

Overwhelming Support U.S. public opinions on the manufacturing industry



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Executive summary

Job creation and economic prosperity continue to be important concerns for many Americans. While they are cautiously optimistic about overall economic recovery, the American public believes manufacturing is a critically important component of a strong national economy. Nonetheless, Americans still have mixed views about the future of manufacturing.

The results of this year's survey — our fifth over the past six years — gauging Americans perspectives on the U.S. manufacturing industry, relative to other industries, reveal that the vast majority of Americans continue to view U.S. manufacturing as crucial to America's economic prosperity, standard of living, and national security. However, less than half believe the U.S. can compete globally in manufacturing.

The good news is the manufacturing industry truly matters to Americans. It is once again among the most important domestic industries in terms of helping maintain a strong national economy, with 90 percent of respondents ranking it as "important" or "very important." Further, when asked "if given an opportunity to create 1,000 new jobs in their community in any industry, which industry would they select?" Americans ranked manufacturing first, underscoring their resounding support for the manufacturing industry.

Nonetheless, while respondents indicate they believe the twelve month manufacturing sector outlook is relatively stable; the longer term outlook portrays feelings of uncertainty. Half of respondents believe the economic situation will change, either for the better (29 percent) or worse (21 percent), 37 percent believe things will stay the same, and 13 percent are unsure about what will happen. To add to the unease, confidence in global competitiveness fell from the prior study, with only 49 percent of respondents believing the U.S. can compete effectively in the global marketplace. Moving jobs offshore remains a concern as well, with 75 percent of respondents believing manufacturing jobs are the first to be moved to other countries. Americans also feel that government leadership in the U.S. should do more to create a competitive advantage for U.S. manufacturers relative to all other countries. Further, they feel current tax policies in the U.S. are not competitive, making America a less attractive place to operate a manufacturing business. The uncertainty gives reason for pause, and likely contributes to only 37 percent of respondents indicating they would encourage their child to pursue a career in manufacturing.

On the bright side, industry familiarity really makes a difference. While overall manufacturing remains less popular than other industries as a career choice (ranked fifth out of seven provided industries, and dead last for generation Y — those 19-33 years of age), respondents with high manufacturing industry familiarity rank it higher as a career choice (third out of seven). Similarly those with high manufacturing familiarity have more positive views toward manufacturing overall and are more than twice as likely to encourage their children to pursue manufacturing careers — 52 percent of those with high manufacturing industry familiarity agree they would encourage their child to pursue manufacturing (as opposed to 21 percent with no familiarity).

Over the past several studies, Americans' support of manufacturing and their views regarding career stability has not changed. Americans consistently voice their support of the manufacturing industry and express the importance of manufacturing to the economy and to job creation. Further, Americans show strong support for a wide range of actions to ensure a position of strength for the U.S. manufacturing sector.

The good news for policy makers and business leaders — Americans remain steadfast in their commitment to creating a strong, globally competitive manufacturing sector in the United States, and eighty-two percent of Americans believe the United States should invest more heavily in manufacturing. This suggests they would support, and expect, appropriate investments to that end. That's important for business leaders and government policy makers to understand, as they work together to pull the right levers on the country's economic and job creation engine. According to the public, manufacturing is a consistent top priority.

We created this research program to provide a running view of the U.S. public's perspectives on manufacturing to supplement the many other research reports and perspectives of economists, policy makers, business leaders and other subject matter experts. Taken together, the public's views are an important guidepost for public policy, as well as an important indicator for businesses, and should be an important consideration for all those responsible for planning and enabling America's future.

Key takeaways

Here's a closer look at important takeaways from this year's survey of the American public:

Americans believe manufacturing is a critically important component of a strong national economy.	Manufacturing remains among the most important industry in terms of helping maintain a strong national economy and received the most support for job creation at a community level. Americans believe the U.S. manufacturing industry's top three competitive advantages include its technology, research capabilities, and energy availability. Unfortunately, less than half of Americans believe the U.S. can now compete globally.
Americans want stronger policies to support manufacturing.	Seventy seven percent of Americans believe a strong manufacturing base should be a national priority. But they are not confident we are taking the right approach today: 83 percent of respondents indicate the U.S. needs a more strategic approach to developing a manufacturing base and 82 percent believe the U.S. should further invest in the manufacturing industry.
Americans support investment and strategy to drive manufacturing competitiveness.	Not only is a more strategic approach to developing a strong U.S. manufacturing base desired, 82 percent of Americans believe the U.S. should further invest in the manufacturing industry. To bolster competitiveness and increase jobs, more than three fourths of respondents would like to see health care costs decrease, a comprehensive energy policy developed that continues to ensure low cost energy availability, education reform, tax incentives and tax cuts.
Americans continue to remain pessimistic regarding the overall economy and the pace of progress.	Less than half of Americans (44 percent) are optimistic the U.S. economy will show significant improvement in the future, while a majority (59 percent) believes the U.S. economy remains weak and may fall back into recession. Further, less than half (46 percent) believe the U.S. economy is in better shape than it was five years ago, and only 28 percent believe federal government leaders know what is needed to grow and strengthen the U.S. economy.
Americans are concerned about the stability and security of the manufacturing sector.	While more than half of respondents believe manufacturing jobs are interesting and rewarding, there still exist negative perceptions toward manufacturing, particularly in terms of likelihood of jobs being moved offshore. Job stability and security was the most common reason given as to why respondents would not encourage someone from a younger generation to pursue a career in manufacturing.

Americans with high industry familiarity view manufacturing more favorably than the overall population.	In general, manufacturing remains less popular than other industries as a career choice. However, respondents with high familiarity with the manufacturing industry (e.g., have worked in the industry) ranked manufacturing third out of seven core industries as a career choice as opposed to fifth for everyone else. Similarly, those with high manufacturing familiarity have much more positive views toward manufacturing and are twice as likely to encourage children to pursue manufacturing careers.
Americans view benefits, rewarding work and skills growth as most important job selection criterion.	In terms of general career choice considerations, while work activities, skill growth, and pay matter, benefits came out on top, with 87 percent indicating benefits as being an important or very important criterion in their job selection. Additionally, Americans indicated they are least concerned with whether or not the job had a physical component (i.e. would not merely be sitting at a desk) or whether it would be a desk job.
Americans want manufacturing jobs...for someone else.	While Americans once again consider manufacturing among the most important domestic industries in terms of helping maintain a strong national economy, they rank it 5th as career choice for themselves — out of the 7 industries provided as a possible answer (and Gen Y ranks it last). Additionally, only 37 percent of respondents indicate they would encourage their children to pursue a manufacturing career. When asked if their parents encouraged them to pursue a career in manufacturing, only 19 percent said yes.
Americans confidence in their school system's ability to provide the necessary skills and career guidance required to pursue a job in manufacturing is declining.	Only 40 percent of respondents believe today's students are qualified for a job in today's modern manufacturing environment. In progress of a mixed variety, over half of respondents believe their school systems are now providing exposure to manufacturing skills but only 30 percent believe their local school system encourages students to pursue manufacturing careers.
Americans favorably view targeted education and career programs, aimed at increasing interest in the industry.	When asked to indicate the degree to which various potential programs would increase their interest in manufacturing as a career choice, respondents indicated a high degree of interest in apprenticeships, which generated the most interest (72 percent), while certification and degree programs received the second highest level of interest (68 percent).

Current environment

Although the U.S. is showing sluggish signs of economic recovery, only 46 percent of Americans believe the U.S. Economy is improving, and over half (59 percent) believe we may fall back into a recession. Americans' confidence in the ability of business leaders and policy makers to improve the situation is limited, and has even decreased since 2012. Less than half (48 percent) believe business leaders know what is needed to strengthen the U.S. economy and less than one third (28 percent) believe policymakers know how to improve the situation.

Chart 1: Percentage of respondents who strongly agree or agree with each statement

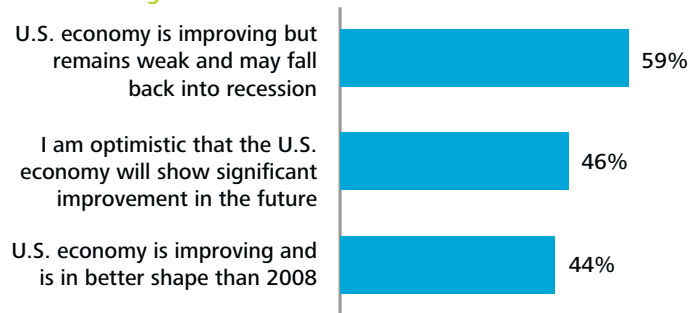
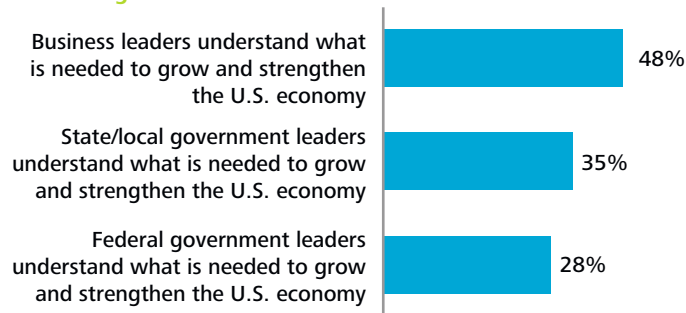


Chart 2: Percentage of respondents who strongly agree or agree with each statement



Building on Strength

Eighty-two percent of Americans believe the United States should invest more heavily in manufacturing. Why? Because strong manufacturing capabilities are the single best predictor of a vibrant, successful, and growing economy.¹ Simply put: manufacturing matters.

When it comes to world-class manufacturing, America has a number of important advantages to build on. Key advantages cited by our survey respondents include:

- Widespread use and availability of advanced technology
- Strong research and development capabilities
- Abundant energy and natural resources availability
- An unmatched network of suppliers and distributors
- High levels of quality
- A highly skilled workforce with a strong work ethic

These are just a few of the advantages that made American manufacturing the envy of the world for most of the past century. Despite increased competition from emerging markets, these advantages remain as relevant as ever today. However, as recent years have shown, simply having these advantages is not enough.

America's position of global leadership is not a birthright. Restoring U.S. manufacturing to a position of strength will require deliberate and sustained effort by both business and government. The people have spoken. It's time for action.

¹ World Economic Forum, The Future of Manufacturing, 2012.
http://www3.weforum.org/docs/WEF_MOB_FutureManufacturing_Report_2012.pdf

Slightly over half of respondents (53 percent) believe the manufacturing sector will remain stagnant and less than one fourth (19 percent) believe it will grow stronger in the short term. While Americans have mixed views on the longer term outlook, the perception has improved slightly since 2012. Today, 29 percent of respondents believe manufacturing will grow stronger in the long term.

Chart 3: U.S. manufacturing outlook over the next 12 months and longer term

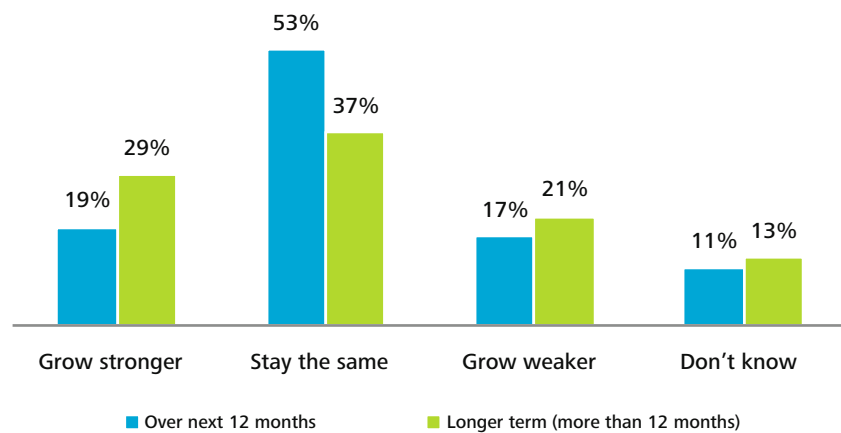
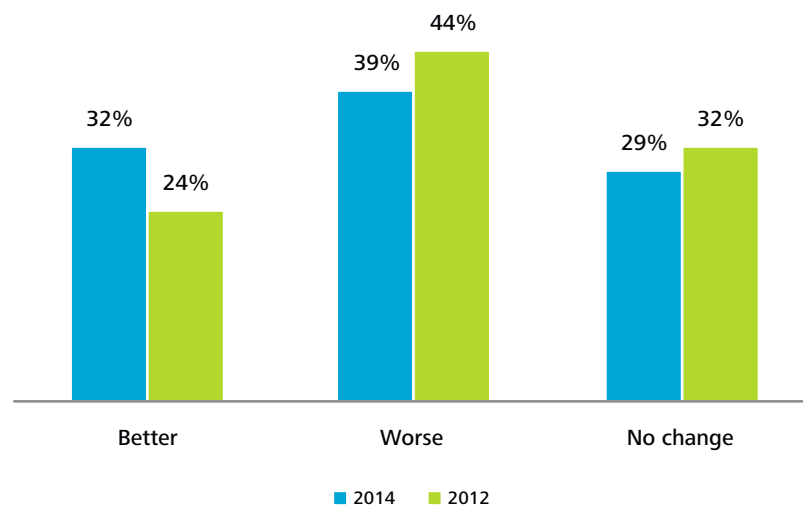


Chart 4: Respondents' views on current economic prosperity compared to a few years ago. Percent of respondents who believe U.S. economic prosperity will be better, worse or show no change over the next 12 months.



The importance and image of manufacturing

Americans continue to have strong, positive support about the importance of manufacturing for both the national economy and for supporting job growth at the community level. But when it comes to pursuing careers in manufacturing, they are wary.

Chart 5: Percentage of respondents who believe the manufacturing industry is very important or important to...

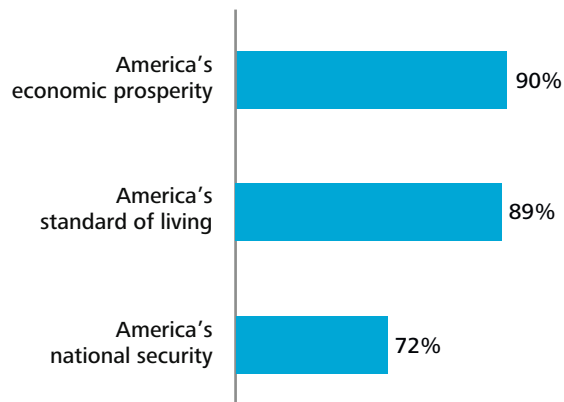


Chart 6: Percentage of respondents who strongly agree or agree with each statement

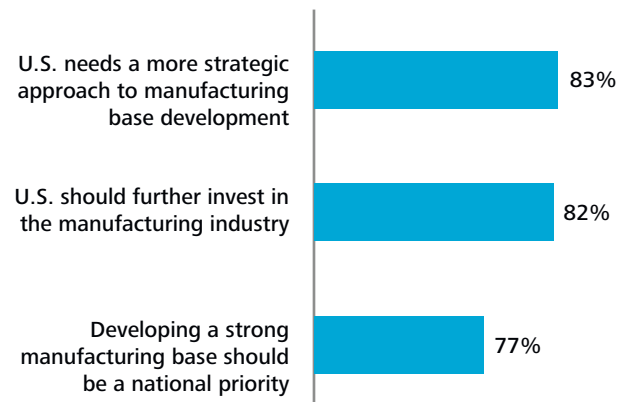


Table 1: Ranking of industries viewed by respondents as most important to maintain a strong national economy in the U.S.

Industry	Rank
Technology	1
Energy	2
Manufacturing	3
Healthcare	4
Financial Services	5
Retail	6
Communications Hub	7

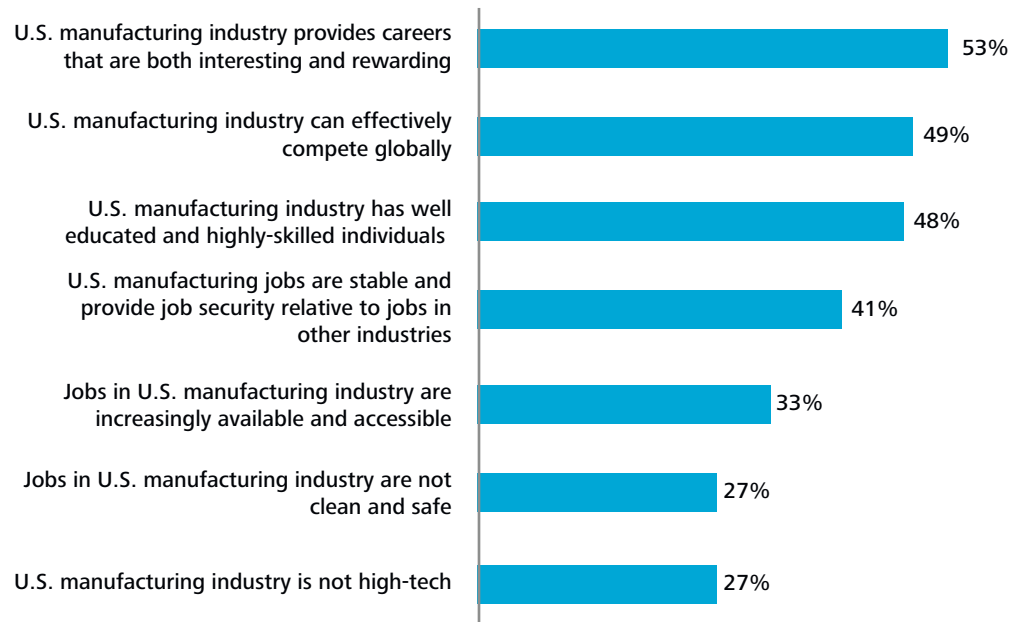
Table 2: Ranking by respondents of the type of new industry facility they would support to create 1,000 new jobs in their community

Facility	Rank
Manufacturing facility	1
Technology development center	2
Energy production facility	3
Healthcare facility	4
Retail center	5
Communications hub	6
Financial institution	7

based on weighted cumulative rank vs. percent of #1 rank designation

Slightly over half of the respondents (53 percent) believe the U.S. manufacturing industry provides interesting and rewarding careers. Also, almost half (49 percent) believe U.S. manufacturing can effectively compete globally and 48 percent believe the U.S. manufacturing industry has well educated and highly skilled individuals. Only 33 percent of respondents believe jobs in U.S. manufacturing are increasingly available and accessible though.

Chart 7: Percentage of respondents who strongly agree or agree with each statement



Increasing interest in manufacturing

When asked to indicate the degree to which potential programs would increase interest in manufacturing as a career choice, respondents pointed to several strategies. In general, respondents indicated a high degree of interest in the majority of programs with internships, work studies, apprenticeships generating the most interest (72 percent), followed by certification and degree programs (68 percent). Americans also believe technical and community colleges (71 percent) and small and medium businesses (69 percent) are “most effective” in leading the creation of the next generation of advanced manufacturing jobs.

Chart 8: Percentage of respondents indicating programs would increase their interest in manufacturing to a high or great extent

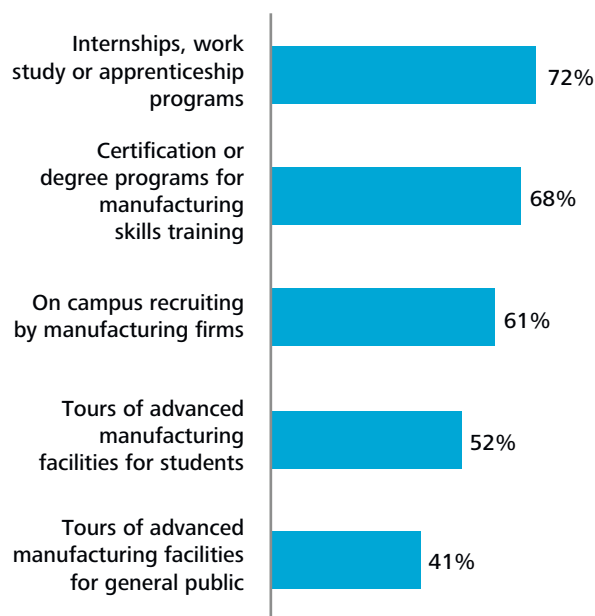
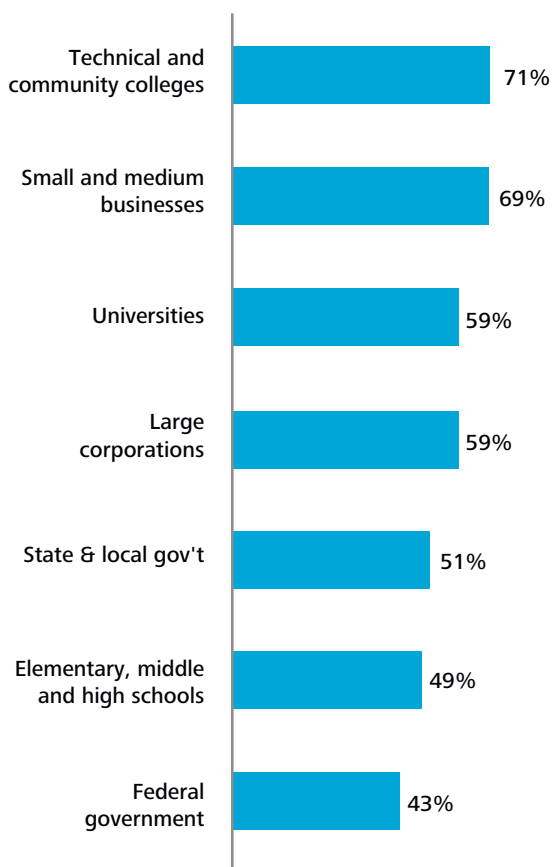
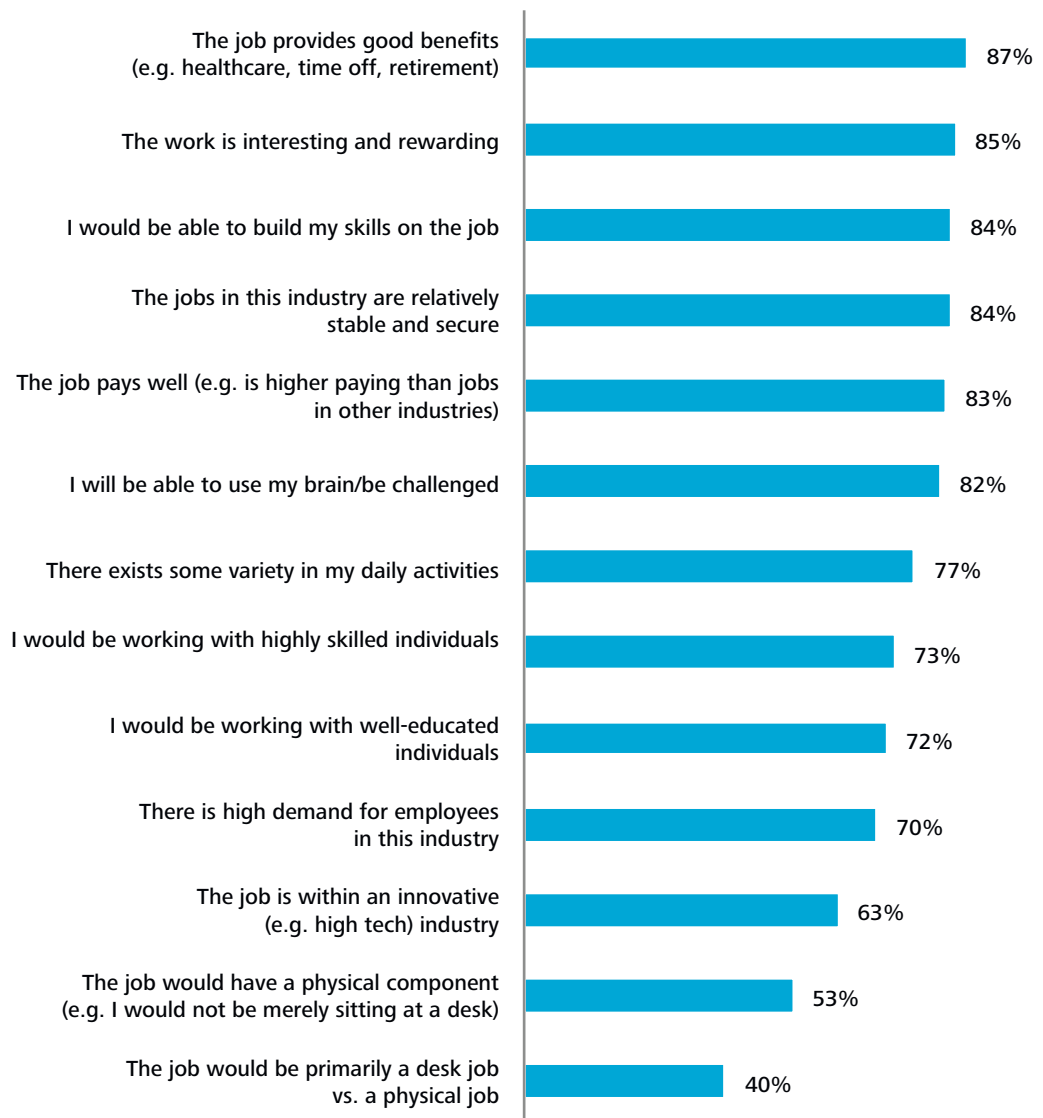


Chart 9: Percentage of respondents who view the following as very effective or effective at leading the creation of the next generation of manufacturing jobs



While work activities, skill growth, and pay are important job selection criterion, benefits ranks the highest, with 87 percent rating it as important or very important. Additionally, Americans indicated they are least concerned with whether or not the job had a physical component (would not merely be sitting at a desk) or whether it would be a desk job.

Chart 10: The percentage of respondents who rank the following as very important or important job selection criterion



The talent pool and future outlook for manufacturing

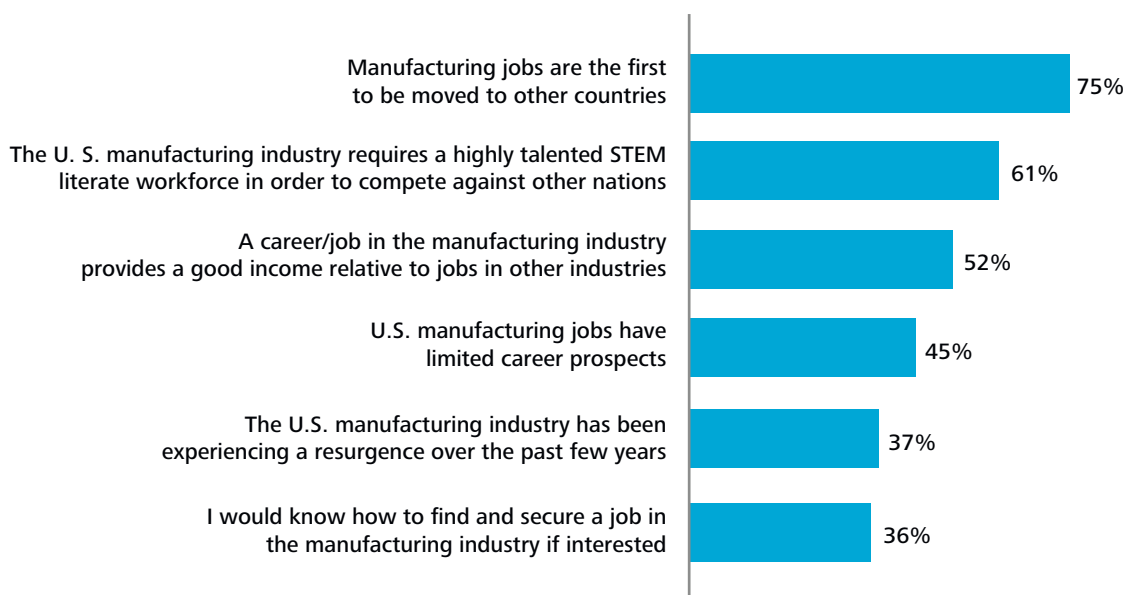
Similar to prior studies, results indicate the ability of manufacturers to capture their fair share of the talent pool will continue to be a challenge in the future. Americans appear to be reluctant to choose careers in manufacturing, and they are largely not encouraging the next generation of talent to pursue these jobs either. Manufacturing is a particularly unattractive career option for Generation Y (ages 19-33) who showed the lowest likelihood for ranking manufacturing as their first career choice.

The good news is respondents with high manufacturing industry familiarity ranked manufacturing as a career choice as third most popular out of the seven provided industries, as opposed to 5th overall.

Table 3: Ranking by respondents of industry preference if they were beginning their career today

Overall Respondents		Generation Y (ages 19-33) Respondents		High Familiarity Respondents	
Industry	Rank	Industry	Rank	Industry	Rank
Technology	1	Technology	1	Technology	1
Healthcare	2	Healthcare	2	Healthcare	2
Financial services	3	Financial services	3	Manufacturing	3
Energy	4	Retail	4	Energy	4
Manufacturing	5	Communications	5	Financial services	5
Communications	6	Energy	6	Retail	6
Retail	7	Manufacturing	7	Communications	7

Chart 11: Percentage of respondents who strongly agree or agree with each statement



Source: Copyright 2014
Deloitte Development LLC and
The Manufacturing Institute

Only 40 percent of respondents believe today's students are qualified for a job in today's modern manufacturing environment. In progress of a mixed variety, over half of respondents believe their school systems are now providing exposure to manufacturing skills but only 30 percent believe their local school system encourages students to pursue manufacturing careers.

Chart 12: Percentage of respondents who strongly agree or agree with each statement

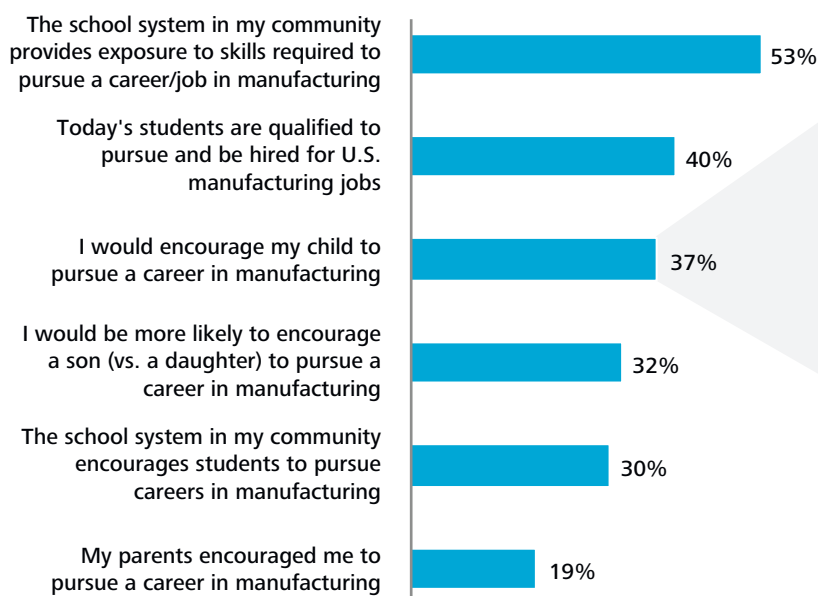
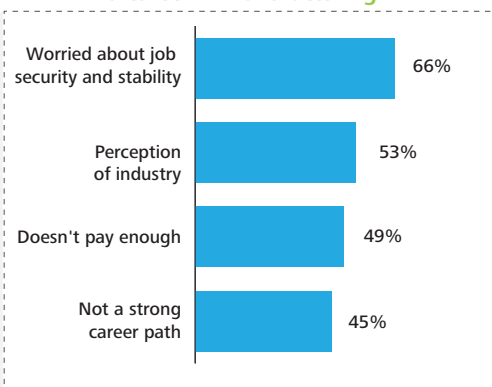


Chart 13: Percentage of respondents who strongly agree or agree with reasons for not encouraging a child to pursue a career in manufacturing



High industry familiarity leads to greater preference for manufacturing careers and more positive perceptions

It is worth noting that increased familiarity with U.S. manufacturing leads to more favorable manufacturing perceptions and increased career interest. Specifically, respondents with high manufacturing industry familiarity (e.g., have worked in the industry) ranked manufacturing third out of seven core industries as a career choice.

These high familiarity respondents are twice as likely to encourage children to pursue manufacturing careers. Fifty two percent of those with high manufacturing familiarity agree they would encourage a child to pursue manufacturing as opposed to 21 percent with no familiarity.² Similarly, those with high manufacturing familiarity have much more positive views toward manufacturing. Specifically, 64 percent of those with high familiarity agree or strongly agree that manufacturing jobs are interesting and rewarding versus 40 percent of those with no familiarity. Similar results emerged regarding manufacturing employing highly educated and skilled people (61 percent of

those with high familiarity agree that this is the case compared to only 40 percent of those with no familiarity).

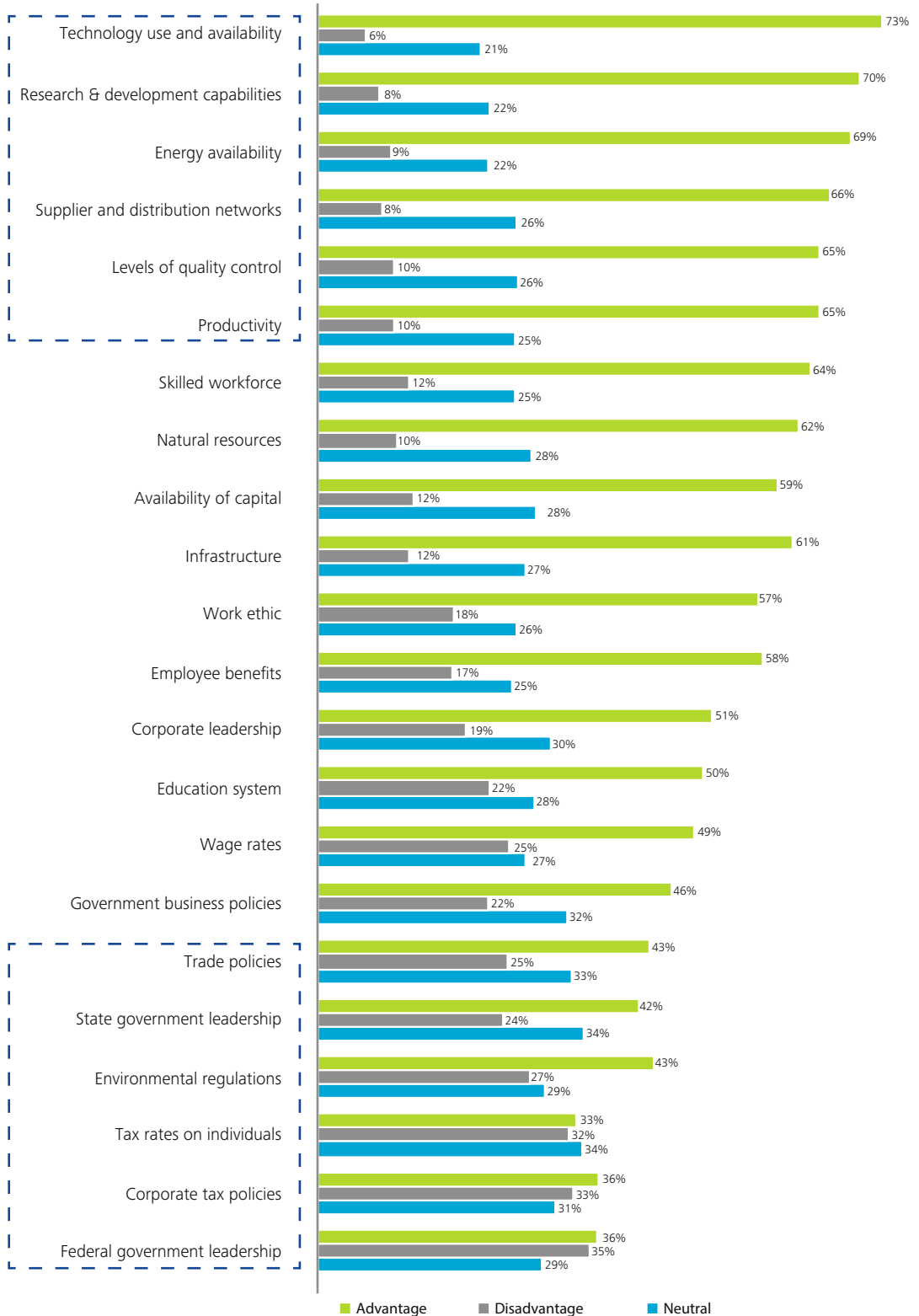
Another disparity exists with regard to manufacturing job accessibility and availability when you segment the question based on familiarity. While only 36 percent of respondents agreed or strongly agreed they would know how to secure a job if interested, 57 percent of respondents with high familiarity agreed or strongly agreed with the statement that they would know how to find a job if interested versus only 21 percent with no familiarity. One implication from this perception disparity is that increasing manufacturing familiarity is critical in order to increase positive perception, industry interest, and successful manufacturing job pursuits. Also, beyond making efforts to increase manufacturing familiarity, opportunities exist to utilize those with high familiarity to help tell and spread the U.S. manufacturing story. It seems clear that increasing the familiarity is an important step in increasing the overall perception of manufacturing.

² No familiarity respondents are those respondents who have neither worked in the manufacturing industry, nor have any friends or family members who work or have worked in the manufacturing industry.

Competitiveness environment

Just as in prior years, Americans continue to think that our manufacturing industry is competitive in a number of areas on the global level. But in their opinion, policymakers are coming up short in terms of the policies and leadership needed to lead the way globally.

Chart 14: Percent of respondents rating these attributes of U.S. competitiveness as an advantage or disadvantage relative to other countries



Source: Copyright 2014
Deloitte Development LLC and
The Manufacturing Institute

Chart 15: Capabilities the majority of respondents consider to be a competitive advantage for U.S. manufacturing

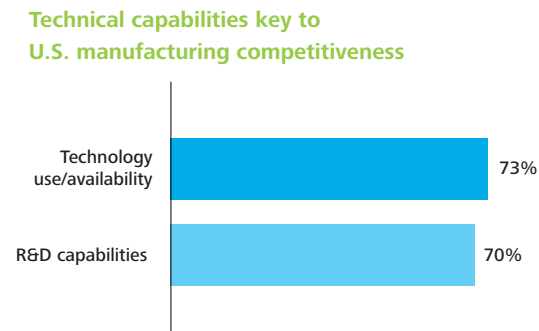
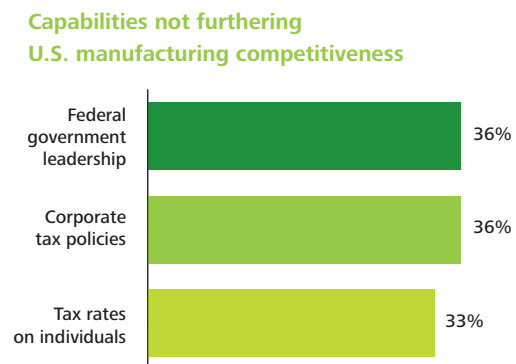
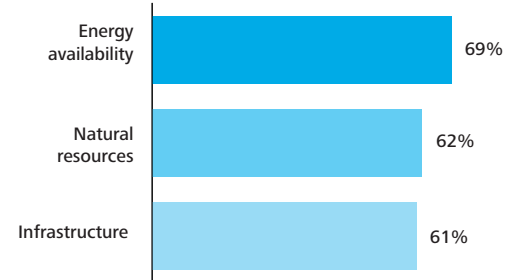


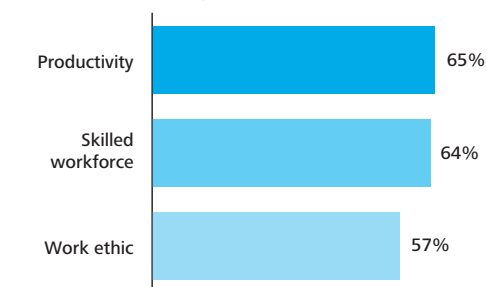
Chart 16: Capabilities the least amount of respondents consider to be a competitive advantage for U.S. manufacturing



Country capabilities key to U.S. manufacturing competitiveness



Workforce capabilities key to U.S. manufacturing competitiveness



Public guidance for policymakers

Americans continue to have strong opinions on the challenges hindering U.S. manufacturing competitiveness and would like to see healthcare costs decrease, a comprehensive energy policy, education reform, and tax incentives to encourage manufacturing in the U.S.

Chart 17: Percentage of respondents who strongly agree or agree with each statement



A large industrial laser cutting machine is shown in operation. Bright orange sparks are being ejected from the cutting head, which is positioned over a metal workpiece. The machine's structure is dark green and black, with various mechanical components visible. The background is slightly blurred, showing more of the industrial environment.

Cutting costs, reforming systems, promoting innovation and creating jobs

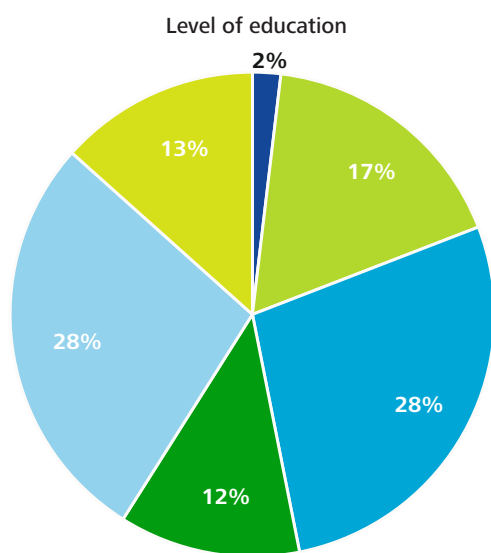
More than three fourths of Americans would like to see healthcare costs decrease, a comprehensive energy policy developed to ensure energy availability and low costs, education reform, and tax incentives that encourage U.S. manufacturing. These concerns and desired actions remain consistent with the 2012 results.

While a little over half of Americans (56%) see international trade as helping create U.S. jobs, a greater proportion of respondents (64%) would like to see the U.S. take a more protectionist position regarding international trade by limiting foreign goods imports through higher tariffs and import quotas.

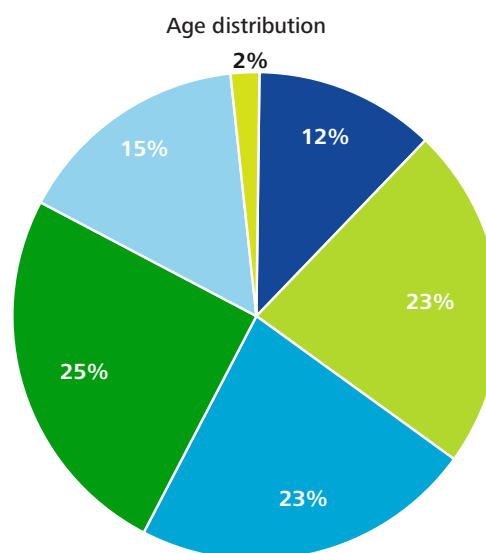
Finally, the majority of Americans continue to believe (74%) the U.S. should ensure long-term stable funding for programs that spur innovation and advanced manufacturing.

Methodology

This survey was commissioned by The Manufacturing Institute and Deloitte, and was conducted online by an independent research company in August 2014. A total of 1,009 Americans across fifty states completed the survey and their demographics are shown below.



- Some high school
- High school graduate or equivalent
- Some college
- Associate degree
- Bachelor's degree
- Graduate or professional degree



- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 & above

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