NAM MANUFACTURERS’ OUTLOOK SURVEY
THIRD QUARTER 2018
OCTOBER 5, 2018

<table>
<thead>
<tr>
<th>Percentage of Respondents Positive About Their Own Company’s Outlook</th>
<th>Overall Facts About the Survey</th>
</tr>
</thead>
</table>
| **92.5%**  
_June: 95.1% – all-time high_  
Four-Quarter Average: 93.9% * | **Overall Number of Responses: 718**  
_In the Field: August 17 to 31, 2018_  
Small Manufacturers: 123 responses  
Medium-Sized Manufacturers: 333 responses  
Large Manufacturers: 259 responses |

| Small Manufacturers: 91.3% (June: 89.5%) | NAM Manufacturing Outlook Index |
| Medium-Sized Manufacturers: 92.5% (June: 95.8%*) | **61.9**  
_June: 63.6 – all-time high, revised_  
*all-time highs* |
| Large Manufacturers: **93.1%** (June: 97.9%*) |

<table>
<thead>
<tr>
<th>NAM Manufacturing Outlook Index</th>
<th>Overall Facts About the Survey</th>
</tr>
</thead>
</table>
| **Expected Growth Rate for SALES**  
Over the Next 12 Months  
↑ **5.0%**  
_June: ↑ 5.7% – remained the highest since 1997:4_ | **Expected Growth Rate for PRODUCTION**  
Over the Next 12 Months  
↑ **4.9%**  
_June: ↑ 5.7% – highest since Q added 3 yrs. ago_ |
| **Expected Growth Rate for FULL-TIME EMPLOYMENT**  
Over the Next 12 Months  
↑ **2.5%**  
_June: ↑ 3.1% – all-time high_ | **Expected Growth Rate for EMPLOYEE WAGES**  
Over the Next 12 Months  
↑ **2.7%** — still the highest since 2001:1  
_June: ↑ 2.7%_ |
| **Expected Growth Rate for CAPITAL INVESTMENTS**  
Over the Next 12 Months  
↑ **3.4%**  
_June: ↑ 4.1% – all-time high_ | **Expected Growth Rate for EXPORTS**  
Over the Next 12 Months  
↑ **0.8%**  
_June: ↑ 1.5% – highest since 2014:2_ |
| **Expected Growth Rate for PRICES OF COMPANY’S PRODUCTS**  
Over the Next 12 Months  
↑ **3.2%** — still the highest since 2011:2  
_June: ↑ 3.2%_ | **Expected Growth Rate for RAW MATERIAL PRICES AND OTHER INPUT COSTS**  
Over the Next 12 Months  
↑ **4.8%**  
_June: ↑ 5.6%_ |
| **Expected Growth Rate for INVENTORIES**  
Over the Next 12 Months  
↑ **1.0%**  
_June: ↑ 1.5%_ | **Expected Growth Rate for HEALTH INSURANCE COSTS**  
Over the Next 12 Months  
↑ **7.4%**  
_June: ↑ 7.7%_ |
Summary

Manufacturing activity remains robust—one of the brightest spots in the economy right now. In the latest Manufacturers’ Outlook Survey from the National Association of Manufacturers (NAM), it is clear that manufacturing leaders in the United States continue to have unprecedented levels of optimism, spurred by improvements in the global economy and, in particular, by pro-growth policies such as tax reform and regulatory relief. Overall, 92.5 percent of those completing the survey said that they were either somewhat or very positive about their own company’s outlook (Figure 1). This continues the high-rate of optimism reported since the beginning of 2017, including the 95.1 percent result in June, which was the highest rate since the survey was introduced in the fourth quarter of 1997.

The four-quarter rolling average—which for this survey reaches back to around the time when Congress began considering tax reform in earnest—inched up to a record-high 93.9 percent. Similarly, manufacturers’ optimism for 2018 is on track to be the highest annual average in the survey’s 20-year history.

In general, those completing this survey have been upbeat since the end of 2016, averaging 92.6 percent positive over the past seven quarters. Additionally, the Manufacturing Outlook Index dipped slightly from an all-time high of 63.6 in June to 61.9 in this release (Figure 2). Index readings above 50 indicate the outlook exceeds the historic average of the survey (74.7 percent positive), with values above 60 suggesting that the outlook is at least one standard deviation greater than that average.

The underlying data continue to show strength in the sector, especially in terms of job growth—more than 58 percent of manufacturers anticipate more hiring over the next year and about a quarter (23.1 percent) are planning employment growth of 5 percent or more. Wage growth is once again expected to rise at its fastest pace since 2001.

The manufacturing sector’s robust jobs situation, however, is also exacerbating the industry’s pre-existing skills-gap challenge, which is rapidly evolving into a full-blown workforce crisis. The survey found that, at 73.2 percent, the inability to attract and retain workers remained the top concern of respondents for the fourth straight survey (Figure 4). The survey also found nearly half of manufacturers (45.4 percent) citing this crisis as the number one threat facing their business. More than one in four (28.4 percent) said that it has forced them to turn down new business opportunities, and one-third (33.2 percent) note that they have had to hold off on plans to hire more workers due to these workforce constraints.

But the survey also shows that manufacturers are doing something about this challenge. A large majority of respondents report that they commit to President Donald Trump’s Pledge to America’s Workers—a commitment to expand programs that educate, train and reskill American workers from high-school age to near-retirement; those who do are planning to train a weighted average of 141.7 employees per firm. This is on top what the NAM and our Manufacturing Institute are already doing to tackle the crisis directly like launching veterans training initiatives, promoting community vocational programs and company-led upskilling programs and introducing more students and parents to the industry first-hand through the annual Manufacturing Day (MFG Day) initiative.
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
**Figure 3: Expected Growth of Manufacturing Activity, 2016–2018**

- **Avg. 12-Month Growth Rates**
  - Sales: ↑ 5.0%
  - Exports: ↑ 0.8%
  - Capital Investments: ↑ 3.4%
  - Full-Time Employment: ↑ 2.5%

Note: Expected growth rates are annual averages.

**Figure 4: Primary Current Business Challenges, Third Quarter 2018**

- Attracting and retaining a quality workforce: 73.2%
- Increased raw material costs: 65.6%
- Trade uncertainties: 58.8%
- Rising health care/insurance costs: 57.5%
- Transportation and logistics costs: 42.0%
- Strengthened U.S. dollar relative to other currencies: 20.7%
- Weaker domestic economy and sales for our products: 13.8%
- Unfavorable business climate (e.g., taxes, regulations): 11.5%
- Weaker global growth and slower export sales: 9.8%
- Challenges with access to capital: 3.8%

Note: Respondents were able to check more than one response; therefore, responses exceed 100 percent.
Here are some of the highlights of the current survey in terms of predicted activity growth over the next year (Figure 3):

- **Sales:** Respondents expect sales growth of 5.0 percent over the next 12 months, down from 5.7 percent in the last survey, which was the second-highest level in the survey’s history and a more than 20-year high. The anticipated sales growth rate has been 5 percent or greater for four straight surveys. In the latest results, 82.3 percent of manufacturers anticipate higher sales over the next year, with just 5.6 percent predicting declines. Roughly one-fifth see revenue gains of more than 10 percent.

- **Production:** Respondents expect production growth of 4.9 percent over the next 12 months, down from 5.7 percent three months ago. The prior figure was the fastest expected pace since the question was added to the survey three years ago. Similar to the sales results, nearly 80 percent predict production to expand over the next year, with 53.2 percent forecasting output growth of 5 percent or more. Just 5.3 percent of manufacturers anticipate reduced production.

- **Employment:** Respondents expect full-time employment to increase by 2.5 percent over the next 12 months, off from 3.1 percent in the previous release, which was an all-time high. Despite some slippage, the data continue to suggest a tight labor market. More than 58 percent anticipate more hiring over the next year, including 23.1 percent planning employment growth of 5 percent or more. Just 5.6 percent see employment falling for their firms. The fastest hiring growth is seen among medium-sized firms, which predict a 2.9 percent increase in employment over the next 12 months. In contrast, small and large manufacturers expect job growth of 2.4 percent and 2.1 percent, respectively.

- **Wages:** Respondents anticipate employee wages (excluding nonwage compensation such as benefits) to rise by 2.7 percent over the next 12 months, the same pace as in the previous survey. It remained the fastest pace in more than 17 years, or since the first quarter of 2001. In the latest results, 93.2 percent see wages increasing over the next year, with nearly 48 percent expecting to hike wages by 3 percent or more. This is consistent with other indicators that have shown wage pressures accelerating, but still at a modest pace.

- **Capital Spending:** Respondents expect capital investments to rise by 3.4 percent over the next 12 months, down from an all-time high of 4.1 percent in the past survey. Roughly 57 percent anticipate higher capital spending in the next year, with almost one-fifth of manufacturers expecting robust investment growth of 10 percent or more. Medium-sized and large manufacturers predict capital investment growth of 3.6 percent over the next 12 months, with small manufacturers anticipating 2.5 percent growth.

- **Exports:** Respondents expect exports to increase by 0.8 percent over the next 12 months, down from 1.5 percent in June, which was a four-year high. This was the slowest pace since the fourth quarter of 2016. Nearly 32 percent of those taking the survey predict export sales increasing over the next year, with 56.9 percent seeing exports being unchanged and 11.4 percent noting possible declines. As seen in prior surveys, those companies that are more optimistic about exports tend to be the most upbeat in their overall company outlook. Along those lines, for those predicting increased exports over the next 12 months, a whopping 99.1 percent were positive in their outlook in this survey. That figure was 92.8 percent positive for those predicting
no change in export sales over the next year, but it fell to 72.5 percent for those individuals saying that they anticipate reduced exports.

- **Product Prices:** Respondents expect product prices to increase by 3.2 percent over the next 12 months, unchanged from the June survey. This continued to be the fastest growth rate for prices since the second quarter of 2011. More than 46 percent of those surveyed forecast price growth for their products of up to 5 percent, with 28.4 percent predicting price growth of 5 percent or more.

- **Raw Material Prices:** Manufacturers anticipate raw material prices and other input costs rising 4.8 percent over the next 12 months, with 47.2 percent of respondents seeing price growth of 5 percent or more. This question was added in the prior survey, with 5.6 percent expecting raw material costs to rise at that time.

- **Inventories:** Respondents expect inventories to increase by 1.0 percent over the next 12 months, pulling back for the second straight survey from the all-time high of 1.7 percent in March. It was the seventh consecutive quarter with anticipated growth in inventories. This mainly reflects stronger demand—another indicator of healthy growth for the sector. Almost 35 percent of manufacturers predict increased inventories, with 46.8 percent expecting stockpiles to remain unchanged.

As noted earlier, there remains a serious talent shortage in the manufacturing sector, with the inability to find and retain talent once again topping the list of primary business challenges, as cited by 73.2 percent of respondents.

Other major concerns in the latest survey included increased raw material costs (65.6 percent), trade uncertainties (58.8 percent), rising health care costs (57.5 percent) and transportation and logistics costs (42.0 percent). The trade and transportation options were new questions added in this survey, mainly due to the prevalence of manufacturing leaders citing those concerns anecdotally in recent conversations. In terms of health care costs, those completing the survey predict that premiums will rise by 7.4 percent over the next 12 months on average. Roughly 70 percent of manufacturers expect their health care costs to increase by at least 5 percent on average next year. At the same time, 28.1 percent of respondents expect their premiums to rise by at least 10 percent. Small and medium-sized manufacturers predict 8.1 percent growth in health care costs on average over the next 12 months, with large firms seeing 6.4 percent growth.

Interestingly, the “business environment” is no longer the concern that it once was, with just 11.5 percent citing the tax and regulatory climate as being a top concern. Respondents cited an unfavorable business climate as their primary business challenge as recently as two years ago, with 73.6 percent of manufacturers noting it as their top problem in the third quarter of 2016.

**Note**

This survey has been conducted quarterly since 1997, with the NAM’s membership submitting this quarter’s responses from August 17 to 31. In total, 718 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 December 2018.

**Special Questions**
Workforce

The strengthened economy and tight labor market have made it difficult to find talent, with the inability to attract and retain workers being the top challenge cited in the past four surveys. With that in mind, we asked manufacturers a series of special questions about how these hiring challenges might be negatively impacting their businesses.

More than one in four (28.4 percent) of manufacturers said that they had turned down new business opportunities due to an inability to attract and retain workers and one-third (33.2 percent) noted that they had held off on plans to expand or create new jobs due to workforce constraints. All in all, about half (45.4 percent) of those completing the survey agreed that the inability to attract and retain workers was the biggest threat facing their business.

Pledge to America’s Workers

In July, NAM President and CEO Jay Timmons and Manufacturing Institute Executive Director Carolyn Lee asked NAM members to commit to President Trump’s Pledge to America’s Workers—a commitment to expand programs that educate, train and reskill American workers from high-school age to near-retirement.

Manufacturers were asked about how many workers they commit to train in the next five years. There were 392 respondents saying that their company would commit to the Pledge, with a weighted average of 141.7 employees being trained per firm. That would translate into 55,537 workers.

Tax Reform Impacts

Manufacturers continue to tell us that they are “keeping their promises” on tax reform by investing in their businesses. Among those respondents who planned to increase investments as a result of tax reform, the average anticipated investment increase was 6.3 percent. Eighty-four percent of those individuals said that capital spending would rise by 3 percent or more, with 58.1 percent suggesting that investment would rise by 5 percent or more. In a similar way, those completing the survey planning to hire more workers cited an average anticipated workforce expansion of 4.6 percent, with 67.4 percent feeling that employment would increase by at least 5 percent. Moreover, this should also lead to greater compensation. Respondents planning to increase wages and benefits expect an average rise of 3.4 percent.
Survey Responses

1. How would you characterize the business outlook for your firm right now?
   a. Very positive – 39.8%
   b. Somewhat positive – 52.7%
   c. Somewhat negative – 7.0%
   d. Very negative – 0.6%

   Percentage that is either somewhat or very positive in their outlook = 92.5%

2. Over the next year, what do you expect to happen with your company’s overall sales?
   a. Increase more than 10 percent – 19.7%
   b. Increase 5 to 10 percent – 35.0%
   c. Increase up to 5 percent – 27.6%
   d. Stay about the same – 12.1%
   e. Decrease up to 5 percent – 2.9%
   f. Decrease 5 to 10 percent – 2.1%
   g. Decrease more than 10 percent – 0.6%

   Average expected increase in sales consistent with these responses = 5.0%

3. Over the next year, what do you expect to happen with your company’s overall production levels?
   a. Increase more than 10 percent – 20.4%
   b. Increase 5 to 10 percent – 32.8%
   c. Increase up to 5 percent – 26.7%
   d. Stay about the same – 14.8%
   e. Decrease up to 5 percent – 2.9%
   f. Decrease 5 to 10 percent – 1.7%
   g. Decrease more than 10 percent – 0.7%

   Average expected increase in production consistent with these responses = 4.9%

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 – 11.8%
   b. Increase 3 to 5 percent – 10.4%
   c. Increase up to 3 percent – 9.4%
   d. Stay about the same – 56.9%
   e. Decrease up to 3 percent – 5.0%
   f. Decrease 3 to 5 percent – 1.7%
   g. Decrease more than 5 percent – 4.7%

   Average expected increase in exports consistent with these responses = 0.8%

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 – 4.5%
   b. Increase 5 to 10 percent – 23.9%
   c. Increase up to 5 percent – 46.5%
   d. Stay about the same – 21.6%
   e. Decrease up to 5 percent – 2.3%
   f. Decrease 5 to 10 percent – 0.8%
   g. Decrease more than 10 percent – 0.4%
Average expected increase in product prices consistent with these responses = 3.2%

6. Over the next year, what do you expect to happen with raw material prices and other input costs?
   a. Increase more than 10 percent – 17.3%
   b. Increase 5 to 10 percent – 29.9%
   c. Increase up to 5 percent – 39.6%
   d. Stay about the same – 10.0%
   e. Decrease up to 5 percent – 2.1%
   f. Decrease 5 to 10 percent – 0.8%
   g. Decrease more than 10 percent – 0.4%

   Average expected increase in raw material prices consistent with these responses = 4.8%

7. Over the next year, what are your company’s capital investment plans?
   a. Increase more than 10 percent – 20.3%
   b. Increase 5 to 10 percent – 17.7%
   c. Increase up to 5 percent – 18.9%
   d. Stay about the same – 36.6%
   e. Decrease up to 5 percent – 2.8%
   f. Decrease 5 to 10 percent – 1.3%
   g. Decrease more than 10 percent – 2.5%

   Average expected increase in capital investments consistent with these responses = 3.4%

8. Over the next year, what are your inventory plans?
   a. Increase more than 10 percent – 4.4%
   b. Increase 5 to 10 percent – 12.2%
   c. Increase up to 5 percent – 18.1%
   d. Stay about the same – 46.8%
   e. Decrease up to 5 percent – 12.5%
   f. Decrease 5 to 10 percent – 4.6%
   g. Decrease more than 10 percent – 1.4%

   Average expected increase in inventories consistent with these responses = 1.0%

9. Over the next year, what do you expect in terms of full-time employment in your company?
   a. Increase more than 10 percent – 6.3%
   b. Increase 5 to 10 percent – 16.8%
   c. Increase up to 5 percent – 35.0%
   d. Stay about the same – 36.3%
   e. Decrease up to 5 percent – 4.5%
   f. Decrease 5 to 10 percent – 0.3%
   g. Decrease more than 10 percent – 0.8%

   Average expected increase in full-time employment consistent with these responses = 2.5%

10. 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 – 7.7%
    b. Increase 3 to 5 percent – 40.1%
    c. Increase up to 3 percent – 45.4%
    d. Stay about the same – 6.7%
    e. Decrease up to 3 percent – none
f. Decrease 3 to 5 percent – 0.1%
g. Decrease more than 5 percent – none

Average expected increase in employee wages consistent with these responses = 2.7%

11. Over the next year, what do you expect to happen to health insurance costs for your company?
   a. Increase 15.0 percent or more – 8.5%
   b. Increase 10.0 to 14.9 percent – 19.6%
   c. Increase 5.0 to 9.9 percent – 42.1%
   d. Increase less than 5.0 percent – 20.1%
   e. No change – 6.2%
   f. Decrease less than 5.0 percent – 0.1%
   g. Decrease 5.0 percent or more – 0.3%
   h. Uncertain – 3.1%

Average expected increase in health insurance costs consistent with these responses = 7.4%

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 – 13.8%
   b. Weaker global growth and slower export sales – 9.8%
   c. Trade uncertainties (e.g., actual or proposed tariffs, trade negotiation uncertainty) – 58.8%
   d. Strengthened U.S. dollar relative to other currencies – 20.7%
   e. Challenges with access to capital or other forms of financing – 3.8%
   f. Unfavorable business climate (e.g., taxes, regulations) – 11.5%
   g. Increased raw material costs – 65.6%
   h. Rising health care/insurance costs – 57.5%
   i. Transportation and logistics costs – 42.0%
   j. Attracting and retaining a quality workforce – 73.2%

13. What is your company’s primary industrial classification?
   a. Chemicals – 6.9%
   b. Computer and electronic products – 1.7%
   c. Electrical equipment and appliances – 5.5%
   d. Fabricated metal products – 28.4%
   e. Food manufacturing – 3.2%
   f. Furniture and related products – 1.3%
   g. Machinery – 11.1%
   h. Nonmetallic mineral products – 1.5%
   i. Paper and paper products – 2.4%
   j. Petroleum and coal products – 1.4%
   k. Plastics and rubber products – 6.2%
   l. Primary metals – 3.9%
   m. Transportation equipment – 3.6%
   n. Wood products – 3.1%
   o. Other – 20.0%

14. What is your firm size (e.g., the parent company, not your establishment)?
   a. Fewer than 50 employees – 17.2%
   b. 50 to 499 employees – 46.6%
   c. 500 or more employees – 36.2%
**SPECIAL QUESTIONS**

**Tax Reform Impacts**

15. If you plan to increase wages and benefits wages after tax reform, what is your anticipated wage increase percentage?
   a. Increase up to 3 percent – 39.8%
   b. Increase 3 to 5 percent – 50.8%
   c. Increase 5 to 10 percent – 8.7%
   d. Increase more than 10 percent – 0.7%

   *Average anticipated wage increase consistent with these responses = 3.4%*

16. If you plan to hire more workers after tax reform, what is your anticipated workforce expansion percentage?
   a. Increase up to 3 percent – 31.6%
   b. Increase 3 to 5 percent – 35.8%
   c. Increase 5 to 10 percent – 22.6%
   d. Increase more than 10 percent – 10.0%

   *Average anticipated workforce increase consistent with these responses = 4.6%*

17. If you plan to increase investment after tax reform, what is your anticipated investment increase percentage?
   a. Increase up to 3 percent – 16.0%
   b. Increase 3 to 5 percent – 25.9%
   c. Increase 5 to 10 percent – 31.4%
   d. Increase more than 10 percent – 26.7%

   *Average anticipated investment increase consistent with these responses = 6.3%*

**Workforce**

18. Have you held off on plans to expand or create new jobs due to an inability to attract and retain workers?
   a. Yes – 33.2%
   b. No – 66.8%

19. Have you turned down new business due to an inability to attract and retain workers?
   a. Yes – 28.4%
   b. No – 71.6%

20. Agree/Disagree: The inability to attract and retain workers is the biggest threat facing my business.
   a. Agree – 45.4%
   b. Disagree – 54.6%

21. In July, NAM President & CEO Jay Timmons and MI Executive Director Carolyn Lee asked NAM members to commit to President Trump's [Pledge to America’s Workers](https://www.nam.org/pound/pledge)—a commitment to expand programs that educate, train, and reskill American workers from high-school age to near-retirement. If you commit to this Pledge, how many workers do you commit to train in the next 5 years?
   a. Up to 50 – 40.7%
   b. 51-100 – 6.7%
   c. 101-250 – 4.8%
   d. 251-500 – 3.4%
e. 501-1000 – 2.1%
f. 1001-2500 – 0.6%
g. 2501-5000 – 0.5%
h. Over 5001 – 1.2%
i. I do not commit to the pledge – 40.0%

_Average commitment for training workers consistent with these responses = 141.7_