Unwavering commitment
The public's view of the manufacturing industry today
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Hungry for a strong manufacturing sector, Americans are nervous about its future

As Labor Day passes, all eyes are on the U.S. economy, with many wondering whether we’re still in the midst of a weak recovery or perched on the precipice of another recession. At the top of the list of concerns: Jobs. Americans are looking for jobs that have so far failed to materialize after the significant cut-backs during the Great Recession. No matter how you look at it, we face a challenging, stubborn economic environment – particularly when it comes to job creation.

Our third annual survey of the American public indicates that nearly three-fourths (72%) of those surveyed do not believe that the economy has been improving or is in better shape since 2008. Over two-thirds (67%) of those surveyed believe the economy remains weak and could fall back into recession. And Americans are nearly evenly split, 50-50, on whether the economy will show significant signs of improvement by 2015. Additionally, the public is not confident that business leaders and policy makers necessarily understand how to effectively grow and strengthen the economy.

So it is noteworthy that our recent survey of the American public’s opinion on manufacturing reveals that throughout one of the most turbulent periods in U.S. economic history, they have maintained remarkably consistent views, year after year, on the importance of manufacturing. Starting in the immediate aftermath of the recession in 2008-2009, each year our survey has uncovered a consistently high regard for manufacturing, both in terms of its role in the U.S. economy and our global standing, as well as its importance in job creation. In many cases, the results of our queries on these messages are virtually interchangeable over the past three years.

This is good news for both policy makers and business leaders. It suggests that despite the frequent swings of public opinion on a wide range of topics, Americans remain steadfast in their commitment to creating a strong, healthy, globally competitive manufacturing sector in the United States, no matter the prevailing economic winds. And it further suggests they would support, and expect, appropriate investments toward that end. That’s important for leaders in business and government 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.

And the good news for the American public is that the past year has shown some positive developments in manufacturing. In 2010, the number of manufacturing jobs in the U.S. grew 1.2%, the first increase since 1997. While these new jobs hardly make up for the number of manufacturing jobs lost since that time, this is a step in the right direction according to our survey results.

Nurturing and sustaining this delicate growth will require a mix of effective policy decisions, steady supplies of world-class talent, and positive shifts in investment and growth strategies for manufacturing by both business leaders and policy makers. Our survey shows significant challenges in the area of public perceptions, indicating that while Americans generally hold strong views on the importance of manufacturing, they hold negative views about its future in the U.S.

We created this annual 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 bellwether for public policy and should be an important consideration for all those responsible for planning and enabling America’s future.

Executive summary

“Americans remain steadfast in their commitment to creating a strong, healthy, globally competitive manufacturing sector in the United States, no matter the prevailing economic winds.”

Here’s a closer look at some of the most important takeaways from our study.

Americans value a strong manufacturing sector
When asked which industries are most important to the national economy, manufacturing is near the top of the list, topped only by energy. Eighty-six percent indicate that America’s manufacturing base is “important” or “very important” to our standard of living. And when asked if they could create 1000 new jobs in their community with any new facility, manufacturing comes in at the top of the list — ahead of energy production facilities, technology development centers, retail centers, banks or financial institutions and a host of others. Those are all clear signs that the American public wants and values a strong manufacturing sector — and they’re consistent year after year.

Americans want stronger policies to support manufacturing
Seventy-nine percent of Americans believe a strong manufacturing base should be a national priority. But they are not confident that we are taking the right approach today — 83% “strongly agree” or “agree” that we need a more strategic approach to developing our manufacturing base. The same can be said of their views of current U.S. tax, trade, and other government business policies, with less than one-third of the public seeing any competitive advantage being created for U.S. business competitiveness from current policies and over two-thirds seeing current policies having a neutral or negative impact relative to our ability to compete with other nations.

Americans are looking for better leadership to support U.S. competitiveness
The U.S. public is unsure of the ability of both business leadership and government leadership to create a competitive U.S. economy. Forty-three percent believe current business leadership provides a competitive advantage to U.S. competitiveness versus all other countries and 26% and 29% respectively believe that federal and state leadership are helping create a competitive advantage for the U.S. versus all other countries. Not exactly a ringing endorsement of leadership. At the same time, they are not really negative, either. Only 22% believe current business leadership is creating a competitive disadvantage for the U.S. and only 35% and 30% respectively believe that federal and state leadership, are creating a competitive disadvantage for the U.S. For the most part, the public is neutral on any advantage or disadvantage being created by business leaders and policy makers. However, in a time of significant challenge for the U.S. economy and at best a jobless recovery, the public’s view of leadership is enlightening.

Americans see a wide range of competitive advantages upon which to build
With respect to U.S.’ competitiveness relative to other countries, the public views the following as a source of competitive advantage: availability and use of technology, R&D capabilities, the skilled workforce, work ethic and productivity of that work force, as well as our natural resources and infrastructure.
They view the manufacturing sector as fragile and unstable

Unfortunately, overall, Americans see manufacturing becoming weaker over the longer term. When asked whether U.S. manufacturing is becoming stronger or weaker from a longer-term perspective, only 7% said it is likely to be stronger. Compare that with 55% who say it’s becoming weaker. They value manufacturing, would like to see more manufacturing jobs created, and see many areas of competitive advantage the U.S. has relative to other nations. However, their overall prognosis for manufacturing in this country is steadily weakening. The perceived lack of a competitiveness strategy, business policies and overall leadership seem to be dragging down the otherwise positive views of and strong support for manufacturing in this country.

Americans want manufacturing jobs – for someone else

While the U.S. public registers a strong belief in the importance of manufacturing for the country’s economy, when it comes to choosing manufacturing as a career choice, they place it near the bottom of the list. Out of 7 key industries, manufacturing ranks second to last as a career choice. While the reasons for this are complex, one interesting finding suggests that Americans (77%) fear the loss of domestic manufacturing jobs to other nations, contributing to a sense that manufacturing is an unstable long-term career choice. Of equal concern is the fact that the future talent pool is least excited about the prospect of a career in manufacturing. Among 18-24 year-olds, manufacturing ranks dead last among industries in which they would choose to start their careers. Finally, manufacturing jobs seem increasingly out of reach for Americans – 74% disagree with the statement “jobs in the U.S. manufacturing industry are increasingly available and accessible.”

These findings suggest a lingering disconnect between what the public is seeking when it comes to manufacturing and what they’re encountering in their own careers and communities. They consistently report their belief that manufacturing is important to our country’s economic success. As a job creation machine, they place manufacturing at the top of the list – and it translates into a strong desire to see new manufacturing facilities established in their own communities, as our survey results show.

But when it comes to their own careers and those of their families, for the U.S. public, manufacturing comes up short year after year. That’s not a trend anyone wants to carry into the future. So why does it persist? When viewed within the context of the other survey findings, the roots of this trend begin to present themselves.

• For starters, Americans are concerned about the long-term stability of manufacturing jobs, and they are equally worried that these jobs are less accessible than they should be.

• Plus, they’re concerned that manufacturing jobs will eventually be moved to workers in other countries.

• And finally, they appear to have doubts about policy makers’ ability to right the ship.

These views are equally consistent year after year, reflecting an ongoing tension between what the public wants and what they’re getting.

The right skills for the job

While public opinion indicates strong confidence in the abilities of American workers, many manufacturers report that they cannot find workers with the skills required in today’s advanced manufacturing workplace.

To counter this trend, The Manufacturing Institute has created the NAM-Endorsed Manufacturing Skills Certification System targeting deficits in education and training. This system of portable, industry-recognized credentials validates the skills and competencies needed in entry-level manufacturing jobs. It confirms both technical and non-technical skills, helping ensure the right combination of “book smarts” and “street smarts” to succeed in a manufacturing environment. Plus, participants receive college credit while earning their certification, moving them closer to college degrees.

President Obama highlighted the NAM-Endorsed Manufacturing Skills Certification at an event in June 2011 as a solution to the skills shortage that manufacturers face. In response, The Manufacturing Institute and the National Association of Manufacturers announced the goal of awarding 500,000 credentials aligned to manufacturers’ hiring needs. Today, implementation of the Skills Certification System is underway in over 30 states.
They have strong perspectives on what needs to change to bolster manufacturing competitiveness

Finally, Americans have strong perceptions on the challenges hindering U.S. manufacturing competitiveness. High healthcare costs, high energy costs, and a domestic education system in need of reform were all identified as challenges that, in their view, must be addressed to create a more competitive manufacturing sector, suggesting a path forward for policy makers. They also see tax policy as an important tool, with 69% agreeing or strongly agreeing that tax cuts for businesses and individuals create jobs and 65% agreeing or strongly agreeing that tax incentives for manufacturing in the U.S. enhances competitiveness.

While all of this is just a measure of public opinion, it is certainly food for thought for those charting America’s economic future, and the role manufacturing should play.
Nurturing and sustaining this delicate growth will require a mix of effective policy decisions, steady supplies of world class talent, and positive shifts in investment and growth strategies for manufacturing by both business leaders and policy makers.
Americans view the U.S. economy as being weak and fragile – and they show little confidence in the ability of business and policy makers to improve the situation. Similarly, they view the manufacturing sector as weak, and are particularly pessimistic on its long-term outlook.

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

- The U.S. economy is improving and is in better shape than it was in 2008: 28%
- The U.S. economy has improved but remains weak and may fall back into recession: 67%
- I am optimistic the U.S. economy will show significant improvement between now and 2015: 48%

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

- Business leaders understand what is needed to grow and strengthen the U.S. economy: 46%
- Federal government leaders understand what is needed to grow and strengthen the U.S. economy: 30%
- State/local government leaders understand what is needed to grow and strengthen the U.S. economy: 27%

**Chart 3.** Respondents short-term views on strength of the manufacturing sector

- Manufacturing activity over next 12 months:
  - Weaken: 34%
  - Stay the same: 43%
  - Strengthen: 9%
  - Don’t know: 14%

**Chart 4.** Respondents long-term views on strength of the manufacturing sector

- Longer-term outlook for manufacturing sector:
  - Weaken: 55%
  - Stay the same: 27%
  - Strengthen: 7%
  - Don’t know: 11%

Source: Copyright 2011 Deloitte Development LLC and The Manufacturing Institute
On the importance and image of manufacturing

Americans have strong, positive opinions about the importance of manufacturing to the economy. But when it comes to pursuing careers in manufacturing they are wary, for some of the reasons indicated below.

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

- Economic prosperity: 86%
- Standard of living: 85%
- National security: 77%

Chart 6. Percentage of respondents who strongly agree or disagree to each statement

- U.S. needs a more strategic approach to the development of its manufacturing base: 83%
- U.S. should further invest in the manufacturing industry: 80%
- Developing a strong manufacturing base should be a national priority: 79%

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

- Manufacturing industry is high-tech: 68%
- Manufacturing requires well-educated and highly-skilled individuals: 66%
- Manufacturing provides careers that are both interesting and rewarding: 59%
- Jobs in manufacturing are clean and safe: 50%

Chart 8. Percentage of respondents who strongly agree or agree with each statement

- Manufacturing jobs are available and accessible: 78%
- Manufacturing jobs are higher paying than jobs in other industries: 44%
- Careers/jobs in manufacturing are stable and secure relative to jobs in other industries: 37%
- Manufacturing jobs are first to be moved to other countries: 26%

Source: Copyright 2011 Deloitte Development LLC and The Manufacturing Institute
Manufacturing continues to be viewed as an important industry for both the national economy and for supporting job growth at the community level.

**Chart 9.** Ranking of industries viewed by respondents as most important to maintain a strong national economy in the U.S.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy industry</td>
<td>1</td>
</tr>
<tr>
<td>Manufacturing industry</td>
<td>2</td>
</tr>
<tr>
<td>Healthcare industry</td>
<td>3</td>
</tr>
<tr>
<td>Technology industry</td>
<td>4</td>
</tr>
<tr>
<td>Financial services industry</td>
<td>5</td>
</tr>
<tr>
<td>Retail industry</td>
<td>6</td>
</tr>
<tr>
<td>Communications industry</td>
<td>7</td>
</tr>
</tbody>
</table>

(Aggregate ranking of sectors by all respondents)

**Chart 10.** Ranking by respondents of the type of new industry facility they would support to create 1,000 new jobs in their community

<table>
<thead>
<tr>
<th>Facility</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing facility</td>
<td>1</td>
</tr>
<tr>
<td>Energy production facility</td>
<td>2</td>
</tr>
<tr>
<td>Healthcare facility</td>
<td>3</td>
</tr>
<tr>
<td>Technology development center</td>
<td>4</td>
</tr>
<tr>
<td>Communications hub</td>
<td>5</td>
</tr>
<tr>
<td>Retail center</td>
<td>6</td>
</tr>
<tr>
<td>Financial institution</td>
<td>7</td>
</tr>
</tbody>
</table>

(Aggregate ranking of sectors by all respondents)
The talent pool and future outlook for manufacturing

This year’s survey indicates the ability of manufacturers to capture their fair share of the talent pool will continue to be a challenge in the future. The American public appears to be reluctant to choose careers in manufacturing and is not encouraging the next generation of talent to pursue these jobs, either. Still, there are bright spots. This year’s survey showed a significant increase in the number of 18-24 year olds who feel manufacturing is important to their standard of living and economic prosperity.

Chart 11. Ranking by respondents of industry preference if they were beginning their career today

<table>
<thead>
<tr>
<th>Industry</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology industry</td>
<td>1</td>
</tr>
<tr>
<td>Energy industry</td>
<td>2</td>
</tr>
<tr>
<td>Healthcare industry</td>
<td>3</td>
</tr>
<tr>
<td>Communications industry</td>
<td>4</td>
</tr>
<tr>
<td>Manufacturing industry</td>
<td>5</td>
</tr>
<tr>
<td>Financial services industry</td>
<td>6</td>
</tr>
<tr>
<td>Retail industry</td>
<td>7</td>
</tr>
</tbody>
</table>

(Aggregate ranking of sectors by all respondents)

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

- Students today are qualified for US manufacturing jobs: 47%
- I would encourage my child to pursue a career in manufacturing: 33%
- Our school system encourages students to pursue careers in manufacturing: 19%
- My parents encouraged me to pursue a career in manufacturing: 17%

Chart 13. Comparison of total respondents who strongly agree or agree with each statement:

- Manufacturing is important to our standard of living: 86% (All Respondents) 72% (18-24 Years Old)
- Manufacturing is important to our economic prosperity: 85% (All Respondents) 71% (18-24 Years Old)
- Manufacturing is important to our national security: 77% (All Respondents) 62% (18-24 Years Old)
- Manufacturing can effectively compete globally: 60% (All Respondents) 51% (18-24 Years Old)
- Manufacturing careers are both interesting and rewarding: 59% (All Respondents) 39% (18-24 Years Old)

Chart 14. Percent of respondents who think the U.S. manufacturing industry can effectively compete in global markets:

- Agree: 60%
- Disagree: 28%
- No opinion: 12%

Source: Copyright 2011 Deloitte Development LLC and The Manufacturing Institute
Just as in previous years, Americans continue to think that our manufacturing industry can compete on the global level. But in their opinion, policy makers are coming up short in terms of the policies and leadership needed to lead the way globally.

Chart 15. Percent of respondents rating these attributes of U.S. competitiveness as an advantage or disadvantage relative to all other countries:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Advantage</th>
<th>Neutral</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology use/availability</td>
<td>23%</td>
<td>24%</td>
<td>70%</td>
</tr>
<tr>
<td>R&amp;D capabilities</td>
<td>7%</td>
<td>6%</td>
<td>70%</td>
</tr>
<tr>
<td>Energy availability</td>
<td>8%</td>
<td>27%</td>
<td>65%</td>
</tr>
<tr>
<td>Skilled workforce</td>
<td>10%</td>
<td>26%</td>
<td>62%</td>
</tr>
<tr>
<td>Natural resources</td>
<td>9%</td>
<td>29%</td>
<td>60%</td>
</tr>
<tr>
<td>Productivity</td>
<td>11%</td>
<td>29%</td>
<td>54%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>11%</td>
<td>36%</td>
<td>54%</td>
</tr>
<tr>
<td>Work ethic</td>
<td>27%</td>
<td>19%</td>
<td>53%</td>
</tr>
<tr>
<td>Employee benefits</td>
<td>17%</td>
<td>30%</td>
<td>53%</td>
</tr>
<tr>
<td>Levels of quality control</td>
<td>12%</td>
<td>36%</td>
<td>52%</td>
</tr>
<tr>
<td>Wage rates</td>
<td>26%</td>
<td>21%</td>
<td>51%</td>
</tr>
<tr>
<td>Availability of capital</td>
<td>20%</td>
<td>47%</td>
<td>33%</td>
</tr>
<tr>
<td>Education system</td>
<td>22%</td>
<td>43%</td>
<td>35%</td>
</tr>
<tr>
<td>Corporate leadership</td>
<td>14%</td>
<td>42%</td>
<td>36%</td>
</tr>
<tr>
<td>Environmental regulations</td>
<td>2%</td>
<td>30%</td>
<td>34%</td>
</tr>
<tr>
<td>Corporate tax policies</td>
<td>14%</td>
<td>42%</td>
<td>36%</td>
</tr>
<tr>
<td>State government leadership</td>
<td>27%</td>
<td>141%</td>
<td>4%</td>
</tr>
<tr>
<td>Trade policies</td>
<td>30%</td>
<td>29%</td>
<td>38%</td>
</tr>
<tr>
<td>Federal government leadership</td>
<td>26%</td>
<td>39%</td>
<td>35%</td>
</tr>
<tr>
<td>Tax rates on individuals</td>
<td>26%</td>
<td>39%</td>
<td>35%</td>
</tr>
<tr>
<td>Government business policies</td>
<td>27%</td>
<td>39%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: Copyright 2011 Deloitte Development LLC and The Manufacturing Institute

Chart 16. Attributes the majority of respondents consider to be a competitive advantage for U.S. manufacturing

- **Technical resources key to U.S. manufacturing competitiveness**
  - Technology use/availability (70%)
  - R&D capabilities (70%)

- **Country resources key to U.S. manufacturing competitiveness**
  - Energy availability (65%)
  - Natural resources (62%)
  - Infrastructure (54%)

- **Human resources key to U.S. manufacturing competitiveness**
  - Skilled workforce (64%)
  - Productivity (60%)
  - Work ethic (54%)

Respondents were asked to rate the importance of 21 attributes

Chart 17. Two-thirds of respondents viewed these attributes not to be an advantage in making U.S. manufacturing industry globally competitive

- **Attributes inhibiting U.S. manufacturing competitiveness**
  - Government business policies
  - Tax rates on individuals
  - Federal government leadership
  - Trade policies
  - State government leadership

Respondents were asked to rate the importance of 21 attributes
Americans have strong opinions on the challenges hindering U.S. manufacturing competitiveness, as seen in these responses on costs, trade and taxes, offering opinions that may prove insightful for policy makers.

Chart 18. Percentage of respondents who strongly agree or agree with each statement

- **Costs**
  - U.S. healthcare costs are too high: 85%
  - U.S. energy costs are too high: 74%

- **Trade**
  - International trade creates U.S. jobs: 48%
  - Increasing exports creates U.S. jobs: 70%

- **Taxes**
  - Tax cuts for small businesses and individuals create jobs: 69%
  - Tax incentives for manufacturing in the U.S. enhance competitiveness: 65%

Source: Copyright 2011 Deloitte Development LLC and The Manufacturing Institute
Methodology

This survey was commissioned by Deloitte and The Manufacturing Institute, and was conducted online by an independent research company in August of 2011. The survey polled a nationally representative sample of 1000 Americans across fifty states and has a margin of error for the entire sample of +/- three percentage points.

Chart 19. 2011 profile of respondents (1,000 total)

Level of education

- Some high school: 27%
- Some college: 27%
- High school graduate or equivalent: 13%
- Associate degree: 12%
- Graduate or professional degree: 2%

Age distribution

- 18 - 24 yrs: 14%
- 25 - 34 yrs: 19%
- 35 - 44 yrs: 20%
- 45 - 54 yrs: 17%
- 55 - 64 yrs: 16%
- 65 yrs and over: 14%

Source: Copyright 2011 Deloitte Development LLC and The Manufacturing Institute
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About The Manufacturing Institute
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