NAM MANUFACTURERS' OUTLOOK SURVEY
THIRD QUARTER 2022
SEPTEMBER 19, 2022

Percentage of Respondents Positive About Their Own Company's Outlook **75.6% – Lowest Since Q4:2020** *(June: 82.6%)* Small Manufacturers: **71.0%** *(June: 72.5%)* Medium-Sized Manufacturers: **78.0%** *(June: 85.5%)* Large Manufacturers: **74.8%** *(June: 84.8%)*	**Overall Facts About the Survey** Number of Responses: 365 In the Field: Aug. 16–30, 2022 Small Manufacturers: 69 responses (18.9%) Medium-Sized Manufacturers: 173 responses (47.4%) Large Manufacturers: 123 responses (33.7%) **NAM Manufacturing Outlook Index[1]** **50.3** *(June: 55.0)*
Expected Growth Rate for SALES Over the Next 12 Months **↑ 3.3% – Lowest Since Q4:2020** *(June: ↑ 4.6%)*	**Expected Growth Rate for PRODUCTION Over the Next 12 Months** **↑ 3.2% – Lowest Since Q3:2020** *(June: ↑ 4.3%)*
Expected Growth Rate for FULL-TIME EMPLOYMENT Over the Next 12 Months **↑ 2.0% – Lowest Since Q4:2020** *(June: ↑ 2.9%)*	**Expected Growth Rate for EMPLOYEE WAGES Over the Next 12 Months** **↑ 3.5%** *(June: ↑ 3.8%)*
Expected Growth Rate for CAPITAL INVESTMENTS Over the Next 12 Months **↑ 2.2 – Lowest Since Q4:2020** *(June: ↑ 2.6%)*	**Expected Growth Rate for EXPORTS Over the Next 12 Months** **↑ 0.7%** *(June: ↑ 0.7%)*
Expected Growth Rate for PRICES OF COMPANY'S PRODUCTS Over the Next 12 Months **↑ 3.9% – Lowest Since Q1:2021** *(June: ↑ 5.9%)*	**Expected Growth Rate for RAW MATERIAL PRICES AND OTHER INPUT COSTS Over the Next 12 Months** **↑ 3.4% – Lowest Since Q4:2020** *(June: ↑ 6.9%)*
Expected Growth Rate for INVENTORIES Over the Next 12 Months **↓ 0.8% – First Decline Since Q3:2020** *(June: ↑ 1.3%)*	**Expected Growth Rate for HEALTH INSURANCE COSTS Over the Next 12 Months** **↑ 7.7%** *(June: ↑ 7.8)*

[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 average for those with positive responses in their outlook is 75.2%, with a standard deviation of 14.8%. An index reading of 40 would be consistent with one standard deviation below the mean (60.3% positive), and an index reading of 60 would be one standard deviation above the mean (90.0% positive). As such, the index helps to normalize the outlook data to put them into a historical context.

Summary of Findings

In assessing the state of the manufacturing industry in America, there are both promising indicators and some warning signs. On the one hand, manufacturers have proven resilient amid an onslaught of challenges, including supply chain issues, economic and geopolitical uncertainties, workforce shortages and soaring costs. Yet, on the other hand, manufacturers are not immune to the weakening of the global economy, and nearly all of the sentiment surveys show activity at two-year lows. Employment growth, which continues to be a bright spot, has also shown signs of cooling since the spring, with expectations that it might soften further in the coming months. For its part, the Federal Reserve is determined to slow demand in its effort to tame inflationary pressures, which have stubbornly risen to 40-year highs in recent months, and these efforts have indeed begun to weaken growth, most notably to date in the housing market.

With that as context, the NAM conducted the Manufacturers' Outlook Survey for the third quarter of 2022 from Aug. 16 to Aug. 30, and 75.6% of respondents felt either somewhat or very positive about their company outlook, down from 82.6% in the second quarter (Figures 1 and 2). It was the weakest reading since the fourth quarter of 2020, with growth slowing notably across the board. Indeed, sentiment was just marginally above the historical average, which was 75.2%, illustrating just how much manufacturing activity has stalled year to date. In the first quarter, for instance, 88.8% of respondents felt positive in their outlook. The NAM Manufacturing Outlook Index measured 50.3 in the third quarter, down from 55.0 in the second quarter.

Small manufacturers (those with fewer than 50 employees) remained less upbeat in their outlook, with 71.0% positive, than their medium (50 to 499 employees) and large (500 or more employees) manufacturing counterparts, which were 78.0% and 74.8% positive, respectively (Figure 3). Their expected growth rates for sales, production and capital spending were also significantly lower than their larger peers. For instance, small manufacturing executives predicted that production would rise 2.0% on average over the next 12 months, as opposed to 3.4% for medium-sized and large firms. At the same time, small firms were more likely to report pricing pressures. Small manufacturers expected raw material costs to increase 5.1% on average over the next year, with medium-sized and large firm respondents anticipating input costs rising 3.5% and 2.3%, respectively.

In addition, 63.3% of manufacturing leaders believed that the U.S. economy would officially slip into a recession in either 2022 or 2023 (Figure 4). Because of worries about slowing U.S. and global economic growth, 34.6% of respondents had reduced their company's outlook for sales growth, with 31.2% and 27.8% suggesting that their capital spending and hiring plans had also slowed, respectively. At the same time, nearly 40% noted that their outlook had not changed, with 8.5% being uncertain.

Meanwhile, supply chain challenges topped the list of primary business challenges in the third quarter (Figure 5), cited by 78.3% of respondents. For the fourth straight quarter, those completing the survey were asked when they expect supply chain disruptions to abate. Just 10.8% anticipate these disruptions improving by the end of 2022, with 60.7% expecting some abatement in 2023 (Figure 6). As such, more respondents expect supply chain issues to drag on longer than in the previous surveys. For instance, in the Q2 survey in June, 53.1% said that they expected supply chain issues would improve in 2023, with 14.6% suggesting that bottlenecks had either already improved or would do so by the end of 2022.

On the list of primary business challenges, attracting and retaining a quality workforce (76.1%), increased raw material costs (76.1%) and transportation and logistics costs (65.9%) were not far behind supply chain challenges as the biggest problems faced by manufacturers. More than 40% of manufacturers felt inflationary pressures were worse today than six months ago, with 53.7% noting that higher prices were making it harder to compete and remain profitable. For firms that have had to raise prices, the top sources of inflation were increased raw material prices (95.2%), freight and transportation costs (85.4%), wages and salaries (81.7%), energy costs (54.4%) and health care and other benefits costs (49.0%) (Figure 7). Roughly 21% cited the war in Ukraine and global instability as a source of higher prices, with 16.3% noting production stoppages.

On the topic of energy costs, 84.5% of respondents supported additional domestic energy production as a means of addressing higher energy costs that are threatening many manufacturers and driving inflation for them (Figure 8). Other actions that policymakers could adopt to help address higher energy costs include building more pipelines, powerlines and other energy delivery infrastructure (75.2%), halting new regulations until existing standards are met (55.8%) and speeding the energy transition (25.9%).

With rapid energy shifts and an aging grid, just more than 56% of those completing the survey said that their company was worried about potential brownouts or electricity outages that could impact their operations and supply chains over the next few years, with 28.9% suggesting they were not worried and 15.0% uncertain. Along those lines, respondents were asked about the energy sources that are important to ensuring that manufacturers have access to reliable and affordable energy. Oil and gas topped the list, cited by 86.4%, with nuclear (76.3%), hydroelectric (56.5%), coal (47.2%), solar (45.8%), wind (43.5%) and hydrogen (22.0%) also mentioned (Figure 9).

The CHIPS and Science Act passed by Congress in July included several provisions strongly supported by manufacturers, including support for semiconductor production and some workforce development investments. But it did not include several policies that were at early points being considered as part of the broader China competition legislation. Respondents were asked which elements not included in the CHIPS and Science Act might be important to supporting manufacturers (Figure 10). Their top choices included strengthening U.S. leadership in energy innovation and competitiveness (69.6%), eliminating ill-conceived labor provisions that facilitate unionization campaigns (68.4%), ensuring that the tax code provides a full deduction for research expenses (51.3%) and reducing tariffs on manufactured goods and components (51.3%), among other items.

If Congress were to consider permitting reforms, manufacturing leaders ranked their preferences for what these actions might be, ranging from 1 for least important to 7 for most important (Figure 11). In terms of ranking, their preferences were concurrent reviews to shorten timelines (4.44), consistent and predictable outcomes (4.25), commonsense environmental protections (4.25), reducing paperwork and saving tax dollars (4.07), reducing abusive litigation (3.83), preempting state patchworks (3.54) and prioritizing certain projects (3.50).

Congress has passed a budget reconciliation bill that includes tax increases for some manufacturers, and 63.8% of respondents said that those increases would make it more difficult to expand their companies' workforces or to invest in new equipment or expand facilities.

Unless Congress acts, the U.S. will remain one of only two developed countries (the other being Belgium) that require companies to amortize their research costs rather than deduct them in the year incurred, which increases the cost of performing research and development. Eighty-two percent of respondents said having a tax regime that supports R&D in the manufacturing sector was important to them, with 49.7% suggesting that it was very important.

Two-thirds of respondents have employees awaiting green card processing due to the current backlog. In addition, 60.3% said that expanding current employment-based visas and new avenues of legal immigration would help address their workforce needs, with 19.3% uncertain.

For the past nine quarters, manufacturers were asked about production, employment and capital spending in the current quarter relative to the previous one (Figure 12 and the following table). This information can be expressed as purchasing managers' indices. The data were consistent with notably slower—but still decent—growth in manufacturing activity in the third quarter relative to the second quarter. For instance, the percentage reporting higher production decelerated from 51.1% in the second quarter to 36.8% in the third quarter, with those citing declining output rising from 12.8% to 20.9%. More than 42% stated that production had not changed in the third quarter, up from 36.2% in the previous survey. There were similar trends for employment and capital spending.

	Previous	**Third Quarter 2022 Relative to Second Quarter 2022**			
	PMI	**Higher**	**No Change**	**Lower**	**PMI**
Production	69.1	36.8%	42.3%	20.9%	**57.9**
Employment	66.0	34.8%	53.9%	11.3%	**61.7**
Capital Spending	63.4	30.7%	56.1%	13.3%	**58.7**

Some other trends regarding predicted growth rates over the next 12 months:

- **Sales:** Respondents expect sales to rise 3.3% over the next 12 months, down from 4.6% in the second quarter and the slowest pace since the fourth quarter of 2020. As such, respondents saw demand increasing modestly over the next year, even as it eased from the more robust paces in recent quarters. Almost 64% of manufacturers predict sales will increase over the next four quarters, with 43.6% feeling orders will rise 5% or more. Firm size mattered in the data. Medium and large manufacturers anticipate sales rising 3.6%, whereas small firms forecast increases of 2.0%.

- **Production:** Respondents expect production to increase 3.2% over the next 12 months, down from 4.3% in the previous survey and the weakest reading in two years. More than 61% forecast output to rise over the coming months, with 15.9% seeing declining production. Firm size breakdowns were discussed earlier.

- **Full-Time Employment:** Respondents expect full-time employment to rise 2.0% over the next 12 months, down from 2.9% in the second quarter. Just more than 53% anticipate more full-time hiring over the next year, with 22.6% predicting employment growth of 5% or more. More than 12% expect employment reductions. Small and medium-sized manufacturers felt the most upbeat in their hiring plans, predicting 2.6% growth over the next 12 months. In contrast, large firms expect employment to rise just 1.0%.

- **Employee Wages:** Respondents anticipate employee wages (excluding nonwage compensation, such as benefits) to rise 3.5% over the next 12 months, down from 3.8% in the second quarter. Overall, 23.6% see wages rising more than 5%, with half of respondents predicting a wage hike of between 3% and 5%. The expected wage increases were larger for medium-sized manufacturers, up 3.7% over the next year, with small and large firms predicting 3.3% on average.

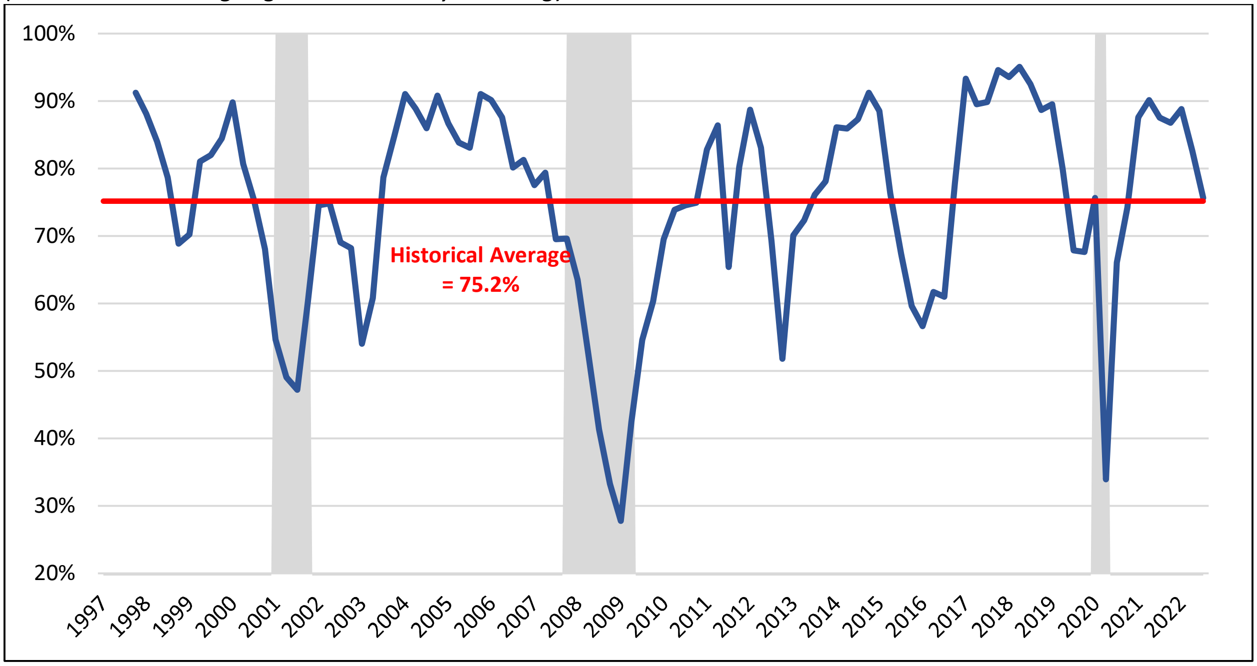
- **Capital Investments:** Respondents expect capital spending to rise 2.2% over the next 12 months, down from 2.6% in the previous survey and the slowest since the fourth quarter of 2020. In this survey, 45.6% expect additional capital spending in the next year, with 40.3% predicting no change and 14.1% forecasting reduced capital expenditures. By firm size, medium and large manufacturers see capital spending increasing 3.5% over the next year, but the smallest firms predict growth of just 1.1%.

- **Exports:** Respondents expect exports to increase 0.7% over the next 12 months, the same pace as in the previous survey. Overall, 29.1% anticipate higher exports in the next year, with 60.8% seeing no changes.

- **Inventories:** Respondents anticipate inventories will shrink 0.8% over the next 12 months, the first negative reading in two years. More than 38% of manufacturers expect falling inventories over the next year, with 27.4% predicting increases and 34.3% seeing no changes.

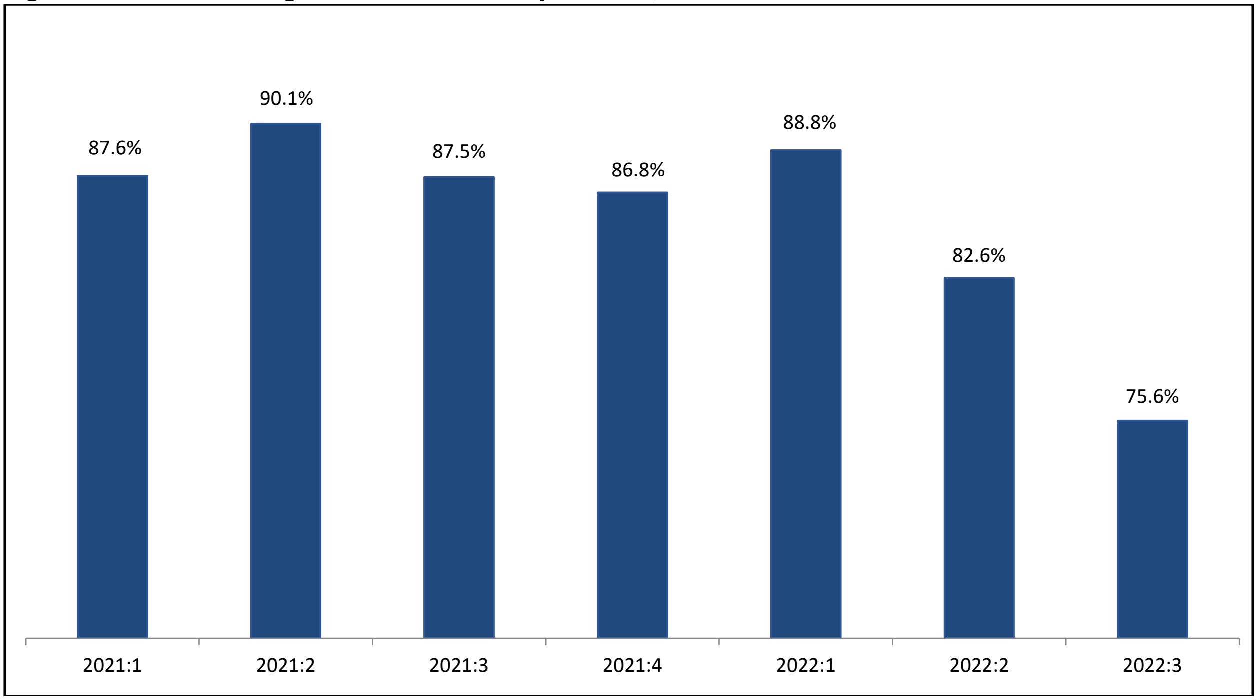
- **Health Insurance Costs:** Manufacturers predict health insurance costs will rise 7.7% over the next 12 months, edging down from 7.8% in the second quarter. In the latest figures, nearly 75.3% expect costs to increase 5% or more, including 30.5% seeing costs rising 10% or more.

Figure 1: Manufacturing Business Outlook by Quarter, 1997–2022
(Recessions Are Highlighted with Gray Shading)



Note: Percentage of respondents who characterized the current business outlook as somewhat or very positive. Recessions are designated by the National Bureau of Economic Research.

Figure 2: Manufacturing Business Outlook by Quarter, 2021–2022



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

Figure 3: NAM Manufacturing Outlook Index, 2021–2022

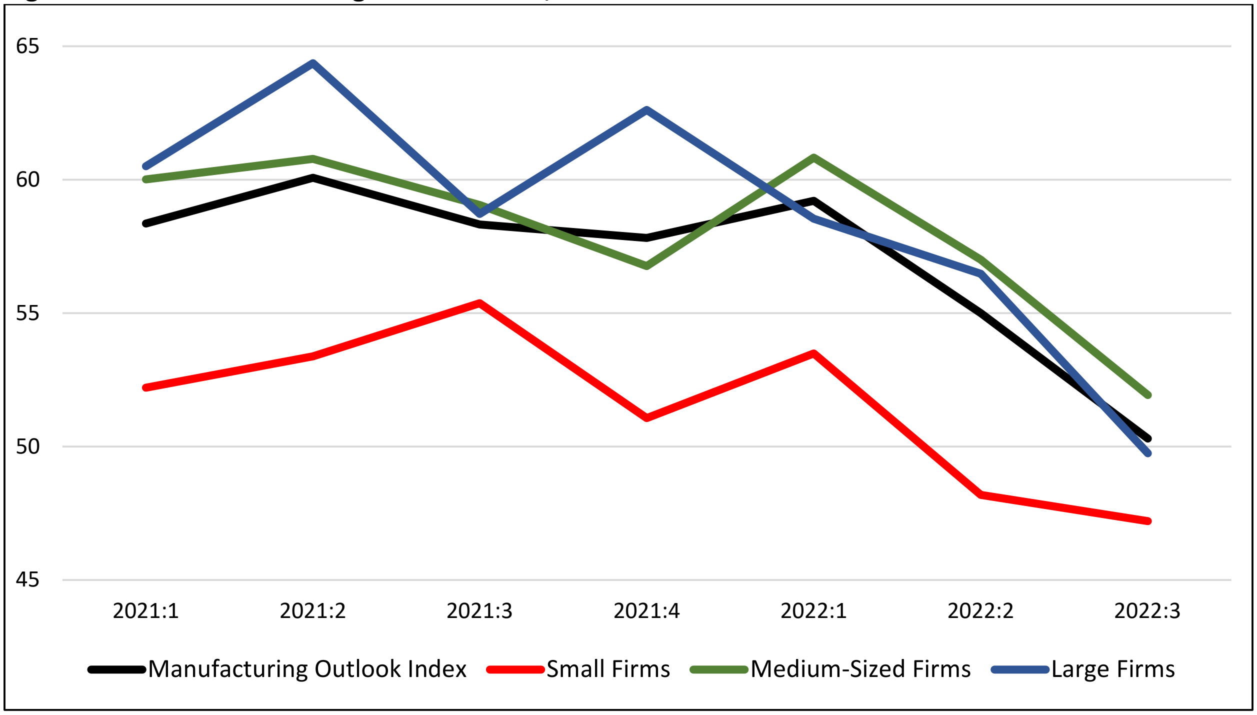


Figure 4: "Do You Think the U.S. Economy Will Slip Officially into a Recession in 2022 or 2023?"

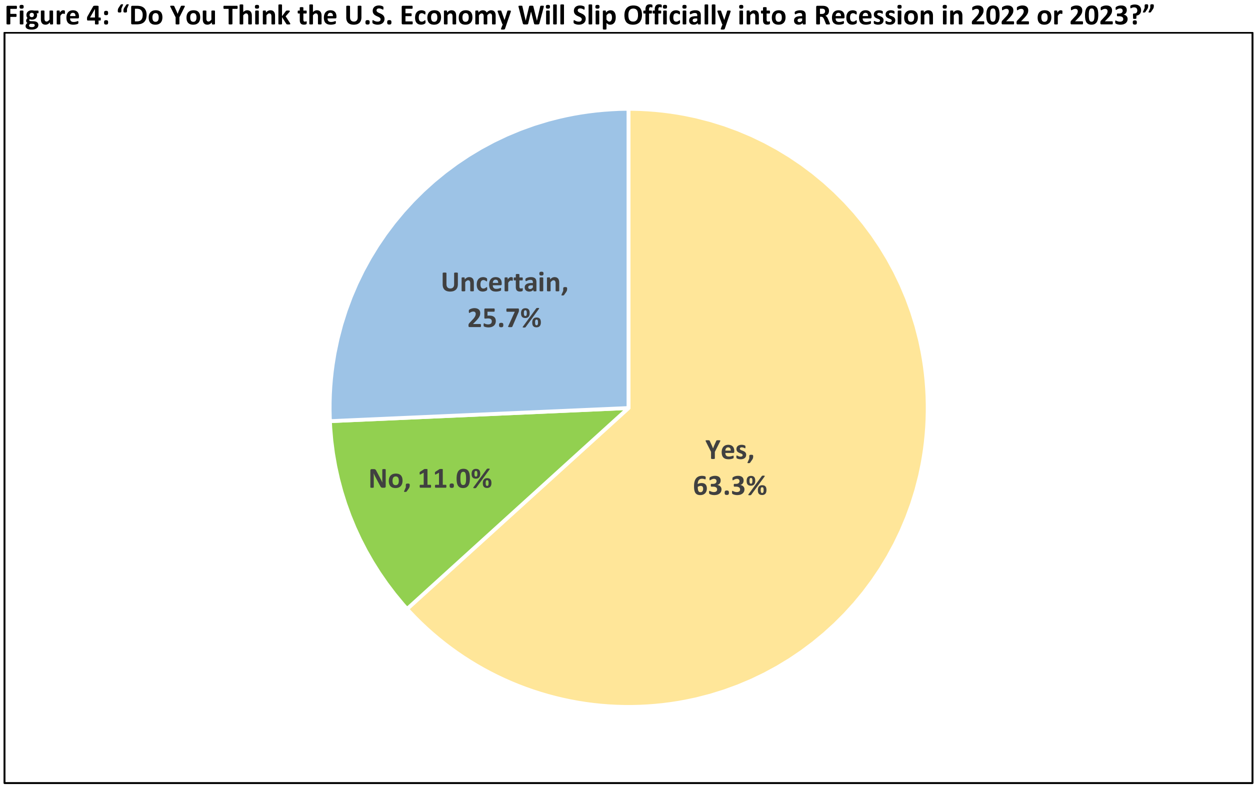


Figure 5: Primary Current Business Challenges, Third Quarter 2022

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

Figure 6: When Firms Expect Supply Chain Disruptions to Abate

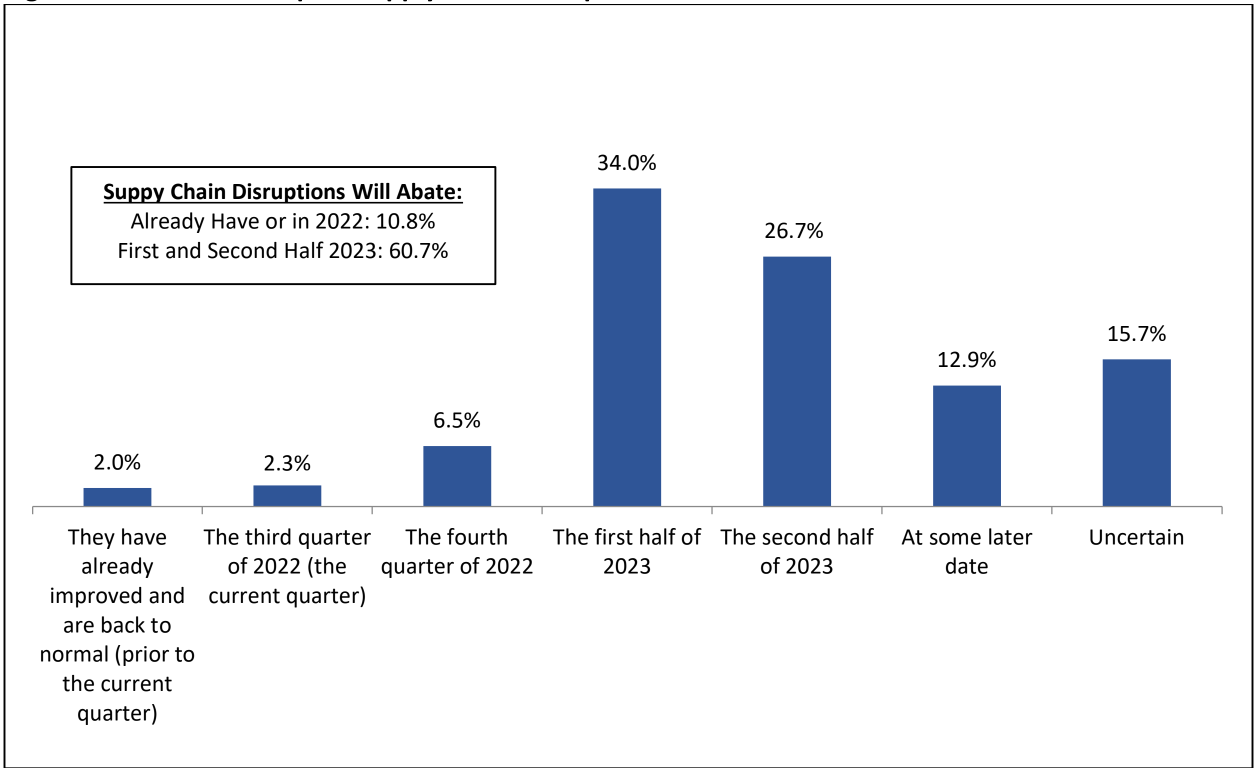
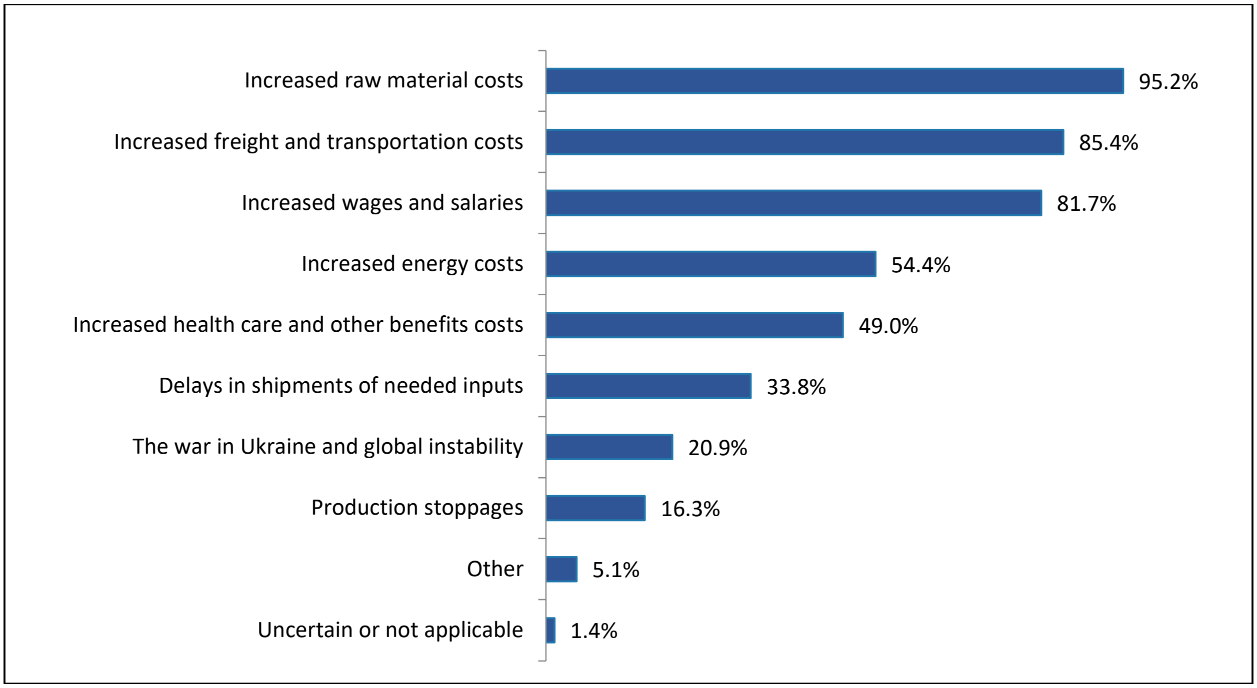
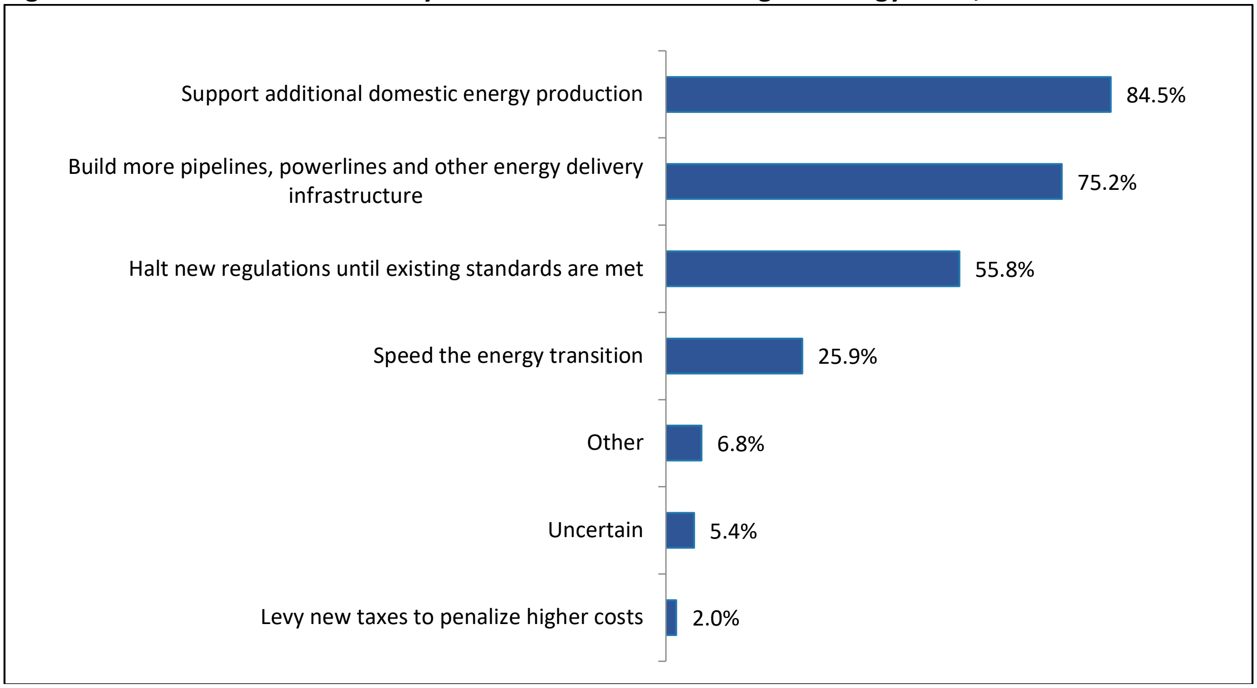


Figure 7: What Has Driven Inflation for Manufacturers for Firms Raising Product Prices, Third Quarter 2022



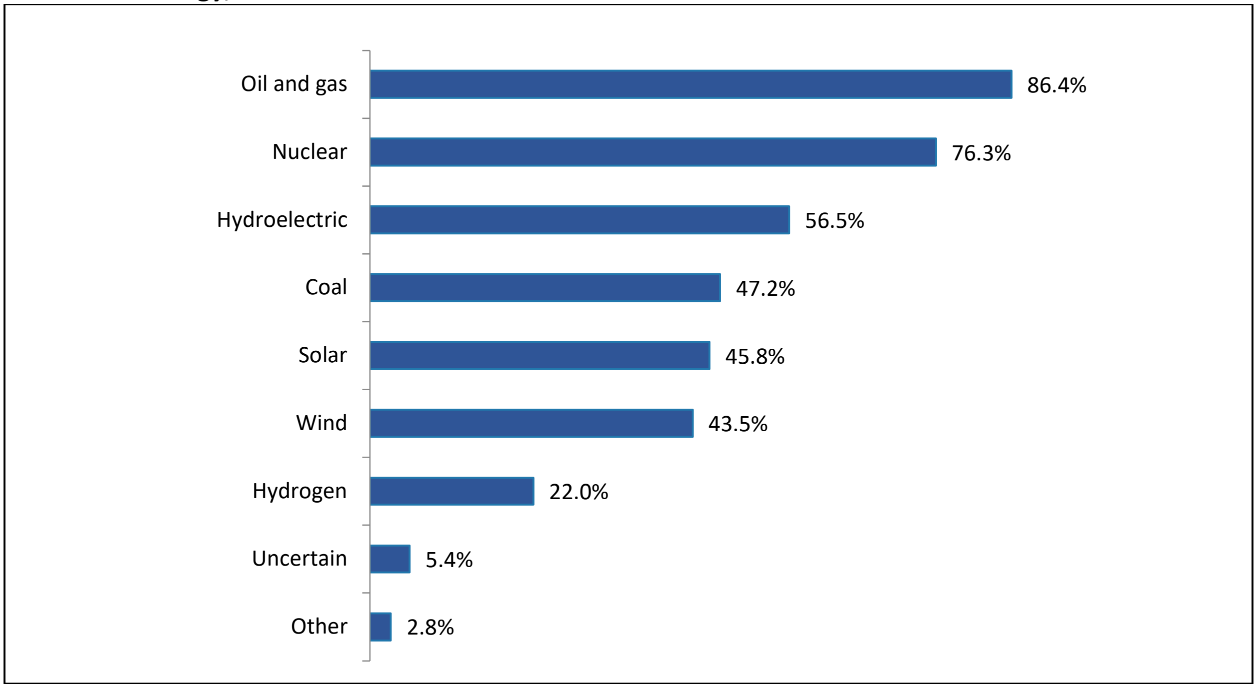
Note: Respondents were able to check more than one response; therefore, responses exceed 100%.

Figure 8: What Actions Could Policymakers Take to Address Higher Energy Costs, Third Quarter 2022



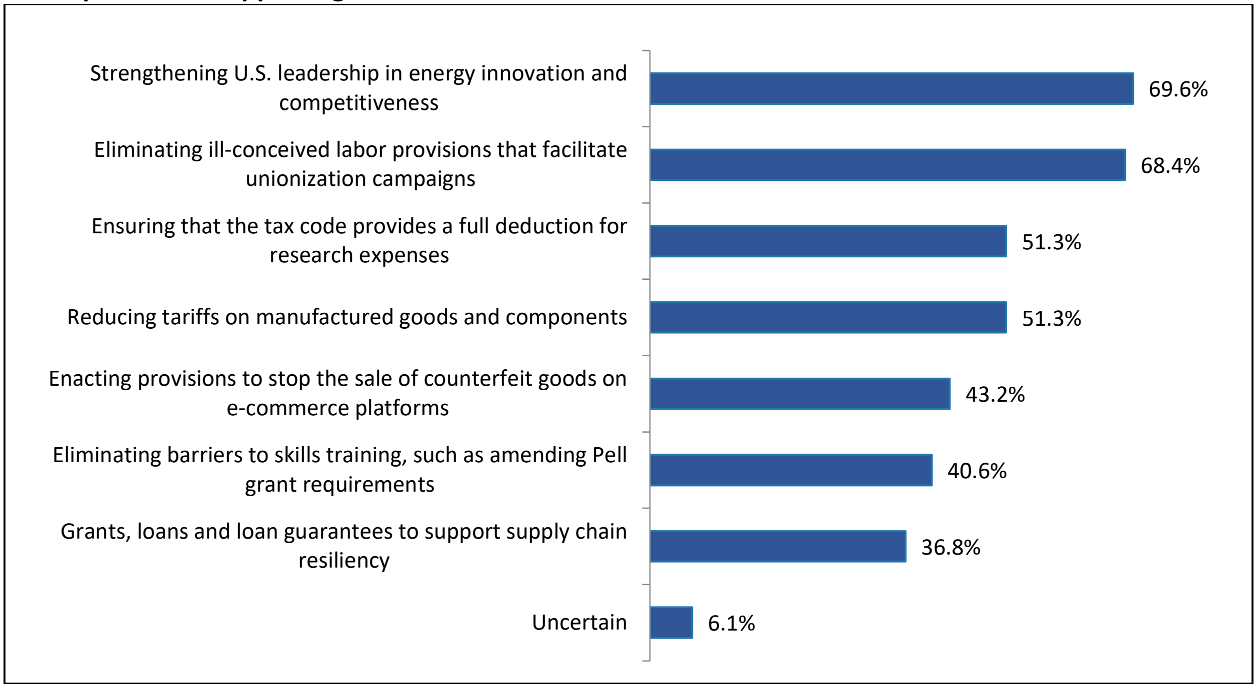
Note: Respondents were able to check more than one response; therefore, responses exceed 100%.

Figure 9: What Energy Sources Are Important to Ensuring Manufacturers Have Access to Reliable and Affordable Energy, Third Quarter 2022



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

Figure 10: "The CHIPS and Science Act passed by Congress in July did not include several policies that were being considered as part of the broader China competition legislation. Which of the following are important to supporting manufacturers?"



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

Figure 11: Ranking of Most Important Policy Actions for Congress to Consider Regarding Permitting Reforms, Third Quarter 2022
(Ranked in terms of importance from 1 being the lowest to 7 being the highest.)

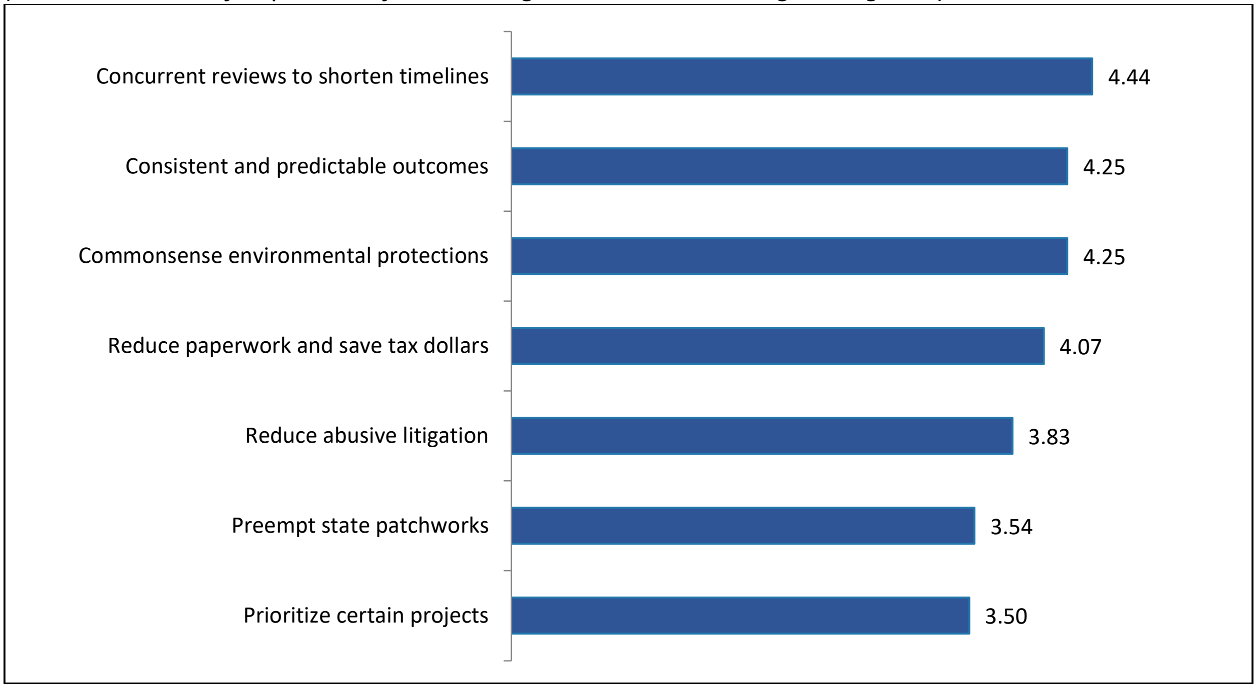


Figure 12: Change in Manufacturing Activity in Third Quarter 2022 Relative to Second Quarter 2022

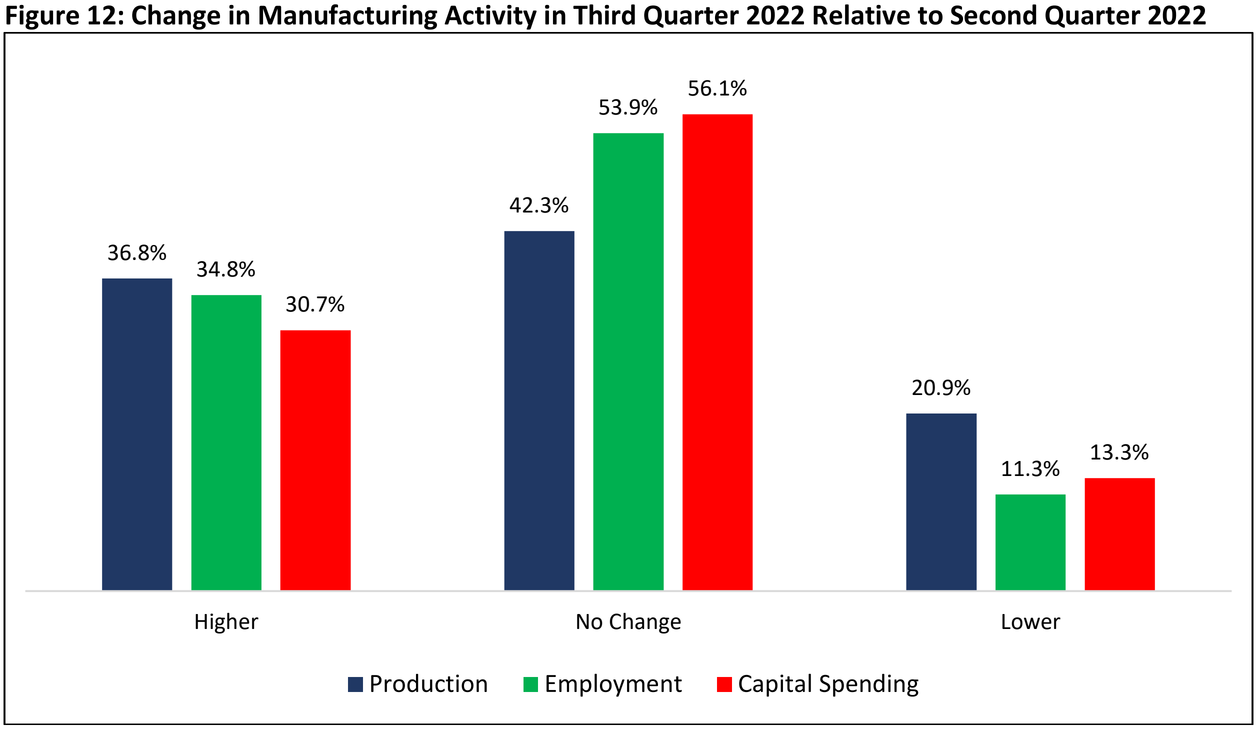
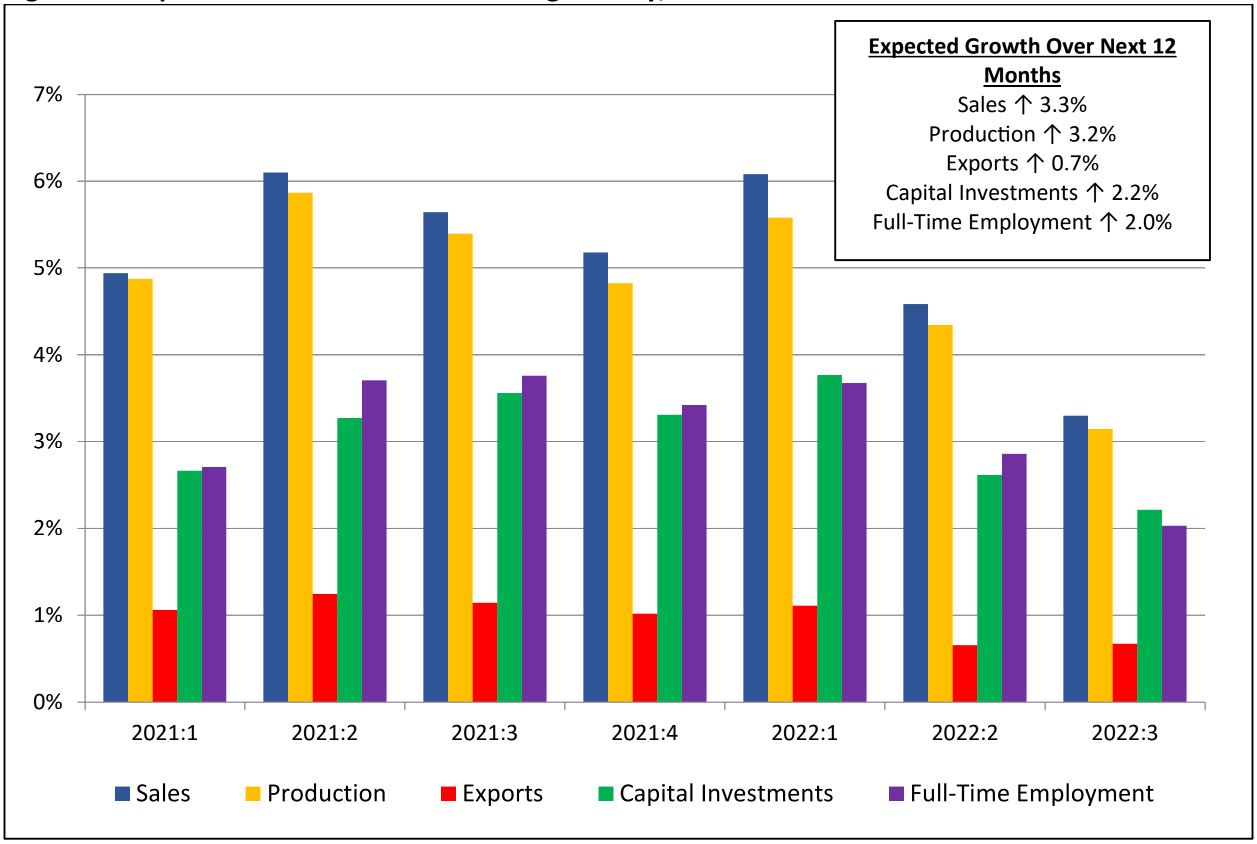


Figure 13: Expected Growth of Manufacturing Activity, 2021–2022



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 – 16.71%
    b. Somewhat positive – 58.90%
    c. Somewhat negative – 22.19%
    d. Very negative – 2.19%

    Percentage that is either somewhat or very positive in their outlook = 75.61%

2. Over the next year, what do you expect to happen with your company's overall sales?
    a. Increase more than 10 percent – 18.63%
    b. Increase 5 to 10 percent – 24.93%
    c. Increase up to 5 percent – 20.27%
    d. Stay about the same – 19.45%
    e. Decrease up to 5 percent – 7.95%
    f. Decrease 5 to 10 percent – 5.48%
    g. Decrease more than 10 percent – 3.29%

    Average expected increase in sales consistent with these responses = 3.30%

3. Over the next year, what do you expect to happen with your company's overall production levels?
    a. Increase more than 10 percent – 17.26%
    b. Increase 5 to 10 percent – 23.56%
    c. Increase up to 5 percent – 20.27%
    d. Stay about the same – 23.01%
    e. Decrease up to 5 percent – 8.49%
    f. Decrease 5 to 10 percent – 4.11%
    g. Decrease more than 10 percent – 3.29%

    Average expected increase in production consistent with these responses = 3.15%

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 – 10.08%
    b. Increase 3 to 5 percent – 9.80%
    c. Increase up to 3 percent – 9.24%
    d. Stay about the same – 60.78%
    e. Decrease up to 3 percent – 3.80%
    f. Decrease 3 to 5 percent – 3.36%
    g. Decrease more than 5 percent – 3.64%

    Average expected increase in exports consistent with these responses = 0.67%

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 – 10.19%
    b. Increase 5 to 10 percent – 32.78%
    c. Increase up to 5 percent – 34.16%
    d. Stay about the same – 14.33%
    e. Decrease up to 5 percent – 4.41%
    f. Decrease 5 to 10 percent – 2.75%
    g. Decrease more than 10 percent – 1.38%

Average expected increase in product prices consistent with these responses = 3.87%

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 – 15.98%
   b. Increase 5 to 10 percent – 26.17%
   c. Increase up to 5 percent – 26.17%
   d. Stay about the same – 14.88%
   e. Decrease up to 5 percent – 9.92%
   f. Decrease 5 to 10 percent – 4.96%
   g. Decrease more than 10 percent – 1.93%

   Average expected increase in raw material prices consistent with these responses = 3.40%

7. Over the next year, what are your company's capital investment plans?
   a. Increase more than 10 percent – 17.96%
   b. Increase 5 to 10 percent – 14.92%
   c. Increase up to 5 percent – 12.71%
   d. Stay about the same – 40.33%
   e. Decrease up to 5 percent – 4.14%
   f. Decrease 5 to 10 percent – 3.31%
   g. Decrease more than 10 percent – 6.63%

   Average expected increase in capital investments consistent with these responses = 2.22%

8. Over the next year, what are your inventory plans?
   a. Increase more than 10 percent – 3.87%
   b. Increase 5 to 10 percent – 9.94%
   c. Increase up to 5 percent – 13.54%
   d. Stay about the same – 34.25%
   e. Decrease up to 5 percent – 17.13%
   f. Decrease 5 to 10 percent – 12.43%
   g. Decrease more than 10 percent – 8.84%

   Average expected increase in inventories consistent with these responses = -0.77%

9. Over the next year, what do you expect in terms of full-time employment in your company?
   a. Increase more than 10 percent – 6.06%
   b. Increase 5 to 10 percent – 16.53%
   c. Increase up to 5 percent – 30.58%
   d. Stay about the same – 34.71%
   e. Decrease up to 5 percent – 7.71%
   f. Decrease 5 to 10 percent – 2.20%
   g. Decrease more than 10 percent – 2.20%

   Average expected increase in full-time employment consistent with these responses = 2.03%

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 – 23.63%
    b. Increase 3 to 5 percent – 50.00%
    c. Increase up to 3 percent – 19.51%
    d. Stay about the same – 6.04%
    e. Decrease up to 3 percent – 0.82%

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

Average expected increase in employee wages consistent with these responses = 3.46%

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 – 7.14%
    b. Increase 10.0 to 14.9 percent – 23.35%
    c. Increase 5.0 to 9.9 percent – 44.78%
    d. Increase less than 5.0 percent – 14.56%
    e. No change – 6.32%
    f. Decrease less than 5.0 percent – 0.27%
    g. Decrease 5.0 percent or more – none
    h. Uncertain – 3.57%

    Average expected increase in health insurance costs consistent with these responses = 7.71%

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 – 39.56%
    b. Weaker global growth and slower export sales – 17.03%
    c. Trade uncertainties (e.g., actual or proposed tariffs, trade negotiation uncertainty) – 22.80%
    d. Strengthened U.S. dollar relative to other currencies – 18.96%
    e. Challenges with access to capital or other forms of financing – 7.14%
    f. Unfavorable business climate (e.g., taxes, regulations) – 49.18%
    g. Increased raw material costs – 76.10%
    h. Rising health care/insurance costs – 52.75%
    i. Transportation and logistics costs – 65.93%
    j. Supply chain challenges – 78.30%
    k. Attracting and retaining a quality workforce – 76.10%
    l. Other – 6.87%

13. What is your company's primary industrial classification?
    a. Chemicals – 9.37%
    b. Computer and electronic products – 3.03%
    c. Electrical equipment and appliances – 7.16%
    d. Fabricated metal products – 24.79%
    e. Food manufacturing – 1.38%
    f. Furniture and related products – 1.93%
    g. Machinery – 12.67%
    h. Nonmetallic mineral products – 2.48%
    i. Paper and paper products – 2.48%
    j. Petroleum and coal products – 0.83%
    k. Plastics and rubber products – 8.54%
    l. Primary metals – 2.48%
    m. Transportation equipment – 3.58%
    n. Wood products – 1.65%
    o. Other – 17.63%

14. What is your firm size (e.g., the parent company, not your establishment)?
    a. Fewer than 50 employees – 18.46%
    b. 50 to 499 employees – 47.66%
    c. 500 or more employees – 33.88%
    d. Uncertain – none

15. How would you characterize **production** in the third quarter relative to the second quarter?
    a. Higher – 36.77%
    b. No change – 42.34%
    c. Lower – 20.89%

Production Purchasing Managers' Index = 57.94

16. How would you characterize **employment** in the third quarter relative to the second quarter?
    a. Higher – 34.81%
    b. No change – 53.87%
    c. Lower – 11.33%

Employment Purchasing Managers' Index = 61.75

17. How would you characterize **capital spending** in the third quarter relative to the second quarter?
    a. Higher – 30.66%
    b. No change – 56.08%
    c. Lower – 13.26%

Capital Spending Purchasing Managers' Index = 58.70

SPECIAL QUESTIONS

18. When do you expect that supply chain disruptions will abate?
    a. They have already improved and are back to normal (prior to the current quarter) – 1.97%
    b. The third quarter of 2022 (the current quarter) – 2.25%
    c. The fourth quarter of 2022 – 6.46%
    d. The first half of 2023 – 33.99%
    e. The second half of 2023 – 26.69%
    f. At some later date – 12.92%
    g. Uncertain – 15.73%

19. Do you think that the U.S. economy will slip officially into a recession in 2022 or 2023?
    a. Yes – 63.28%
    b. No – 11.02%
    c. Uncertain – 25.71%

20. Which statements best describe your company's views of inflation? (Select all that apply.)
    a. Inflationary pressures make it harder to compete and to remain profitable. – 53.67%
    b. Inflationary pressures make a recession likely in the next 12 months. – 55.65%
    c. Inflationary pressures are worse today than six months ago. – 40.40%
    d. Inflationary pressures are about the same today as six months ago. – 22.88%
    e. Inflationary pressures have improved somewhat today relative to six months ago. – 19.77%
    f. Other – 3.39%
    g. Uncertain – 2.54%

21. If you have increased prices, what has driven this inflation? (Select all that apply.)
    a. Increased raw material costs – 95.21%
    b. Delays in shipments of needed inputs – 33.80%
    c. Increased freight and transportation costs – 85.35%
    d. Increased energy costs – 54.37%

e. Increased wages and salaries – 81.69%
f. Increased health care and other benefits costs – 49.01%
g. The war in Ukraine and global instability – 20.85%
h. Production stoppages – 16.34%
i. Other – 5.07%
j. Uncertain or not applicable – 1.41%

22. Because of worries about slowing U.S. and global economic growth over the next few years, my company has done the following: (Select all that apply.)
    a. Reduced our company's outlook for sales growth – 34.56%
    b. Slowed our plans for hiring – 27.76%
    c. Slowed our plans for capital spending – 31.16%
    d. Not changed our outlook for sales, hiring or capital spending – 39.94%
    e. Uncertain – 8.50%

23. Congress has passed a budget reconciliation bill that includes tax increases for some manufacturers. Do these tax increases make it more difficult to expand your company's workforce or to invest in new equipment or expand facilities?
    a. Yes – 63.79%
    b. No – 36.21%

24. Unless Congress acts, the U.S. will remain one of only two developed countries (the other being Belgium) that require companies to amortize their research costs rather than deduct them in the year incurred, which increases the cost of performing research and development. How important is a tax regime that supports R&D in the manufacturing sector?
    a. Very important – 49.72%
    b. Somewhat important – 32.30%
    c. Not important at all – 12.64%
    d. Uncertain – 5.34%

25. High energy costs are threatening many manufacturers and driving inflation. What actions could policymakers take to help? (Select all that apply.)
    a. Support additional domestic energy production – 84.51%
    b. Build more pipelines, powerlines and other energy delivery infrastructure – 75.21%
    c. Halt new regulations until existing standards are met – 55.77%
    d. Levy new taxes to penalize higher costs – 1.97%
    e. Speed the energy transition – 25.92%
    f. Other – 6.78%
    g. Uncertain – 5.35%

26. With rapid energy shifts and an aging grid, is your company worried about potential brownouts or electricity outages that could impact operations and supply chains over the next few years?
    a. Yes – 56.09%
    b. No – 28.90%
    c. Uncertain – 15.01%

27. What energy sources are important to ensuring manufacturers have access to reliable, affordable energy? (Select all that apply.)
    a. Coal – 47.18%
    b. Oil and gas – 86.44%
    c. Nuclear – 76.27%
    d. Hydroelectric – 56.50%

e. Wind – 43.50%
f. Solar – 45.76%
g. Hydrogen – 22.03%
h. Other – 2.82%
i. Uncertain – 5.37%

28. If Congress considers permitting reforms, what is most important? (Rank in terms of importance from 1 being the lowest to 7 being the highest.)
    a. Concurrent reviews to shorten timelines – 4.44
    b. Commonsense environmental protections – 4.25
    c. Preempt state patchworks – 3.54
    d. Reduce paperwork and save tax dollars – 4.07
    e. Consistent and predictable outcomes – 4.25
    f. Prioritize certain projects – 3.50
    g. Reduce abusive litigation – 3.83

29. The CHIPS and Science Act passed by Congress in July did not include several policies that were being considered as part of the broader China competition legislation. Which of the following are important to supporting manufacturers? (Select all that apply.)
    a. Grants, loans and loan guarantees to support supply chain resiliency – 36.81%
    b. Enacting provisions to stop the sale of counterfeit goods on e-commerce platforms – 43.19%
    c. Reducing tariffs on manufactured goods and components – 51.30%
    d. Ensuring that the tax code provides a full deduction for research expenses – 51.30%
    e. Strengthening U.S. leadership in energy innovation and competitiveness – 69.57%
    f. Eliminating barriers to skills training, such as amending Pell grant requirements – 40.58%
    g. Eliminating ill-conceived labor provisions that facilitate unionization campaigns – 68.41%
    h. Uncertain – 6.09%

30. Do you have employees awaiting green card processing due to the current backlog?
    a. Yes – 20.68%
    b. No – 67.42%
    c. Uncertain – 11.90%

31. Would expanding current employment-based visas and new avenues of legal immigration help address your workforce needs?
    a. Yes – 60.34%
    b. No – 20.40%
    c. Uncertain – 19.26%