NAM MANUFACTURERS' OUTLOOK SURVEY
FIRST QUARTER 2018

APRIL 12, 2018

Percentage of Respondents Positive in Their Own Company's Outlook **93.5%** *(December: 94.6% — all-time high)* Small Manufacturers: **94.5%** *(December: 91.5%)* Medium-Sized Manufacturers: **93.0%** *(Dec.: 95.7%)* Large Manufacturers: **93.8%** *(December: 94.5%)*	**NAM Manufacturing Outlook Index** **63.0** *(December: 63.7 — revised, all-time high)* **Expected Growth Rate for <u>SALES</u> Over the Next 12 Months** **↑ 5.7% — highest since 1997:4** *(December: ↑ 5.2%)*
Expected Growth Rate for <u>PRODUCTION</u> Over the Next 12 Months **↑ 5.5%** *(December: ↑ 5.0%)*	**Expected Growth Rate for <u>EXPORTS</u> Over the Next 12 Months** **↑ 1.2%** *(December: ↑ 1.4%)*
Expected Growth Rate for <u>CAPITAL INVESTMENTS</u> Over the Next 12 Months **↑ 3.9% — all-time high** *(December: ↑ 3.4%)*	**Expected Growth Rate for <u>PRICES</u> Over the Next 12 Months** **↑ 3.0% — highest since 2011:2** *(December: ↑ 1.9%)*
Expected Growth Rate for <u>FULL-TIME EMPLOYMENT</u> Over the Next 12 Months **↑ 2.9% — all-time high** *(December: ↑ 2.6%)*	**Expected Growth Rate for <u>INVENTORIES</u> Over the Next 12 Months** **↑ 1.7% — all-time high** *(December: ↑ 1.4%)*
Expected Growth Rate for <u>EMPLOYEE WAGES</u> Over the Next 12 Months **↑ 2.6% — highest since 2001:1** *(December: ↑ 2.2%)*	**Expected Growth Rate for <u>HEALTH INSURANCE COSTS</u> Over the Next 12 Months** **↑ 7.8%** *(December: ↑ 8.4%)*

"Do you think the United States is headed in the right direction, or is our country on the wrong track?"
RIGHT TRACK: 67.7% WRONG TRACK: 11.4% UNSURE: 20.9%
(December: Right Track: 58.7%, Wrong Track: 14.6%, Unsure: 26.7%)

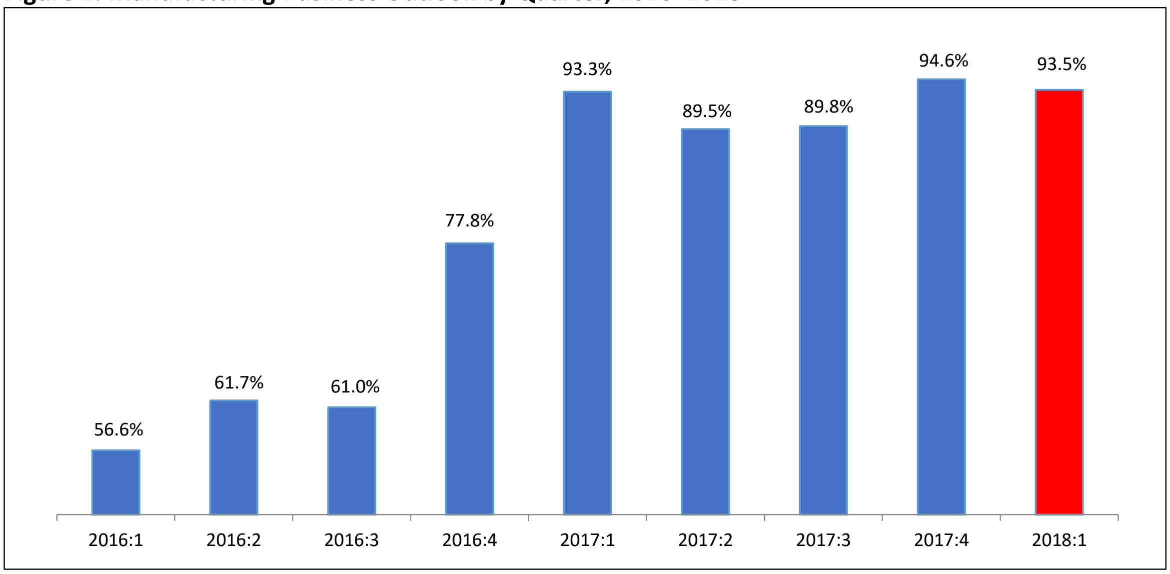
<u>Summary</u>

In the latest Manufacturers' Outlook Survey from the National Association of Manufacturers (NAM), U.S. manufacturers express levels of optimism about the future of their companies and their industry that have never been seen in the survey's 20-year history. Manufacturers project record-setting growth rates for capital investments, full-time employment and inventories over the next 12 months. The percentage of manufacturers who believe the country is on the right track (67.6 percent) has risen since the last survey, while the numbers of those who believe we are on the wrong track (11.4 percent) or are unsure (21 percent) have both fallen.

Regarding their own companies, 93.5 percent express a positive outlook (Figure 1), the second-highest reading in the survey's 20-year history following the all-time high of 94.6 percent in December. Optimism has been at historically high levels over the past five quarters, averaging 92.1 percent. Sentiment is sharply higher than two years ago, with an average of 64.3 percent in 2016.

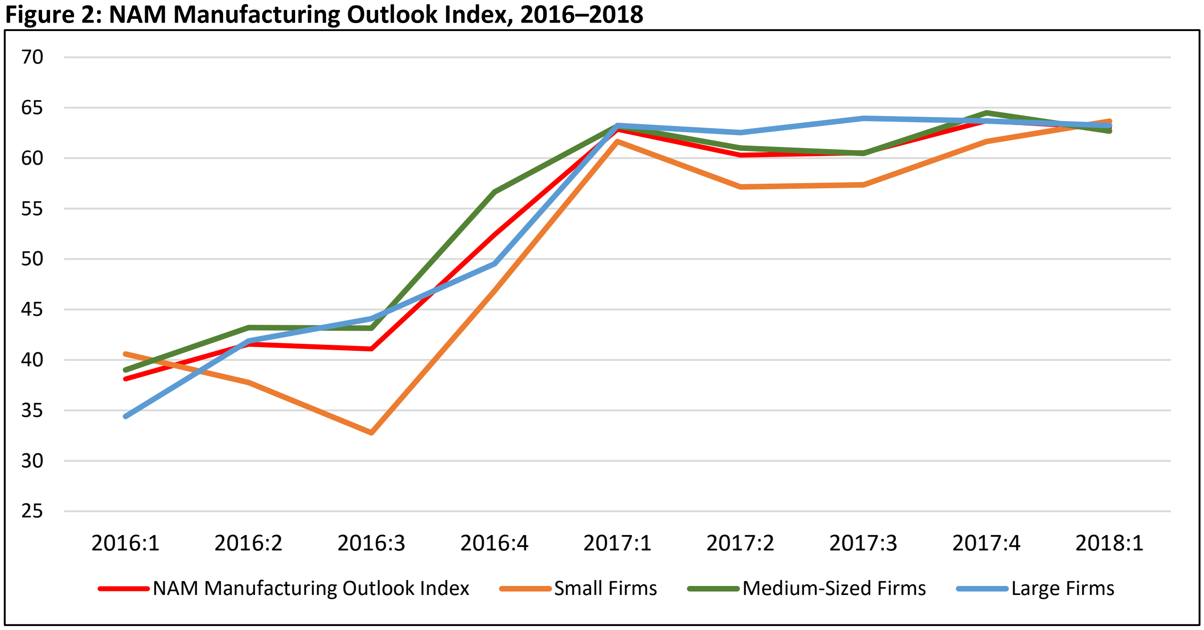
Manufacturers continue to be upbeat following Washington's passage of the comprehensive tax cuts package and its less-burdensome approach toward regulatory policy—pro-growth stances that will help manufacturers compete in the global marketplace.

Figure 1: Manufacturing Business Outlook by Quarter, 2016–2018



Note: Percentage of respondents who characterized the current business outlook as somewhat or very positive

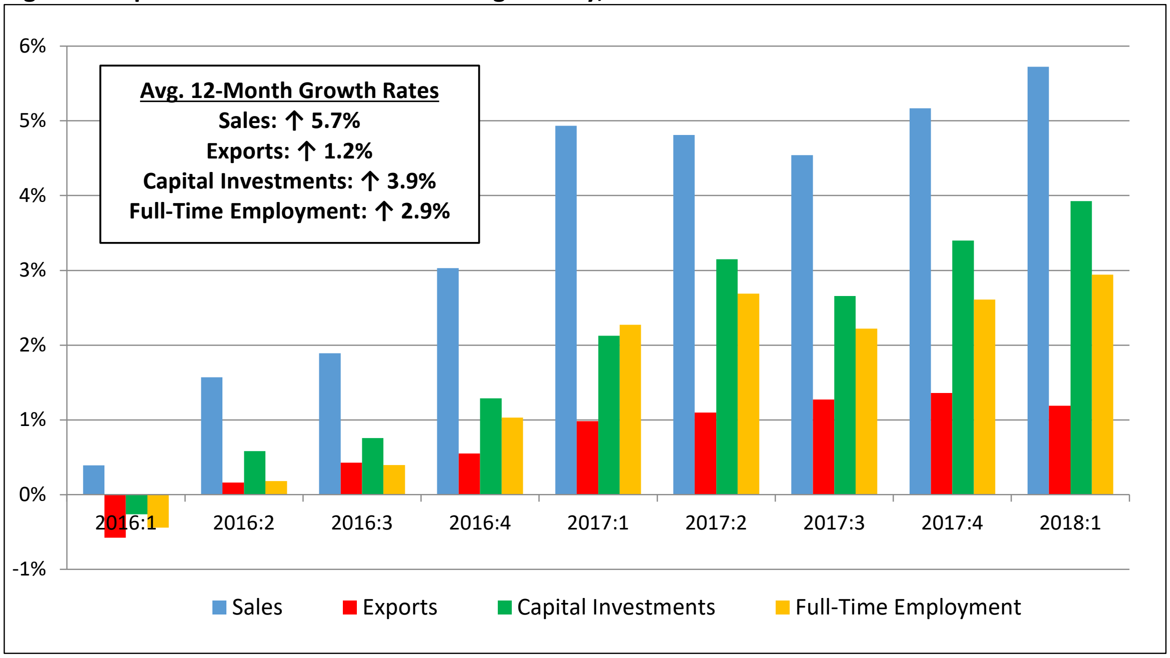
Figure 2: NAM Manufacturing Outlook Index, 2016–2018



Source: National Association of Manufacturers

The NAM Manufacturing Outlook Index pulled back slightly from 63.7 in December (an all-time high) to 63.0 in this survey (Figure 2). Numbers greater than 60 indicate strong levels of optimism, with the percentage positive in their outlook more than one standard deviation from the historical average (74.2 percent positive). This was the sixth straight quarter where the outlook exceeded that average.

Figure 3: Expected Growth of Manufacturing Activity, 2016–2018



Note: Expected growth rates are annual averages.

Beyond the headline numbers, the underlying data also reflect record-breaking strength in many areas (Figure 3), such as:

- **Sales:** Respondents expect sales growth of 5.7 percent over the next 12 months, up from 5.2 percent in the last survey. This is the fastest pace since the fourth quarter of 1997, which was coincidentally the first survey in this series, making it the second-highest level in the survey's history. In the latest results, 87.4 percent of manufacturers anticipate higher sales over the next year, with just 4.6 percent predicting declines. More than one-quarter see revenue gains of more than 10 percent.

- **Production:** Respondents expect production growth of 5.5 percent over the next 12 months, up from 5.0 percent three months ago. This question was added to the survey three years ago, and it is the fastest pace for output activity in that time span. Similar to the sales results, 85.8 percent predict production to expand over the next year, with 59.4 percent forecasting output growth of 5 percent or more. Just 3.8 percent of manufacturers anticipate reduced production.

- **Capital Spending:** Respondents expect capital investments to rise by 3.9 percent over the next 12 months, up from 3.4 percent in the past survey. This was a new all-time high. More than

62 percent anticipate higher capital spending in the next year, with one in four manufacturers (25.5 percent) expecting robust investment growth of 10 percent or more.

- **Employment:** Respondents expect full-time employment to increase by 2.9 percent over the next 12 months, up from 2.6 percent in the previous release. This was a new all-time high. More than 63 percent anticipate more hiring over the next year, including 27.4 percent planning employment growth of 5 percent or more. Just 4.5 percent see employment falling for their firms.

- **Wages:** Respondents anticipate employee wages (excluding nonwage compensation such as benefits) to rise by 2.6 percent over the next 12 months, up from 2.2 percent in December's survey. This was the fastest pace in 17 years, that is, since the first quarter of 2001. In the latest results, 93.3 percent see wages increasing over the next year, with nearly half, 47.7 percent, expecting to hike wages by 3 percent or more. This is consistent with other indicators that have shown wage pressures accelerating somewhat with an ever-tighter labor market.

- **Inventories:** Respondents expect inventories to increase by 1.7 percent over the next 12 months, up from 1.4 percent in the previous data. This was a new all-time high. The growth in inventories mainly reflects stronger demand—another indicator of healthy growth for the sector. Just over 40 percent of manufacturers predict increased inventories, with 48.5 percent expecting stockpiles to remain unchanged.

- **Prices:** Respondents expect product prices to increase by 3.0 percent over the next 12 months, jumping from a 1.9 percent gain seen in December. This was the fastest growth rate for prices since the second quarter of 2011, or in nearly seven years. More than half of those surveyed forecast price growth for their products of up to 5 percent, with 22.1 percent predicting price growth of 5 percent or more.

- **Exports:** International demand was one of the few laggards in this release, even as exports have improved in general over the past year or more. Respondents expect export sales to rise by 1.2 percent over the next 12 months, pulling back from 1.4 percent in December, which was the fastest rate since the second quarter of 2014. Nearly 40 percent of manufacturers predict increased exports over the next year, with 54.6 percent seeing them remaining unchanged. Encouragingly, although exports were a drag on growth two years ago, they have generally trended higher since then.

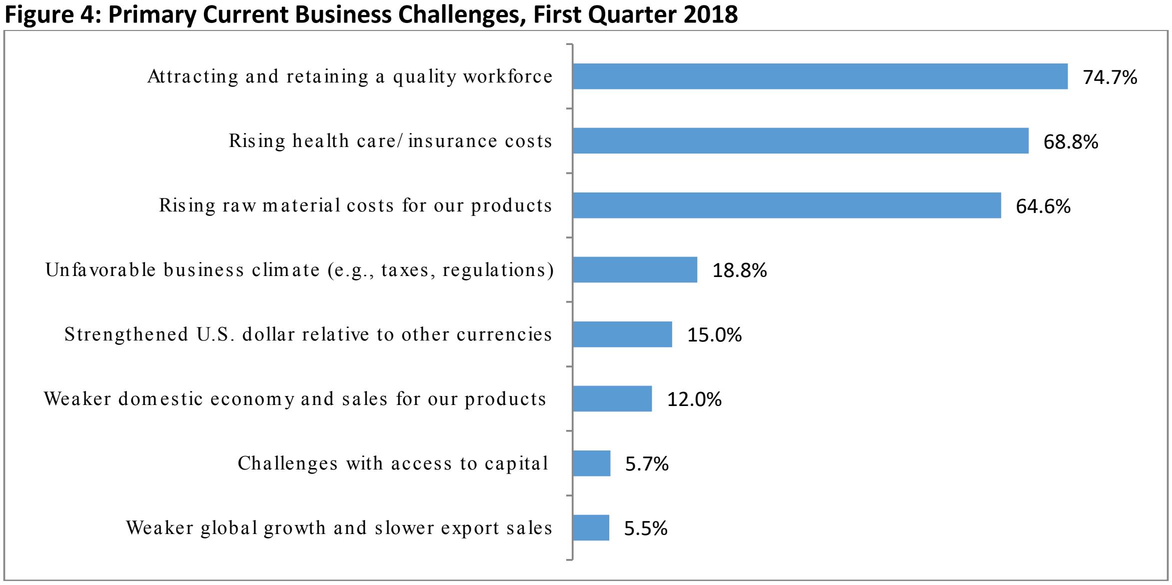
For the second straight survey, the inability to attract and retain a quality workforce was the top business challenge for manufacturers, cited by 74.8 percent of respondents (Figure 4). With robust job growth and an encouraging economic outlook, it has become increasingly more difficult to find talent—something echoed in the sample comments.

The second greatest business challenge concerned rising health care costs (68.8 percent), with respondents anticipating that health insurance premiums will increase 7.7 percent over the next 12 months. More than 71 percent of manufacturers expect their premiums to increase by at least 5 percent on average next year. More than one-third of manufacturers, 34.4 percent, expect their premiums to rise by at least 10 percent.

The third major business concern was the rising cost of raw materials (64.6 percent), the first time this issue cracked the top three concerns list. It was at 42.4 percent just three months ago. This finding is consistent with accelerating input costs overall in other measures, including the producer price index and other sentiment surveys.

It is also interesting to note the steady decline of the business climate as a top concern. Since this question was added in 2011, the unfavorable business climate response was regularly one of the top two concerns, usually identified by at least 70 percent of those completing the survey as their primary business challenge. In the latest survey, only 18.8 percent of respondents said that the business climate was unfavorable to their company—a stunning development. With that said, this reordering of top concerns mainly reflects manufacturers' recognition that a dramatic change in the policymaking environment has occurred in Washington since the 2016 election.

Figure 4: Primary Current Business Challenges, First Quarter 2018



Note: Respondents were able to check more than one response; therefore, responses exceed 100 percent.

Special Questions

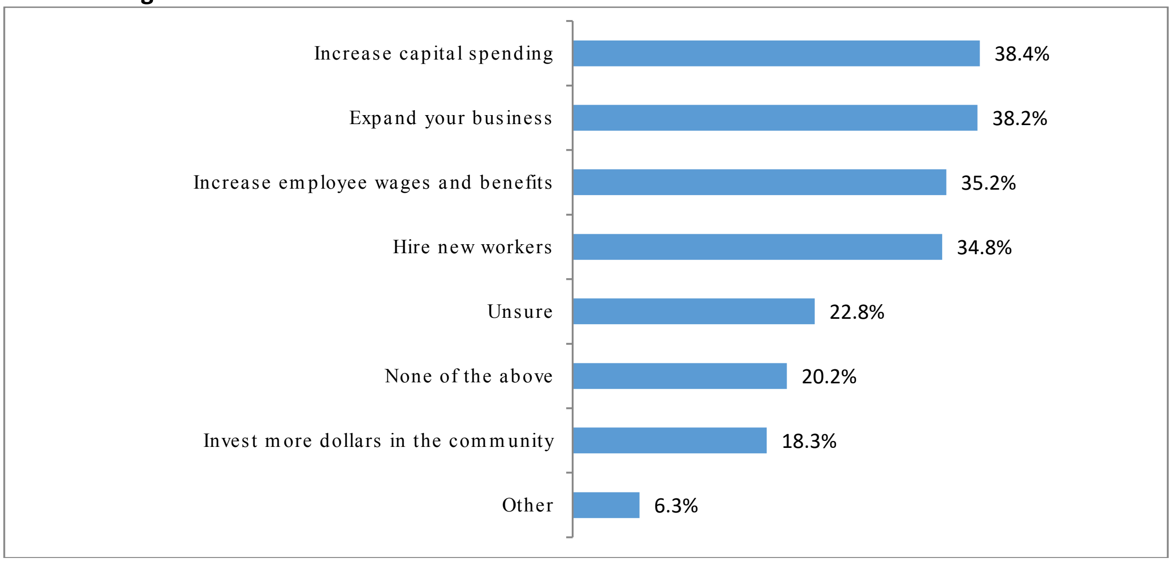
Regulations

Manufacturers continue to be upbeat about regulatory reform and its economic impacts.

Because of the regulatory moratorium last year, a dramatic shift has occurred in the federal rulemaking process, and manufacturers widely consider it a positive development. More importantly, the changed regulatory environment should allow manufacturers to increase capital spending (38.3 percent), expand their businesses (38.1 percent), increase employee wages and benefits (35.2 percent) and hire new workers (34.8 percent), according to responses in the latest survey (Figure 5).

Moving forward, respondents also want to further reform the way that federal rulemaking is done by streamlining the process and better including business feedback. Respondents were asked if they generally have enough time to understand new regulations before those rules become effective or mandatory, and 54.5 percent said that they did not. A meaningful 18.5 percent of manufacturers noted that they had been accused of violating a regulatory provision that they did not realize applied to them or that they did not realize existed. Beyond the awareness issue, nearly 47 percent of respondents indicated that they have delayed an investment due to uncertainties related to regulations.

Figure 5: As a result of the changed regulatory environment, is your company more likely to do any of the following?



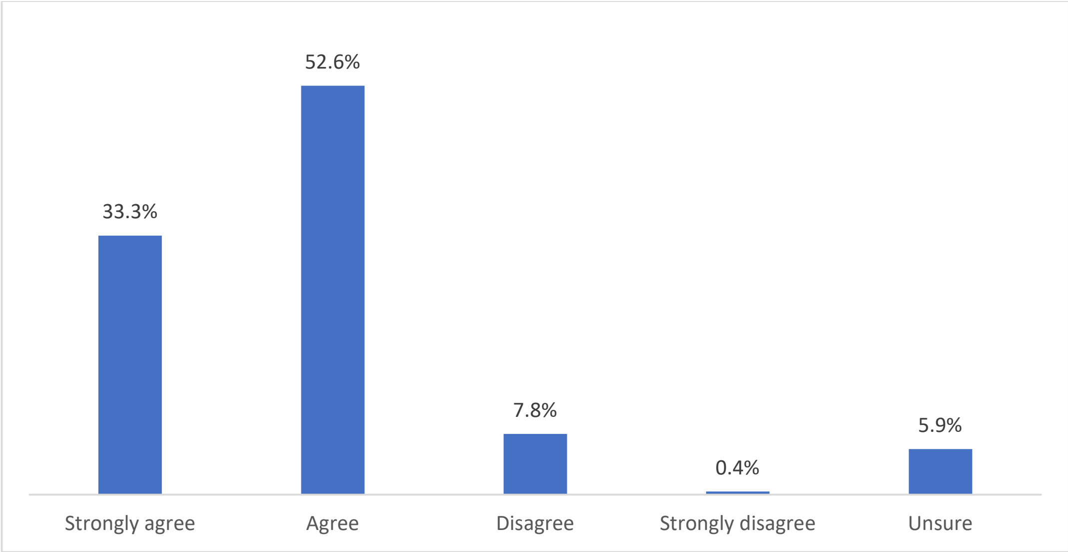
Note: Respondents were able to check more than one response; therefore, responses exceed 100 percent.

Infrastructure Spending

For manufacturers, a bipartisan infrastructure package is at the top of the legislative priority list, and the NAM's infrastructure blueprint, "Building to Win," offers the best path to get there. A large majority (86.1 percent) of respondents agreed with the following statement: "In modern manufacturing, an efficient infrastructure system reduces the transportation costs to get my product to market, and a single transportation bottleneck can disrupt my supply chain and shut down my shop floor" (Figure 6). Indeed, one-third of those completing the survey said that they strongly agreed with that statement.

As "Building to Win" lays out, the time is now for a targeted and substantial infrastructure package that modernizes our nation's infrastructure with reliable, user-based funding streams that will allow our country to keep building far into the future. In this survey, 58.8 percent of manufacturers noted that they support the modernization of user fees that fund vital infrastructure accounts to ensure that certainty is restored to these programs and chronic shortfalls are eliminated. Just over 10 percent said that they did not support the modernization of user fees, with 30.6 percent unsure.

Figure 6: In modern manufacturing, an efficient infrastructure system reduces the transportation costs to get my product to market, and a single transportation bottleneck can disrupt my supply chain and shut down my shop floor.



Apprenticeship Programs

The Trump administration has made apprenticeship programs one of its top priorities, which is important in light of the challenges described earlier. The Manufacturing Institute has worked with others in the business community, educational institutions and the military to build new avenues of access to the training and certifications that workers need to have successful, rewarding careers in modern manufacturing.

In this survey, we asked questions about such programs to gauge general interest and discover how widely used they might be. Sixty-five percent of respondents said their company has participated in a work-and-learn program (e.g., registered or unregistered apprenticeship, work-study, internship, co-op or something similar) in the past three years, with one-third of those completing the survey suggesting that their firm had not.

More importantly, 70.4 percent of manufacturers said that they would be interested in participating in such a program if the right opportunity became available. In addition, 19.6 percent were unsure, with 10 percent saying that they would not be interested.

Note

This survey has been conducted quarterly since 1997, with the NAM's membership submitting this quarter's responses from February 26 to March 12. In total, 527 manufacturers from all parts of the country, in a wide variety of manufacturing sectors and in varying size classifications responded this quarter. Aggregated survey responses appear below. The next survey is scheduled for June 2018.

Comments on Primary Challenges Facing Manufacturers

Respondents were given the opportunity to submit other challenges affecting their business aside from the choices given in the survey question. Here is a sample of the comments that respondents offered:

- “2018 election.” (*Transportation equipment*)
- “Changing retail grocery landscape.” (*Food manufacturing*)
- “Dodd-Frank Conflict Minerals Act is expensive and serves little purpose. Solve the humanitarian issues and terrorist issues where they exist in the Congo. Do not penalize American manufacturers with the conflict minerals act.” (*Other/Manufacturer of foot controls for medical and industrial applications*)
- “Extremely worried about U.S. trade and immigration policies. We’re hiring, but finding qualified (and who want to work) people to hire is difficult.” (*Other/Specialty manufacturing for food retail/processing and pharmaceutical distribution*)
- “Hiring qualified personnel is really hard. Vocational tech has not been sufficiently emphasized, and it will take time to recover.” (*Machinery*)
- “Intellectual property protection.” (*Fabricated metal products*)
- “Lack of skilled labor is by far the biggest thing holding us back!” (*Fabricated metal products*)
- “Local unemployment rate is about 2 percent.” (*Computer and electronic products*)
- “Longer lead times due to the increase in business is reducing inventories.” (*Machinery*)
- “Off-shore competitors are selling within the U.S. at below market levels.” (*Machinery*)
- “Uncertainty about trade policy.” (*Machinery*)
- “Unknown implications of local government trying to implement the Paris accords.” (*Machinery*)
- “We have great success finding and retaining quality employees. This being said, we are finding that other companies are making offers to candidates we ‘hire’ so as not to not lose them. This has happened pretty rarely in the past. Now it happens on a regular basis.” (*Furniture and related products*)
- “We need to settle immigration and take on welfare reform.” (*Primary metals*)
- “Widening federal and state deficits. Lack of concern for the environment.” (*Fabricated metal products*)
- “Winning new business from non-U.S.-based manufacturers.” (*Fabricated metal products*)

Survey Responses

1. How would you characterize the business outlook for your firm right now?
    a. Very positive – 45.7%
    b. Somewhat positive – 47.8%
    c. Somewhat negative – 5.5%
    d. Very negative – 1.0%

    Percentage that is either somewhat or very positive in their outlook = 93.5%

2. Over the next year, what do you expect to happen with your company's overall sales?
    a. Increase more than 10 percent – 26.4%
    b. Increase 5 to 10 percent – 36.1%
    c. Increase up to 5 percent – 24.9%
    d. Stay about the same – 8.2%
    e. Decrease up to 5 percent – 2.3%
    f. Decrease 5 to 10 percent – 1.5%
    g. Decrease more than 10 percent – 0.8%

    Average expected increase in sales consistent with these responses = 5.7%

3. Over the next year, what do you expect to happen with your company's overall production levels?
    a. Increase more than 10 percent – 25.9%
    b. Increase 5 to 10 percent – 33.5%
    c. Increase up to 5 percent – 26.4%
    d. Stay about the same – 10.5%
    e. Decrease up to 5 percent – 1.7%
    f. Decrease 5 to 10 percent – 1.3%
    g. Decrease more than 10 percent – 0.8%

    Average expected increase in production consistent with these responses = 5.5%

4. Over the next year, what do you expect to happen with the level of exports from your company?
    a. Increase more than 5 percent – 14.7%
    b. Increase 3 to 5 percent – 11.6%
    c. Increase up to 3 percent – 13.3%
    d. Stay about the same – 54.6%
    e. Decrease up to 3 percent – 2.4%
    f. Decrease 3 to 5 percent – 0.4%
    g. Decrease more than 5 percent – 3.1%

    Average expected increase in exports consistent with these responses = 1.2%

5. Over the next year, what do you expect to happen with prices on your company's overall product line?
    a. Increase more than 10 percent – 5.0%
    b. Increase 5 to 10 percent – 17.1%
    c. Increase up to 5 percent – 51.1%
    d. Stay about the same – 24.4%
    e. Decrease up to 5 percent – 1.7%
    f. Decrease 5 to 10 percent – 0.6%
    g. Decrease more than 10 percent – 0.2%

Average expected increase in prices consistent with these responses = 3.0%

6. Over the next year, what are your company's capital investment plans?
   a. Increase more than 10 percent – 25.5%
   b. Increase 5 to 10 percent – 16.2%
   c. Increase up to 5 percent – 20.5%
   d. Stay about the same – 32.9%
   e. Decrease up to 5 percent – 1.9%
   f. Decrease 5 to 10 percent – 0.6%
   g. Decrease more than 10 percent – 2.5%

   Average expected increase in capital investments consistent with these responses = 3.9%

7. Over the next year, what are your inventory plans?
   a. Increase more than 10 percent – 6.7%
   b. Increase 5 to 10 percent – 13.7%
   c. Increase up to 5 percent – 20.2%
   d. Stay about the same – 48.5%
   e. Decrease up to 5 percent – 7.4%
   f. Decrease 5 to 10 percent – 2.7%
   g. Decrease more than 10 percent – 1.0%

   Average expected increase in inventories consistent with these responses = 1.7%

8. Over the next year, what do you expect in terms of full-time employment in your company?
   a. Increase more than 10 percent – 8.6%
   b. Increase 5 to 10 percent – 18.8%
   c. Increase up to 5 percent – 35.9%
   d. Stay about the same – 32.3%
   e. Decrease up to 5 percent – 2.5%
   f. Decrease 5 to 10 percent – 1.0%
   g. Decrease more than 10 percent – 1.0%

   Average expected increase in full-time employment consistent with these responses = 2.9%

9. Over the next year, what do you expect to happen to employee wages (excluding nonwage compensation, such as benefits) in your company?
   a. Increase more than 5 percent – 6.7%
   b. Increase 3 to 5 percent – 41.0%
   c. Increase up to 3 percent – 45.6%
   d. Stay about the same – 6.1%
   e. Decrease up to 3 percent – 0.2%
   f. Decrease 3 to 5 percent – none
   g. Decrease more than 5 percent – 0.4%

   Average expected increase in employee wages consistent with these responses = 2.6%

10. Over the next year, what do you expect to happen to health insurance costs for your company?
    a. Increase 15.0 percent or more – 11.1%
    b. Increase 10.0 to 14.9 percent – 23.2%
    c. Increase 5.0 to 9.9 percent – 37.0%
    d. Increase less than 5.0 percent – 17.5%
    e. No change – 7.6%

f. Decrease less than 5.0 percent – 0.2%
g. Decrease 5.0 percent or more – 0.4%
h. Uncertain – 3.1%

Average expected increase in health insurance costs consistent with these responses = 7.7%

11. Do you think the United States is headed in the right direction, or is our country on the wrong track?
    a. Right direction – 67.7%
    b. Wrong track – 11.4%
    c. Unsure – 20.9%

12. What are the biggest challenges you are facing right now? (Check all that apply.)
    a. Weaker domestic economy and sales for our products to U.S. customers – 12.0%
    b. Weaker global growth and slower export sales – 5.5%
    c. Strengthened U.S. dollar relative to other currencies – 15.0%
    d. Challenges with access to capital or other forms of financing – 5.7%
    e. Unfavorable business climate (e.g., taxes, regulations) – 19.0%
    f. Increased raw material costs – 64.5%
    g. Rising health care/insurance costs – 68.9%
    h. Attracting and retaining a quality workforce – 74.8%

13. What is your company's primary industrial classification?
    a. Chemicals – 4.9%
    b. Computer and electronic products – 2.1%
    c. Electrical equipment and appliances – 5.9%
    d. Fabricated metal products – 31.0%
    e. Food manufacturing – 3.8%
    f. Furniture and related products – 1.3%
    g. Machinery – 11.9%
    h. Nonmetallic mineral products – 2.3%
    i. Paper and paper products – 3.6%
    j. Petroleum and coal products – 1.5%
    k. Plastics and rubber products – 7.6%
    l. Primary metals – 3.0%
    m. Transportation equipment – 2.8%
    n. Wood products – 1.9%
    o. Other – 16.5%

14. What is your firm size (e.g., the parent company, not your establishment)?
    a. Fewer than 50 employees – 20.6%
    b. 50 to 499 employees – 54.7%
    c. 500 or more employees – 24.6%

<u>SPECIAL QUESTIONS</u>

Regulatory Burdens

15. As a result of the changed regulatory environment, is your company more likely to do any of the following? (Check all that apply.)
    a. Expand your business – 38.1%
    b. Hire more workers – 34.8%
    c. Increase employee wages and benefits – 35.2%
    d. Increase capital spending – 38.3%

e. Invest more dollars in the community – 18.3%
f. Other – 6.3%
g. None of the above – 20.2%
h. Unsure – 22.8%

16. Have you ever been accused of violating a regulatory provision when you believed that provision did not apply to you or you were unaware of its existence?
    a. Yes – 18.5%
    b. No – 74.1%
    c. Unsure – 7.4%

17. Have you ever delayed an investment in your plant or business because you expected a new and uncertain regulation might influence the viability of that investment?
    a. Yes – 46.6%
    b. No – 46.2%
    c. Unsure – 7.2%

18. When regulations change, or when new regulations are developed, do you generally have enough time to understand them before they become effective/mandatory?
    a. Yes – 29.2%
    b. No – 54.5%
    c. Unsure – 16.3%

19. How would comprehensive regulatory reform affect employment in your company's U.S. operations?
    a. Increase – 47.3%
    b. No change – 25.9%
    c. Decrease – 0.8%
    d. Unsure – 26.1%

Infrastructure Spending

20. In modern manufacturing, an efficient infrastructure system reduces the transportation costs to get my product to market, and a single transportation bottleneck can disrupt my supply chain and shut down my shop floor.
    a. Strongly Agree – 33.3%
    b. Agree – 52.6%
    c. Disagree – 7.8%
    d. Strongly Disagree – 0.4%
    e. Unsure – 5.9%

21. Do you support the modernization of user fees that fund vital infrastructure accounts to ensure that certainty is restored to these programs and chronic shortfalls are eliminated?
    a. Yes – 58.8%
    b. No – 10.6%
    c. Unsure – 30.6%

Apprenticeships

22. Has your company participated in a work-and-learn program (e.g., registered or unregistered apprenticeship, work-study, internship, co-op or something similar) in the past three years?
    a. Yes – 65.1%

   b. No – 33.1%
   c. Unsure – 1.8%

23. Would you be interested in participating in a work-and-learn program if the right opportunity became available?
    a. Yes – 70.4%
    b. No – 10.0%
    c. Unsure – 19.6%