Federal Reserve Bank of Dallas

Texas Manufacturing Outlook Survey

February 27, 2017

Growth in Texas Manufacturing Activity Continues

What's New This Month

For this month's survey, Texas business executives were asked supplemental questions on employment expectations and the labor market. 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.

Texas factory activity increased for the eighth consecutive month in February, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, rose five points to 16.7, suggesting output growth picked up pace this month.

Other measures of current manufacturing activity also indicated expansion. The new orders and growth rate of orders indexes fell but remained positive, coming in at 11.6 and 2.0, respectively. The shipments index also moved down but stayed positive, posting a reading of 12.2 in February. The capacity utilization index rose from 9.1 to 14.7 this month.

Perceptions of broader business conditions improved again in February. The general business activity index returned to positive territory in October 2016 and has pushed further positive every month since, reaching 24.5 this month. The company outlook index posted a sixth consecutive reading above zero this month, but slipped slightly to 17.6.

Labor market measures indicated employment gains and longer workweeks. The employment index posted a second positive reading in a row—something that hasn't happened since the end of 2015—and edged up from 6.1 to 9.6. Nineteen percent of firms noted net hiring, compared with 10 percent noting net layoffs. The hours worked index was largely steady at 7.7.

Upward price pressures remained strong in February, and wages continued to rise. The raw materials price index was unchanged at 31.5, and the finished goods prices index rose slightly to 19.5, reaching its highest level since 2011. The wages and benefits index held fairly steady at 19.5.

Expectations regarding future business conditions generally improved this month. The indexes of future general business activity and future company outlook came in at 37.0 and 35.6, respectively—down from their January readings but still solidly in positive territory. Most other indexes for future manufacturing activity also slipped but remained positive.

Next release: Monday, March 27

Data were collected Feb. 14–22, and 115 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.

Historical data are available from June 2004 to the most current release month.

Business Indicators Relating to Facilities and Products in Texas
Current (versus previous month)

Indicator	Feb Index	Jan Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Production	16.7	11.9	+4.8	Increasing	8	31.5	53.7	14.8
Capacity Utilization	14.7	9.1	+5.6	Increasing	8	28.5	57.7	13.8
New Orders	11.6	15.7	–4.1	Increasing	4	28.8	54.0	17.2
Growth Rate of Orders	2.0	6.7	–4.7	Increasing	2	20.5	61.0	18.5
Unfilled Orders	0.7	5.2	–4.5	Increasing	2	15.8	69.1	15.1
Shipments	12.2	15.8	–3.6	Increasing	3	29.1	54.0	16.9
Delivery Time	5.8	–5.4	+11.2	Increasing	1	13.7	78.4	7.9
Materials Inventories	9.7	–5.3	+15.0	Increasing	1	23.6	62.5	13.9
Finished Goods Inventories	–2.6	–8.8	+6.2	Decreasing	4	12.3	72.8	14.9
Prices Paid for Raw Materials	31.5	30.8	+0.7	Increasing	12	35.8	59.9	4.3
Prices Received for Finished Goods	19.5	17.7	+1.8	Increasing	7	24.8	69.9	5.3
Wages and Benefits	19.5	20.8	–1.3	Increasing	87	21.7	76.1	2.2
Employment	9.6	6.1	+3.5	Increasing	2	19.1	71.4	9.5
Hours Worked	7.7	9.1	–1.4	Increasing	4	18.3	71.1	10.6
Capital Expenditures	14.4	16.3	–1.9	Increasing	6	19.4	75.6	5.0

General Business Conditions
Current (versus previous month)

Indicator	Index	Jan Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Improved	% Reporting No Change	% Reporting Worsened
Company Outlook	17.6	25.0	–7.4	Improving	6	29.2	59.2	11.6
General Business Activity	24.5	22.1	+2.4	Improving	5	33.2	58.1	8.7

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

Indicator	Feb Index	Jan Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Decrease
Production	46.4	53.9	–7.5	Increasing	96	54.3	37.8	7.9
Capacity Utilization	45.2	49.9	–4.7	Increasing	96	54.4	36.4	9.2
New Orders	51.0	55.2	–4.2	Increasing	96	57.2	36.6	6.2
Growth Rate of Orders	39.9	48.4	–8.5	Increasing	96	46.6	46.8	6.7
Unfilled Orders	11.3	16.6	–5.3	Increasing	17	21.9	67.5	10.6
Shipments	42.8	51.8	–9.0	Increasing	96	50.2	42.4	7.4
Delivery Time	6.1	4.4	+1.7	Increasing	3	13.1	79.9	7.0
Materials Inventories	6.2	3.7	+2.5	Increasing	3	21.4	63.4	15.2
Finished Goods Inventories	4.6	13.7	–9.1	Increasing	8	19.1	66.4	14.5
Prices Paid for Raw Materials	36.4	38.7	–2.3	Increasing	95	40.9	54.5	4.5
Prices Received for Finished Goods	31.5	32.8	–1.3	Increasing	13	36.0	59.5	4.5
Wages and Benefits	45.0	42.5	+2.5	Increasing	153	45.9	53.2	0.9
Employment	38.9	37.7	+1.2	Increasing	51	46.5	45.8	7.6
Hours Worked	12.2	14.3	–2.1	Increasing	9	20.5	71.2	8.3
Capital Expenditures	33.0	26.6	+6.4	Increasing	87	35.8	61.5	2.8

General Business Conditions
Future (six months ahead)

Indicator	Index	Jan Index	Change	Indicator Direction*	Trend** (Months)	% Reporting Increase	% Reporting No Change	% Reporting Worsened
Company Outlook	35.6	48.8	–13.2	Improving	13	44.0	47.5	8.4
General Business Activity	37.0	43.7	–6.7	Improving	9	45.5	45.9	8.5

*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.

Data have been seasonally adjusted as necessary.

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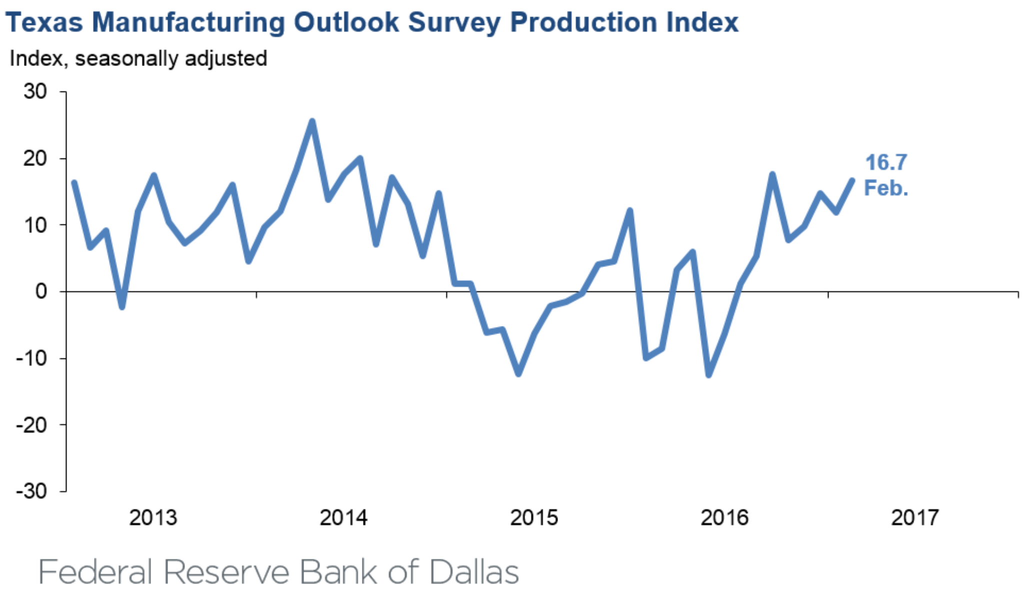

February 27, 2017

Comments from Survey Respondents

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

Chemical Manufacturing

- February and March will be partially impacted major planned outages at our customers.

Nonmetallic Mineral Product Manufacturing

- We have and have had manual labor type jobs that are unfilled.

Primary Metal Manufacturing

- We are seeing new orders from customers that were essentially flat for the past 22 months. Outlooks in all major industries have increased, and the uncertainty for federal regulatory policy has eased. We are still greatly concerned about the Occupational Safety and Health Administration's silica rule rolled out in 2016, but remain cautiously optimistic this rule will be overturned or revisited in 2017.
- There was definitely an upturn in business activity this month.

Fabricated Metal Product Manufacturing

- We continue to see a reduction in equipment purchases for the refinery operators. They are mostly taking a wait and see approach regarding crack spreads and cash flow from operations. Maintenance spending continues to be reduced from previous years. General activity outside of refining appears to be improving.
- We had a slightly disappointing January versus our expectations. February was in line with January. Quote activity is up, and this is usually a barometer for three to six months out. Steel prices are going up seemingly weekly. This is not demand driven.
- The ability to find qualified labor for manufacturing jobs has become nearly impossible. Even with increases in starting wages (30 percent in the last two years) applicants are less qualified and less able to work a consistent 40-hour week. The labor force for manufacturing opportunities in my opinion has gone to near full employment.
- The basis of our more positive view of the business environment is the new administration's commitment to regulation reform, lower taxes and repeal/replace the Affordable Care Act.
- The global economies and U.S. economy are very weak and uncertain.

- Volume improvement has continued since the turn-around in conditions in the fourth quarter. The energy sector has shown particular strength. Our expectations for business six months from now are not based on a concrete backlog or strong indicators, but rather the optimism that a generally improving trend will continue (absent any major disruptions).

Machinery Manufacturing

- We have continued questions about the potential of changes to NAFTA or import duties that might be coming. We have a portion of our manufacturing in Mexico, and some customers are asking for backup plans.

Computer and Electronic Product Manufacturing

- The rising dollar is hurting American manufacturers. Exports are down in the manufacturing sector.

Transportation Equipment Manufacturing

- We anticipate that the increasing confidence level will become real when some of President Trump's pro-growth policies become a reality. We expect moderate inflationary pressures as the economy expands and immigration slows. Help with health care costs and lower energy prices should help with increasing labor costs.
- Though we are seeing a decrease in key areas, we feel this is a function of our customer base being predominantly municipal and the fact that we typically lag the broader economy by 8–12 months or more. We see an improved business environment turning around for us toward year-end. In the meantime, we are taking aggressive sales and marketing steps in hopes of actually improving our overall outlook this year as well. Those efforts have been in place about four weeks, so time will tell how that works out for us.

Printing and Related Support Activities

- We continue to be very slow, with reduced hours in the shop. That is something that seems to be a constant trend for this time of year over the past three to four years. There is quite a bit of activity picking up though, which makes us optimistic that green fields are not far away.

Paper Manufacturing

- Increase in demand from several months ago remains at a stable level, so month to month is neutral but we are at an increase from six months ago.

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

Surveys

Special Questions

February 27, 2017

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 Feb. 14–22, and 399 Texas business executives responded to the surveys.

1. **Do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next six to twelve months?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Increase	46.9	39.0	40.7
Leave unchanged	43.1	43.8	46.2
Decrease	10.1	17.2	13.1

2. **Are you having problems finding qualified workers when hiring?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Yes	63.4	62.9	71.8
No	36.6	37.1	28.2

3. **If you are having problems finding qualified workers, what are the main reasons why? Please check all that apply.**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Lack of technical competencies (hard skills)	59.8	66.8	62.0
Lack of available applicants/no applicants	43.2	49.2	44.5
Lack of workplace competencies (soft skills)	43.2	48.9	46.0
Lack of experience	40.5	41.6	41.0
Looking for more pay than is offered	34.4	45.8	39.0
Inability to pass drug test and/or background check	29.3	28.6	28.5

4. **What, if anything, are you doing to recruit and retain employees? Please check all that apply.**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Intensify recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	57.1	57.8	57.9
Increase wages and or benefits	47.9	45.5	49.0
Offer additional training	34.8	39.5	36.0
Increase variable pay, including bonuses	30.1	30.4	28.3
Improve working conditions	23.2	25.0	22.3
Reduce education and other requirements for new hires	5.4	6.0	8.5
Other	9.8	8.4	10.9

5. **If labor costs are increasing, are you passing the cost on to customers in the way of price increases?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Yes	33.8	31.7	31.9
No	49.5	52.2	53.8
Not applicable	16.8	16.1	14.3

NOTE: Survey respondents were given the opportunity to provide comments. These comments can be found on the individual survey Special Questions results pages, accessible by the tabs above.

Surveys

Special Questions

February 27, 2017

Texas Manufacturing Outlook Survey

Data were collected Feb. 14–22, and 112 Texas manufacturers responded to the survey.

1. **Do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next six to twelve months?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Increase	57.1	41.6	41.9
Leave unchanged	33.0	44.2	41.9
Decrease	9.8	14.2	16.3

2. **Are you having problems finding qualified workers when hiring?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Yes	68.5	66.1	74.4
No	31.5	33.9	25.6

3. **If you are having problems finding qualified workers, what are the main reasons why? Please check all that apply.**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Lack of technical competencies (hard skills)	72.2	82.5	76.9
Lack of workplace competencies (soft skills)	45.6	48.8	52.3
Lack of experience	44.3	38.8	43.1
Lack of available applicants/no applicants	44.3	37.5	36.9
Looking for more pay than is offered	36.7	48.8	35.4
Inability to pass drug test and/or background check	29.1	28.8	32.3

4. **What, if anything, are you doing to recruit and retain employees? Please check all that apply.**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Intensify recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	63.5	56.0	58.1
Increase wages and or benefits	58.3	46.2	44.6
Offer additional training	33.3	40.7	37.8
Increase variable pay, including bonuses	30.2	35.2	27.0
Improve working conditions	21.9	27.5	21.6
Reduce education and other requirements for new hires	5.2	6.6	12.2
Other	5.2	8.8	13.5

5. **If labor costs are increasing, are you passing the cost on to customers in the way of price increases?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Yes	35.8	27.4	35.7
No	55.0	56.6	52.4
Not applicable	9.2	15.9	11.9

Special Questions Comments

These comments have been edited for publication.

Primary Metal Manufacturing

- All employee cost increases have to be passed on to our customers. Maybe not at once, but within 12 months. If we don't make a reasonable profit we will simply cease to exist.

Fabricated Metal Product Manufacturing

- Experienced engineers continue to be in very short supply.

Machinery Manufacturing

- Labor costs generally increase every year. We offset those increases with efficiency gains in the factories and with business process improvements. Supply chain costs are more difficult to completely offset with cost reduction, so some of this is passed on in the form of price increases. This is rarely done across the board because certain customers or channel partners contribute much larger than average sales dollars and can negotiate from a stronger position.

Paper Manufacturing

- We have taken on many new hires that we plan on training, but 80 percent are released after attendance problems or found out the past history on employment form was exaggerated as to skill level.
- We are not having a problem finding qualified workers and are not seeing any wage pressure.

Apparel Manufacturing

- Tough to pass labor cost increases to military.

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

Surveys

Special Questions

February 27, 2017

Texas Service Sector Outlook Survey

Data were collected Feb. 14–22, and 287 Texas business executives responded to the survey.

1. **Do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next six to twelve months?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Increase	42.8	37.9	40.2
Leave unchanged	47.0	43.6	48.1
Decrease	10.2	18.4	11.6

2. **Are you having problems finding qualified workers when hiring?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Yes	61.4	61.7	70.6
No	38.6	38.3	29.4

3. **If you are having problems finding qualified workers, what are the main reasons why? Please check all that apply.**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Lack of technical competencies (hard skills)	54.4	59.9	54.8
Lack of available applicants/no applicants	42.8	54.4	48.1
Lack of workplace competencies (soft skills)	42.2	48.9	43.0
Lack of experience	38.9	42.9	40.0
Looking for more pay than is offered	33.3	44.5	40.7
Inability to pass drug test and/or background check	29.4	28.6	26.7

4. **What, if anything, are you doing to recruit and retain employees? Please check all that apply.**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Intensify recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	54.6	58.5	57.8
Increase wages and or benefits	43.8	45.2	50.9
Offer additional training	35.4	39.0	35.3
Increase variable pay, including bonuses	30.0	28.6	28.9
Improve working conditions	23.8	24.1	22.5
Reduce education and other requirements for new hires	5.4	5.8	6.9
Other	11.7	8.3	9.8

5. **If labor costs are increasing, are you passing the cost on to customers in the way of price increases?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Yes	33.0	33.5	30.2
No	47.3	50.4	54.5
Not applicable	19.7	16.2	15.3

Special Questions Comments

These comments have been edited for publication.

Credit Intermediation and Related Activities

- We continue to keep our core experienced personnel together, even though it is hurting the income line. You might say we are overstaffed.

Insurance Carriers and Related Activities

- We are insurance brokers, so we don't have any control over unit costs or pricing controls. We shop various markets, and the markets price the insurance.

Real Estate

- Most of our full-time hires are clerical. There seems to be an abundance of applicants for nontechnical clerical skills.

Professional, Scientific and Technical Services

- Just increasing rates annually along with payroll increases, nothing more.

Administrative and Support Services

- We try to pass on costs. However, the costs of the Affordable Care Act have really impacted our margins already. The margins have become very narrow.

- Customers are still very resistant to price increases.

Educational Services

- Not having any increased difficulty in finding qualified applicants; still difficult to find bilingual/multicultural staff but not any different than in prior months.
- Skilled labor is in shorter supply, but with pay increases we have been able to support needs.

Ambulatory Health Care Services

- Wages are now consuming 45 percent of business expenses. This has increased nearly 100 percent since 2005. This is a factor of increased wages coupled with decreased reimbursement in health care. True deflationary business at least on the outpatient side where we are dictated fee schedules. Business however remains viable … we are quite efficient.

Social Assistance

- Our response relates to the network of employers we work with and for whom it has been difficult to find qualified applicants.

Amusement, Gambling and Recreation Industries

- There is another issue with employees now. Many companies do not want to hire full-time employees so that they do not have to pay health insurance and other benefits. Therefore, to work around 40 hours, employees have two to three jobs. This is making scheduling very challenging. Since many places work on a tip basis (we do not), employees tend to select shifts according to where they are going to make the most cash on any given night. They also tend to call in sick if a better deal comes along.

Food Services and Drinking Places

- Many in today's workforce are lacking in skills, ambition and work ethic (more specifically in the under 30-years-old group). Our immigrants on the other hand are typically exhibiting more ambition and typically work harder. Education system needs a cleanup.
- Our labor costs have been higher recently, but it is mostly caused by the failure of our management staff to adjust to the lower sales. We have not passed the additional costs on to the customer. Instead we are trying to get our labor back in line with our current level of sales.
- Sold a sister company; laying off some of our office staff as a result.

Religious, Grantmaking, Civic, Professional, and Similar Organizations

- There is more competition in the Dallas area from new companies moving to North Texas.

Questions regarding the Texas Service Sector Outlook Survey can be addressed to Amy Jordan at amy.jordan@dal.frb.org .

Surveys

Special Questions

February 27, 2017

Texas Retail Outlook Survey

Data were collected Feb. 14–22, and 55 Texas retailers responded to the survey.

1. **Do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next six to twelve months?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Increase	40.7	24.1	43.9
Leave unchanged	50.0	56.9	48.8
Decrease	9.3	19.0	7.3

2. **Are you having problems finding qualified workers when hiring?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Yes	76.4	67.2	85.4
No	23.6	32.8	14.6

3. **If you are having problems finding qualified workers, what are the main reasons why? Please check all that apply.**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Lack of technical competencies (hard skills)	55.6	63.4	61.1
Inability to pass drug test and/or background check	48.9	48.8	50.0
Lack of workplace competencies (soft skills)	46.7	56.1	52.8
Lack of available applicants/no applicants	46.7	53.7	52.8
Lack of experience	37.8	31.7	33.3
Looking for more pay than is offered	28.9	31.7	33.3

4. **What, if anything, are you doing to recruit and retain employees? Please check all that apply.**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Intensify recruiting, including advertising, paying recruiting bonuses, utilizing employment agencies, etc.	53.1	61.8	67.5
Increase wages and or benefits	49.0	34.5	40.0
Increase variable pay, including bonuses	42.9	30.9	32.5
Offer additional training	30.6	34.5	40.0
Improve working conditions	22.4	25.5	22.5
Reduce education and other requirements for new hires	6.1	7.3	15.0
Other	10.2	5.5	7.5

5. **If labor costs are increasing, are you passing the cost on to customers in the way of price increases?**

	Feb. '17 (percent)	Feb. '16 (percent)	Aug. '15 (percent)
Yes	39.6	37.9	43.9
No	50.9	48.3	41.5
Not applicable	9.4	13.8	14.6

Special Questions Comments

These comments have been edited for publication.

Motor Vehicle and Parts Dealers

- In the past 12 months, we have been able to hire several highly qualified people for specific management positions. When we need skilled people, there are fewer applicants available.
- Difficult for average technicians to keep up with the advances, requiring significant additional training, which is expensive. The market is currently resisting price increases. I think this applies more in the part of our market that relies on oil. There is resistance from all disciplines but less so than from the petroleum segment.

Building Material and Garden Equipment and Supplies Dealers

- In over 40 years in business, it's always been hard to find quality employees.

Food and Beverage Stores

- Regional labor supply is heavily dependent on state and federal aid and assistance/welfare as well as illicit cash circulating throughout the border region. There is very little incentive to find and maintain employment.

Questions regarding the Texas Service Sector Outlook Survey can be addressed to Amy Jordan at amy.jordan@dal.frb.org.