NAM MANUFACTURERS' OUTLOOK SURVEY
FIRST QUARTER 2021
MARCH 9, 2021

<table>
<tr>
<td>Percentage of Respondents Positive About Their Own Company's Outlook
87.6% – Highest Since 2019:1
(Dec.: 74.2%)

Small Manufacturers: 78.4% – Highest Since 2019:2 (Dec.: 68.1%)

Medium-Sized Manufacturers: 90.0% – Highest Since 2019:1 (Dec.: 73.4%)

Large Manufacturers: 90.7% – Highest Since 2018:3 (Dec.: 81.0%)</td>
<td>Overall Facts About the Survey
Number of Responses: 450
In the Field: Feb. 19 – March 5, 2021

Small Manufacturers: 102 responses (22.7%)
Medium-Sized Manufacturers: 240 responses (53.3%)
Large Manufacturers: 108 responses (24.0%)
<hr>NAM Manufacturing Outlook Index[1]
58.7
(Dec.: 49.8 – Revised)</td>
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<tr>
<td>Expected Growth Rate for <u>SALES</u> Over the Next 12 Months
↑ 4.9% – Highest Since 2018:3
(Dec.: ↑ 3.4%)</td>
<td>Expected Growth Rate for <u>PRODUCTION</u> Over the Next 12 Months
↑ 4.9% – Highest Since 2018:3
(Dec.: ↑ 3.4%)</td>
</tr>
<tr>
<td>Expected Growth Rate for <u>FULL-TIME EMPLOYMENT</u> Over the Next 12 Months
↑ 2.7% – Highest Since 2018:2
(Dec.: ↑ 1.8%)</td>
<td>Expected Growth Rate for <u>EMPLOYEE WAGES</u> Over the Next 12 Months
↑ 2.5% – Highest Since 2018:3
(Dec.: ↑ 1.9%)</td>
</tr>
<tr>
<td>Expected Growth Rate for <u>CAPITAL INVESTMENTS</u> Over the Next 12 Months
↑ 2.7% – Highest Since 2019:1
(Dec.: ↑ 1.5%)</td>
<td>Expected Growth Rate for <u>EXPORTS</u> Over the Next 12 Months
↑ 1.1% – Highest Since 2018:2
(Dec.: ↑ 0.8%)</td>
</tr>
<tr>
<td>Expected Growth Rate for <u>PRICES OF COMPANY'S PRODUCTS</u> Over the Next 12 Months
↑ 3.9% – Record High (Dating to First Survey, 1997:4)
(Dec.: ↑ 2.1%)</td>
<td>Expected Growth Rate for <u>RAW MATERIAL PRICES AND OTHER INPUT COSTS</u> Over the Next 12 Months
↑ 6.2% – Record High (Dating to Question Addition in 2018:2)
(Dec.: ↑ 3.3%)</td>
</tr>
<tr>
<td>Expected Growth Rate for <u>INVENTORIES</u> Over the Next 12 Months
↑ 1.1% – Highest Since 2018:2
(Dec.: ↑ 0.6%)</td>
<td>Expected Growth Rate for <u>HEALTH INSURANCE COSTS</u> Over the Next 12 Months
↑ 7.2% – Highest Since 2018:3
(Dec.: ↑ 6.4%)</td>
</tr>
</table>

[1] The NAM Manufacturing Outlook Index data series is revised each quarter to reflect the mean and standard deviation of the historical data, dating back to the fourth quarter of 1997. Currently, the historical mean for those with positive responses in their outlook is 74.5%, with a standard deviation of 15.0%. An index reading of 40 would be consistent with one standard deviation below the mean (59.5% positive), and an index reading of 60 would be one standard deviation above the mean (89.5% positive). As such, the index helps to normalize the outlook data to put them into a historical context.

Summary

After plummeting sharply last year due to the COVID-19 pandemic and the global recession, manufacturing activity has rebounded sharply, with the sector being a bright spot in the economy in recent months. Manufacturing production is likely to exceed pre-pandemic levels in the next couple months, and employment in the sector has risen in all but one month since April 2020. Despite solid growth, there have also been significant supply chain disruptions in the marketplace as firms have struggled to keep up with that demand. In the most recent Institute for Supply Management® report, the backlog of orders soared to the highest level since April 2004, and raw material costs rose at the swiftest rate since May 2008. In addition, firms continue to note workforce challenges, with manufacturing job openings elevated despite a dramatically altered labor market over the past year.

With that as context, the Manufacturers' Outlook Survey for the first quarter of 2021 was conducted from Feb. 19 to March 5, and 87.6% of respondents felt either somewhat or very positive about their company outlook (Figures 1 and 2). It was the third straight quarterly increase in optimism in the survey, with the outlook bouncing back from the 33.9% reading in the second quarter of 2020, which was the worst since the Great Recession. More importantly, this suggests that manufacturers had the strongest outlook in two years, since the first quarter of 2019.

The NAM Manufacturing Outlook Index measured 58.7 in the first quarter, up from 49.8 in the fourth quarter (Figure 3). This is consistent with the current outlook that was well above the historical average, which was 74.5%.

For the past three reports, manufacturers were asked about production, employment and capital spending in the current quarter relative to the previous one (Figure 4 and the following table). This information can be expressed as purchasing managers' indices.

	First Quarter 2021 Relative to Fourth Quarter 2020				
	Higher	**No Change**	**Lower**	**Uncertain**	**PMI**
Production	49.9%	33.2%	15.6%	1.3%	**66.5**
Employment	38.0%	51.9%	9.6%	0.5%	**64.0**
Capital Spending	24.9%	63.2%	11.2%	0.7%	**56.5**

Respondents were asked when they expect revenues to return to pre-pandemic levels. Nearly 33% said that their revenues had recovered by the end of 2020 (Figure 5). An additional 6.3% reported their revenues will return to pre-pandemic levels by the end of the first quarter of 2021 (the current quarter). Overall, 67.6% of manufacturers completing this survey anticipate that their revenues will be back to pre-pandemic levels by the end of 2021, with 85.7% saying the same thing by the end of 2022.

The survey probed views on the Protecting the Right to Organize Act, which proposes significant changes to HR, workplace and labor relations laws, including eliminating the secret ballot in union elections, removing state right-to-work laws, giving unions access to personal employee information, eliminating captive audience meetings and others. The vast majority say the bill would have negative consequences. If the PRO Act were to become law, 96.8% of respondents say it would have a negative impact on their business operations and with their existing relationships with employees.

Rising raw material costs topped the list of primary business challenges in the first quarter (Figure 6), cited by 76.2% of respondents. In addition, manufacturers predict 6.2% growth on average for input costs over the next 12 months, the fastest pace since the question was added to the survey in the second quarter of 2018. Respondents expected product prices to rise 3.9% between now and this time next year, a new record in the more than 23 years that this survey has existed.

The inability to attract and retain talent dropped to second place on the list of top challenges but was still noted by 65.8% of those completing the survey. This issue was the primary concern in 11 of the past 13 quarters prior to this release, speaking to the structural skills mismatches that many manufacturers face regarding employment. In a special question, 73.5% of manufacturers said that passage of a major workforce training investment bill would positively impact their company's business plans and outlook. Of those saying that such a bill would be helpful for them, respondents were asked how their companies would utilize such federal dollars if enacted (Figure 7). The most impactful uses included funding on-the-job training programs (74.0%), employer support for growing and expanding apprenticeship programs (59.0%), funding for incumbent worker training programs (57.5%), expanding community college programs (44.5%) and supporting industry certification programs (35.0%).

Other top worries included rising health care and insurance costs (50.9%), transportation and logistics costs (50.2%), supply chain challenges with inventory management (48.7%) and an unfavorable business climate, including taxes and regulations (44.0%). It was the highest reading for the business climate since the fourth quarter of 2017, or since Congress enacted tax reform.

Along those lines, 87.4% of respondents said that their company would find it more difficult to expand their workforce, invest in new equipment or expand facilities if Congress increased the tax burden on income from manufacturing activities. Likewise, if lawmakers adopted policies that provide tax incentives for manufacturing investment in the United States (for activities such as workforce training, research and development, capital equipment purchases or debt financing new investments), more than 80% responded that their company would find it easier to expand their domestic workforce.

Meanwhile, 70.5% of manufacturers responding to this latest survey felt that passage of a major infrastructure bill would impact their company's business plans and outlook positively.

Some other trends regarding predicted growth rates over the next 12 months (Figure 8):

- **Sales:** Respondents expect sales to rise 4.9% over the next 12 months, the best reading since the third quarter of 2018. More than 80% of manufacturers predict that sales will increase over the next four quarters, with 56.0% feeling that orders will rise 5.0% or more. Firm size mattered in the data. Medium-sized and large manufacturers anticipate sales rising 5.5%, whereas small firms forecast increases of 2.9%. Smaller manufacturers also had the lowest outlook overall, with 78.4% positive about their company's outlook versus 90% or more for their larger counterparts.

- **Production:** Respondents also expect production to increase 4.9% over the next 12 months, the strongest reading in 10 quarters. More than 79% forecast output to rise over the coming months, with 6.9% seeing declining production. Medium and large manufacturers felt the most optimistic, anticipating 5.4% growth in production over the next 12 months. In contrast, small businesses expect output to rise 3.2%.

- **Full-Time Employment:** Respondents expect full-time employment to rise 2.7% over the next 12 months, the highest rate since the second quarter of 2018. More than 60% anticipate more full-time hiring over the next year, with more than one-quarter predicting employment growth of 5% or more. Just 6.2% expect employment reductions. Medium-sized manufacturers felt the most upbeat in their hiring plans, predicting 3.3% growth over the next 12 months. In contrast, small and large firms expect employment to rise 1.9% and 2.2%, respectively.

- **Employee Wages:** Respondents anticipate employee wages (excluding nonwage compensation, such as benefits) to rise 2.5% over the next 12 months, up from 1.9% in the previous survey and the strongest figure since the third quarter of 2018. More than 41% see wages rising 3% or more, with 48.8% predicting an increase of up to 3%.

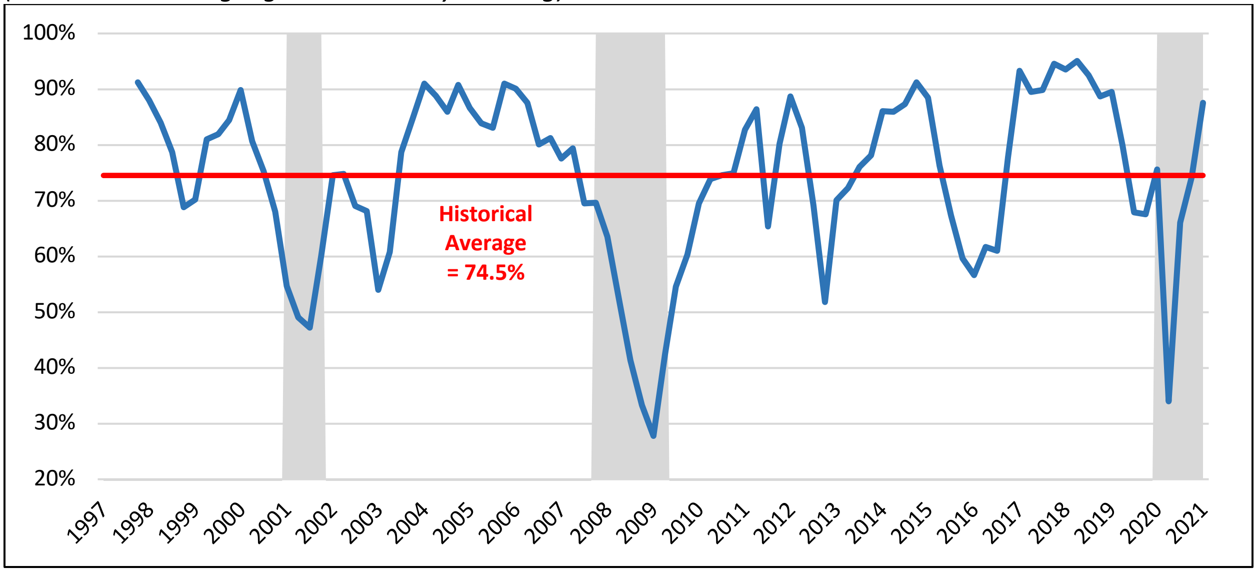
- **Capital Investments:** Capital spending expectations were the strongest in two years, with respondents anticipating an average increase of 2.7% over the next 12 months, up from 1.5% in the fourth quarter. In this survey, almost half expect additional capital spending in the next year, with 38.9% expecting no change and 11.3% forecasting reduced capital expenditures. By firm size, small, medium and large manufacturers see capital spending increasing 1.3%, 3.0% and 3.2%, respectively.

- **Exports:** Respondents expect exports to increase 1.1% over the next 12 months, up from 0.8% in the previous survey and the best reading since the second quarter of 2018. Thirty-five percent anticipate higher exports in the next year, with 59.6% seeing no changes. Large manufacturers forecasted export growth of 1.4% over the next year, with small and medium-sized firms predicting 1.0% growth each.

- **Inventories:** After six consecutive quarters with expected declines, respondents anticipated inventory growth for the second straight report, up 0.6% and 1.1% over the next 12 months in the fourth quarter and current surveys, respectively. The latest figure was the strongest since the second quarter of 2018. More than 39% of manufacturers anticipate increased inventories over the next year, with 16.3% expecting decreases and 44.5% seeing no changes.

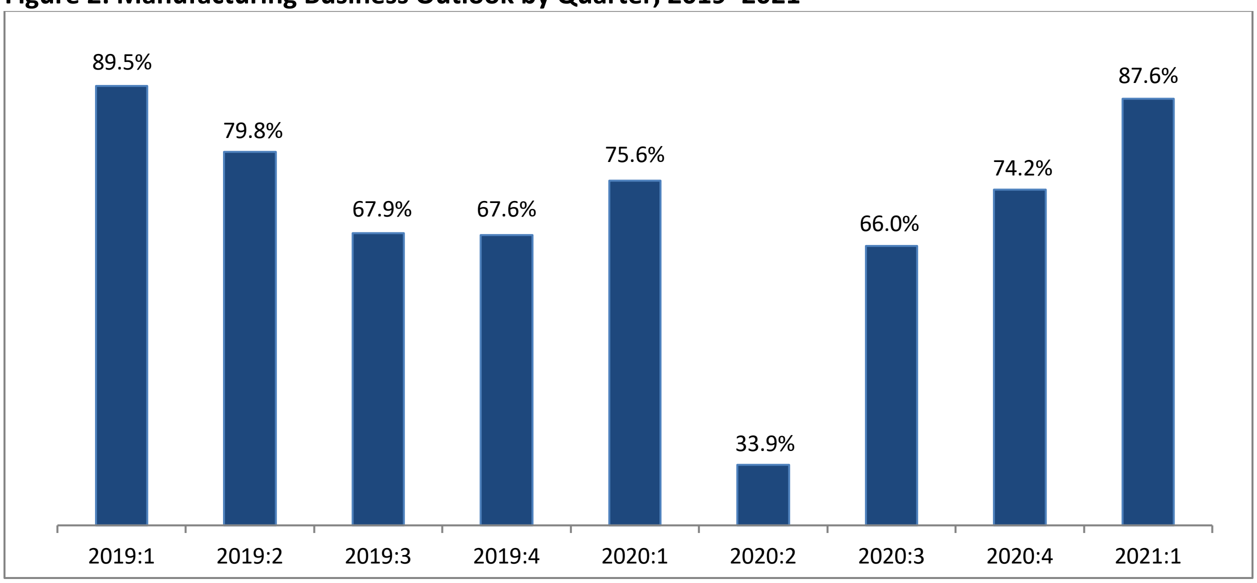
- **Health Insurance Costs:** Manufacturers predict health insurance costs will rise 7.2% over the next 12 months, up from 6.4% in the previous survey and the fastest pace since the third quarter of 2018. In the latest figures, 69.2% expect costs to increase 5% or more, including 25.9% seeing costs rising 10% or more.

Figure 1: Manufacturing Business Outlook by Quarter, 1997–2021
(Recessions Are Highlighted with Gray Shading)



Note: Percentage of respondents who characterized the current business outlook as somewhat or very positive. The National Bureau of Economic Research has not officially dated the latest recession, which began in February 2020.

Figure 2: Manufacturing Business Outlook by Quarter, 2019–2021



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

Figure 3: NAM Manufacturing Outlook Index, 2019–2021

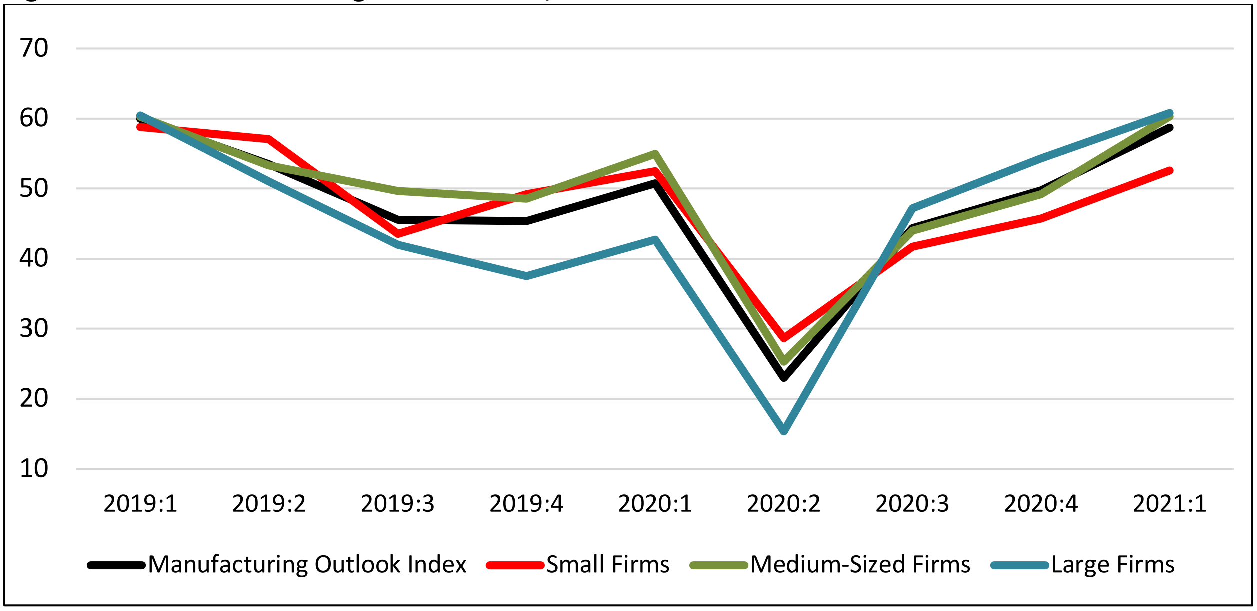


Figure 4: Change in Manufacturing Activity in First Quarter 2021 Relative to Fourth Quarter 2020

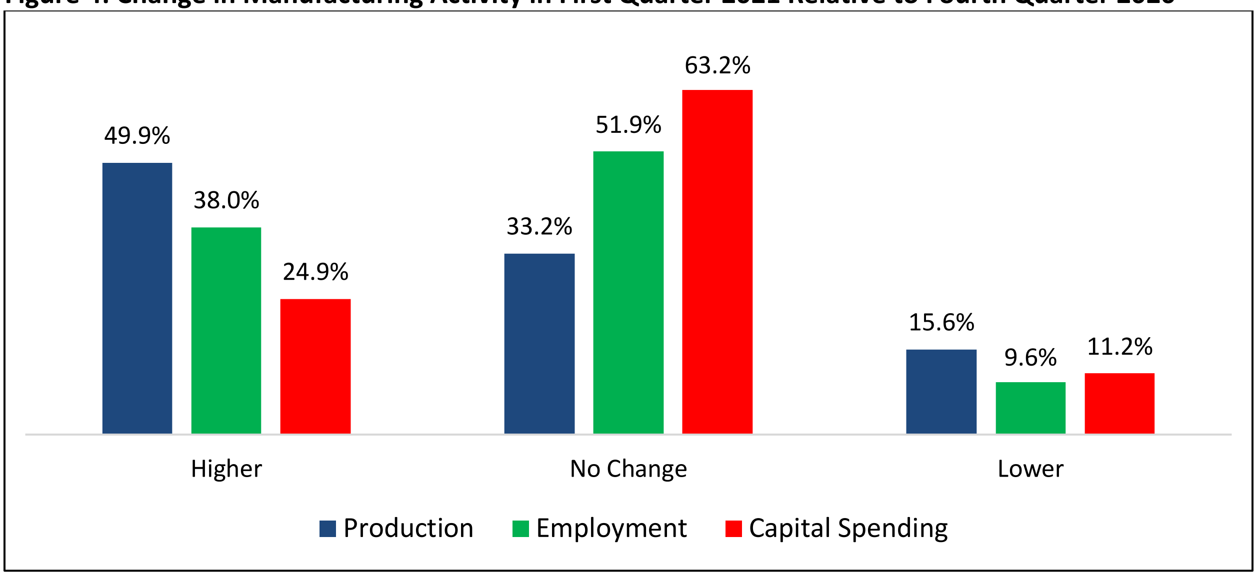


Figure 5: When Firms Expect Revenues to Return to Pre-COVID-19 Levels

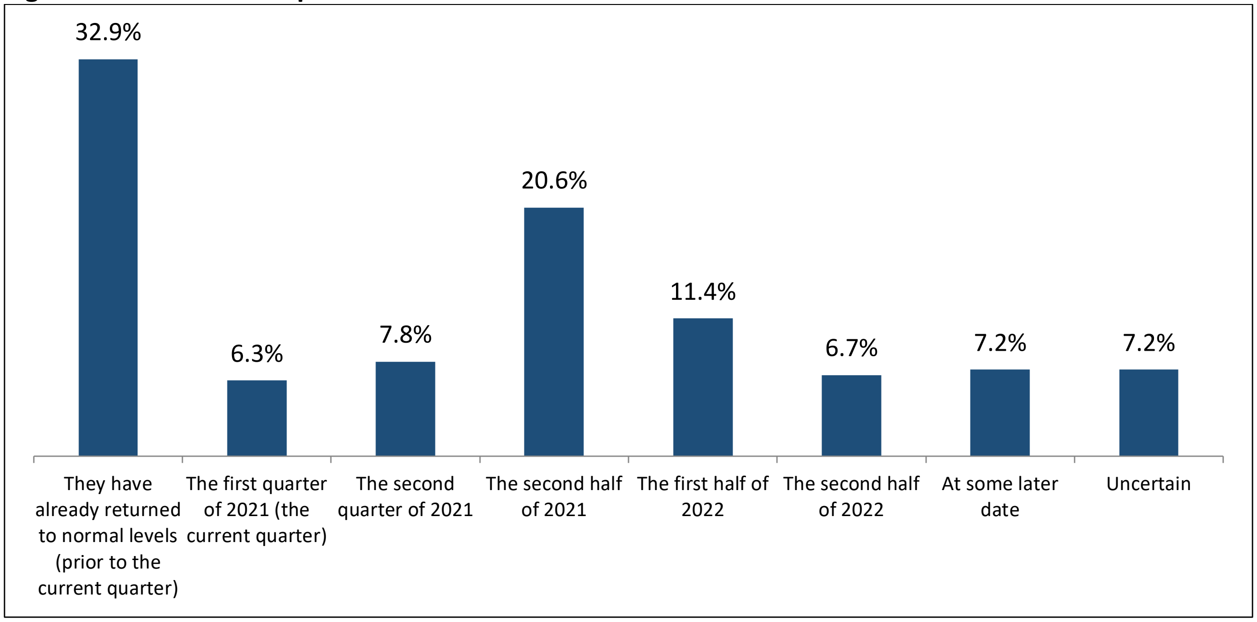
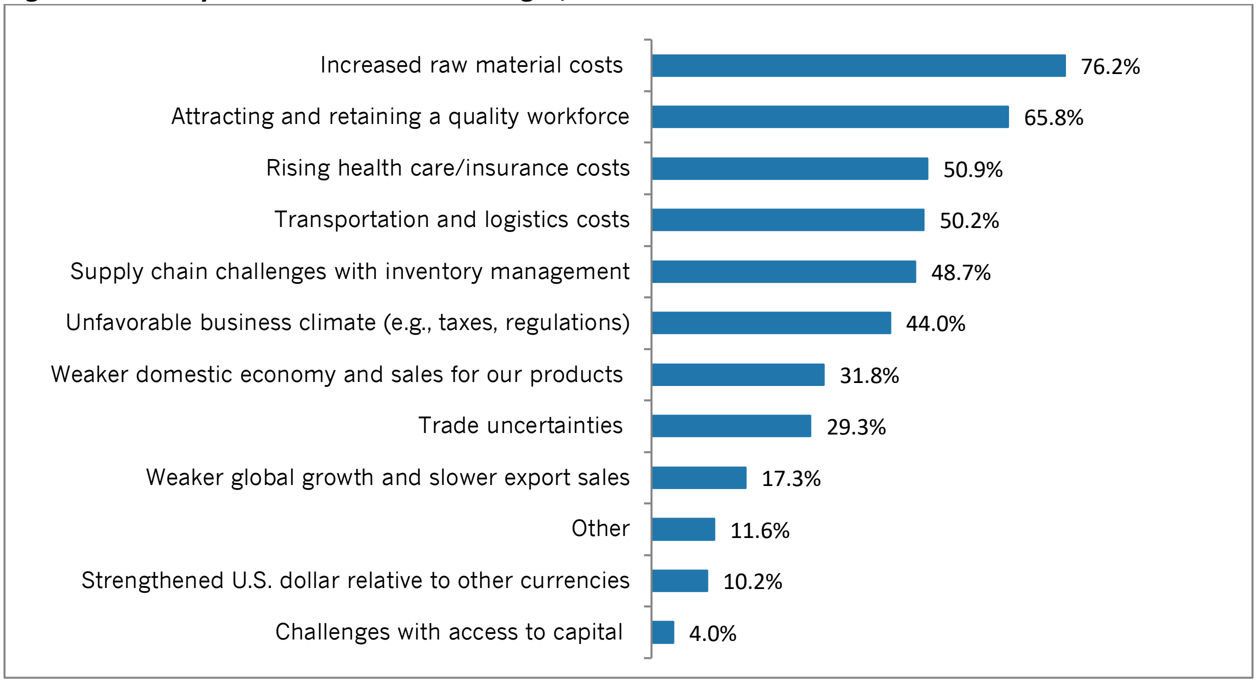
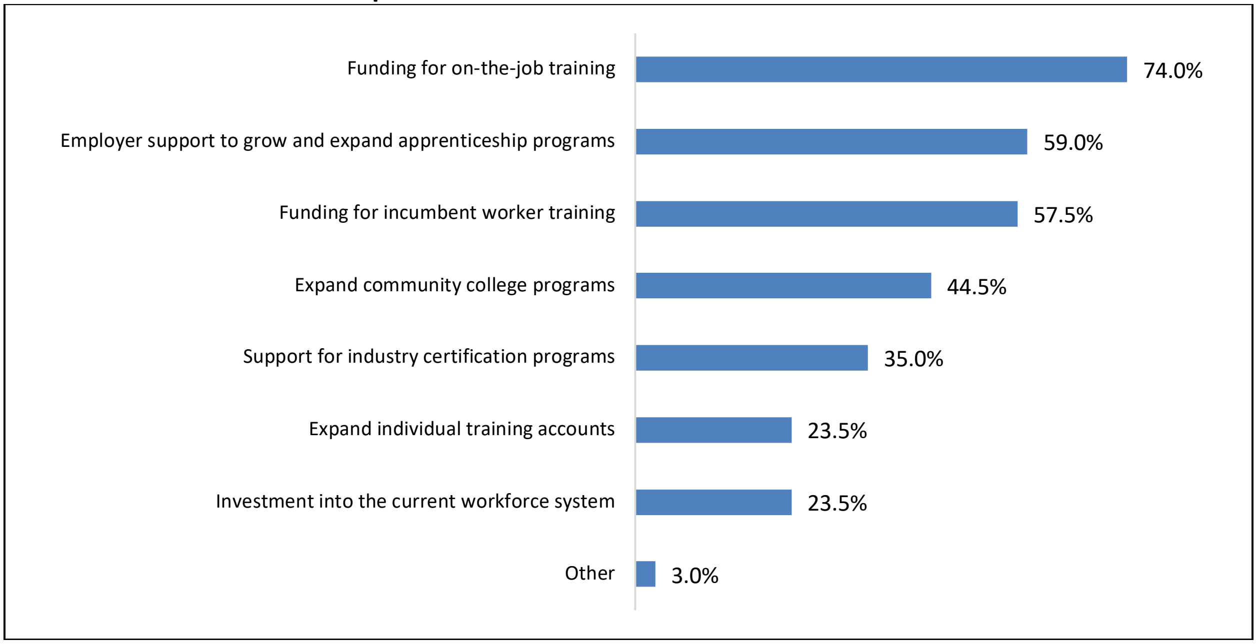


Figure 6: Primary Current Business Challenges, First Quarter 2021



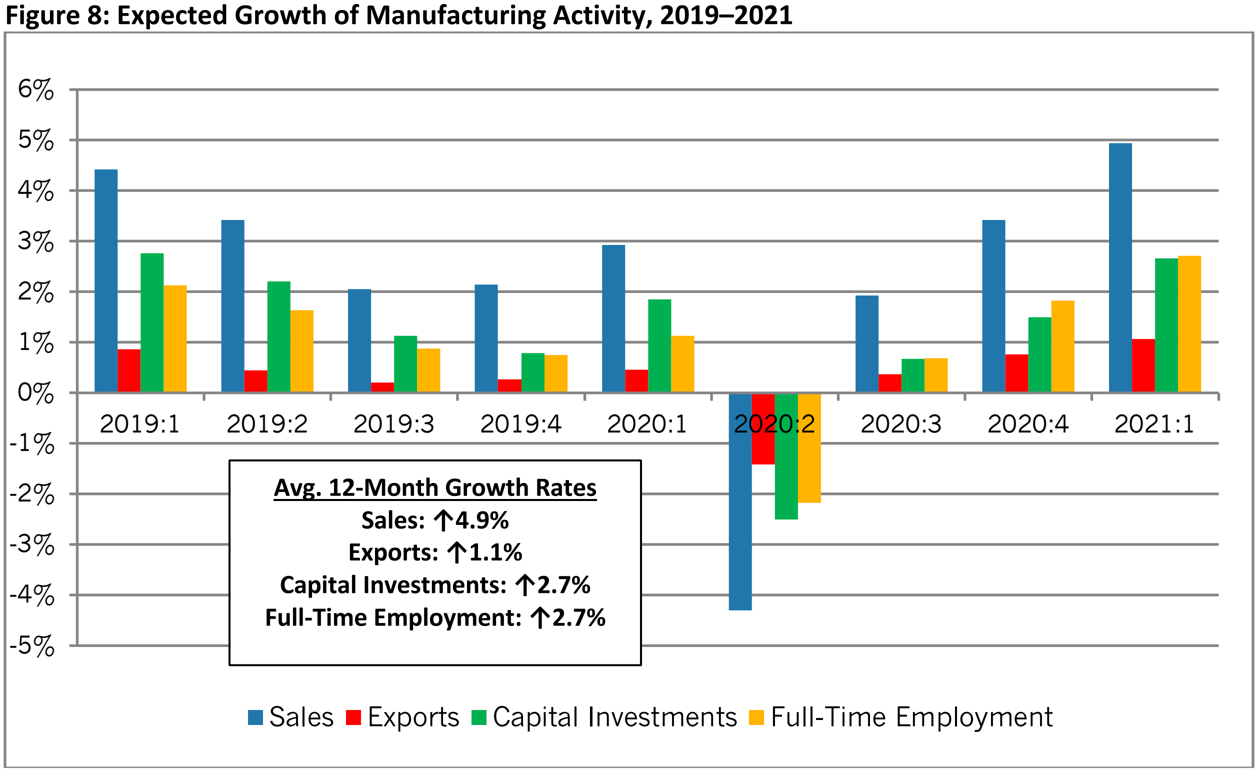
Note: Respondents were able to check more than one response; therefore, responses exceed 100%.

Figure 7: If a Workforce Training Investment Bill Were Enacted, What Would Be the Most Impactful Use of Federal Dollars to Fill Open Positions for Manufacturers?



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

Figure 8: Expected Growth of Manufacturing Activity, 2019–2021



Note: Expected growth rates are annual averages.

Survey Responses

1. How would you characterize the business outlook for your firm right now?
    a. Very positive – 27.3%
    b. Somewhat positive – 60.22%
    c. Somewhat negative – 10.67%
    d. Very negative – 1.78%

    Percentage that is either somewhat or very positive in their outlook = 87.55%

2. Over the next year, what do you expect to happen with your company's overall sales?
    a. Increase more than 10 percent – 25.11%
    b. Increase 5 to 10 percent – 30.89%
    c. Increase up to 5 percent – 24.22%
    d. Stay about the same – 11.33%
    e. Decrease up to 5 percent – 3.78%
    f. Decrease 5 to 10 percent – 2.67%
    g. Decrease more than 10 percent – 2.00%

    Average expected increase in sales consistent with these responses = 4.94%

3. Over the next year, what do you expect to happen with your company's overall production levels?
    a. Increase more than 10 percent – 22.49%
    b. Increase 5 to 10 percent – 32.52%
    c. Increase up to 5 percent – 24.28%
    d. Stay about the same – 13.81%
    e. Decrease up to 5 percent – 2.67%
    f. Decrease 5 to 10 percent – 2.90%
    g. Decrease more than 10 percent – 1.34%

    Average expected increase in production consistent with these responses = 4.88%

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 – 13.18%
    b. Increase 3 to 5 percent – 10.91%
    c. Increase up to 3 percent – 10.91%
    d. Stay about the same – 59.55%
    e. Decrease up to 3 percent – 1.82%
    f. Decrease 3 to 5 percent – 1.14%
    g. Decrease more than 5 percent – 2.50%

    Average expected increase in exports consistent with these responses = 1.06%

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 – 10.94%
    b. Increase 5 to 10 percent – 25.89%
    c. Increase up to 5 percent – 37.72%
    d. Stay about the same – 23.44%
    e. Decrease up to 5 percent – 1.56%
    f. Decrease 5 to 10 percent – 0.22%
    g. Decrease more than 10 percent – 0.22%

Average expected increase in product prices consistent with these responses = 3.90%

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 – 24.89%
    b. Increase 5 to 10 percent – 40.22%
    c. Increase up to 5 percent – 30.00%
    d. Stay about the same – 4.00%
    e. Decrease up to 5 percent – 0.22%
    f. Decrease 5 to 10 percent – 0.22%
    g. Decrease more than 10 percent – 0.44%

    Average expected increase in raw material prices consistent with these responses = 6.19%

7. Over the next year, what are your company's capital investment plans?
    a. Increase more than 10 percent – 17.78%
    b. Increase 5 to 10 percent – 16.44%
    c. Increase up to 5 percent – 15.56%
    d. Stay about the same – 38.89%
    e. Decrease up to 5 percent – 4.67%
    f. Decrease 5 to 10 percent – 2.00%
    g. Decrease more than 10 percent – 4.67%

    Average expected increase in capital investments consistent with these responses = 2.67%

8. Over the next year, what are your inventory plans?
    a. Increase more than 10 percent – 4.47%
    b. Increase 5 to 10 percent – 12.75%
    c. Increase up to 5 percent – 21.92%
    d. Stay about the same – 44.52%
    e. Decrease up to 5 percent – 8.28%
    f. Decrease 5 to 10 percent – 5.15%
    g. Decrease more than 10 percent – 2.91%

    Average expected increase in inventories consistent with these responses = 1.07%

9. Over the next year, what do you expect in terms of full-time employment in your company?
    a. Increase more than 10 percent – 8.00%
    b. Increase 5 to 10 percent – 17.78%
    c. Increase up to 5 percent – 34.44%
    d. Stay about the same – 33.56%
    e. Decrease up to 5 percent – 4.22%
    f. Decrease 5 to 10 percent – 0.67%
    g. Decrease more than 10 percent – 1.33%

    Average expected increase in full-time employment consistent with these responses = 2.71%

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 – 8.72%
    b. Increase 3 to 5 percent – 32.44%
    c. Increase up to 3 percent – 48.77%
    d. Stay about the same – 9.62%
    e. Decrease up to 3 percent – 0.22%

f. Decrease 3 to 5 percent – none
g. Decrease more than 5 percent – 0.22%

Average expected increase in employee wages consistent with these responses = 2.45%

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 – 6.70%
    b. Increase 10.0 to 14.9 percent – 19.20%
    c. Increase 5.0 to 9.9 percent – 43.30%
    d. Increase less than 5.0 percent – 21.43%
    e. No change – 6.25%
    f. Decrease less than 5.0 percent – 0.22%
    g. Decrease 5.0 percent or more – 0.22%
    h. Uncertain – 2.68%

    Average expected increase in health insurance costs consistent with these responses = 7.17%

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 – 31.78%
    b. Weaker global growth and slower export sales – 17.33%
    c. Trade uncertainties (e.g., actual or proposed tariffs, trade negotiation uncertainty) – 29.33%
    d. Strengthened U.S. dollar relative to other currencies – 10.22%
    e. Challenges with access to capital or other forms of financing – 4.00%
    f. Unfavorable business climate (e.g., taxes, regulations) – 44.00%
    g. Increased raw material costs – 76.22%
    h. Rising health care/insurance costs – 50.89%
    i. Transportation and logistics costs – 50.22%
    j. Supply chain challenges with inventory management – 48.67%
    k. Attracting and retaining a quality workforce – 65.78%
    l. Other – 11.56%

13. What is your company's primary industrial classification?
    a. Chemicals – 7.40%
    b. Computer and electronic products – 1.35%
    c. Electrical equipment and appliances – 6.28%
    d. Fabricated metal products – 28.25%
    e. Food manufacturing – 3.59%
    f. Furniture and related products – 1.79%
    g. Machinery – 11.66%
    h. Nonmetallic mineral products – 1.35%
    i. Paper and paper products – 2.47%
    j. Petroleum and coal products – 0.67%
    k. Plastics and rubber products – 7.17%
    l. Primary metals – 3.81%
    m. Transportation equipment – 3.59%
    n. Wood products – 1.57%
    o. Other – 19.06%

14. How would you characterize **<u>production</u>** in the first quarter relative to the fourth quarter?
    a. Higher – 49.89%
    b. No change – 33.18%
    c. Lower – 15.59%
    d. Uncertain – 1.34%

Production Purchasing Managers' Index = 66.48

15. How would you characterize **<u>employment</u>** in the first quarter relative to the fourth quarter?
    a. Higher – 38.03%
    b. No change – 51.90%
    c. Lower – 9.62%
    d. Uncertain – 0.45%

Employment Purchasing Managers' Index = 63.98

16. How would you characterize **<u>capital spending</u>** in the first quarter relative to the fourth quarter?
    a. Higher – 24.89%
    b. No change – 63.23%
    c. Lower – 11.21%
    d. Uncertain – 0.67%

Capital Spending Purchasing Managers' Index = 56.51

17. What is your firm size (e.g., the parent company, not your establishment)?
    a. Fewer than 50 employees – 22.67%
    b. 50 to 499 employees – 53.33%
    c. 500 or more employees – 24.00%
    d. Uncertain - none

<u>SPECIAL QUESTIONS</u>

18. When do you expect your firm's revenues to return to normal (pre-COVID-19) levels?
    a. They have already returned to normal levels (prior to the current quarter) – 32.89%
    b. The first quarter of 2021 (the current quarter) – 6.26%
    c. The second quarter of 2021 – 7.83%
    d. The second half of 2021 – 20.58%
    e. The first half of 2022 – 11.41%
    f. The second half of 2022 – 6.71%
    g. At some later date – 7.16%
    h. Uncertain – 7.16%

19. If the tax burden on income from manufacturing activities increased, would your company find it more difficult to expand its workforce, invest in new equipment or expand facilities?
    a. Yes – 87.39%
    b. No – 12.61%

20. If lawmakers adopted policies that provide tax incentives for manufacturing investment in the United States (for activities such as workforce training, research and development, capital equipment purchases or debt financing new investments), would your company find it easier to expand its domestic workforce?
    a. Yes – 80.22%
    b. No – 19.78%

21. Would passage of a major workforce training investment bill positively impact your company's business plans and outlook?
    a. Yes – 73.45%
    b. No – 26.55%

22. If yes, what would be the most impactful use of federal dollars to fill your open positions? (Check all that apply.)
    a. Investment into the current workforce system, such as local workforce boards – 23.50%
    b. Expand community college programs – 44.50%
    c. Funding for incumbent worker training – 57.50%
    d. Expand individual training accounts – 23.50%
    e. Funding for on-the-job training – 74.00%
    f. Employer support to grow and expand apprenticeship programs – 59.00%
    g. Support for industry certification programs – 35.00%
    h. Other – 3.00%

23. The PRO Act proposes significant changes to HR, workplace and labor relations laws, including eliminating the secret ballot in union elections, removing state right-to-work laws, giving unions access to personal employee information, eliminating captive audience meetings and others. If the PRO Act were to become law, what impact do you expect the new rules to have on your business operations and your existing relationships with employees?
    a. Positive impact – 3.19%
    b. Negative impact – 96.81%

24. Would passage of a major infrastructure bill positively impact your company's business plans and outlook?
    a. Yes – 70.51%
    b. No – 29.49%