CD	0.40%	11/28/22	3,189,521	3,146	–	3,192,667	3,189,521	3,146	3,192,667
Bank OZK CD	0.24%	12/15/22	–	3,000,000	–	3,000,000	–	3,000,000	3,000,000
Prosperity Bank CD	0.30%	01/25/23	–	6,002,910	–	6,002,910	–	6,002,910	6,002,910
Prosperity Bank CD	0.25%	02/24/23	–	6,325,395	–	6,325,395	–	6,325,395	6,325,395
Bank OZK CD	0.26%	03/15/23	–	6,112,713	–	6,112,713	–	6,112,713	6,112,713
TOTAL / AVERAGE	**0.76%**		**$ 119,916,220**	**$ 29,263,140**	**$ (21,208,368)**	**$ 127,970,992**	**$ 119,916,220**	**$ 8,054,772**	**$ 127,970,992**

Cash and Investments by Fund

		03/31/2021	12/31/2020
General Fund	101	$ 23,920,571	$ 17,227,900
General Capital Projects Fund	102	120,941	404,498
Street Improvement Fund	103	970,684	239,936
Development Services Fund	202	1,609,577	1,567,781
Cemeteries Operating Fund	204	130,106	127,622
Forfeitures Fund	205	537,094	611,772
Court Technology Fund	207	42,909	(1,782)
Hotel-Motel Tax Fund	211	5,276,303	5,430,608
Donations Fund	216	408,690	346,857
TIF/TIRZ # 3	218	613,604	522,367
Tyler Tourism & Convention Facilities Fund	219	367,575	256,331
Half Cent Sales Tax Fund	231	23,446,367	22,054,744
Passenger Facility Fund	234	111,688	155,855
Oil & Natural Gas Fund	235	7,937,299	7,506,811
PEG Fee Fund	236	916,887	882,036
Fair Plaza Fund	240	(39,028)	(36,831)
Retained HUD Admin Fee Fund	274	426	425
Housing Assistance Fund	276	1,239,889	1,182,703
State/Federal Grants Fund	285	(222,353)	(231,021)
Transit System Fund	286	(574,916)	(406,063)
CDBG Grant Fund	294	(120,790)	(41,869)
HOME Grant Fund	295	274,405	274,922
Utilities Fund	502	10,040,701	12,102,265
Utilities Construction Fund	503	8,030,815	6,762,404
Utilities Debt Service Fund	504	3,002,566	2,707,621
Utilities Debt Reserve Fund	505	812,428	812,428
Revenue Bond Series 2017	518	341,602	454,557
Revenue Bond Series 2019	519	9,282,606	12,270,127
Airport Fund	524	1,032,063	969,035
Airport Grant Fund	525	(121,884)	115,650
Solid Waste Fund	560	186,179	454,998
Solid Waste Capital Projects Fund	562	(164,925)	22,808
Storm Water Management	575	1,511,629	1,437,324
Productivity Improvement Fund	639	2,811,254	2,867,642
Fleet Replacement Fund	640	6,895,010	6,901,532
Prop, Liab, W/C Insurance Fund	650	1,718,220	1,878,440
Employee Benefits Fund	661	6,025,679	5,395,436
Prop & Facility Management Fund	663	1,117,950	1,237,829
Technology Fund	671	1,299,212	952,416
Payroll Fund	710	12,265	1,290,884
Cemetery Trust Fund	713	3,119,467	3,111,167
Landfill Trust Fund	720	2,873,274	2,857,782
Retiree Benefits Fund	761	(108,471)	(539,974)
Section 125 Trust Fund	772	224,102	216,871
TOTAL		**$ 126,909,670**	**$ 122,354,845**

Federal Reserve Bank of Dallas

FIRST QUARTER 2021

Southwest Economy

COVID-19 Slammed into Texas, Leaving Long-Lasting Impacts

PLUS

- COVID-19 Poses Stubborn Challenge to Economic Growth in Mexico
- On the Record: Value-Added Tax Could Restrain Long-Term Federal Debt
- Spotlight: Pandemic Pushes Texas Minority Unemployment Beyond Highs Reached During Great Recession
- Go Figure: Collapsing Fuel Demand Tanks Texas Exports During Pandemic's Peak

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 Stance of Monetary Policy

"My forecast has improved meaningfully. … Having said that, we are still in the middle of a pandemic, and I want to see more than a forecast, and I want to see actual evidence that that forecast is going to unfold. As we do, and as we make substantial further progress on meeting our dual-mandate goals [stable prices and maximum sustainable employment], I for one am going to be an advocate of beginning the process of removing some of these extraordinary monetary measures, and doing it sooner rather than later. But I need to see outcomes, not just a strong forecast."

CNBC Interview with Steve Liesman—March 23, 2021

On the Importance of the Vaccine Rollout

"The most important thing is how we manage the virus, and these variants, and getting people vaccinated and speeding the vaccinations so we head off the potential impact of these variants. That's still the No. 1 thing I'm watching."

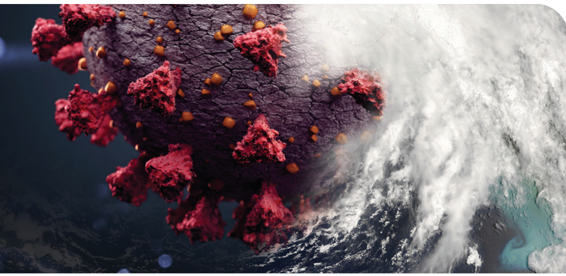
Interview with Reuters—Feb. 17, 2021

On the Outlook for Inflation

"It wouldn't be surprising to see the cyclical elements of inflation build, and I think that you will see some supply outages. We are already seeing evidence of it [in] semiconductors, metals, wood products, maybe even in oil markets. But I don't think those are going to be persistent, I don't think those are going to be long term.

"I think there is no question that the cyclical forces will build, and over time, the question for me is how strong are the accelerating forces of technology and technology-enabled disruption which have been muting inflationary pressures for some time. How do those cyclical and structural forces play out over time? That's what I am going to be watching for. The temporary jump up or rise in inflation won't surprise me. The question for me will be how persistent is it, and I think the jury is still out on that right now."

Bloomberg TV Interview with Mike McKee—Feb. 9, 2021



COVID-19 Slammed into Texas, Leaving Long-Lasting Impacts

By Emily Kerr, Judy Teng and Keith Phillips

ABSTRACT: The economic road from the COVID-19 recession in Texas will likely feature a steeper, more rapid climb than the usual gradual rise associated with most recoveries. Some structural changes that the pandemic wrought will take longer to resolve, including those that will make work from home a longer-term occupational reality for some.

The economic downturn that began with the arrival of COVID-19 in March 2020 has greater resemblance to a natural disaster than a typical recession.

Most recessions begin with slowing growth that transitions into declining jobs and output. At the time, the process may appear so gradual that analysts often miss it until many months later.

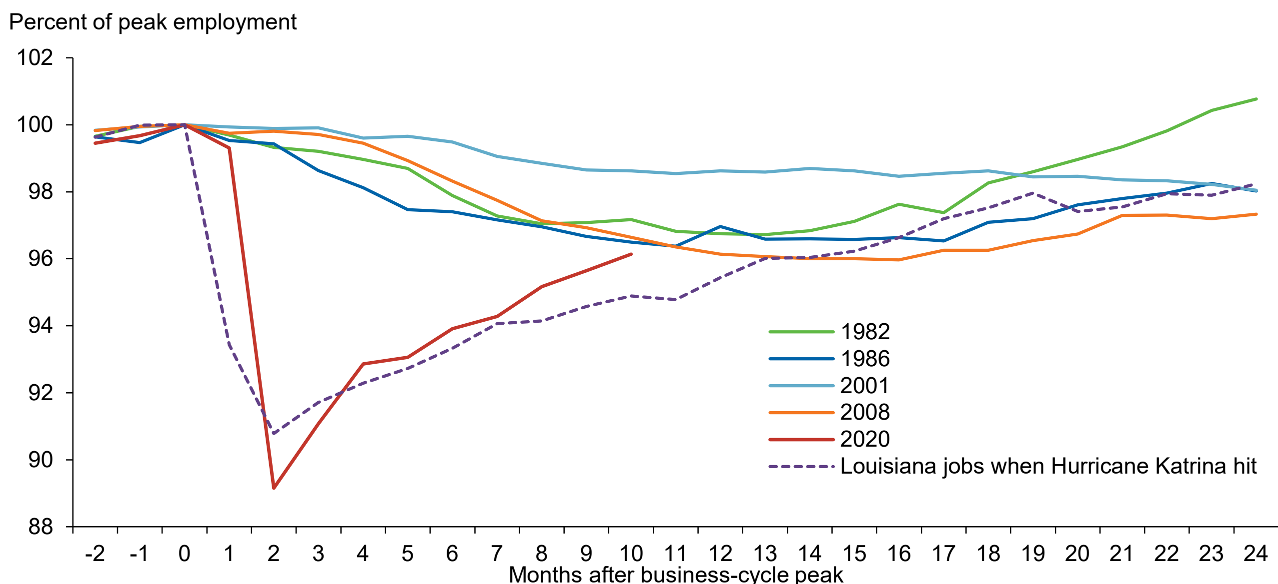
By comparison, when a hurricane occurs—for example, Hurricane Katrina striking Louisiana in 2005—the economy suddenly halts, and jobs and output fall sharply. A quick return to growth follows just a couple months later, although a full recovery can take a year or more.

The pattern of job growth in Texas at the beginning of the pandemic resembles that of Louisiana following Katrina rather than past Texas recessions (*Chart 1*). The speed with which the state achieves prepandemic levels of output and jobs will depend on how quickly COVID-19 cases and hospitalizations decline and the long-lasting structural changes left behind.

Expecting a Slow Return

The pandemic fundamentally disrupted Texas business. Despite the economic recovery that began in May 2020, roughly 60 percent of firms in the Dallas Fed Texas Business Outlook Surveys (TBOS) reported that their January 2021 revenues remained below

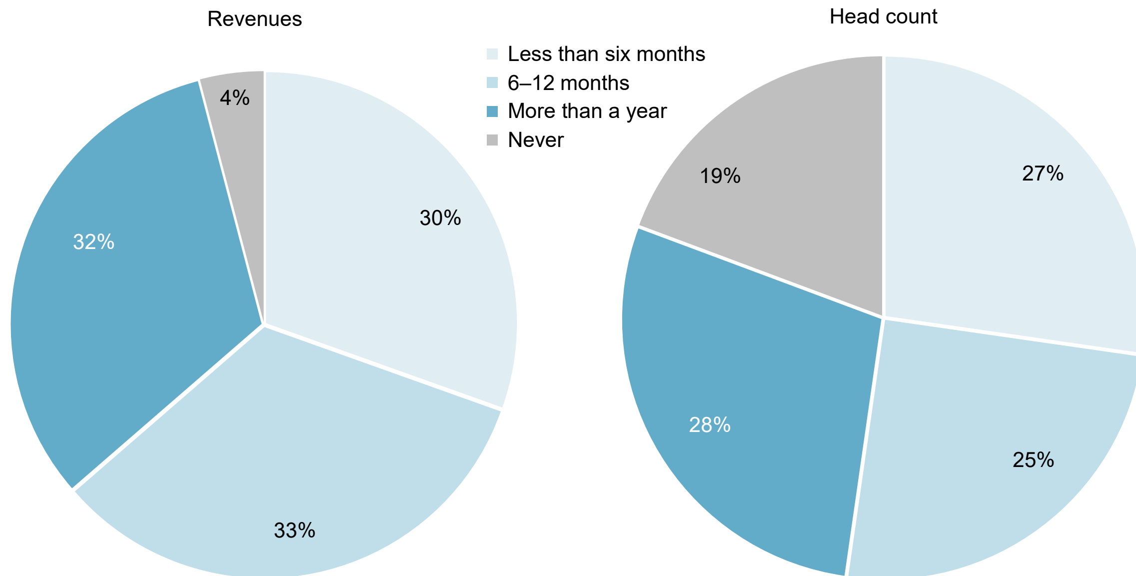
CHART 1 2020 Texas Downturn Looks Much Like Impact from Large Natural Disaster



NOTES: Solid lines refer to Texas nonfarm payroll employment. Recessions are indexed to peak employment: March 1982, January 1986, March 2001, August 2008 and February 2020. Dotted line refers to Louisiana nonfarm payroll employment indexed to peak employment in August 2005.

SOURCE: Bureau of Labor Statistics.

CHART 2 When Do You Expect Your Firm's Revenues and Head Counts to Return to Pre-COVID Levels?



NOTES: This question was only posed to those indicating January revenues or head counts that were below normal (60 and 48 percent of all firms, respectively). Data were collected Jan. 12-20. There were 220 responses for revenues and 176 for head count.

SOURCE: Federal Reserve Bank of Dallas Texas Business Outlook Surveys, January 2021.

normal. When these responding executives were asked when they expected a return to pre-COVID-19 levels, 30 percent said within six months, and 63 percent said within a year (*Chart 2*). The vast majority—96 percent—anticipate full recovery, though nearly one-third said it will take more than 12 months.

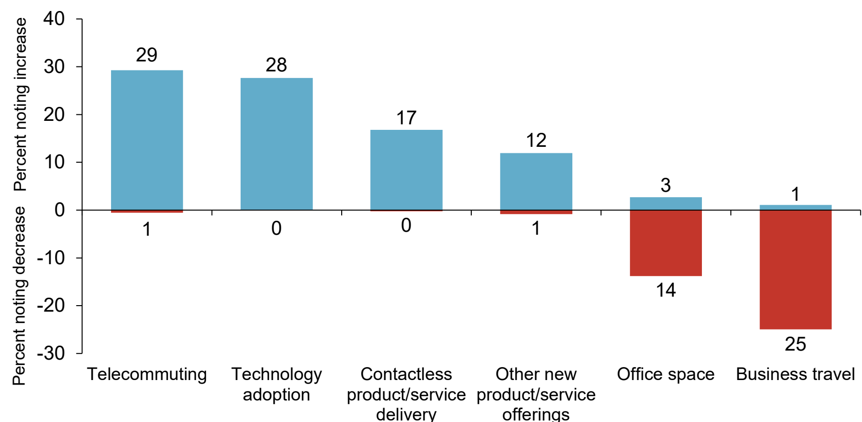
Restoring normal employment may take longer than reviving revenues. Among the 48 percent of firms reporting January 2021 head counts below prepandemic levels, nearly 20 percent said they do not expect them to ever return to pre-COVID-19 numbers. These businesses point to increased efficiency and productivity or streamlining due to technology adoption. Several companies said that they were overstaffed leading up to the pandemic.

These pandemic-spurred productivity improvements allow firms to generate more revenue per employee going forward. This wouldn't be uncommon, as aggregate productivity tends to rise during economic downturns. A National Bureau of Economic Research study found that output per worker rose by more than 5 percent during the Great Recession.[1]

In the long run, productivity gains are a main source in a country's standard of living. They spur both strong output growth and full employment. However, in the short run, they can lead to slower job growth, particularly if there is a mismatch between the skills demanded by the new jobs and the skills of unemployed workers.

For example, the large number of workers displaced from the leisure and

CHART 3 Texas Businesses Report on COVID-19 Structural Changes



NOTES: There were 369 respondents. Firms were asked, "Are there structural changes your firm has made or plans to make as a result of the COVID-19 pandemic that you expect to be permanent? If yes, please specify any changes and whether it is an increase or decrease." Those not responding to a specific category are not shown, thus the percentages do not total 100.

SOURCE: Federal Reserve Bank of Dallas Texas Business Outlook Surveys, December 2020.

hospitality sector likely won't readily transition to growing sectors such as information technology and financial services. They may more easily find employment related to e-commerce, such as in warehousing and parcel delivery services.

Long-Term Pandemic Impacts

TBOS respondents reported at year-end 2020 whether they expected the structural changes instituted because of the pandemic to be permanent. Nearly 30 percent anticipated a permanent increase in telecommuting and technology adoption relative to pre-COVID-19 levels (*Chart 3*).

A quarter of firms expected a permanent reduction in business travel, and 14 percent said they likely won't need as much office space.

These structural shifts portend changes in where people desire to live and work and also affect commuting. The impacts will affect business travel and the oil and gas sector.

More Remote Work Likely

During the pandemic, the dynamics of high-density mostly urban living changed—the potential of virus spread increased costs, while the benefits of leisure opportunities such as restaurants and entertainment fell. This, along with historically low interest rates, likely prompted a significant shift in Texas from city centers to suburban regions and larger homes.[2]

Moreover, the desire to work from home increased sharply due to early government "stay at home" orders and a fear of viral spread. During the initial outbreak, the average share of employees working remotely increased by 26.7 percentage points to more than a third of all workers (*Table 1*).

With numerous telecommuting platforms available to facilitate remote job activity, collaboration and even large-scale business transactions, work-from-home efficiency surprised many in a variety of industries.

The success of remote work likely will reduce demand for office space over the next few years from what it would have been absent COVID-19. TBOS contacts indicated that on average, they expect about 21 percent of their employees to continue working from home after the pandemic.

Office vacancy rates have increased across the state's major metro areas. The fourth quarter 2020 office vacancy rate reached 23.4 percent in Dallas–Fort Worth and 22.3 percent in Houston, surpassing Great Recession peaks.[3]

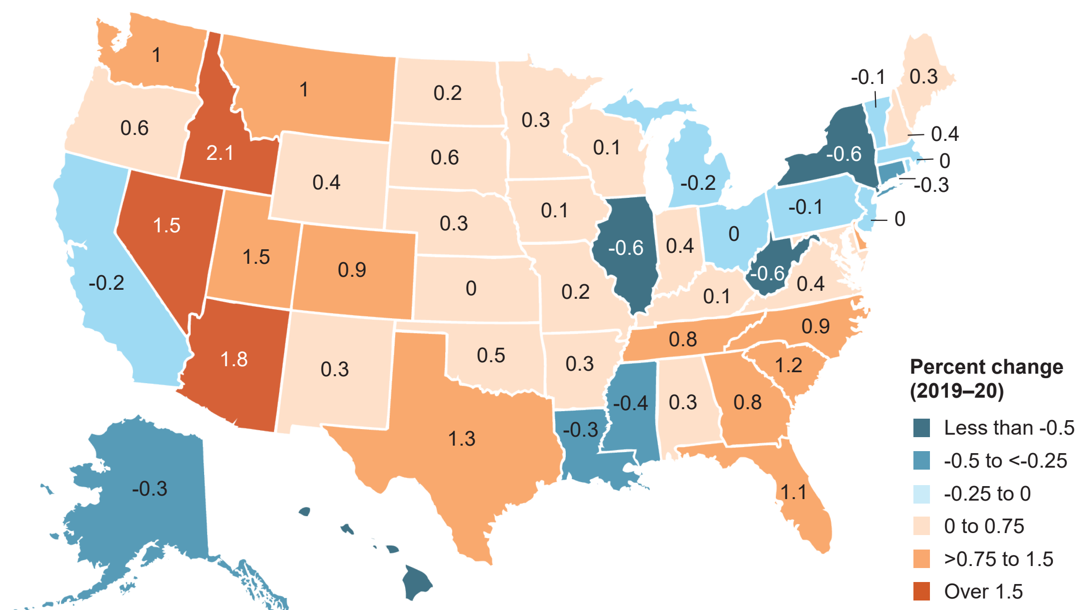
TABLE 1 Share of Work-from-Home Employees to Remain Elevated

	Average (percent)
Pre-COVID-19	8.3
Current	35.0
Post-COVID-19	20.6

NOTES: Respondents were asked, "What share of your employees were working remotely in February 2020 (pre-COVID-19), and what share are currently (August 2020) working remotely? What share do you expect to work remotely after the pandemic ends?" There were 390 responses. Data were collected Aug. 18–26, 2020.

SOURCE: Federal Reserve Bank of Dallas Texas Business Outlook Surveys, August 2020.

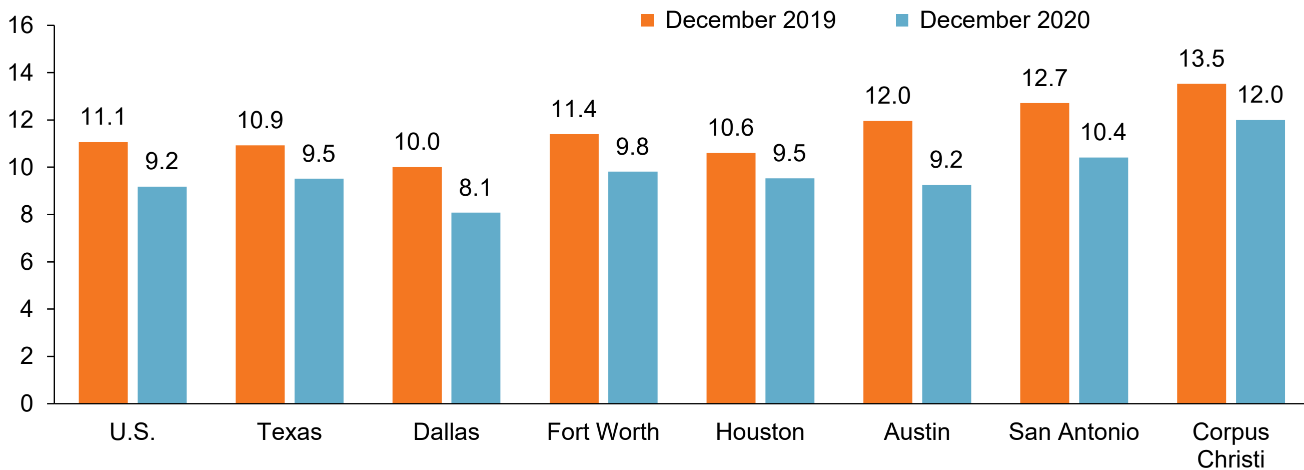
CHART 4 Texas 2020 Population Growth Suggests Strong Migration from Other States



SOURCE: Census Bureau.

CHART 5

Texas Exposure to Leisure and Hospitality Similar to U.S.; Varies Across Metros



SOURCE: Texas Workforce Commission, adjustments by the Federal Reserve Bank of Dallas.

With fewer workers commuting to urban centers, restaurants and retail in those areas may experience a slower recovery, and demand for gasoline (and thus, oil) will increase more slowly than would otherwise be the case following a downturn.

Still Moving to Texas

Some recent studies have found the pandemic not only resulted in some movement to the suburbs but may also have increased the desire of people to live in less-dense and more-inexpensive cities nationally, which would benefit states such as Texas.[4]

Data on population growth, U-Haul rental truck movements and a national builders survey all suggest that net in-migration into Texas from other states remained high last year.

Texas' population increased 1.3 percent in 2020—about the same pace as in 2019 and the fastest rate of growth of the 10 largest states (*Chart 4*). While a breakdown of the sources of the increase is not yet available, average growth rates of births, deaths and international migration to the state over the past five years provide an indicator. These estimates along with census data imply that Texas net domestic migration increased by about 20 percent last year—to around 151,700.

The strength in net domestic migration to Texas is supported by data from U-Haul, which measures movements of one-way moving truck rentals. Last year, Texas ranked second in net trucks coming into the state—behind only Tennessee and ahead of Florida.

Interestingly, the top three states for net positive moves were three of only nine states that do not have a state income tax.[5] California was at the bottom of the list as the state with the greatest net outflow of moving trucks.

Also supporting strong net domestic migration, a Zonda research survey of builders in November 2020 found that 60 percent of 45 builders with operations in Texas said that out-of-market/out-of-state home purchases had increased in Texas, while 4.4 percent said they had decreased.[6]

Six out of the 10 builders that posted comments mentioned people moving from California or the West Coast, with one citing a "huge influx from California still continuing."

Firms recently announcing relocation of major operations or headquarters to the state included Tesla, Hewlett Packard Enterprise, Oracle and CBRE.

Business Travel Impacts

Telecommunications technology, and in particular web conferencing, has gained new prominence—digital platforms such as Skype, Lifesize, Zoom, GoToMeeting and Cisco WebEx. While their development generally began in the mid-1990s, their use accelerated during the pandemic.

As employees shifted to working from home, they were forced to learn about these platforms and began appreciating their ease of use. Many internal and external conferences were converted from in-person events to digital, and business travel declined dramatically in 2020. How fast and how far business travel rebounds remains subject to debate, though experts in the field predict a slow recovery to prepandemic levels.

In a survey of meeting planners in January 2021, only 22 percent anticipated resuming face-to-face meetings in the first half of the year, with 25 percent seeing a third-quarter resumption, 27 percent anticipating a return at year-end and 18 percent suggesting a resumption in 2022.[7] When asked about what percentage of 2019 events activity they foresee coming back, just 7 percent reported returning to 2019

levels this year, 32 percent by 2022 and 71 percent by 2023.

If meetings and conferences are slow to return, then industries relying on business travel, such as airlines, hotels, restaurants, retail and convention centers will feel the effects. Nationally, hotel occupancy averaged just 44 percent last year, and revenue per available room was down 48 percent from 2019, according to hospitality analytics firm STR, a unit of CoStar Group Inc.[8]

Luxury hotels performed far worse, with 21 percent occupancy in December 2020 versus 68 percent in 2019, while economy hotel occupancy was 45 percent in December compared with 48 percent in December 2019. STR forecasts that overall room demand will rebound to 2019 levels by 2023, and it won't be until 2024 before revenue per available room fully recovers.

How will reduced business travel affect the jobs recovery in Texas? While detailed data on business travel are difficult to obtain, broader measures of the sector's size provide insight regarding the potential outline of a rebound.

About 11 percent of jobs in Texas and the U.S. were in leisure and hospitality in 2019, though the figure was much higher in metros such as San Antonio and Corpus Christi (*Chart 5*). Given the sector's size, especially in certain areas, its slow return may depress job growth this year, even as other sectors and certain portions of the industry—such as leisure travel and local spending on restaurants—grow strongly.

Oil and Gas Sector Impact

Texas accounted for 41 percent of U.S. oil production and 25 percent of U.S. natural gas production in 2019. With the rise in working remotely and the declines in air travel and leisure and hospitality activity, worldwide fuel demand plummeted in the first half of 2020.

Gasoline consumption fell by nearly half and jet fuel by 70 percent nationally.[9] The reduced demand for oil products played a major role in a large decline in the monthly average price of West Texas Intermediate Crude (WTI)—from $59.88 per barrel in December 2019 to $16.55 in April 2020. Prices subsequently recovered to an average of $59.05 per barrel by February 2021.

Although contacts in the first-quarter Dallas Fed Energy Survey reported increased activity and an improved outlook, commuter and business travel won't likely return to pre-COVID-19 levels over the next several years.

Survey respondents expected the price of WTI to be $61 in fourth quarter 2021, slightly above the average breakeven price the survey reported in first quarter 2021. Despite higher oil prices, slightly over half—53 percent—of executives expect their head count to remain unchanged from December 2020 to December 2021.

Vaccinations Remain Key

Assuming there is COVID-19 vaccine efficacy and a high percentage of the population is vaccinated or immune by the third quarter, the Texas economy should grow strongly in the second half of 2021.

Structural changes and frictions in the labor market might impact the pace of job gains and a return to pre-COVID-19 employment levels in Texas. Shifting demand toward less dense, lower cost of living areas, such as those in Texas, should support economic growth.

Overall, the changes suggest that Texas will continue to see stronger job growth than the national average and employment will return to pre-COVID-19 levels before the end of the year. However, jobs will still be below the trend level suggested before COVID-19. Jobs in Texas will likely grow a strong 6.0 percent this year, according to the Dallas Fed Texas Employment Forecast.[10]

Households that have pent up demand and built up savings should return to restaurants and vacation destinations and even some high-contact events such as concerts and sporting events. At a growth rate of 6.0 percent, however, jobs in December 2021 would still be about 0.9 percent (116,000 jobs) above the peak level reached in February 2020, but below the previous trend by 2.7 percent (359,000 jobs).

Kerr is a senior business economist in the Research Department at the Federal Reserve Bank of Dallas.

Teng is a research analyst in the San Antonio Branch of the Federal Reserve Bank of Dallas.

Phillips is an assistant vice president and senior economist in the San Antonio Branch of the Federal Reserve Bank of Dallas.

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[2] "COVID-19 Fuels Sudden, Surging Demand for Suburban Housing," by Laila Assanie and Yichen Su, Federal Reserve Bank of Dallas *Southwest Economy*, Fourth Quarter 2020.

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[4] "The Impact of the COVID-19 Pandemic on the Demand for Density: Evidence from the U.S. Housing Market," by Sitian Liu and Yichen Su, Federal Reserve Bank of Dallas Working Paper no. 2024, revised October 2020; "Emerging Trends in Real Estate 2021," Urban Land Institute and PwC, accessed Feb. 22, 2021.

[5] Tennessee and New Hampshire are among the nine states, although they collect taxes on interest and dividend income.

[6] Survey from Zonda advisory of homebuilders operating in Texas and their assessment of the impact of COVID-19. Results presented Jan. 27, 2021, www.surveymonkey.com/results/SM-X3H6DDP67/.

[7] i-Meet Planner Confidence Index, "2021 Planner Confidence Index–Phase 3," a weekly survey of trends and evolving opinions of meeting professionals.

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A Conversation with Alan D. Viard

Value-Added Tax Could Restrain Long-Term Federal Debt

Alan D. Viard, a resident scholar at the American Enterprise Institute, studies tax and budget policy. A former senior economist at the Federal Reserve Bank of Dallas, Viard discusses how to address the U.S. budget deficit in the aftermath of the COVID-19 pandemic.

Q. How large is the long-run fiscal imbalance and what is driving it? How much has the COVID-19 pandemic added to the imbalance?

In June 2019, the Congressional Budget Office (CBO) projected that the federal government's debt under current law would rise from 78 percent of annual gross domestic product (GDP) in 2019 to 144 percent in 2049.

The fiscal imbalance further widened during the recession accompanying the pandemic in 2020, as tax revenue fell and Congress adopted large spending increases and tax cuts to provide income support and economic stimulus. On March 5, 2021, the CBO projected that the debt would grow to 202 percent of annual GDP in 2051.

That estimate does not include the costs of the $1.9 trillion stimulus and relief plan that became law in March 2021. Congressional action to respond to the pandemic was likely necessary but has added to the government's debt.

The underlying cause of the long-run fiscal imbalance is that spending on Social Security and the major health care programs (Medicare, Medicaid and Affordable Care Act health insurance premium subsidies) is growing much more rapidly than revenue, due to population aging and rising medical costs.

The CBO projects that, under current law, noninterest spending will rise from 19.2 percent of GDP in 2019 to 23.1 percent in 2051, while revenue will only grow from 16.3 percent of GDP to 18.5 percent. The projected spending increase is highly uneven; spending on Social Security and the major health care programs will surge from 10.2 percent of GDP to 15.7 percent, while all other noninterest spending will shrink from 9.0 percent of GDP to 7.4 percent.

Addressing the fiscal imbalance will require reductions in Social Security and health care spending, revenue increases or both.

Q. Why is the growth of the national debt concerning?

The CBO has explained that higher debt will slow long-run economic growth by crowding out private investment and pushing up interest payments to foreigners who hold Treasuries. It may also increase the risk of a crisis in which investors demand higher interest rates for federal debt. Higher debt may also lead to higher inflation expectations and may reduce flexibility to respond to unforeseen events.

When addressing the fiscal imbalance, time is not on our side. Delay will only make the necessary responses more painful. The CBO estimated in September 2020 that holding the 2050 debt to its 2019 share of GDP would require permanent tax increases or spending cuts equal to 3.6 percent of GDP, if those measures took effect in 2025. The required magnitude of the tax increases or spending cuts would rise to 4.4 percent of GDP if action were delayed to 2030 and to 5.9 percent if action were put off to 2035.

Although it would be unwise to implement major tax increases or spending cuts while the economy is still weakened by the pandemic, action should be taken as soon as possible after the economy regains its strength.

Q. You have proposed implementing a national value-added tax (VAT) to boost revenue. What is a VAT and how does it differ from a retail sales tax?

The VAT is a consumption tax that is used in 160 countries, including all Organization for Economic Cooperation and Development (OECD) countries other than the United States. A VAT is economically similar to a retail sales tax but is collected in a different manner.

While the retail sales tax is collected entirely from the retailer, part of the VAT is collected at each stage of production. The multistage collection ensures that the entire revenue cannot be lost through tax evasion at a single stage of production.

Suppose that a manufacturer sells its output for $500 to a wholesaler, which sells its output for $800 to a retailer, which sells a final product to consumers for $1,000. Of the $1,000 value of the final product, $500 is added at the manufacturing stage, $300 at the wholesale stage and $200 at the retail stage.

Under a retail sales tax, the retailer remits tax on the $1,000 of sales to consumers. Under a VAT, the manufacturer remits tax on its $500 of value added, the wholesaler remits tax on its $300 of value added, and the retailer remits tax on its $200 of value added, yielding the same combined tax payment as the retail sales tax.

Q. A VAT would raise taxes on the middle class. Could this be avoided by relying instead on tax increases that target corporations and high-income households? What about benefit cuts?

Although tax increases on corporations and high-income households as well as benefit cuts could be part of a debt-reduction package, they cannot

Although it would be unwise to implement major tax increases or spending cuts while the economy is still weakened by the pandemic, action should be taken as soon as possible after the economy regains its strength.

provide a full solution to the long-term fiscal imbalance.

High-income tax increases would reduce inequality and place fiscal burdens on those with the greatest ability to pay, but they would also induce economic distortions, thus threatening long-run growth. The individual income tax and the estate and gift tax penalize saving. The corporate income tax distorts decisions about business organization and financing and penalizes investment in the United States. None of those penalties arise under a VAT.

Also, such tax increases would have limited revenue potential. Even commentators who support these kind of measures recognize that they would not raise enough revenue to fully address the fiscal imbalance and would have to be accompanied by other measures.

Restraining the rapid projected growth of Social Security and the major health care programs could significantly narrow the fiscal imbalance and could even promote long-run economic growth by encouraging additional saving.

However, benefit cuts would be severely regressive, placing far larger burdens relative to income on lower-income households than higher-income households. For example, the burden imposed by across-the-board Social Security benefit cuts would be approximately 100 times larger as a share of income for the bottom 20 percent of the income distribution than for the top 1 percent.

Significant benefit cuts would also face formidable political challenge. Most Democrats oppose benefit cuts, and many of them support benefit increases. Although Republicans often support benefit cuts in the abstract, they generally refrain from proposing specific cuts. Benefit reductions may be even harder to achieve in the wake of the pandemic, which may have permanently increased public support for a generous safety net.

Q. Aren't consumption taxes regressive? Wouldn't a VAT hurt low-income families who save less and spend more of their income?

In isolation, the VAT is regressive. The Urban-Brookings Tax Policy Center has estimated that a 5 percent broad-based VAT would reduce after-tax income by 3.9 percent for households in the bottom 20 percent of the income distribution, 3.6 percent for households in the middle 20 percent and 2.5 percent for households in the top 1 percent.

Nevertheless, the VAT is far less regressive than benefit cuts. Under a VAT, the burden on the bottom 20 percent as a share of income would be less than double the burden on the top 1 percent, not 100 times greater as under across-the-board Social Security benefit cuts. Rejecting a VAT based on its regressivity would be a pyrrhic victory if it caused the fiscal imbalance to instead be addressed through benefit cuts that were vastly more regressive.

Moreover, a VAT should—and undoubtedly would—be accompanied by rebates to offset the tax burden on low-income households. The Tax Policy Center estimated that a 7.7 percent VAT with rebates, which would raise the same net revenue as a 5 percent VAT without rebates, would generally be progressive. It would reduce after-tax income by 0.6 percent for the bottom 20 percent, 2.9 percent for the middle 20 percent and 3.6 percent for the top 1 percent.

Finally, it is important to remember that the VAT would be only one component of the federal tax system. Individual and corporate income taxes would continue to add progressivity to the overall federal tax system.

Q. What do you tell voters who are concerned that additional revenue will prompt the government to spend more rather than shrink the national debt?

Some have argued that a VAT would fuel the growth of government spending because it would be a relatively invisible tax. That concern could be addressed by requiring that the tax be listed as a separate item on customer receipts, as is normally done for state and local retail sales taxes.

The VAT would then likely be at least as visible as employee payroll taxes and individual income tax withholding, which are displayed as line items on paycheck stubs and would be much more visible than corporate income taxes and employer payroll taxes, which are largely hidden from public view.

To be sure, even if the VAT is listed on customer receipts, its enactment could reduce pressure for benefit cuts. Those who believe that benefit cuts are the best debt-reduction strategy may thus be tempted to delay or avert the adoption of a VAT. However, they should consider the political and economic limitations of benefit cuts and weigh any possible gains against the costs of delaying action on the fiscal imbalance.

COVID-19 Poses Stubborn Challenge to Economic Growth in Mexico

By Jesus Cañas and Chloe Smith

ABSTRACT: Mexico, confronting a high rate of COVID-19 infection and an ineffectual medical response, recorded the largest decline in gross domestic product in a quarter century last year. While manufacturing trade with the U.S. provided economic support, the large and hard to reach off-the-books informal sector proved more troublesome and will play an important role in the nation's performance in 2021.

With COVID-19 sweeping across the world, Mexico's gross domestic product (GDP) contracted the most in a quarter century in 2020.

The Mexican economy has since proceeded along two tracks—external trade-related sectors performing well, and the service sector struggling. Workers have been especially hard hit in the informal sector—where activity is not reported to the government and whose participants do not pay employment taxes or receive government-mandated benefits and pensions. They have suffered the largest job losses.

Insufficient fiscal stimulus from the government has likely contributed to shrinking GDP.

While COVID-19 cases have dropped sharply since hitting a postholiday peak in January, strict social-distancing measures will be needed to minimize the likelihood of another infection wave given that a national vaccine program is proceeding very slowly.

Testing for the virus remains an ongoing challenge. Mexico has not followed the World Health Organization's testing recommendation, arguing that the country lacks proper infrastructure. Mexico tests only the sickest patients who seek medical attention. There are few prevention measures and little contact tracing.

Recent Economic Developments

The Mexican economy shrank 4.5 percent in 2020 as the pandemic ravaged factories, businesses and households. It was the greatest contraction since the 1994 Tequila Crisis that followed a peso devaluation.[1] The latest decline compared with the downturn in Chile (-5.0 percent) and was more severe than the ones in the U.S. (-2.4 percent) and in Brazil (-1.2 percent), the largest economy in Latin America.

Output in service-related activities (including trade and transportation) dropped 5.2 percent in Mexico, while goods-producing industries (including manufacturing, construction and utilities) fell 0.5 percent. Agricultural output increased 4.4 percent.

As in other countries, COVID-19 disproportionately affected the service industry, particularly leisure and hospitality—businesses such as hotels and restaurants. While e-commerce thrives, brick-and-mortar retail has suffered. Because e-commerce is tiny in Mexico by developed-country standards, it has provided little offset for the decline in the traditional service sector.

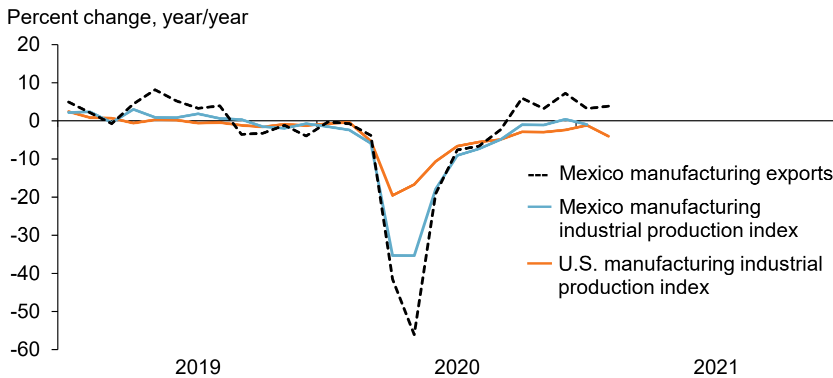
Additionally, the government has provided scant fiscal support for the economy. Mexico's stimulus plan—which includes a mix of loans and tax credits, tax payment deferrals and job training—amounts to 1.1 percent of GDP compared with plans in Brazil (8.4 percent) and Chile (4.7 percent).

Mexico's real retail sales index remains 5.5 percent below levels seen in February 2020, while Chile's retail sales are 4.3 percent above its pre-COVID-19 performance as the country regained prepandemic levels in August. Brazil's sales began rebounding in June 2020 and expanded during third quarter 2020, recovering to levels seen before the pandemic despite a resurgence of the virus.

Although Mexico's lack of fiscal stimulus has hurt households and businesses, it has helped the government avoid large deficits and accompanying inflation that could depress the currency. The peso regained much of its strength relative to the dollar in the second half of 2020 after sliding with

CHART 1

Mexico's Manufacturing Production, Export Growth Return to Prepandemic Levels



SOURCES: Mexico's National Institute of Statistics and Geography (INEGI); Banco de México; Federal Reserve Board.

the onset of the pandemic. The peso averaged 19.9 per dollar in December, a net depreciation of 1.1 pesos for the year.

Inflation finished 2020 at 3.1 percent in December (12-month change), firmly within the central bank's target range.[2] Mexico's refusal to boost public spending to mitigate COVID-19's economic impact will likely result in the lowest budget deficit among Latin America's major economies in 2020, though its recovery is likely to lag behind the region.

Strong Manufacturing Output

Mexico's manufacturing production and manufacturing exports are above pre-COVID-19 levels, reflecting a strong correlation with what has been a resilient U.S. manufacturing sector *(Chart 1)*.[3] These ties between the two countries, largely involving intra-industry trade, took root and grew with the 1994 North American Free Trade Agreement, which was recently supplanted by the United States–Mexico–Canada Agreement (USMCA).

Manufacturing exports represent 90 percent of total exports, and Mexico sends 81 percent of its total exports to the U.S. Thus, U.S. economic stimulus bolsters Mexico's manufacturing export sector. Higher global oil prices are a tailwind for Mexico's recovery, with the price of Mexican mix at around $50 per barrel, up from $17 per barrel in April. Crude oil production in Mexico is down 50 percent in the past 10 years, however.

Normalization of trade flows between the United States and Mexico has helped speed a sectoral manufacturing recovery.

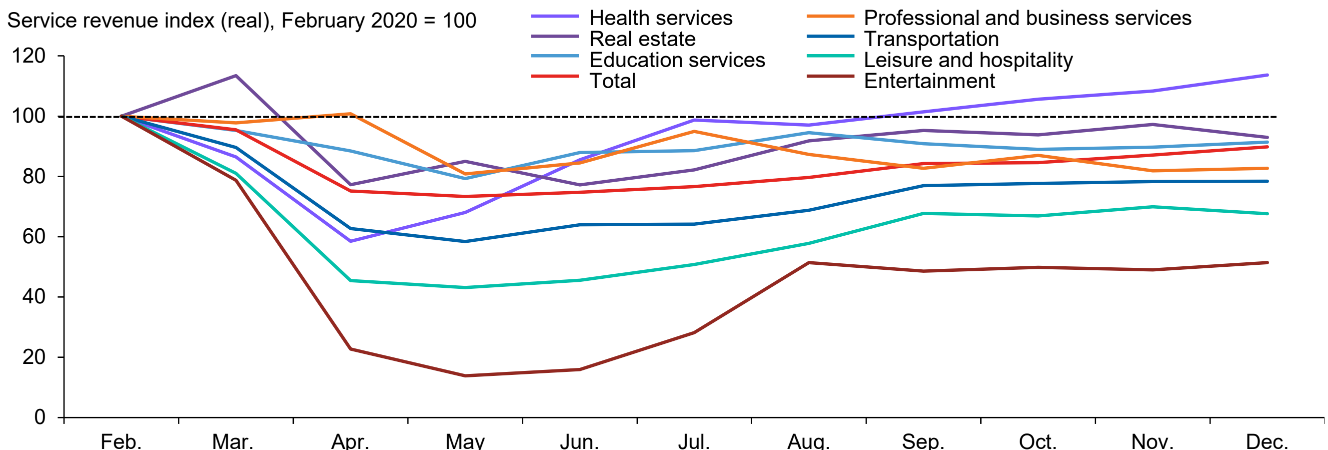
Meanwhile, the performance of Mexico's service sector has not recovered, although the extent of progress varies by industry *(Chart 2)*. Revenue in health care services, real estate, education, and professional and business services has been the most resilient. However, output in entertainment (down 49 percent from prepandemic levels), leisure and hospitality (off 32 percent) and transportation services (down 22 percent) have proven the most vulnerable.

Mexico's large informal sector challenges economic recovery as well as efforts to contain the virus' spread. Mexico's national employment survey pegged total employment at 53.3 million in December 2020, with formal employment representing 44 percent of the total and informal employment 56 percent.

The majority of informal work is in high-contact industries such as retail trade, miscellaneous services (temporary workers and gig labor) and construction. Informal work produces 23 percent of GDP, according to Mexico's National Statistics Institute (INEGI).

CHART 2

Recovery in Mexico's Service Sector Stalls Under Weight of COVID-19 Infection



NOTE: Seasonally adjusted by authors.

SOURCE: Mexico's National Institute of Statistics and Geography (INEGI).

Unlike workers in the formal economy, who benefit from legal and social protections, informal workers lack such a safety net. They are mostly self-employed, working in street vending, domestic work and transportation. Some also work as off-the-books day laborers in factories, farms and other formal businesses that don't extend full rights or protections to all employees.

Pandemic control measures, such as sheltering in place and social distancing, achieved more inconsistent adoption in the informal sector relative to the formal sector. The informal sector's behavior and its likely ties to recurring waves of COVID-19 infections could be key to the introduction of any future national government-mandated restrictions—ones that might well slow an economic recovery.

Disproportionate COVID-19 Impact

Total Mexico employment fell 3.7 percent from March 2020 to December 2020. Formal employment dropped 2.6 percent (626,000 jobs) and informal employment fell 4.5 percent (1.4 million jobs) *(Table 1)*. The most-affected sector was leisure and hospitality, followed by miscellaneous services.

The largest employment base within the informal sector is in trade, agriculture and miscellaneous services (55 percent), while the highest concentration of formal jobs is in manufacturing, trade and social services (56 percent).

More women—particularly in the informal sector—have lost their jobs during the pandemic in developing economies such as Mexico, according to the World Bank. While men represent 61 percent of informal jobs, their employment only fell 2.4 percent. Among women—who account for 39 percent of informal jobs—employment dropped 7.6 percent.

Continued COVID-19 Outbreak

Mexico's first confirmed COVID-19 case was reported on Feb. 28, 2020, ultimately prompting public health measures that included travel restrictions, social distancing, school closures and the shutdown of nonessential activities.

The government announced plans to begin normalization of economic activities in mid-May, including a green-yellow-orange-red color system to represent the extent of activities allowed in individual states. For example, states with the most active cases were designated as red and would remain in forced quarantine. Officials also added construction, mining and transport equipment manufacturing to the list of essential activities.

Mexico's COVID-19 cases spiked first in early August before reaching a second peak in December and an all-time high in late January. Recently, cases per 100,000 people have fallen in Mexico, while a new surge has begun in Chile and Brazil *(Chart 3)*.

Mexico isn't performing widespread COVID-19 tests of its population—just 12 tests per 100,000 people. Mexico's

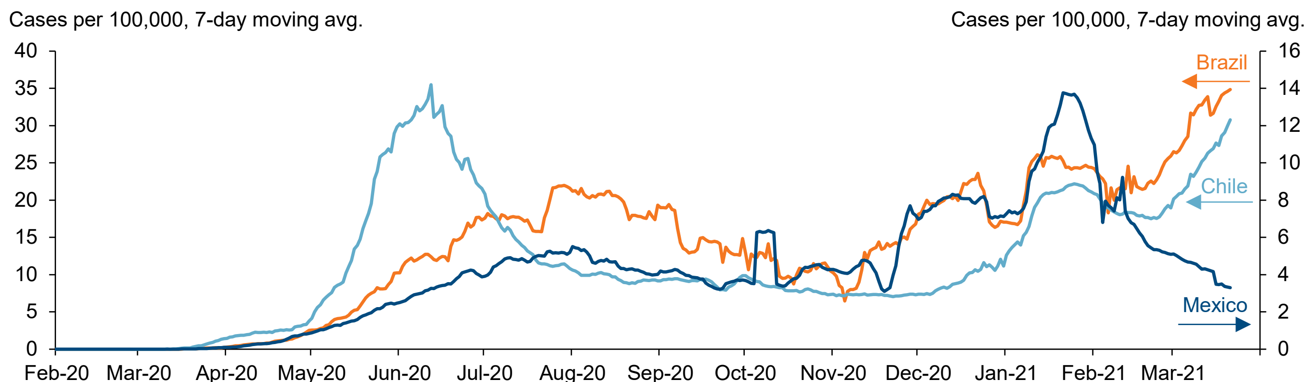
TABLE 1 Mexico's Total Employment Shows Strains of Recurring Pandemic Surges

Economic sector	Total employment (millions of workers)	Dec/Mar chg (%)	Share (%)	Formal employment (millions of workers)	Dec/Mar chg (%)	Share (%)	Informal employment (millions of workers)	Dec/Mar chg (%)	Share (%)
Total	**53.3**	**-3.7**	**100.0**	**23.7**	**-2.6**	**100.0**	**29.6**	**-4.5**	**100.0**
Leisure and hospitality	3.7	-17.5	6.9	1.0	-23.5	4.3	2.6	-15.0	8.9
Miscellaneous services	5.2	-8.6	9.8	1.0	-8.0	4.1	4.3	-8.8	14.4
Oil, mining and electricity generation	0.4	-4.8	0.7	0.3	-8.1	1.3	0.1	17.3	0.2
Transportation, communications and warehousing	2.7	-4.4	5.1	1.4	2.6	6.1	1.3	-11.1	4.4
Manufacturing	8.7	-4.3	16.3	5.4	-4.8	23.0	3.3	-3.5	11.0
Professional and financial services	3.8	-3.9	7.1	2.7	-1.1	11.4	1.1	-10.3	3.6
Trade	10.6	-1.4	19.9	4.3	0.7	18.2	6.3	-2.8	21.3
Construction	4.3	-1.0	8.0	0.9	-9.3	3.7	3.4	1.3	11.5
Social services	4.4	-0.3	8.3	3.6	2.0	15.3	0.8	-9.5	2.7
Agriculture	6.7	1.6	12.5	0.9	-2.0	3.6	5.8	2.2	19.6
Government	2.5	2.8	4.8	2.1	2.7	8.9	0.4	3.2	1.5
Other	0.3	-9.0	0.6	0.0	38.4	0.2	0.3	-14.5	0.8

NOTE: Rank is in terms of total employment losses.
SOURCE: National employment survey, December 2020, Mexico's National Institute of Statistics and Geography (INEGI).

CHART 3

COVID-19 Cases Falling in Mexico After Spiking in January



NOTE: Data are through March 21, 2021.
SOURCES: Johns Hopkins University; United Nations.

46 percent positivity rate—second only to Paraguay worldwide—is an indication that only the sickest patients seeking medical attention are tested. Absent contact tracing or widely administered medical treatment, detecting a new wave of infections is difficult.

Governments should see positivity rates below 5 percent for at least 14 days before relaxing social-distancing measures, according to the World Health Organization. Nevertheless, restrictions in Mexico were lessened as the holiday wave waned.

In the March 1-14, 2021, monitoring report, none of the Mexican states were in red for the first time since late September/early October 2020. Ten states were in orange, the second-most restrictive tier; 20 states were in yellow; and two states were in green, the point at which activities are allowed without restriction.

Vaccinations began in late December, when Mexico became the first Latin American country to receive a vaccine shipment. The inoculation effort has since stalled due to mismanagement and a global vaccine shortage. Just 0.5 percent of the population was fully vaccinated as of mid-March, according to the Johns Hopkins Coronavirus Resource Center.

Challenging Economic Outlook

Mexico's economic recovery is largely confined to its manufacturing sector, which is filling production orders from its northern neighbor. Manufacturing has dealt with comparatively few restrictions and largely avoided disruption in North American supply chains, a situation unlikely to change.

By comparison, a service sector recovery is hindered by suppressed domestic demand, social-distancing measures and little government assistance. The lack of fiscal stimulus has left many households and businesses with significant income loss that will remain a headwind to the recovery.

The consensus forecast compiled by Banco de México for 2021 GDP growth is 3.9 percent, with a projected exchange rate of 20.3 pesos per dollar and year-end inflation of 3.9 percent.[4] However, the pandemic remains far from controlled, and supply and logistical issues have slowed vaccination progress. Additionally, the dearth of testing will complicate the timely detection of future COVID-19 incidents, impeding an economic recovery.

Cañas is a senior business economist in the Research Department at the Federal Reserve Bank of Dallas.

Smith is a research analyst in the Research Department at the Federal Reserve Bank of Dallas.

Notes

[1] GDP growth is calculated comparing fourth quarter 2020 with fourth quarter 2019. If the estimation is computed as Mexico's National Institute of Statistics and Geography (INEGI) officially calculates growth—the averaging of year-over-year quarterly growth throughout the year—GDP fell 8.7 percent.

[2] For a more complete Mexico economic update, see www.dallasfed.org/research/update/mex.

[3] "Intra-Industry Trade with Mexico May Aid U.S. Global Competitiveness," by Jesus Cañas, Aldo Heffner and Jorge Herrera Hernández, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter, 2017.

[4] Communiqué on Economic Expectations, Banco de México, February 2021. The survey period was Feb. 24–26, 2021.

Pandemic Pushes Texas Minority Unemployment Beyond Highs Reached During Great Recession

By Carlee Crocker and Pia Orrenius

Recessions are hardest on minorities; the COVID-19 downturn is no different in that regard. Texas is a majority minority state—more than half of Texas' population is Hispanic or Black—and the consequences are far-reaching if those groups lag behind economically.

Once the pandemic hit, the state lost 1.4 million jobs from February to April 2020, and the unemployment rate shot up to 12.9 percent. The recovery that began in May has been slow, hampered by the repeated resurgence of the virus. Texas' unemployment rate of 6.9 percent at year-end was well above what it was before COVID-19 hit (3.7 percent), and more than 625,000 jobs were lost.

One year into the pandemic, Texas' labor market disparities are glaring (*Chart 1*). About 9.3 percent of Hispanic workers were unemployed in February, 4.6 percentage points above prior-year levels. Roughly 12.4 percent of non-Hispanic Black workers were unemployed, 7.6 percentage points higher.

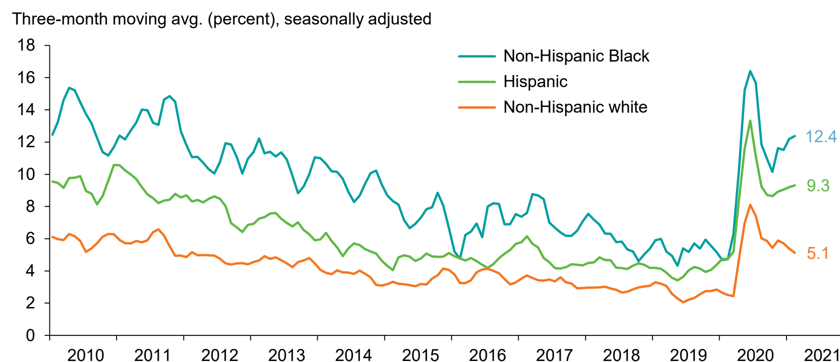
Unemployment among Black workers in Texas was more than twice that for non-Hispanic white workers, whose jobless rate was 5.1 percent in February, 2.6 percentage points above February 2020.

Early in the pandemic, as the government imposed lockdowns and only essential businesses remained open, the disparate impact on workers became clear. White-collar workers operating from home largely escaped job cuts, while blue-collar workers in essential businesses such as grocery stores remained on payrolls but were exposed to the risk of COVID-19 infection.

Jobs vanished for restaurant, bar and hotel workers and for businesses linked to arts and recreation, transportation and personal care.

Minorities are disproportionately employed in many of these generally lower-paying, face-to-face service industries, partly because they have less education on average than non-Hispanic white workers. These workers also tend to be younger. And within all groups, women have been especially affected because they are disproportionately employed in the service sector and frequently must deal with parental duties.

CHART 1 Unemployment Rates Diverge, Minorities Fall Behind



NOTE: Texas data are through February 2021.
SOURCE: Current Population Survey.

Great Recession Comparison

At the height of the pandemic recession last spring, all groups' unemployment rates surpassed their Great Recession peaks. Black unemployment reached 16.4 percent; Hispanic joblessness hit 13.3 percent. However, most layoffs were temporary, and minority unemployment fell through the summer and fall as workers were called back. That trend reversed course in the fourth quarter when a second COVID-19 wave took hold, even as white unemployment continued to decline.

Workers dropping out of the labor force poses another pandemic-era concern. Black labor force participation fell dramatically in first quarter 2020 with the onset of COVID-19; non-Hispanic white worker declines occurred largely in the second quarter, a period that included stay-at-home orders. By comparison, Hispanic labor force participation was little changed during the year.

Through February 2021, overall labor force participation rates remained below prepandemic levels.

In addition to direct stimulus payments, unemployed workers in the pandemic have received supplemental unemployment benefits and extended unemployment benefits. The benefits have also gone to the self-employed and other groups typically ineligible for unemployment insurance.

The initial provision of $600 per week in supplemental benefits boosted earnings to such a degree that many beneficiaries earned more while unemployed than while working. The payments expired in the fall and were last renewed in March to run into early September at $300 per week.

Thus, despite record-high unemployment rates, many who lost jobs during the pandemic could make ends meet because of governmental support. After federal assistance ends, a large number of Texans—many of them minorities—will need job opportunities if they are to get back to work.

Collapsing Fuel Demand Tanks Texas Exports During Pandemic's Peak

Design: Justin Chavira; Content: Emma Marshall, Pia Orrenius

The COVID-19 pandemic wreaked havoc on Texas energy exports.

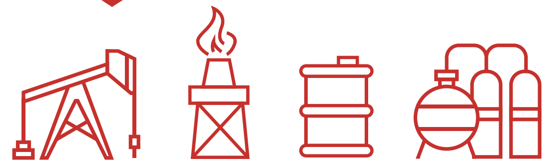
U.S. energy exports excluding Texas were dramatically less affected.

Texas Energy Exports Fell
53%
February to May 2020

16%
U.S. (minus Texas) Energy Exports Fell

Texas energy exports make up half of total Texas exports.

Texas energy exports include: crude oil, natural gas, petroleum products and petrochemicals.



U.S. (minus Texas) Total Exports Fell
29%

Texas Total Exports Fell
45%
February to May 2020

The decrease in Texas energy exports was a big factor in the drastic drop in total exports for the state.

In comparison, the drop in U.S. total exports excluding Texas was less severe.

As of December 2020, Texas energy exports and total exports are recovering to prepandemic levels.

Texas Energy Exports Recovered to
78%
of prepandemic levels as of December 2020

Texas Total Exports Recovered to 85%

NOTES: Natural gas prices refers to the Henry Hub spot price for natural gas. Leaderboard rankings are based on country refining capacity for Jan. 1, 2015, and Jan. 1, 2018.
SOURCES: Energy Information Administration; *Oil and Gas Journal*, Worldwide Refining Survey.

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SNAPSHOT

Dining Out Picks Up in Texas, Houston

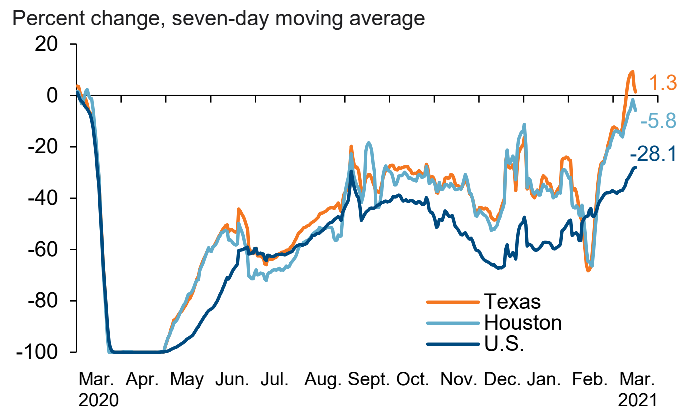
The number of patrons dining at restaurants surged in Texas and Houston after the state thawed from a deep freeze in February and COVID-19 constraints on restaurants and bars were lifted March 10. The uptick also reflected improving COVID-19 statistics and the arrival of spring break.

The number of reservations relative to the same time in 2019 suggests restaurant dining is approaching more normal levels. In Houston, restaurant demand climbed to 6 percent below the base level during the seven days ended March 23, according to OpenTable data (*Chart 1*). Texas was up 1 percent, while the nation overall was off 28 percent.

During the first spring break weekend, March 13–14, restaurant reservations statewide rose 12 percent compared with the same weekend in 2019. The following weekend, March 20–21, reservations were up 16 percent.

—*Adapted from Houston Economic Indicators,* March 22, 2021

CHART 1 Restaurants Seating More Diners as State Eases Restrictions



NOTES: Data refer to the percent change in seated diners at restaurants from the corresponding day in 2019 on the OpenTable network across all channels: online reservations, phone reservations and walk-ins. Numbers at right are the values on March 23, 2021.
SOURCE: OpenTable.

Federal Reserve Bank of Dallas

Southwest Economy

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Federal Reserve Bank of Dallas
2200 N. Pearl St., Dallas, TX 75201

Investments held on March 31, 2021 by type and by major fund are shown below:

Investment Category	Book Value	Market Value	Quarterly Average Yield	Average Maturity
City Funds				
Pools/Bank	39,103,022	39,103,022	0.50	1 day
Securities/CD's	79,243,762	79,243,762	0.95	281 days
Revenue Bond				
Pools/Bank	9,624,208	9,624,208	0.23	1 day
Securities/CD's	0	0	0	0 days
	127,970,992	127,970,992	0.76	260 days

*Totals listed about reflect rounded figures

Benchmarks:

Rolling 3 month Treasury average yield was 0.06 percent
Rolling 6 month Treasury average yield was 0.09 percent
The Tex Pool average yield for this quarter was 0.02 percent
The Fiscal Year-to-Date Average Yield was 0.90 percent