Texas Manufacturing Outlook Survey

June 25, 2018

Texas Manufacturing Continues to Expand, Outlook Improves

What's New This Month

For this month's survey, Texas business executives were asked supplemental questions on technology, employment expectations and pricing power. Results for these questions from the Texas Manufacturing Outlook Survey (TMOS), Texas Service Sector Outlook Survey (TSSOS) and Texas Retail Outlook Survey (TROS) have been released together.

The expansion in Texas factory activity continued in June, albeit at a slower pace than in May, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, declined 12 points to 23.3, signaling a deceleration in output growth.

Some other indexes of manufacturing activity also indicated slower growth in June. The capacity utilization and shipments indexes posted double-digit declines, falling to 21.7 and 25.5, respectively. However, demand improved further in June as the new orders index edged up to 29.6, its highest level this year.

Perceptions of broader business conditions were even more positive in June than in May. The general business activity index rose 10 points to 36.5, and the company outlook index rose five points to 33.2, its highest reading since 2006.

Labor market measures suggested robust growth in employment and longer work hours in June. The employment index stayed near last month's six-year high at 23.9. Thirty-one percent of firms noted net hiring, compared with 7 percent noting net layoffs. The hours worked index remained highly positive but edged down to 20.2.

Price and wage pressures increased markedly in June. The raw materials prices index rose 10 points to 53.6, its highest reading since 2011. The finished goods prices index moved up to a 10-year high of 26.2. Compensation costs also accelerated, with the wages and benefits index rising seven points to 31.4.

Expectations regarding future business conditions remained largely optimistic in June. The indexes of future general business activity and future company outlook moved up to 35.9 and 38.7, respectively, with both readings significantly above average. Other indexes of future manufacturing activity showed mixed movements but remained in solidly positive territory.

Next release: Monday, July 30

Data were collected June 12–20, and 104 Texas manufacturers responded to the survey. The Dallas Fed conducts the Texas Manufacturing Outlook Survey monthly to obtain a timely assessment of the state's factory activity. Firms are asked whether output, employment, orders, prices and other indicators increased, decreased or remained unchanged over the previous month

Survey responses are used to calculate an index for each indicator. Each index is calculated by subtracting the percentage of respondents reporting a decrease from the percentage reporting an increase. When the share of firms reporting an increase exceeds the share reporting a decrease, the index will be greater than zero, suggesting the indicator has increased over the prior month. If the share of firms reporting a decrease exceeds the share reporting an increase, the index will be below zero, suggesting the indicator has decreased over the prior month. An index will be zero when the number of firms reporting an increase is equal to the number of firms reporting a decrease. Data have been seasonally adjusted as necessary.

Results Summary

Business Indicators Relating to Facilities and Products in Texas

Current (versus previous month)

Indicator	Jun Index	May Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Production	23.3	35.2	–11.9	Increasing	24	38.4	46.6	15.1
Capacity Utilization	21.7	32.2	–10.5	Increasing	24	35.6	50.5	13.9
New Orders	29.6	27.7	+1.9	Increasing	20	44.0	41.5	14.4
Growth Rate of Orders	22.2	26.5	–4.3	Increasing	18	35.2	51.8	13.0
Unfilled Orders	13.0	4.1	+8.9	Increasing	15	25.5	62.0	12.5
Shipments	25.5	39.5	–14.0	Increasing	19	41.9	41.7	16.4
Delivery Time	15.9	10.2	+5.7	Increasing	12	23.4	69.1	7.5
Finished Goods Inventories	5.8	–6.6	+12.4	Increasing	1	22.1	61.5	16.3
Prices Paid for Raw Materials	53.6	44.0	+9.6	Increasing	28	54.1	45.4	0.5
Prices Received for Finished Goods	26.2	20.5	+5.7	Increasing	23	28.0	70.2	1.8
Wages and Benefits	31.4	24.3	+7.1	Increasing	107	32.5	66.4	1.1
Employment	23.9	23.4	+0.5	Increasing	18	30.9	62.1	7.0
Hours Worked	20.2	23.2	–3.0	Increasing	20	31.5	57.2	11.3
Capital Expenditures	23.8	21.7	+2.1	Increasing	22	29.5	64.8	5.7

General Business Conditions

Current (versus previous month)

Indicator	Jun Index	May Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Improved	% Reporting No Change	% Reporting Worsened
Company Outlook	33.2	28.0	+5.2	Improving	22	38.3	56.6	5.1
General Business Activity	36.5	26.8	+9.7	Improving	20	43.3	49.9	6.8

Indicator	Jun Index	May Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Outlook Uncertainty†	7.9	–2.9	+10.8	Increasing	1	17.8	72.3	9.9

Business Indicators Relating to Facilities and Products in Texas
Future (six months ahead)

Indicator	Jun Index	May Index	Change	Indicator Direction	Trend* (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Production	47.9	58.0	–10.1	Increasing	112	52.0	43.9	4.1
Capacity Utilization	46.5	51.0	–4.5	Increasing	112	49.9	46.7	3.4
New Orders	47.0	48.5	–1.5	Increasing	112	50.2	46.6	3.2
Growth Rate of Orders	37.7	37.7	0.0	Increasing	112	42.0	53.7	4.3
Unfilled Orders	24.5	13.8	+10.7	Increasing	33	28.2	68.1	3.7
Shipments	43.9	49.2	–5.3	Increasing	112	47.3	49.2	3.4
Delivery Time	6.8	13.4	–6.6	Increasing	19	15.4	76.0	8.6
Finished Goods Inventories	7.2	11.9	–4.7	Increasing	8	17.5	72.2	10.3
Prices Paid for Raw Materials	49.0	51.9	–2.9	Increasing	111	51.0	46.9	2.0
Prices Received for Finished Goods	28.1	27.0	+1.1	Increasing	29	33.3	61.5	5.2
Wages and Benefits	53.2	50.6	+2.6	Increasing	169	54.6	44.0	1.4
Employment	39.8	37.6	+2.2	Increasing	67	43.5	52.8	3.7
Hours Worked	9.7	13.9	–4.2	Increasing	25	18.1	73.5	8.4
Capital Expenditures	33.9	32.2	+1.7	Increasing	103	42.8	48.3	8.9

General Business Conditions
Future (six months ahead)

Indicator	Jun Index	May Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Worsened
Company Outlook	38.7	35.2	+3.5	Improving	29	42.2	54.3	3.5
General Business Activity	35.9	30.0	+5.9	Improving	25	41.4	53.1	5.5

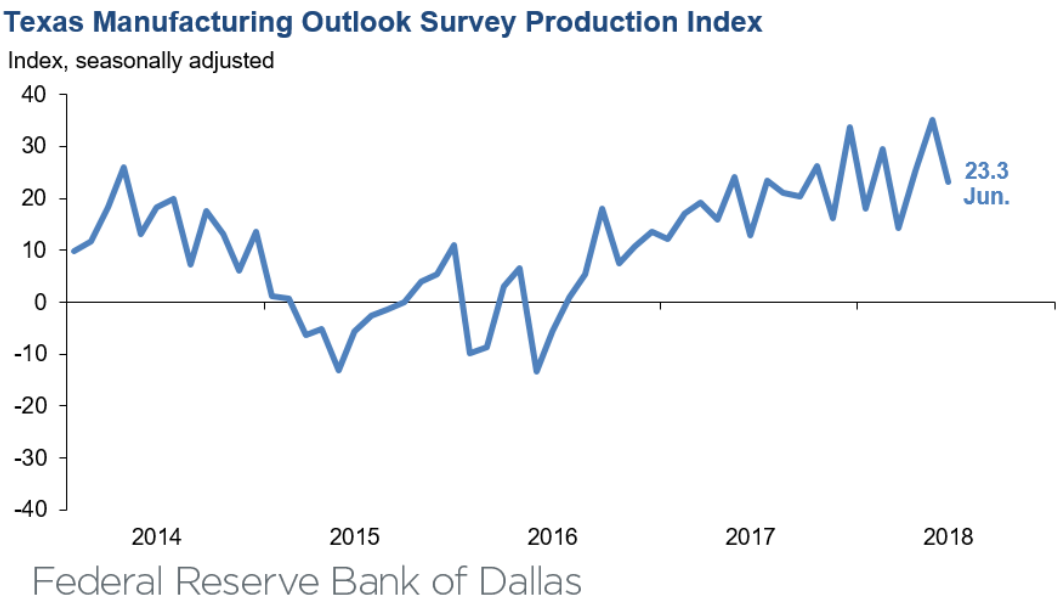
*Indicator direction refers to this month's index. If index is positive (negative), indicator is increasing (decreasing) or improving (worsening). If zero, indicator is unchanged.

**Number of months moving in current direction.

†Added to survey in January 2018.

Data have been seasonally adjusted as necessary, with the exception of the outlook uncertainty index, which does not yet have a sufficiently long time series to test for seasonality.

Production Index



Comments from Survey Respondents

These comments are from respondents' completed surveys and have been edited for publication.

Nonmetallic Mineral Product Manufacturing

- The price of steel raw materials is causing costs to increase.

Primary Metal Manufacturing

- We have experienced continuous growth from all sectors in iron casting sales. The two remaining inhibitors for growth are: 1. The severe lack of workforce in the north central Texas region. Numerous companies in our area are struggling to fill crucial manufacturing positions, and skilled labor is scarce. 2. OSHA's decision not to stay the economic and technologically infeasible silica rule is creating significant cost impacts on our industry as well as many others. This rule continues to be the largest inhibitor of growth due to the sheer cost of attempting to comply with the new permissible-exposure limits of the rule, as well as the ancillary medical surveillance costs for exposed-employee monitoring.

Fabricated Metal Product Manufacturing

- Steel tariffs to NAFTA partners is a mistake. Higher steel prices could slow down strong projects and the manufacturing recovery which started in fourth quarter 2017.
- I can't believe the effect the tariff response has had on the metals trade. Somebody needs their head examined if they think this is good for the American economy.
- We are about to raise prices for the first time in six years due to the rising cost of steel and aluminum. That is going to cause some uncertainty, with our customers looking elsewhere to purchase the products we manufacture.

Machinery Manufacturing

- There is lots of uncertainty among manufacturers regarding the impact of the steel tariffs. Even steel sourced from the U.S. is rapidly increasing in price due to capacity constraints.
- We are operating at the lowest levels of our 70-year history. Chinese imports continue to depress pricing of our products.
- Inflationary pressures are of concern. Freight costs per mile are up. Metals are costing more, impacting a large number of purchased parts. Tariff escalation is not going to help.

- Business remains strong.
- President Trump—trade, tariffs and diplomacy—is leading to more uncertainty.

Computer and Electronic Product Manufacturing

- It's like a switch was turned on in May and orders were abnormally high. June bookings look very positive so far.

Printing and Related Support Activities

- The lingering effects of Hurricane Harvey have still impacted our volume. Through May, our volume is down 7 percent from last year at this time.
- We are busy now because of a large single order that we entered in May and that is being worked on now and into July. We are feeling the need to raise labor wages, which will require a price increase, but since all our materials seem to be increasing in cost, why should we miss an opportunity to include a small increase to cover rising wages? I am very concerned long term about this goofiness with tariffs and possible foreign-country retaliation. Much of what we use in materials and equipment comes from Europe and a little from Asia.

Food Manufacturing

- Tariffs impacting the price of stainless steel are a concern. We also are in an agriculture-related environment, and commodity price increases and stability are of concern.

Apparel Manufacturing

- The Army is ordering huge volumes of apparel, which we anticipate will continue for another nine months.

Paper Manufacturing

- We see a slight softness in order volume. We will wait and see how July turns out.
- We lost a large contract, and it will decrease our production for the short term. We expect to get additional new business to replace it.

Questions regarding the Texas Manufacturing Outlook Survey can be addressed to Emily Kerr at emily.kerr@dal.frb.org.

Texas Manufacturing Outlook Survey

Special Questions

June 25, 2018

Texas Business Outlook Surveys

Results below include responses from participants of all three surveys: Texas Manufacturing Outlook Survey (TMOS), Texas Service Sector Outlook Survey (TSSOS) and Texas Retail Outlook Survey (TROS).

Data were collected June 12–20, and 314 Texas business executives responded to the surveys.

1. **Which of the following technologies: has your firm already adopted; is your firm in the process of adopting; does your firm plan to adopt within the next three years? Please select all that apply.**

	Already adopted (percent)	In process of adopting (percent)	Plan to adopt (percent)
Communication platforms (Skype, email, etc.)	64.6	1.9	1.6
Social media	64.6	4.8	3.8
High-speed wireless communication	54.8	2.5	1.9
Intranet (private computer network)	49.7	1.3	1.6
Mobile apps	49.4	8.0	4.1
CRM (customer relationship management) system	45.5	8.6	5.1
Cloud computing/edge computing	42.0	10.8	8.0
Digital video/photography	41.1	2.9	0.6
Collaboration platforms (SharePoint, Google Docs, etc.)	40.1	8.3	4.1
E-commerce	40.1	4.1	3.5
Telecommuting/mobile workforce	38.2	3.2	2.2
Digitization	29.0	3.2	1.6
GPS tracking	28.7	2.2	3.2
Internet of Things (connection of physical objects to the internet)	22.0	5.7	2.2
Modeling using high-performance computing	15.3	3.2	2.2
Big data	10.8	8.9	9.6

	Already adopted (percent)	In process of adopting (percent)	Plan to adopt (percent)
Drones	10.2	2.5	4.1
Robotics	9.6	3.5	8.3
Biometric authentication	8.0	2.2	10.5
3D printing	7.0	1.9	9.9
Artificial intelligence (voice recognition, decision trees, autonomous vehicles, etc.)	5.4	8.0	11.8
3D scanning	4.8	1.3	10.8
Virtual reality/augmented reality	4.8	4.5	5.7
Digital currencies (cryptocurrency, bitcoin, etc.)	1.9	0.3	5.7
Nanotechnology	1.6	0.3	4.1
Blockchain	0.6	1.6	10.5
Other (please describe)	0.3	0.6	0.6
None of the above (5.7 percent)			

2. **What are the main reasons why your firm is adopting these technologies? You may select up to three.**

	June '18 (percent)
To raise productivity	66.1
To remain competitive/fend off new competitors	52.9
To increase output (revenue/sales/production)	52.5
To lower costs	39.7
To expand into new business lines/markets	18.6
To strengthen security and/or protect information	18.0
To meet industry standards/government regulations	10.2
Other (please explain)	2.7

3. **On net, how will the adoption of these technologies affect employment at your firm over the next five years?**

	June '18 (percent)
Increases our need for workers	12.5
Decreases our need for workers	14.2
Does not impact our need for workers	48.6
Changes the type of workers we need but not the number	24.7

4. **Overall, do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next five years?**

	June '18 (percent)
Increase	65.4
Leave unchanged	25.6
Decrease	9.0

5. **On net, how have long-term trends in your industry, such as technological change and globalization, affected your firm's ability to pass on cost increases to customers over the past five years?**

	June '18 (percent)
Increased	23.1
No effect	54.2
Decreased	22.7

Texas Manufacturing Outlook Survey

Data were collected June 12–20, and 90 Texas manufacturers responded to the survey.

1. **Which of the following technologies: has your firm already adopted; is your firm in the process of adopting; does your firm plan to adopt within the next three years? Please select all that apply.**

	Already adopted (percent)	In process of adopting (percent)	Plan to adopt (percent)
Communication platforms (Skype, email, etc.)	64.4	2.2	1.1
Social media	58.9	4.4	4.4
High-speed wireless communication	56.7	0.0	0.0
Intranet (private computer network)	50.0	1.1	2.2
Digital video/photography	43.3	1.1	1.1
CRM (customer relationship management) system	42.2	12.2	4.4
Mobile apps	40.0	6.7	4.4
Cloud computing/edge computing	38.9	13.3	8.9
Collaboration platforms (SharePoint, Google Docs, etc.)	38.9	10.0	5.6
Telecommuting/mobile workforce	36.7	2.2	3.3
E-commerce	34.4	4.4	7.8
Digitization	33.3	2.2	4.4
GPS tracking	32.2	2.2	3.3
Internet of Things (connection of physical objects to the internet)	23.3	6.7	3.3
Modeling using high-performance computing	21.1	3.3	1.1
Robotics	20.0	5.6	18.9
3D printing	17.8	1.1	18.9
Biometric authentication	8.9	3.3	13.3
3D scanning	7.8	1.1	22.2
Big data	6.7	11.1	11.1
Artificial intelligence (voice recognition, decision trees, autonomous vehicles, etc.)	5.6	1.1	17.8
Drones	5.6	2.2	7.8
Virtual reality/augmented reality	5.6	6.7	10.0
Nanotechnology	3.3	0.0	7.8
Blockchain	0.0	1.1	14.4
Digital currencies (cryptocurrency, bitcoin, etc.)	0.0	0.0	6.7
Other (please describe)	1.1	2.2	1.1
None of the above (3.3 percent)			

2. **What are the main reasons why your firm is adopting these technologies? You may select up to three.**

	June '18 (percent)
To raise productivity	70.9
To lower costs	55.8
To increase output (revenue/sales/production)	53.5
To remain competitive/fend off new competitors	45.3
To expand into new business lines/markets	19.8
To strengthen security and/or protect information	16.3
To meet industry standards/government regulations	7.0
Other (please explain)	1.2

3. **On net, how will the adoption of these technologies affect employment at your firm over the next five years?**

	June '18 (percent)
Increases our need for workers	15.1
Decreases our need for workers	12.8
Does not impact our need for workers	48.8
Changes the type of workers we need but not the number	23.3

4. **Overall, do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next five years?**

	June '18 (percent)
Increase	78.2
Leave unchanged	16.1
Decrease	5.7

5. **On net, how have long-term trends in your industry, such as technological change and globalization, affected your firm's ability to pass on cost increases to customers over the past five years?**

	June '18 (percent)
Increased	20.5
No effect	48.2
Decreased	31.3

Special Questions Comments

These comments have been edited for publication.

Fabricated Metal Product Manufacturing

- In light of manufacturing, these perceived, adopted, etc., tariffs are going to ruin our economy.

Machinery Manufacturing

- Globalization and taxes have had detrimental effects on the decline of production for us.

Computer and Electronic Product Manufacturing

- We have not been able to execute a price increase on existing products in 10 years due to globalization; however, health care costs and salaries keep going up year after year, causing service levels to decrease.

Transportation Equipment Manufacturing

- With more internal data, we have been able to support passing along cost increases to our customers with specificity; it helps us demand improved pricing from suppliers as well.

Texas Service Sector Outlook Survey

Data were collected June 12–20, and 224 Texas business executives responded to the survey.

1. **Which of the following technologies: has your firm already adopted; is your firm in the process of adopting; does your firm plan to adopt within the next three years? Please select all that apply.**

	Already adopted (percent)	In process of adopting (percent)	Plan to adopt (percent)
Social media	67.0	4.9	3.6
Communication platforms (Skype, email, etc.)	64.7	1.8	1.8
High-speed wireless communication	54.0	3.6	2.7
Mobile apps	53.1	8.5	4.0
Intranet (private computer network)	49.6	1.3	1.3
CRM (customer relationship management) system	46.9	7.1	5.4
Cloud computing/edge computing	43.3	9.8	7.6
E-commerce	42.4	4.0	1.8
Collaboration platforms (SharePoint, Google Docs, etc.)	40.6	7.6	3.6
Digital video/photography	40.2	3.6	0.4
Telecommuting/mobile workforce	38.8	3.6	1.8
Digitization	27.2	3.6	0.4
GPS tracking	27.2	2.2	3.1
Internet of Things (connection of physical objects to the internet)	21.4	5.4	1.8
Modeling using high-performance computing	12.9	3.1	2.7
Big data	12.5	8.0	8.9
Drones	12.1	2.7	2.7
Biometric authentication	7.6	1.8	9.4
Artificial intelligence (voice recognition, decision trees, autonomous vehicles, etc.)	5.4	10.7	9.4
Robotics	5.4	2.7	4.0
Virtual reality/augmented reality	4.5	3.6	4.0
3D scanning	3.6	1.3	6.3
3D printing	2.7	2.2	6.3
Digital currencies (cryptocurrency, bitcoin, etc.)	2.7	0.4	5.4
Blockchain	0.9	1.8	8.9
Nanotechnology	0.9	0.4	2.7
Other (please describe)	0.0	0.0	0.4
None of the above (6.7 percent)			

2. **What are the main reasons why your firm is adopting these technologies? You may select up to three.**

	June '18 (percent)
To raise productivity	64.1
To remain competitive/fend off new competitors	56.0
To increase output (revenue/sales/production)	52.2
To lower costs	33.0
To strengthen security and/or protect information	18.7
To expand into new business lines/markets	18.2
To meet industry standards/government regulations	11.5
Other (please explain)	3.3

3. **On net, how will the adoption of these technologies affect employment at your firm over the next five years?**

	June '18 (percent)
Increases our need for workers	11.4
Decreases our need for workers	14.8
Does not impact our need for workers	48.6
Changes the type of workers we need but not the number	25.2

4. **Overall, do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next five years?**

	June '18 (percent)
Increase	60.3
Leave unchanged	29.4
Decrease	10.3

5. **On net, how have long-term trends in your industry, such as technological change and globalization, affected your firm's ability to pass on cost increases to customers over the past five years?**

	June '18 (percent)
Increased	24.1
No effect	56.7
Decreased	19.2

Special Questions Comments

These comments have been edited for publication.

Professional, Scientific and Technical Services

- Clients have much more access to information about our firm and our competitors, making the market more competitive.
- The workforce will shift somewhat. Some roles will be impacted to a greater degree by automation, and productivity will be enhanced in others, but we plan to expand in some of those areas and capture work with lower/controlled pricing, but ultimately better margins.

Administrative and Support Services

- Costs have crept up as a result of the tight employee market. The intensity of the competition and low barrier of entry into the staffing industry have given clients an escape route for the moment by moving to low-price small companies attempting to break into the market.
- We are using technology to link offices and workers in areas outside the main office.
- We are still running into acquiring bank loans to acquire capital equipment that is not directly utilized in our line of business. Technology infrastructure does not seem to be a big concern for the bankers at this time.

Ambulatory Health Care Services

- As an outpatient diagnostic imaging facility, we have no ability to raise costs; our reimbursement typically declines slightly each year. Health care for us is a deflationary business. We remain profitable due to our increasing productivity, but this can only increase so much.

Accommodation

- The tightening of the labor market and lack of available workers are forcing us to find ways to become more efficient in the delivery of our services.

Food Services and Drinking Places

- We have only experienced normal inflation. So far, we have been able to increase prices to cover these costs.

Personal and Laundry Services

- Most of the technologies do not apply to my industry.

Texas Retail Outlook Survey

Data were collected June 12–20, and 44 Texas retailers responded to the survey.

1. **Which of the following technologies: has your firm already adopted; is your firm in the process of adopting; does your firm plan to adopt within the next three years? Please select all that apply.**

	Already adopted (percent)	In process of adopting (percent)	Plan to adopt (percent)
Communication platforms (Skype, email, etc.)	63.6	0.0	2.3
Social media	61.4	2.3	4.5
High-speed wireless communication	54.5	0.0	2.3
Mobile apps	52.3	6.8	0.0
Cloud computing/edge computing	50.0	6.8	4.5
E-commerce	47.7	9.1	4.5
CRM (customer relationship management) system	45.5	9.1	6.8
GPS tracking	43.2	0.0	2.3
Digital video/photography	40.9	4.5	0.0
Intranet (private computer network)	40.9	0.0	0.0
Telecommuting/mobile workforce	36.4	2.3	2.3
Collaboration platforms (SharePoint, Google Docs, etc.)	34.1	4.5	6.8
Internet of Things (connection of physical objects to the internet)	27.3	0.0	0.0
Digitization	22.7	2.3	2.3
Big data	13.6	9.1	4.5
Drones	11.4	2.3	0.0
Modeling using high-performance computing	9.1	4.5	0.0
Artificial intelligence (voice recognition, decision trees, autonomous vehicles, etc.)	4.5	9.1	6.8
Biometric authentication	4.5	0.0	6.8
Robotics	4.5	6.8	2.3
Digital currencies (cryptocurrency, bitcoin, etc.)	2.3	0.0	4.5
Virtual reality/augmented reality	2.3	2.3	2.3
3D printing	0.0	4.5	9.1
3D scanning	0.0	4.5	6.8
Blockchain	0.0	0.0	9.1
Nanotechnology	0.0	2.3	2.3
Other (please describe)	0.0	0.0	0.0
None of the above (13.6 percent)			

2. **What are the main reasons why your firm is adopting these technologies? You may select up to three.**

	June '18 (percent)
To raise productivity	73.7
To remain competitive/fend off new competitors	71.1
To increase output (revenue/sales/production)	60.5
To lower costs	26.3
To expand into new business lines/markets	15.8
To strengthen security and/or protect information	10.5
To meet industry standards/government regulations	2.6
Other (please explain)	2.6

3. **On net, how will the adoption of these technologies affect employment at your firm over the next five years?**

	June '18 (percent)
Increases our need for workers	12.8
Decreases our need for workers	12.8
Does not impact our need for workers	51.3
Changes the type of workers we need but not the number	23.1

4. **Overall, do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next five years?**

	June '18 (percent)
Increase	65.0
Leave unchanged	32.5
Decrease	2.5

5. **On net, how have long-term trends in your industry, such as technological change and globalization, affected your firm's ability to pass on cost increases to customers over the past five years?**

	June '18 (percent)
Increased	30.8
No effect	46.2
Decreased	23.1

Special Questions Comments

These comments have been edited for publication.

Motor Vehicle and Parts Dealers

- Technology is driving our industry as it is the business model of the world. We spend more on technology today than ever before, and that trend will continue. We haven't found a way to pass the increased cost of doing business to the consumer. They want more for less. Technology has not allowed us to reduce a single head count. Our business model is flawed.
- We have been increasing costs with technology with not necessarily enough savings in personnel to offset the cost of the technologies (i.e., connectivity, tech support of programs, inefficiencies of less-than-complete tech solutions, etc.). The tools to conduct business (at least in the retail arena) have changed, but the basic process is still the same.

Questions regarding the Texas Business Outlook Surveys can be addressed to Emily Kerr at emily.kerr@dal.frb.org,