MANUFACTURING OVERVIEW
ISM Manufacturing Purchasing Managers’ Index
(August 2015 – August 2016)

Source: Institute for Supply Management
Percentage Changes in Manufacturing Output
(July 2015 – July 2016)

Source: Federal Reserve Board
Year-Over-Year Industrial Production Growth
(July 2015 – July 2016)

Source: Federal Reserve Board
Year-Over-Year Growth in Manufacturing Production by Sector
(July 2015 to July 2016)

-10.4% Apparel and leather
-3.8% Primary metals
-3.2% Printing and support
-2.5% Fabricated metal products
-1.2% Paper
-0.8% Machinery
-0.7% Aerospace and miscellaneous transportation equipment
-0.5% Furniture and related products
-0.5% Plastics and rubber products

Miscellaneous durable goods: ↑ 6.3%
Nonmetallic mineral products: ↑ 3.1%
Computer and electronic products: ↑ 3.0%
Motor vehicles and parts: ↑ 1.8%
Textile and product mills: ↑ 1.8%
Petroleum and coal products: ↑ 1.4%
Electrical equipment and appliances: 0.9%
Wood products: 0.9%
Food, beverage and tobacco products: 0.8%
Chemicals: 0.6%

ACTUAL YEAR-OVER-YEAR GROWTH
Manufacturing (NAICS): ↑ 0.4%
Durable Goods: ↑ 0.6%
Nondurable Goods: ↑ 0.2%

Source: Federal Reserve Board
NAM Manufacturers’ Outlook Survey by Quarter
(First Quarter 2015 – Third Quarter 2016)

Source: NAM Manufacturers’ Outlook Survey
Note: Percentage of respondents who characterized the current business outlook as somewhat or very positive.
Expected Growth of Manufacturing Activity
(First Quarter 2015 – Third Quarter 2016)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Sales (↑ 1.9%)</th>
<th>Exports (↑ 0.4%)</th>
<th>Capital Investments (↑ 0.8%)</th>
<th>Full-Time Employment (↑ 0.4%)</th>
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<td>Q1:2015</td>
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Source: NAM Manufacturers' Outlook Survey
Note: Expected growth rates are annual averages.
Major Contributing Factors for Those Manufacturers Not Increasing Capital Spending

- Reduced or slower demand for our products: 46.6%
- Already operating below capacity: 40.6%
- Limited need to replace existing capital goods: 38.2%
- Political uncertainty: 35.3%
- Global uncertainty: 32.9%
- Finances not allowing us to invest more at this time: 26.1%
- Other: 10.8%
- Unsure: 4.4%

Source: NAM Manufacturers' Outlook Survey
Note: Respondents were able to check all that apply. Therefore, responses exceed 100 percent.
Major Contributing Factors for Those Manufacturers Increasing Capital Spending

- Need to replace other capital goods: 49.4%
- New products and innovations in our processes: 46.0%
- Need to increase overall capacity utilization: 40.2%
- Increased demand for our products: 32.2%
- Improved financial position allowing us to invest more: 19.5%
- Other: 5.7%

Source: NAM Manufacturers’ Outlook Survey
Note: Respondents were able to check all that apply. Therefore, responses exceed 100 percent.
INTERNATIONAL ECONOMIC UPDATE, INCLUDING EXPORTS
Percentage of Total Sales Coming from Exports

- Up to 10 percent: 44.1%
- 10 to 25 percent: 23.3%
- 25 to 40 percent: 9.7%
- 40 to 50 percent: 3.0%
- More than half of our total sales come from exports: 3.3%
- Our firm does not export products: 13.6%
- Unknown: 3.0%

Source: NAM Manufacturers’ Outlook Survey
Markit Purchasing Managers’ Indices for the Top 15 Export Markets for U.S. Manufactured Goods
(August 2016)

Emerging Markets Manufacturing PMI: 50.1
Eurozone Manufacturing PMI: 51.7
Global Manufacturing PMI: 50.8
U.S. Manufacturing PMI (Markit): 52.0

Source: Markit

(Currency Units per U.S. Dollar, 1973=100)

Source: Federal Reserve Board
Monthly Changes in Employment
(August 2015–August 2016, in Thousands of Employees)

Nonfarm Payrolls

Manufacturing

Source: Bureau of Labor Statistics

source: Bureau of Labor Statistics
Manufacturing Sectors with the Largest Net Employment Gains
(July 2015 to July 2016, in thousands of employees)

- Food manufacturing: 44.6
- Miscellaneous nondurable goods manufacturing: 13.1
- Chemicals: 9.2
- Furniture and related products: 5.9
- Plastics and rubber products: 4.3
- Transportation equipment: 3.9
- Wood products: 3.2
- Miscellaneous durable goods manufacturing: 2.8
- Nonmetallic mineral products: 1.3

Source: Bureau of Labor Statistics
Manufacturing Job Openings, Hires and Separations

(July 2015–July 2016, in thousands of workers)

Source: Bureau of Labor Statistics
Real Gross Domestic Product
(Chained 2009 Dollars)

Real GDP Forecast:
↑ 2.6% (2015)
↑ 1.9% (2016)
↑ 2.0% (2017)

Source: Bureau of Economic Analysis, NAM calculations using Moody’s Analytics simulation model
Predicted Manufacturing Production Based on the NAM Manufacturers’ Outlook Survey

Source: NAM Manufacturers’ Outlook Survey
QUESTIONS?

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