NAM MANUFACTURERS' OUTLOOK SURVEY FOURTH QUARTER 2018

DECEMBER 20, 2018

Percentage of Respondents Positive	Overall Facts About the Survey
About Their Own Company's Outlook	Number of Responses: 539
00 70/	In the Field: November 28 to December 12, 2018
88.7%	Small Manufacturors: 114 responses
(October: 92.5%)	Small Manufacturers: 114 responses Medium-Sized Manufacturers: 265 responses
	Large Manufacturers: 160 responses
2018 Annual Average: 92.4% (all-time high)	NAM Manufacturing Outlook Index
S	NAM Manufacturing Outlook index
Small Manufacturers: 87.9% (Oct.: 91.3%) Medium-Sized Manufacturers: 88.6% (Oct.: 92.5%)	59.2
Large Manufacturers: 89.2% (Oct.: 93.1%)	(October: 61.8, revised)
Expected Growth Rate for SALES	Expected Growth Rate for PRODUCTION
Over the Next 12 Months	Over the Next 12 Months
↑ 4.3%	↑ 4.3%
(October: ↑ 5.0%)	(October: ↑ 4.9%)
Expected Growth Rate for FULL-TIME EMPLOYMENT	Expected Growth Rate for EMPLOYEE WAGES
Over the Next 12 Months	Over the Next 12 Months
↑ 2.2%	↑ 2.3%
(October: ↑ 2.5%)	(October: \uparrow 2.7% — the highest since 2001:1)
Expected Growth Rate for CAPITAL INVESTMENTS	Expected Growth Rate for EXPORTS
Over the Next 12 Months	Over the Next 12 Months
↑ 2.6%	↑ 0.8 %
(October: ↑ 3.4%)	(October: ↑ 0.8%)
	Expected Growth Rate for RAW MATERIAL PRICES
Expected Growth Rate for PRICES OF COMPANY'S	Expected Glowth Rate for KAW MATERIAL PRICES
PRODUCTS Over the Next 12 Months	AND OTHER INPUT COSTS Over the Next 12 Months
PRODUCTS Over the Next 12 Months ↑ 2.8%	AND OTHER INPUT COSTS Over the Next 12 Months ↑ 4.4%
PRODUCTS Over the Next 12 Months ↑ 2.8% (October: ↑ 3.2% — the highest since 2011:2)	AND OTHER INPUT COSTS Over the Next 12 Months
PRODUCTS Over the Next 12 Months ↑ 2.8%	AND OTHER INPUT COSTS Over the Next 12 Months ↑ 4.4%

↑ 6.8%

(October: ↑ 7.4%)

↑ 0.3%

(October: ↑ 1.0%)

Summary

Manufacturers continued to report strong growth in activity, with the sector remaining one of the brightest spots in the economy. In the latest Manufacturers' Outlook Survey from the National Association of Manufacturers (NAM), 88.7 percent of respondents felt either somewhat or very positive about their own company's outlook, down from 92.5 percent in the third quarter (Figure 1). While that represents the second straight easing in confidence from the all-time high reading in the second quarter (95.1 percent), the four-quarter annual average, which reaches back to when congressional passage of tax reform appeared increasingly likely, shows that manufacturers' optimism for 2018 reached the highest level on record in the 20-year history of the survey. On average this year, 92.4 percent of manufacturers surveyed reported a positive outlook for their companies (surpassing the 2017 average of 91.8 percent).

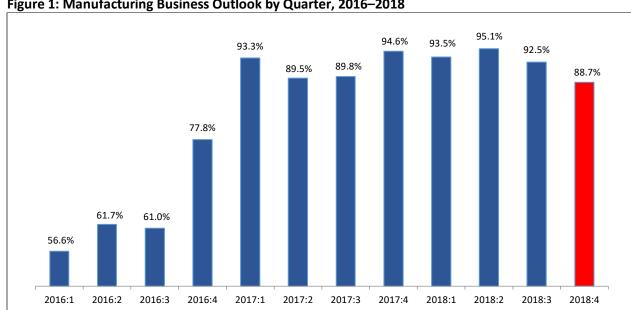


Figure 1: Manufacturing Business Outlook by Quarter, 2016–2018

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

Clearly, manufacturers remain very optimistic about business conditions overall, and that is influenced by the impact of (or expectation of) pro-growth policies like tax reform. Indeed, respondents have been upbeat since the end of 2016, averaging 92.1 percent positive sentiment over the past eight quarters. Along those lines, while the NAM Manufacturing Outlook Index declined from 61.8 (revised) in the third quarter to 59.2 in this release (Figure 2), index readings above 50 indicate the outlook exceeds the historical average of the survey (74.9 percent positive), and values above 60 suggest that the outlook is at least one standard deviation greater than that average. The index has exceeded 50 for nine straight quarters.

That said, manufacturers continue to report challenges with finding talent, especially with the unemployment rate at 50-year lows and a labor market with more job openings than people looking for work. According to the latest government data, there are now 522,000 open manufacturing jobs in the United States (an all-time high), and a recent report from The Manufacturing Institute—the NAM's social-impact arm—and Deloitte projects that 2.4 million manufacturing jobs will go unfilled over the

next decade. Accordingly, the survey found that—at 68.2 percent—the inability to attract and retain workers remained respondents' top concern for the fifth straight survey (Figure 3). More than three in four (77 percent) of those firms said they had unfilled positions at their company that they were struggling to fill, and more than one in four (28.8 percent) manufacturers said they were unable to take on new business and have lost revenue opportunities because of workforce constraints.

Figure 2: NAM Manufacturing Outlook Index, 2016–2018

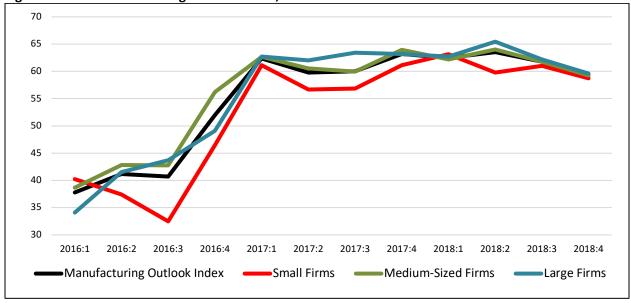
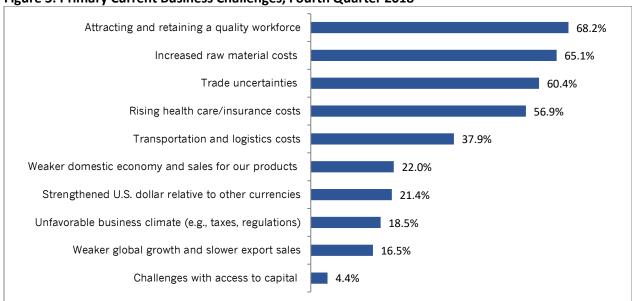


Figure 3: Primary Current Business Challenges, Fourth Quarter 2018



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

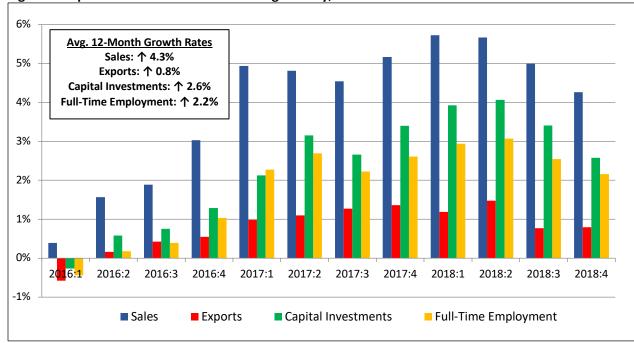


Figure 4: Expected Growth of Manufacturing Activity, 2016–2018

Note: Expected growth rates are annual averages.

Below are some highlights of the current survey in terms of predicted activity growth over the next year (Figure 4):

• Sales: Respondents expect sales growth of 4.3 percent over the next 12 months, down from 5.0 percent in the previous survey. It was the eighth straight quarter with expected growth of at least 4 percent on average, even with some easing from the all-time highs recorded in the first half of 2018. In the latest results, 74.1 percent of manufacturers anticipate higher sales over the next year, with just 8.3 percent predicting declines. Moreover, 47.2 percent see revenue gains of 5 percent or more.

Medium (e.g., those with 50 to 499 employees) and large-sized (e.g., those with 500 or more employees) businesses felt the most optimistic in their sales outlook, forecasting 4.3 percent growth versus 3.9 percent for small firms (e.g., those with fewer than 50 employees).

- **Production:** Mirroring the sales data, the percentage of respondents expecting production growth over the next 12 months dropped from 4.9 percent in the third quarter to 4.3 percent in this release. Anticipated production growth has also exceeded 4 percent for four consecutive quarters, averaging 4.9 percent over that time frame. In the fourth quarter responses, 74.2 percent predict production to expand over the next year, with 44.4 percent forecasting output growth of 5 percent or more. Just 6.5 percent of manufacturers anticipate reduced production.
- Full-Time Employment: Respondents expect full-time employment to increase 2.2 percent over the next 12 months, down from 2.5 percent in the previous release. Despite some slippage, the data continue to suggest a tight labor market. More than 53 percent anticipate more hiring over the next year, including 19.5 percent planning employment growth of 5 percent or more. Eight percent see employment falling for their firms.

Hiring growth was expected to be the strongest for medium-sized manufacturers, which predict 2.5 percent growth over the next 12 months. In contrast, small and large firms see employment rising 1.8 percent over the next year.

- Employee Wages: Respondents anticipate employee wages (excluding nonwage compensation, such as benefits) to rise 2.3 percent over the next 12 months, pulling back somewhat from the 2.7 percent pace in the third quarter, which was the fastest pace since the first quarter of 2001. In the latest results, nearly 38 percent expect to hike wages 3 percent or more.
- Capital Investments: Respondents expect capital investments to rise 2.6 percent over the next 12 months, down from 3.4 percent in the previous survey. About half anticipate higher capital spending in the next year, with 31.2 percent expecting solid investment growth of 5 percent or more. Much like for hiring, anticipated capital expenditures growth was the largest for medium-sized manufacturers, which predict 2.9 percent growth over the next 12 months, whereas small and large firms expect capital spending to increase 2.3 percent over the next year.
- Exports: Respondents expect exports to increase 0.8 percent over the next 12 months, unchanged from the previous survey. Nearly 30 percent of respondents predict export sales increasing over the next year, with 61.5 percent seeing exports staying about the same and 8.8 percent noting possible declines. As seen in previous 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, 95.6 percent felt positive in their outlook in this survey. That figure was 87.7 percent positive for those predicting no change in export sales over the next year, but it fell to 71.7 percent for those individuals anticipating reduced exports.
- Product Prices: Respondents expect product prices to increase 2.8 percent over the next 12 months, pulling back from 3.2 percent in the previous two surveys, which had been the highest since the second quarter of 2011. In this survey, 47.5 percent forecast price growth for their products of up to 5 percent, with 22.6 percent predicting price growth of 5 percent or more. Only 3.5 percent see price declines in the next 12 months for their products.
- Raw Material Prices: Manufacturers anticipate raw material prices and other input costs rising 4.4 percent over the next 12 months, with 42.8 percent of respondents seeing price growth of 5 percent or more. The NAM added this question over the summer, and while growth has stabilized from earlier readings in the previous two surveys (5.6 percent and 4.8 percent in the second and third quarters, respectively), it is clear that raw materials costs are highly elevated.
- Inventories: Respondents expect inventories to inch up 0.3 percent over the next 12 months, down from 1.0 percent in the third quarter and the slowest pace of growth in two years. It was the eighth consecutive quarter with anticipated growth in inventories. Just more than 29 percent of manufacturers predict increased inventories, with 47.5 percent expecting stockpiles to remain unchanged and 23.3 percent forecasting declines.

In addition to attracting and retaining a quality workforce, other major concerns in the latest survey included increased raw material costs (65.1 percent), trade uncertainties (60.4 percent), rising health care and insurance costs (56.9 percent) and transportation and logistics costs (37.9 percent).

Interestingly, the business environment is no longer the concern that it once was, with just 18.5 percent citing an unfavorable business climate (taxes, regulations) as being a top concern. Respondents cited an unfavorable business climate as their primary business challenge as recently as the fourth quarter of 2016 (71.2 percent).

Note

The NAM has conducted this survey quarterly since 1997, with the NAM's membership submitting this quarter's responses from November 28 to December 12. In total, 539 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 March 2019.

Special Questions

United States-Mexico-Canada Agreement (USMCA)

Manufacturers sell more to Canada and Mexico, our country's largest two trading partners, than the United States' next 10 trading partners combined. Therefore, it should not be a surprise that more than three-quarters of respondents said passage of the USMCA was important for their company. Just more than 19 percent said it was not important, with 5.2 percent being uncertain.

Of those manufacturers who are positive about their own company's export growth over the next 12 months, 82.7 percent reported that passage of the USMCA is important.

Infrastructure

As noted in our "Building to Win" publication, manufacturers believe that we should be investing in infrastructure to best position the sector for long-term success. However, year after year, underinvestment in the United States has resulted in failing grades for America's most critical infrastructure systems, potentially threatening our competitiveness.

With that in mind, we asked manufacturers if the current state of our nation's infrastructure helped to position them to best respond to a growing economy over the next 10 to 15 years. Nearly 73 percent of respondents felt the nation's infrastructure was not sufficient to meet their competitive needs moving forward, with 17.6 percent uncertain and just 9.6 percent satisfied.

Eighty-three percent of large manufacturers felt that the nation's infrastructure was not sufficient to their long-term competitiveness, whereas 61.4 percent and 71.6 percent of small and medium-sized firms, respectively, responded that way. As such, the larger the manufacturer, the more likely that infrastructure spending was a priority for the company.

Workforce

As noted earlier, manufacturers continue to cite the inability to attract and retain talent as their top concern. Nearly 77 percent of those firms said they had unfilled positions at their company that they were struggling to fill, and 28.8 percent said they were unable to take on new business and have lost revenue opportunities because of workforce constraints.

We asked manufacturers how they were addressing the skills shortage. The responses included working their existing workforce more (70.3 percent), creating or expanding internal training programs (65.5 percent), utilizing temporary staffing services (57.7 percent), collaborating with educational institutions on skills certification programs (55.6 percent), working with the local employment office (32.1 percent), encouraging possible retirees to stay longer in their roles (30.7 percent) and considering moving operations to another location (13.5 percent).

Tax Reform

If Congress rolled back business provisions of the Tax Cuts and Jobs Act (e.g., by increasing the corporate tax rate, limiting the new deduction for pass-through business income or reducing incentives for capital equipment purchases), this would likely impact manufacturers' ability to stay competitive globally. With that in mind, we asked respondents what they would do if some of the tax reform provisions were rolled back. Sixty-five percent would consider reducing capital investments in the United States under that scenario, with 46.5 percent and 56.2 percent possibly scaling back employment and wages and bonuses, respectively.

Proxy Advisory Firms

Institutional investors—including the brokerages and money managers that maintain Americans' retirement accounts—control nearly 80 percent of the stocks and equities traded on U.S. exchanges. With such large stakes in American businesses, they have a big say in corporate decision-making and governance when a vote is put before shareholders. They often turn to outside advisers, called proxy advisory firms, to guide those decisions. While seeking outside advice makes sense for many, an increasing worry for manufacturers (and public companies in general) is that proxy advisory firms often have conflicts of interest and can let views of political activists on issues unrelated to a company's business color their recommendations.

In this survey, we asked companies to discuss their experiences along these lines. Of the public companies responding to the survey, nearly 78 percent of manufacturers said that proxy advisory firms were a concern of theirs. In addition, just more than 56 percent had to divert resources from core business functions due to responding to the demands of proxy advisory firms.

Survey Responses

- 1. How would you characterize the business outlook for your firm right now?
 - a. Very positive 28.3%
 - b. Somewhat positive 60.4%
 - c. Somewhat negative 10.4%
 - d. Very negative 0.9%

Percentage that is either somewhat or very positive in their outlook = 88.7%

- 2. Over the next year, what do you expect to happen with your company's overall sales?
 - a. Increase more than 10 percent 16.5%
 - b. Increase 5 to 10 percent -30.7%
 - c. Increase up to 5 percent 26.9%
 - d. Stay about the same 17.6%
 - e. Decrease up to 5 percent 5.7%
 - f. Decrease 5 to 10 percent 1.7%
 - g. Decrease more than 10 percent 0.9%

Average expected increase in sales consistent with these responses = 4.3%

- 3. Over the next year, what do you expect to happen with your company's overall production levels?
 - a. Increase more than 10 percent 18.2%
 - b. Increase 5 to 10 percent 26.2%
 - c. Increase up to 5 percent 29.7%
 - d. Stay about the same 19.3%
 - e. Decrease up to 5 percent 5.0%
 - f. Decrease 5 to 10 percent 0.7%
 - g. Decrease more than 10 percent 0.7%

Average expected increase in production consistent with these responses = 4.3%

- 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 10.7%
 - b. Increase 3 to 5 percent 9.4%
 - c. Increase up to 3 percent 9.7%
 - d. Stay about the same 61.5%
 - e. Decrease up to 3 percent 4.5%
 - f. Decrease 3 to 5 percent 2.2%
 - g. Decrease more than 5 percent 2.1%

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 4.3%
 - b. Increase 5 to 10 percent 18.4%
 - c. Increase up to 5 percent 47.5%
 - d. Stay about the same 26.4%
 - e. Decrease up to 5 percent 2.6%
 - f. Decrease 5 to 10 percent 0.6%
 - g. Decrease more than 10 percent 0.4%

Average expected increase in product prices consistent with these responses = 2.8%

- 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 10.6%
 - b. Increase 5 to 10 percent 32.2%
 - c. Increase up to 5 percent 43.2%
 - d. Stay about the same 10.7%
 - e. Decrease up to 5 percent 2.6%
 - f. Decrease 5 to 10 percent 0.4%
 - g. Decrease more than 10 percent 0.4%

Average expected increase in raw material prices consistent with these responses = 4.4%

- 7. Over the next year, what are your company's capital investment plans?
 - a. Increase more than 10 percent 14.8%
 - b. Increase 5 to 10 percent 16.3%
 - c. Increase up to 5 percent 18.6%
 - d. Stay about the same 41.6%
 - e. Decrease up to 5 percent 3.0%
 - f. Decrease 5 to 10 percent 2.0%
 - g. Decrease more than 10 percent 3.7%

Average expected increase in capital investments consistent with these responses = 2.6%

- 8. Over the next year, what are your inventory plans?
 - a. Increase more than 10 percent 3.7%
 - b. Increase 5 to 10 percent 6.8%
 - c. Increase up to 5 percent 18.7%
 - d. Stay about the same 47.5%
 - e. Decrease up to 5 percent 15.9%
 - f. Decrease 5 to 10 percent 4.1%
 - g. Decrease more than 10 percent 3.3%

Average expected increase in inventories consistent with these responses = 0.3%

- 9. Over the next year, what do you expect in terms of full-time employment in your company?
 - a. Increase more than 10 percent 6.7%
 - b. Increase 5 to 10 percent 12.8%
 - c. Increase up to 5 percent 34.1%
 - d. Stay about the same 38.5%
 - e. Decrease up to 5 percent 5.9%
 - f. Decrease 5 to 10 percent 1.5%
 - g. Decrease more than 10 percent 0.6%

Average expected increase in full-time employment consistent with these responses = 2.2%

- 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 5.4%
 - b. Increase 3 to 5 percent 32.5%
 - c. Increase up to 3 percent 52.7%
 - d. Stay about the same 8.5%
 - e. Decrease up to 3 percent 0.7%

- f. Decrease 3 to 5 percent none
- g. Decrease more than 5 percent 0.2%

Average expected increase in employee wages consistent with these responses = 2.3%

- 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 7.8%
 - b. Increase 10.0 to 14.9 percent 16.7%
 - c. Increase 5.0 to 9.9 percent 40.6%
 - d. Increase less than 5.0 percent 21.9%
 - e. No change 7.8%
 - f. Decrease less than 5.0 percent 1.7%
 - g. Decrease 5.0 percent or more 0.9%
 - h. Uncertain 2.6%

Average expected increase in health insurance costs consistent with these responses = 6.8%

- 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 22.0%
 - b. Weaker global growth and slower export sales 16.5%
 - c. Trade uncertainties (e.g., actual or proposed tariffs, trade negotiation uncertainty) 60.4%
 - d. Strengthened U.S. dollar relative to other currencies 21.4%
 - e. Challenges with access to capital or other forms of financing 4.4%
 - f. Unfavorable business climate (e.g., taxes, regulations) 18.5%
 - g. Increased raw material costs 65.1%
 - h. Rising health care/insurance costs 56.9%
 - i. Transportation and logistics costs 37.9%
 - j. Attracting and retaining a quality workforce 68.2%
- 13. What is your company's primary industrial classification?
 - a. Chemicals 5.2%
 - b. Computer and electronic products 2.6%
 - c. Electrical equipment and appliances 5.2%
 - d. Fabricated metal products 29.2%
 - e. Food manufacturing 2.6%
 - f. Furniture and related products 1.1%
 - g. Machinery 11.1%
 - h. Nonmetallic mineral products 3.0%
 - i. Paper and paper products 2.4%
 - j. Petroleum and coal products 0.6%
 - k. Plastics and rubber products 6.8%
 - I. Primary metals 5.4%
 - m. Transportation equipment 3.9%
 - n. Wood products 2.2%
 - o. Other 18.9%
- 14. What is your firm size (e.g., the parent company, not your establishment)?
 - a. Fewer than 50 employees 21.2%
 - b. 50 to 499 employees 49.2%
 - c. 500 or more employees 29.7%

SPECIAL QUESTIONS

- 15. How important is it for your company to have the new United States—Mexico—Canada Agreement (USMCA) approved?
 - a. Very important 33.0%
 - b. Somewhat important 42.5%
 - c. Not important 19.3%
 - d. Uncertain 5.2%
- 16. Do you believe the current state of our nation's infrastructure is positioned to respond to the competitive demands of a growing economy over the next 10–15 years?
 - a. Yes 9.6%
 - b. No 72.9%
 - c. Uncertain 17.6%
- 17. Do you have unfilled positions within your company for which you are struggling to find qualified applicants?
 - a. Yes 76.6%
 - b. No 20.4%
 - c. Uncertain 3.0%
- 18. If you answered "yes" to the previous question, how are you addressing the skills shortage? (Check all that apply.)
 - a. Working existing workforce more 70.3%
 - b. Creating or expanding internal training programs 65.5%
 - c. Encouraging possible retirees to stay longer in their roles 30.7%
 - d. Collaborating with educational institutions on skills certification programs 55.6%
 - e. Utilizing temporary staffing services 57.7%
 - f. Working with local employment office 32.1%
 - g. Considering moving operations to another location 13.5%
 - h. Other 10.4%
 - i. Uncertain 2.2%
- 19. Because of my company's inability to attract and retain workers, we have been unable to take on new business and have lost revenue opportunities.
 - a. True 28.8%
 - b. False 56.9%
 - c. Uncertain 14.3%
- 20. If Congress rolled back business provisions of the Tax Cuts and Jobs Act (e.g., by increasing the corporate tax rate, limiting the new deduction for pass-through business income or reducing incentives for capital equipment purchases), would your business consider reducing capital investments in the United States?
 - a. Yes 65.0%
 - b. No 35.0%
- 21. If Congress rolled back business provisions of the Tax Cuts and Jobs Act, would your business consider scaling back employment in the United States?
 - a. Yes 46.5%
 - b. No 53.5%
- 22. If Congress rolled back business provisions of the Tax Cuts and Jobs Act, would your business consider scaling back wage and bonus increases in the United States?
 - a. Yes 56.2%

- b. No 43.8%
- 23. If you are a public company, are the actions of proxy advisory firms a concern of yours? (Percentages are for public companies only.)
 - a. Yes 77.6%
 - b. No 22.4%
- 24. If you are a public company, does responding to the activities of proxy advisory firms cause you to divert resources from your core business functions? (Percentages are for public companies only.)
 - a. Yes 56.1%
 - b. No 43.9%