

# The Manufacturing Economic Update

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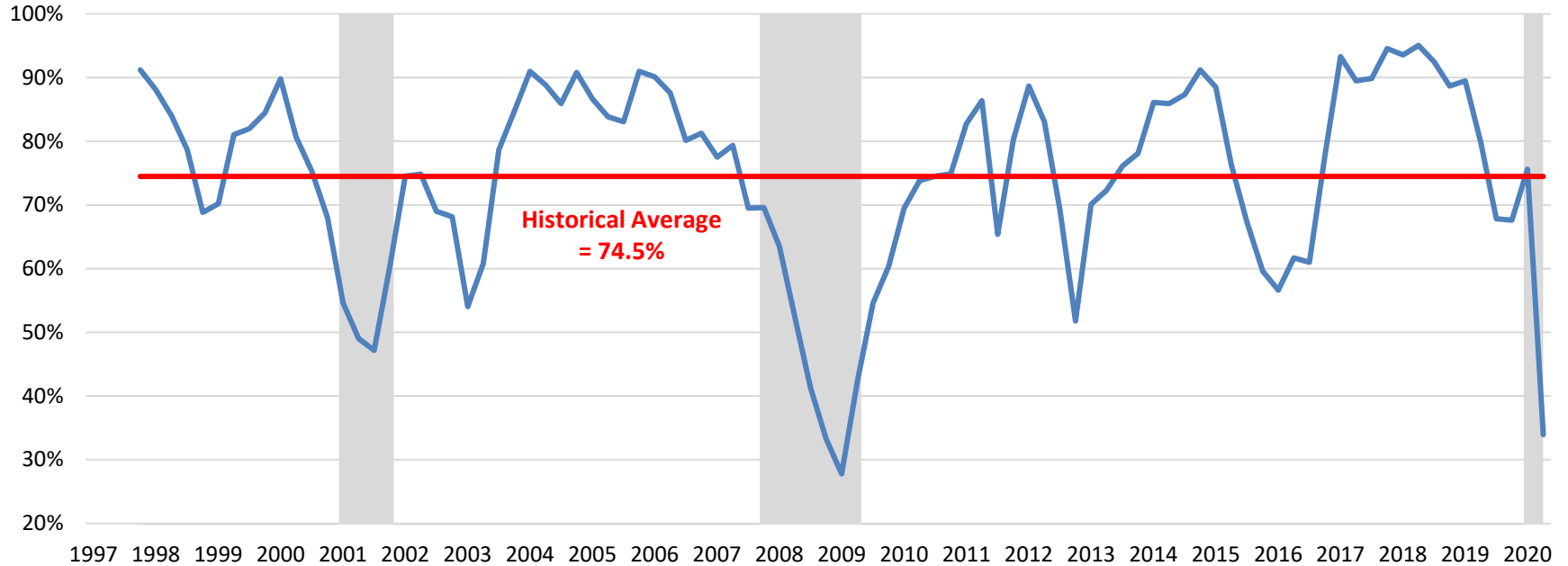
@chadmoutray



Updated July 17, 2020

# NAM Manufacturers' Outlook Survey by Quarter, 1997-2020

(Recessions Are Highlighted with Gray Shading)

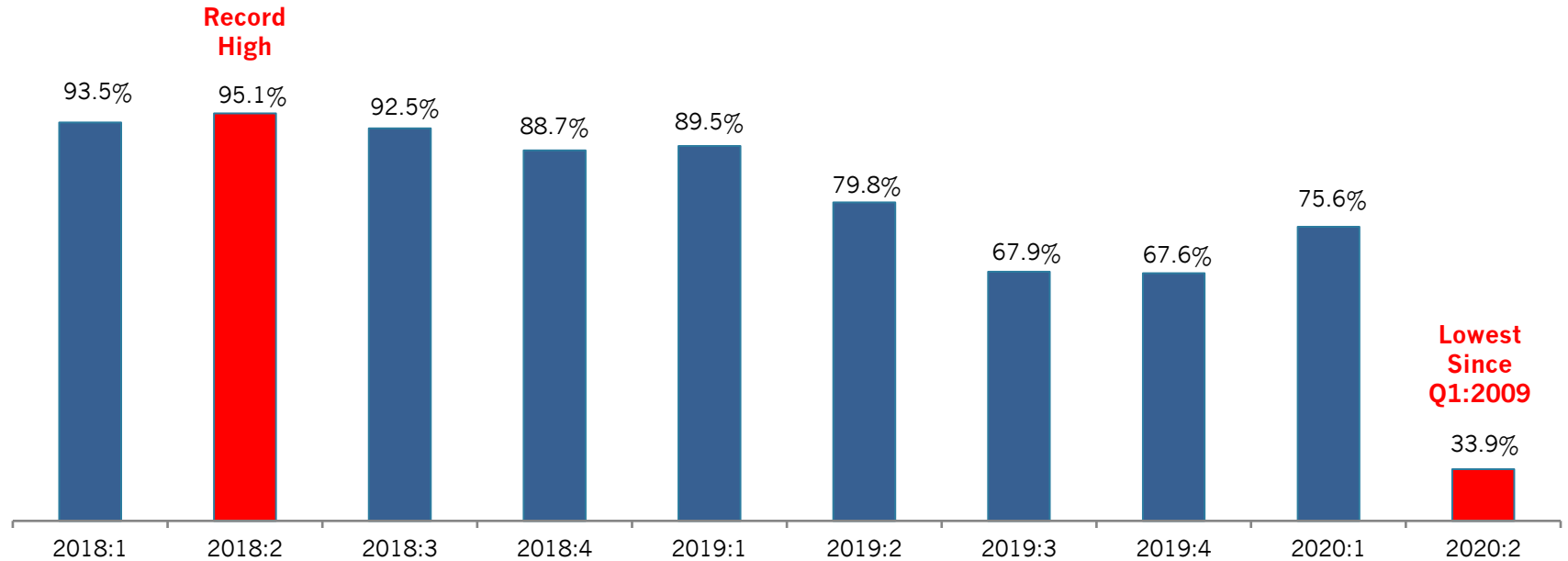


*Note: Percentage of respondents who characterized the current business outlook as somewhat or very positive. The National Bureau of Economic Research has not officially dated the latest recession, which likely began in either February or March.*



# NAM Manufacturers' Outlook Survey by Quarter

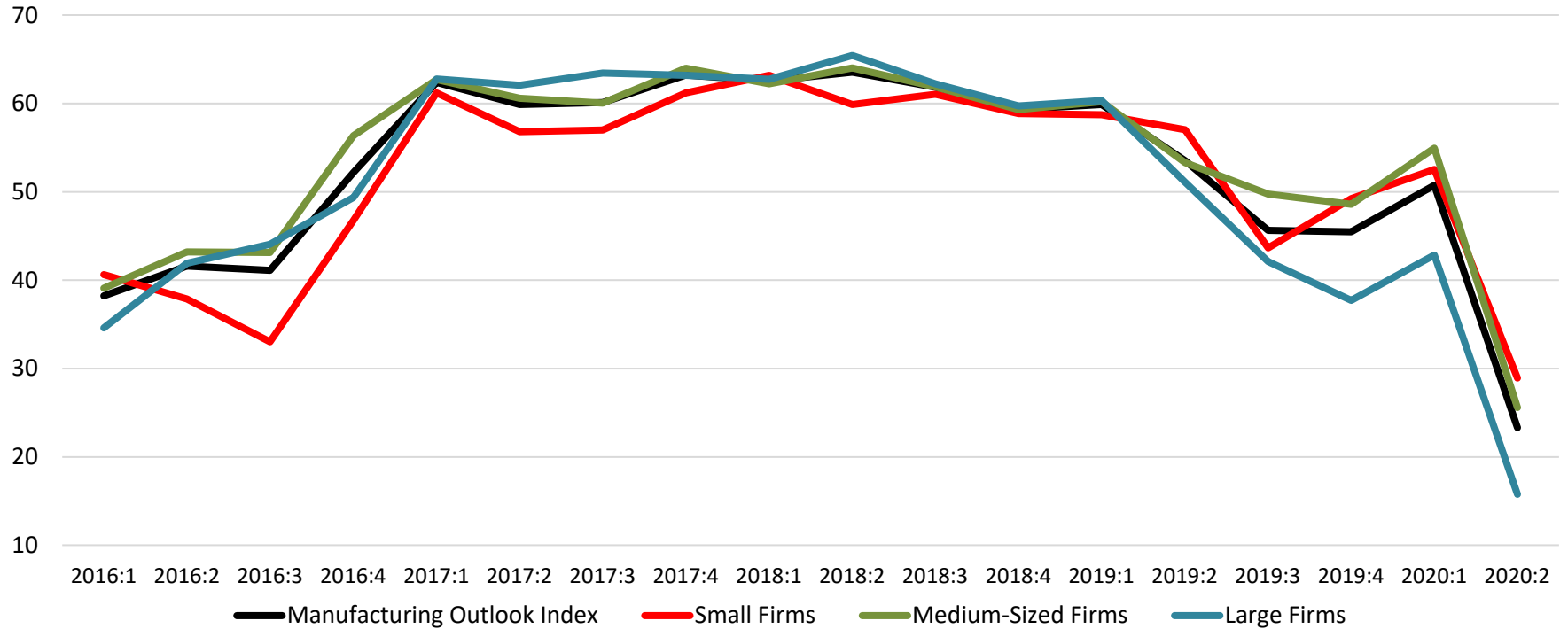
(First Quarter 2018 – Second Quarter 2020)



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



# NAM Manufacturing Outlook Index, 2016–2020



# NAM Manufacturers' Outlook Survey Primary Business Challenges

(Second Quarter 2020)

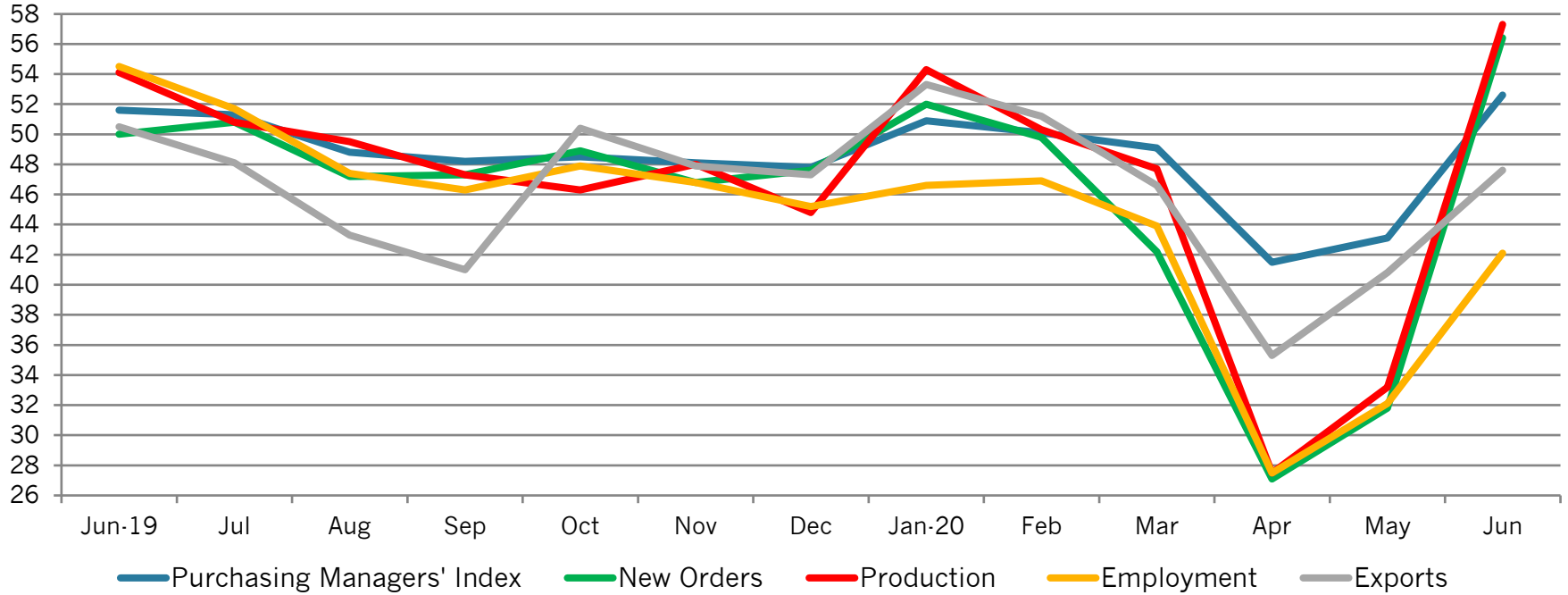


*Note: Respondents were able to check all that apply. Therefore, responses exceed 100 percent.*



# ISM<sup>®</sup> Manufacturing Purchasing Managers' Index<sup>®</sup>

(June 2019 – June 2020)

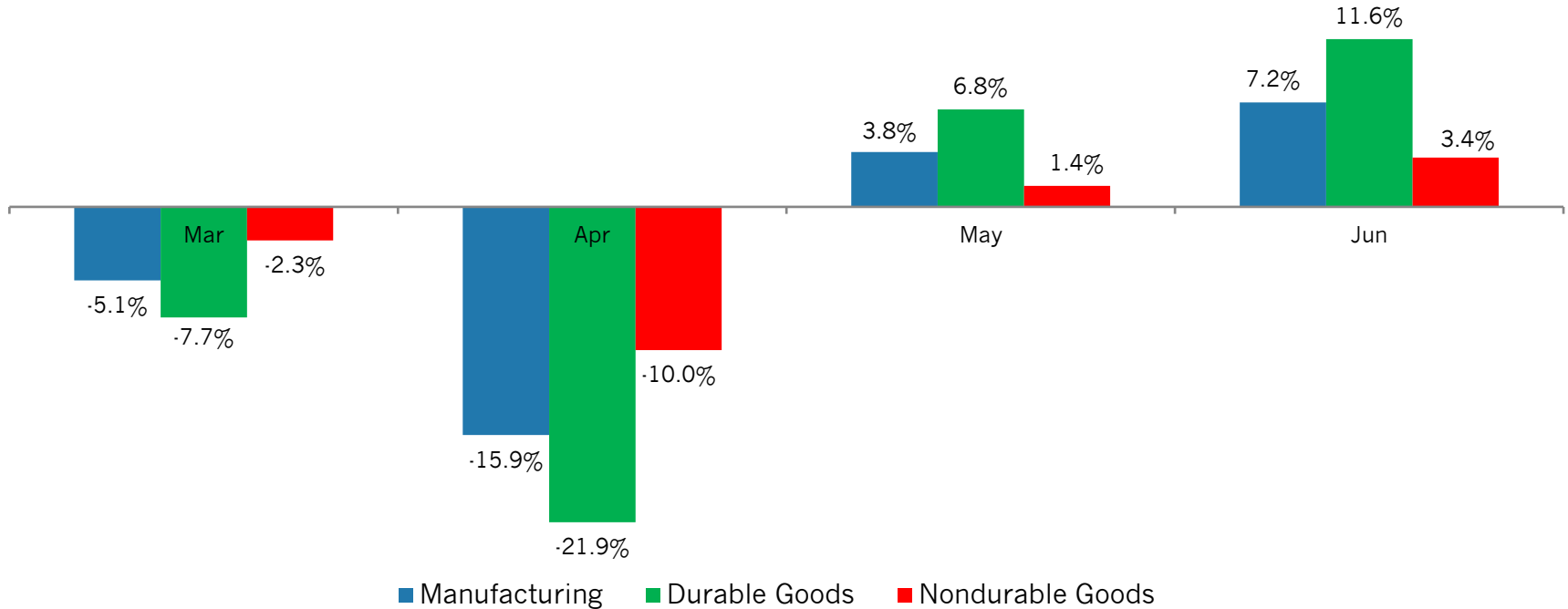


Source: Institute for Supply Management



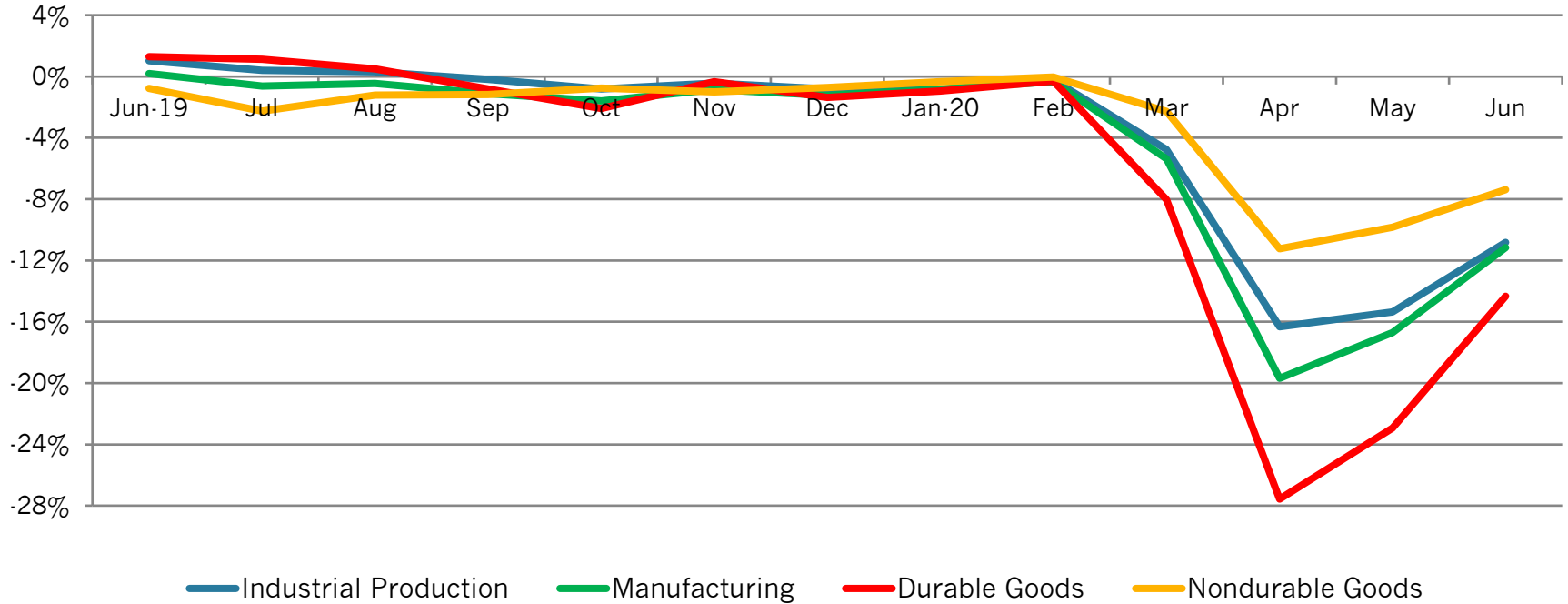
# Monthly Percentage Changes in Manufacturing Production

(March – June 2020)



# Year-Over-Year Industrial Production Growth

(June 2019 – June 2020)



Source: Federal Reserve Board



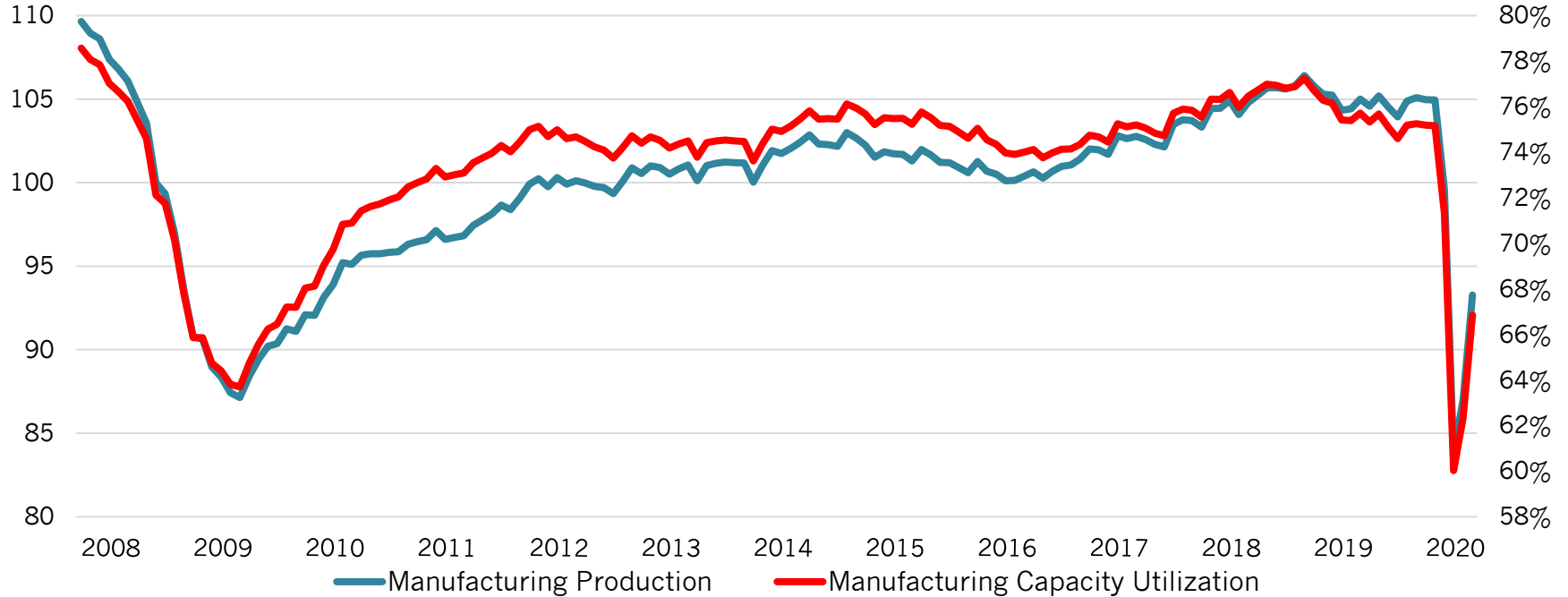


Manufacturing  
Production (SIC)  
(2012=100)

# Manufacturing Production and Capacity Utilization

(January 2008 to June 2020)

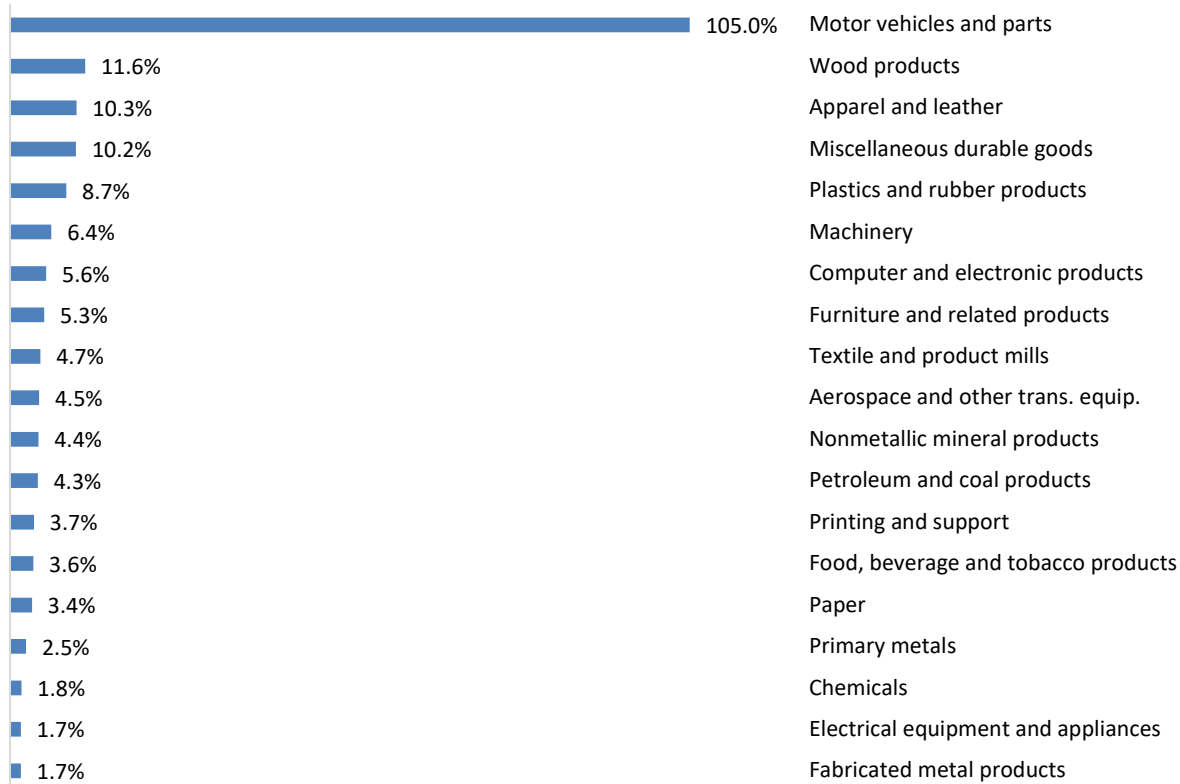
Manufacturing  
Capacity  
Utilization (SIC)



Source: Federal Reserve Board



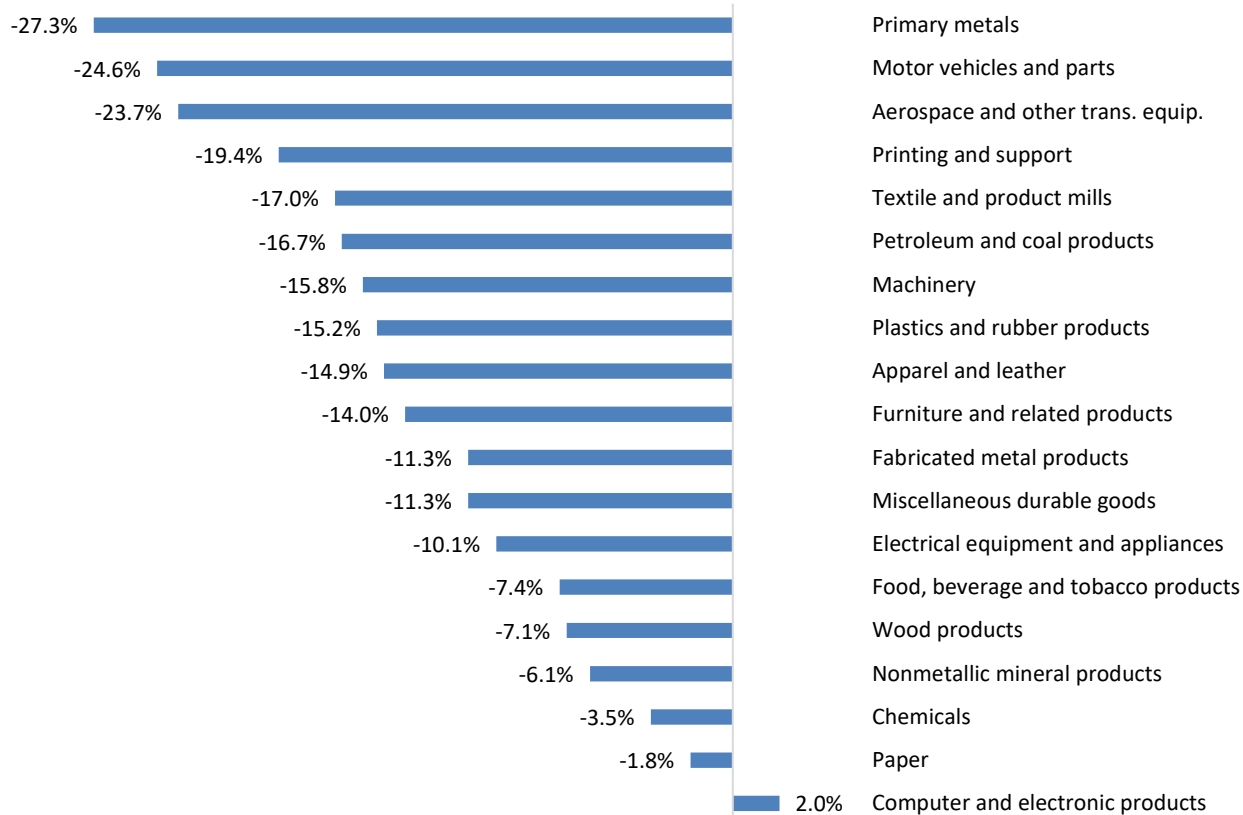
## Monthly Percentage Change in Manufacturing Production by Major Sector, June 2020



Source: Federal Reserve Board



## Year-Over-Year Percentage Change in Manufacturing Production by Major Sector, June 2020

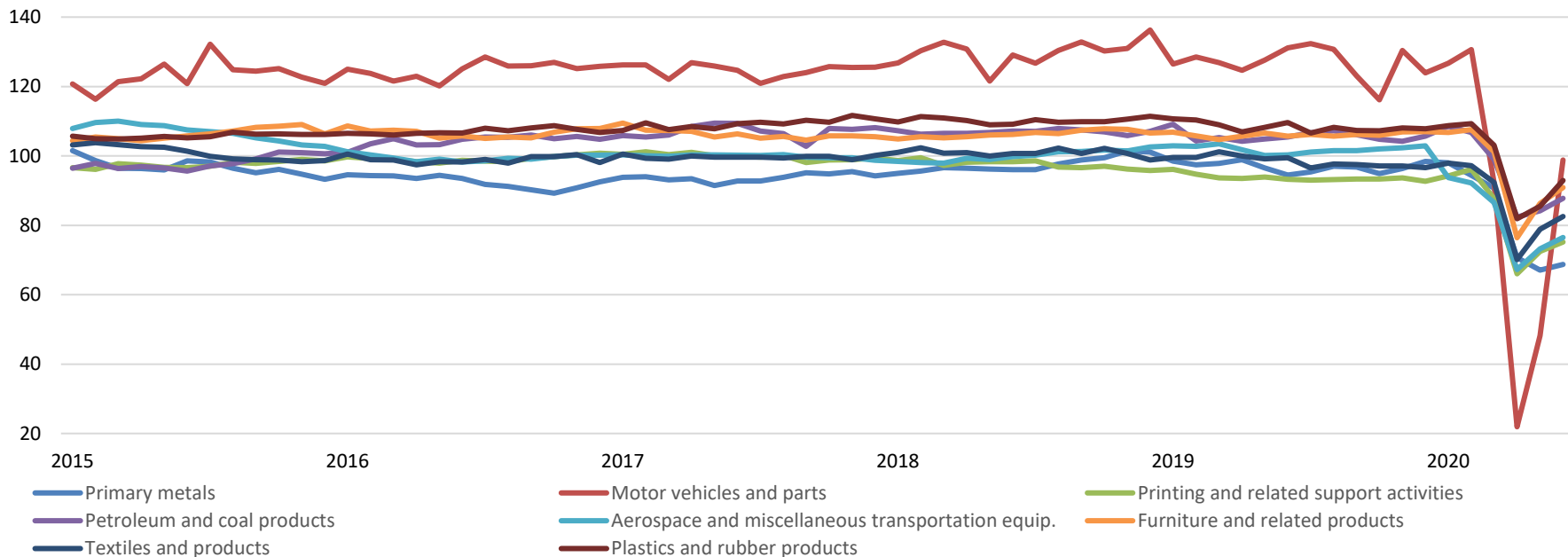


Source: Federal Reserve Board



# Hardest-Hit Manufacturing Sectors by COVID-19:

Manufacturing Production for Select Industries Since 2015 (2012=100), Seasonally Adjusted



Source: Federal Reserve Board

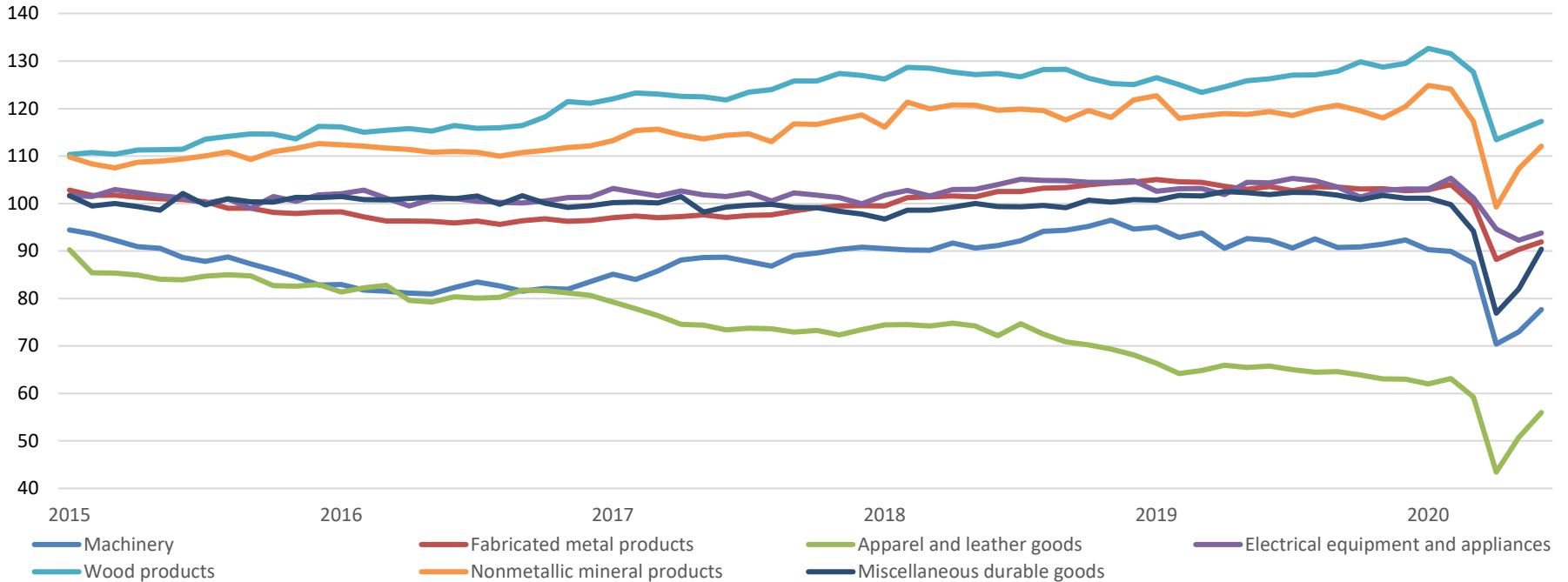
## Percentage Changes in Manufacturing Production, February to June 2020

- Primary metals, -27.2%
- Motor vehicles and parts, -24.4%
- Printing and related support activities, -21.8%
- Petroleum and coal products, -17.8%
- Aerospace and miscellaneous transportation equip., -17.0%
- Furniture and related products, -15.5%
- Textiles and products, -15.0%
- Plastics and rubber products, -15.0%



# Moderately-Hit Manufacturing Sectors by COVID-19:

Manufacturing Production for Select Industries Since 2015 (2012=100), Seasonally Adjusted



Source: Federal Reserve Board

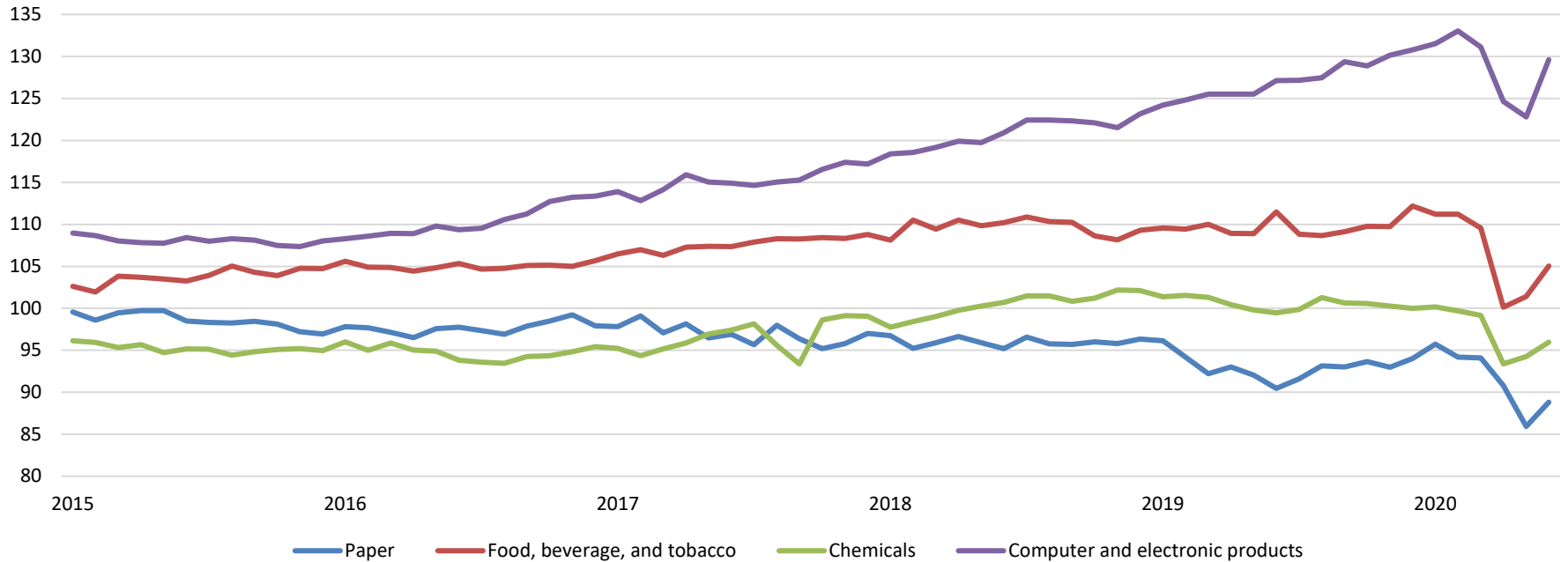
## Percentage Changes in Manufacturing Production, February to June 2020

- Machinery, -13.6%
- Fabricated metal products, -11.6%
- Apparel and leather goods, -11.4%
- Electrical equipment and appliances, -11.0%
- Wood products, -10.8%
- Nonmetallic mineral products, -9.8%
- Miscellaneous durable goods, -9.4%



# Least-Hit Manufacturing Sectors by COVID-19:

Manufacturing Production for Select Industries Since 2015 (2012=100), Seasonally Adjusted



Source: Federal Reserve Board

## Percentage Changes in Manufacturing Production, February to June 2020

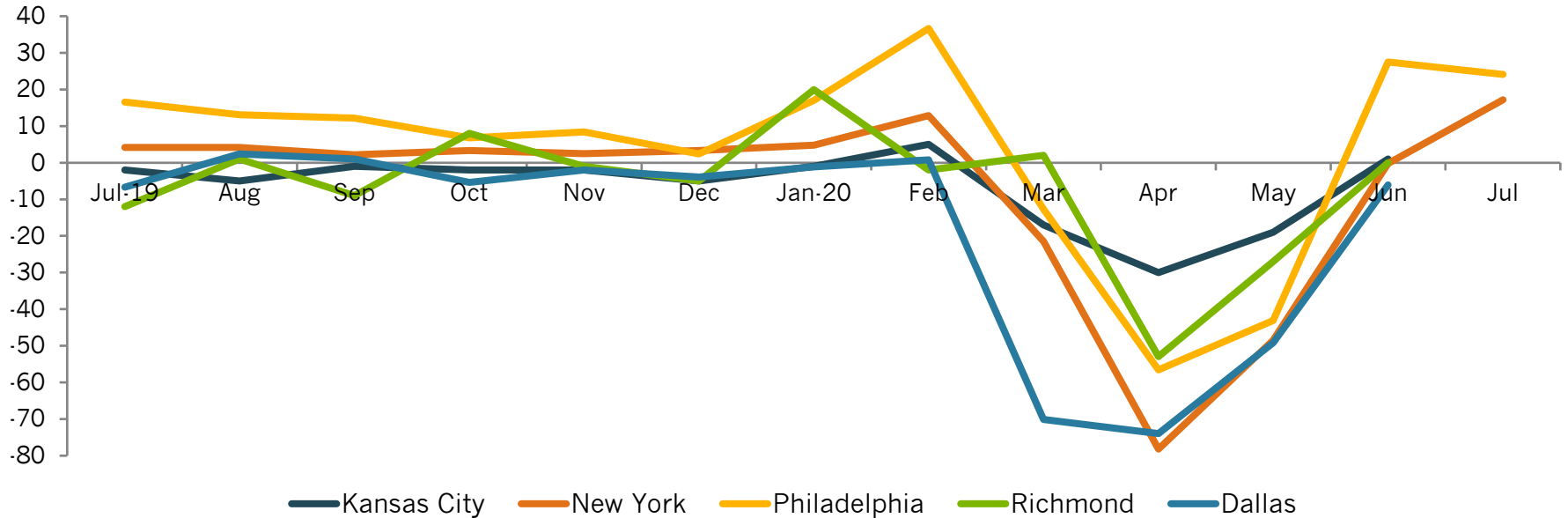
Paper, -5.7%  
Food, beverage, and tobacco, -5.5%  
Chemicals, -3.7%  
Computer and electronic products, -2.6%



# Regional Federal Reserve Bank Manufacturing and Business Surveys

(July 2019 – July 2020)

Index  
(Growth >0)

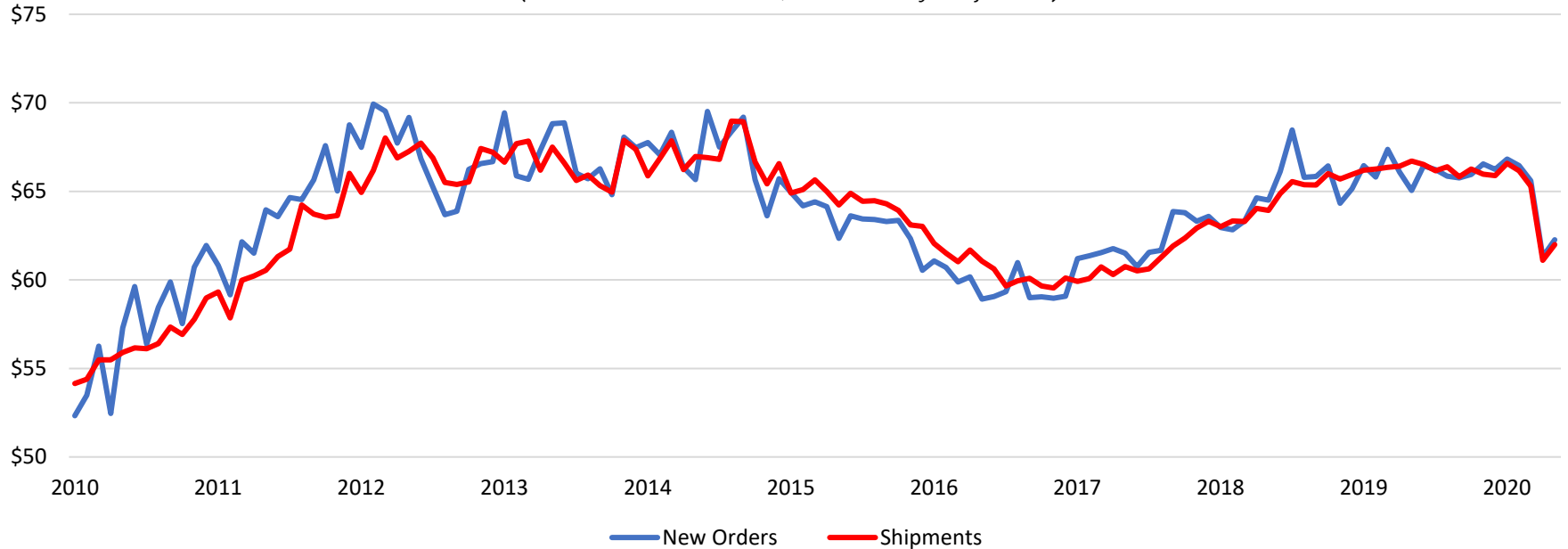


Source: Regional Federal Reserve Banks



# Core Capital Goods New Orders and Shipments, 2010–2020

(in Billions of Dollars, Seasonally Adjusted)



**Note:** "Core capital goods" are nondefense capital goods excluding aircraft.



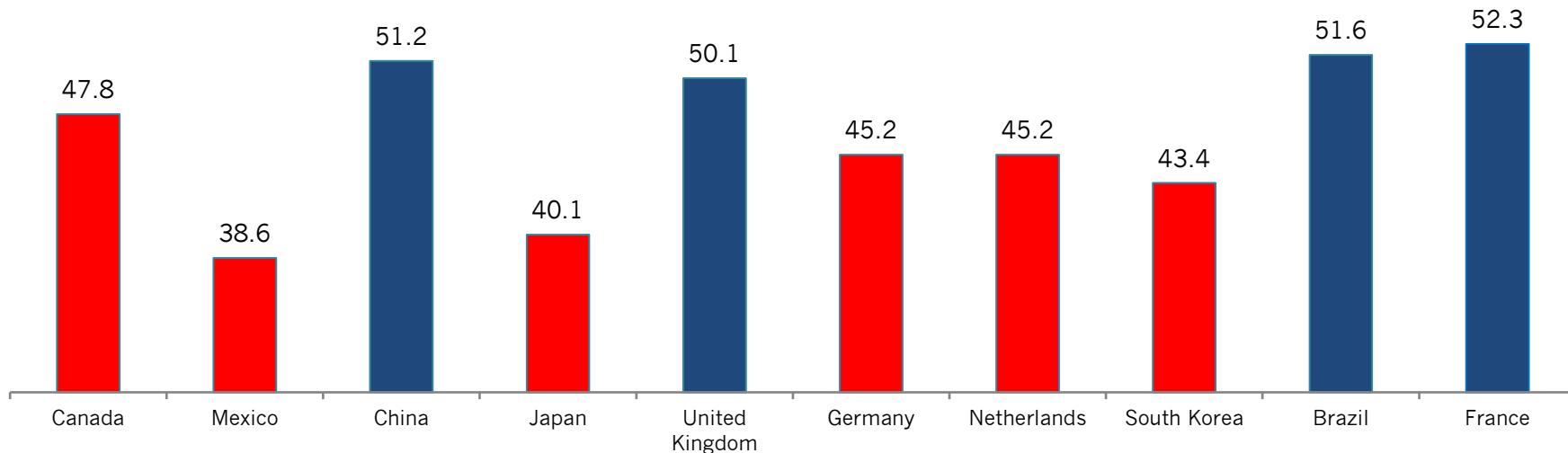
Source: U.S. Census Bureau





# IHS Markit Purchasing Managers' Indices® for the Top 10 Export Markets for U.S. Manufactured Goods

(June 2020)



**Emerging Markets Manufacturing PMI: 49.6**  
**Eurozone Manufacturing PMI: 47.4**  
**Global Manufacturing PMI: 47.8**  
**U.S. Manufacturing PMI (Markit): 49.8**

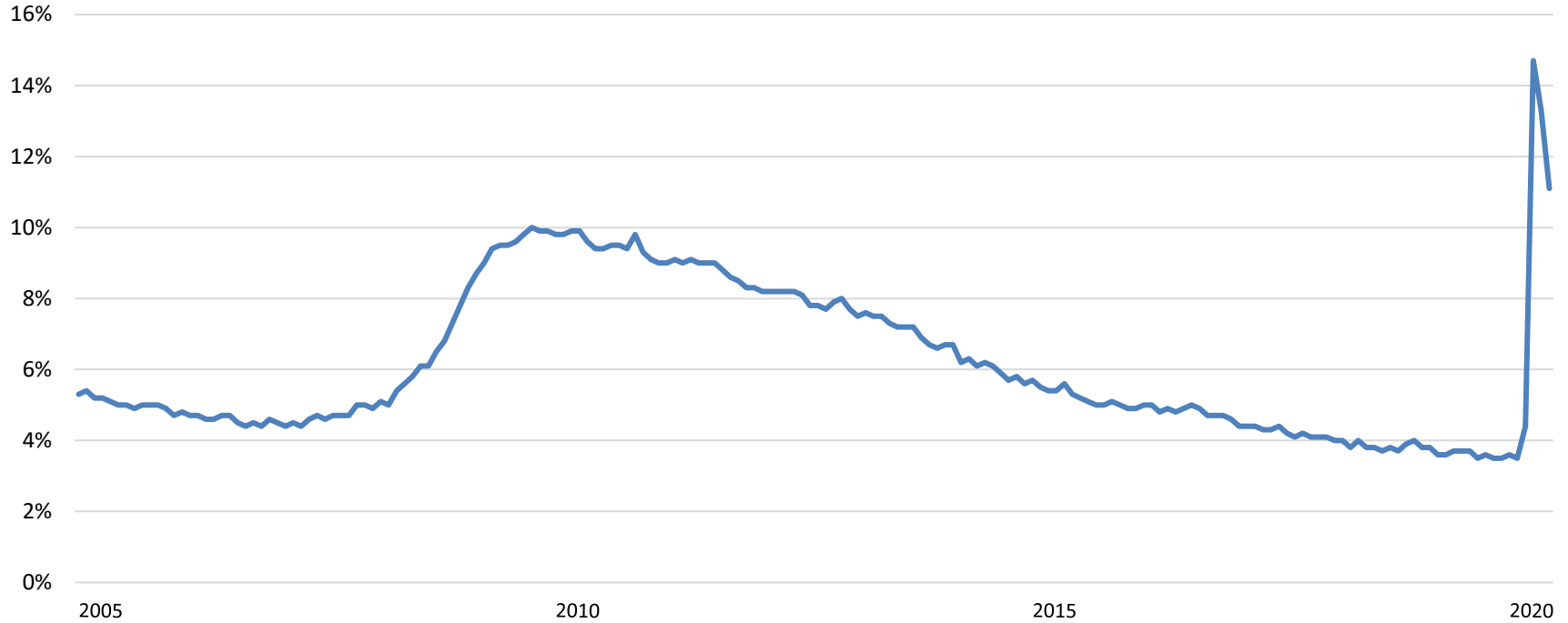
**MANUFACTURERS**  
**MAKE**  
**AMERICA**

Source: IHS Markit

Note: Top 10 Export Markets Based on 2019 Data from the U.S. Commerce Department



# Monthly Unemployment Rate, 2005–2019

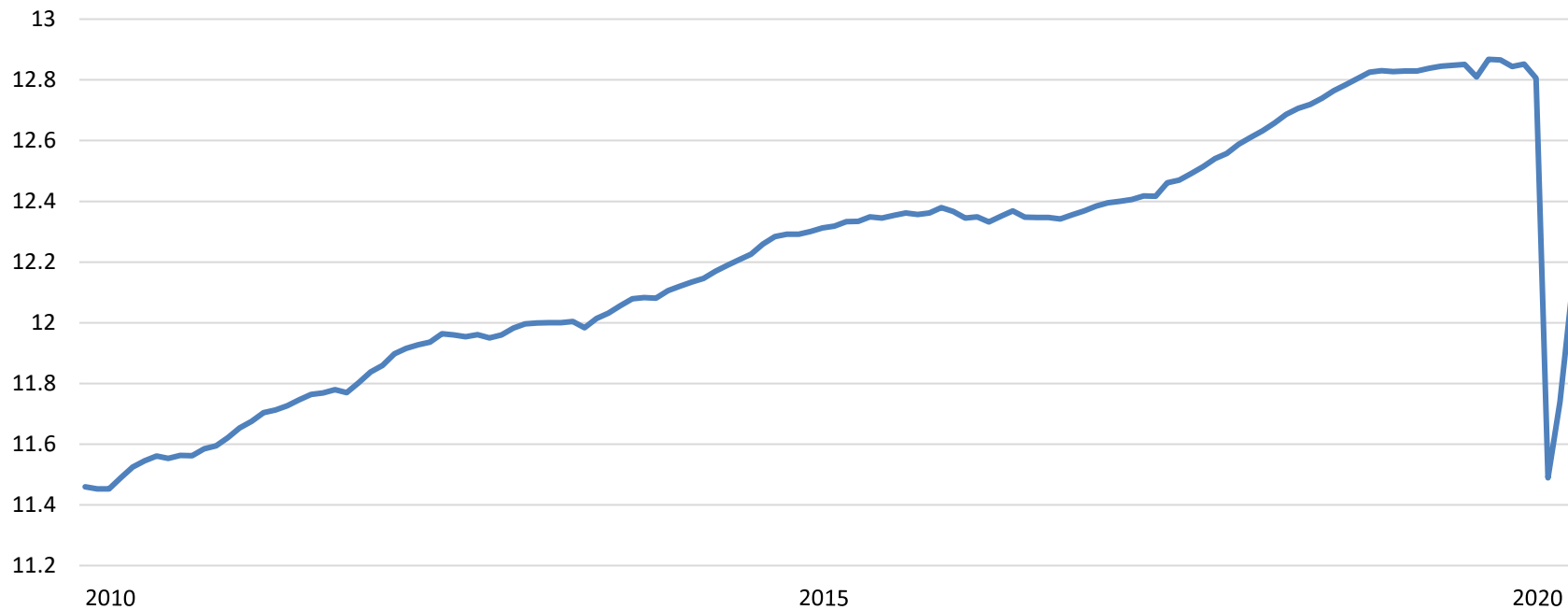


Source: Bureau of Labor Statistics



# Monthly Employment in Manufacturing, 2010–2020

(in Millions of Workers)

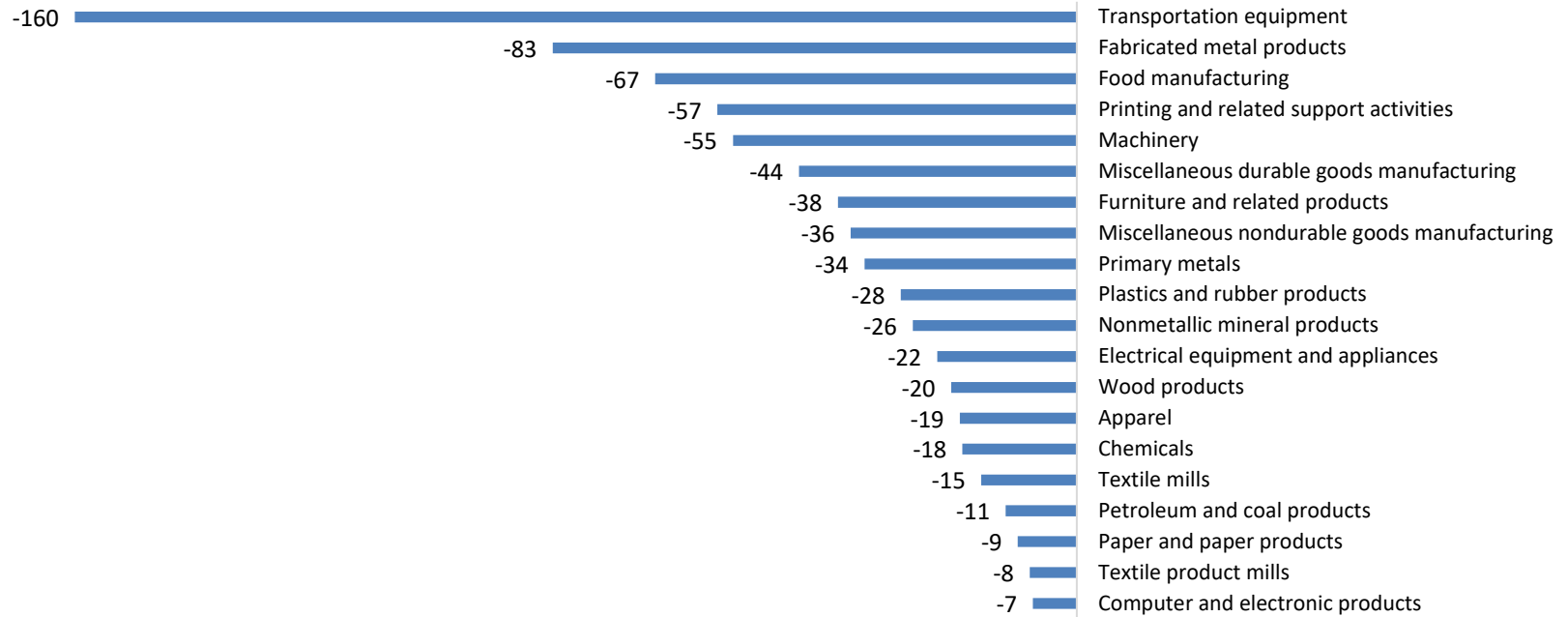


Source: Bureau of Labor Statistics



# Declines in Manufacturing Employment by Sector Since February

(in Thousands of Workers, February to June 2020)

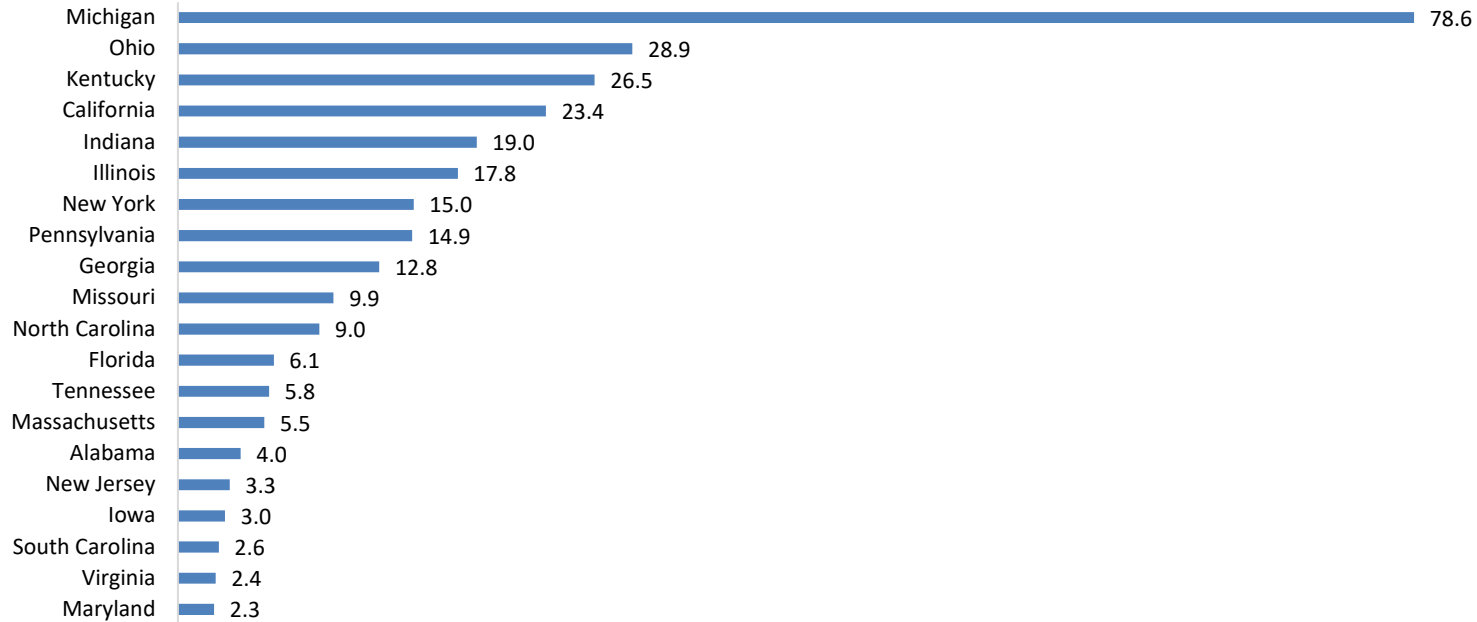


Source: Bureau of Labor Statistics

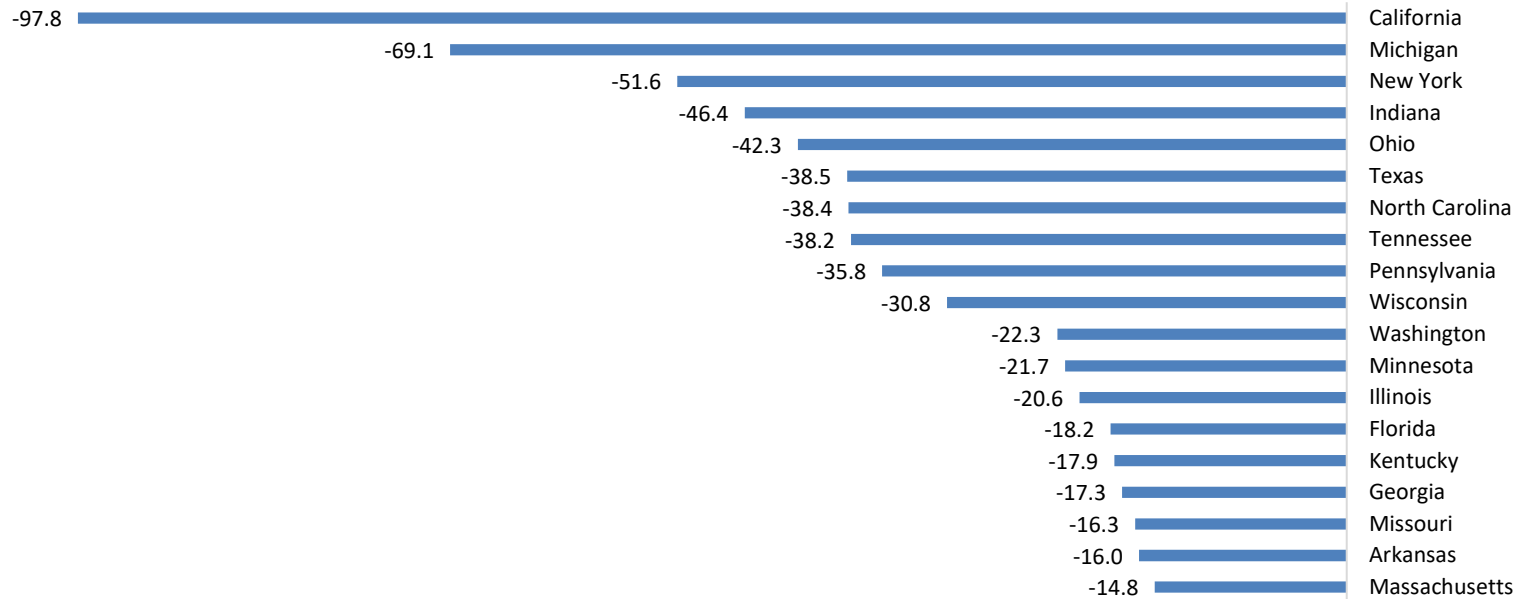


# Top 20 States with Increased Manufacturing Employment, June 2020

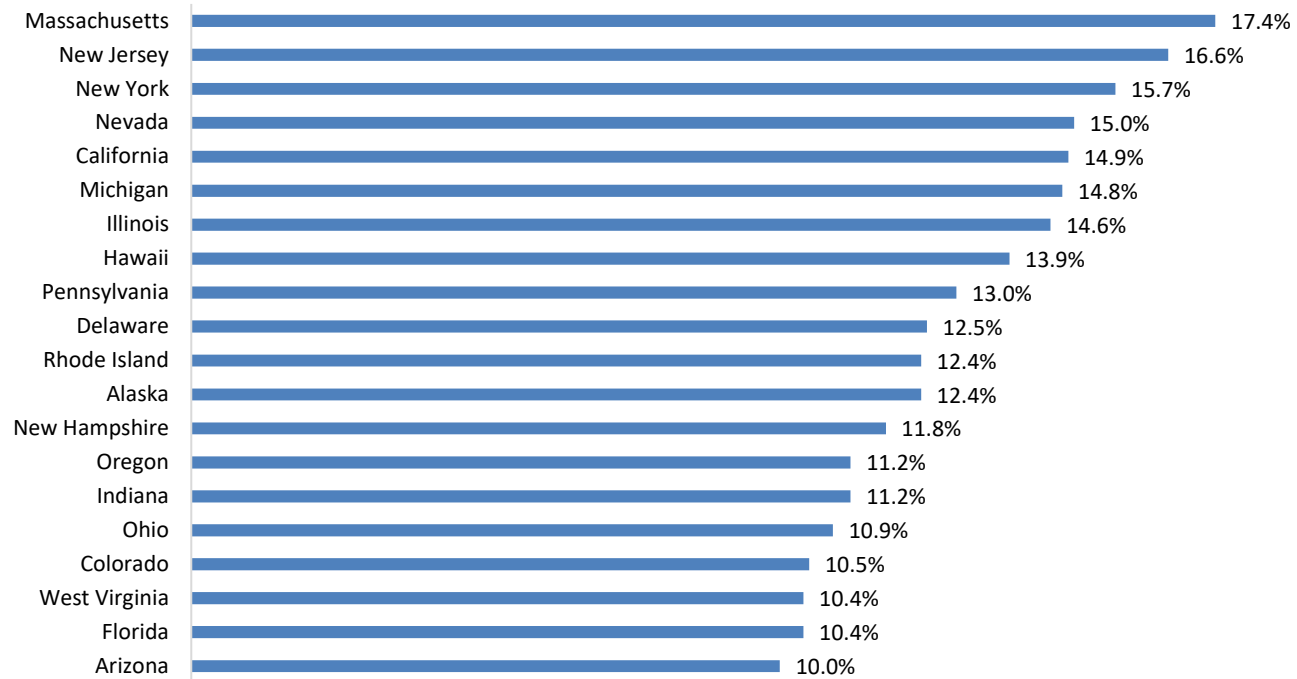
*(in Thousands of Employees)*



## Largest Statewide Declines in Manufacturing Employment Since February *(in Thousands of Workers, February to June 2020)*

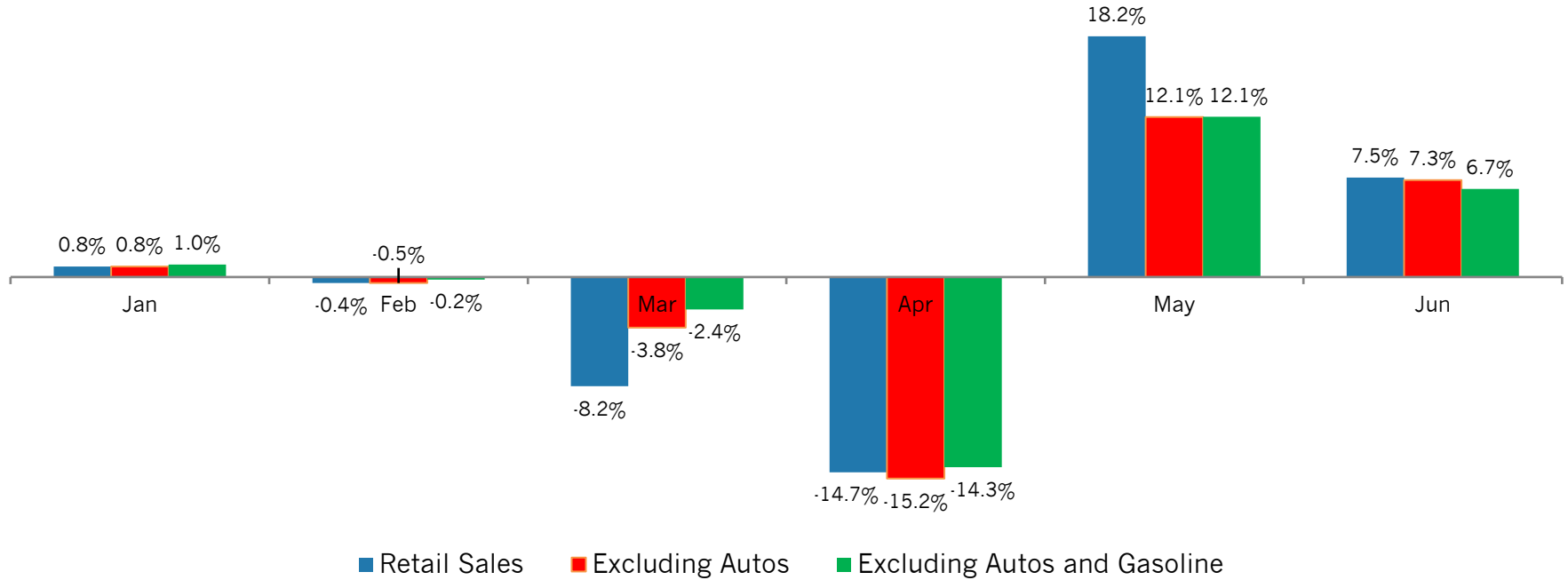


# States with the Highest Unemployment Rates, June 2020



# Percentage Changes for Retail Spending by Month

(January – June 2020)



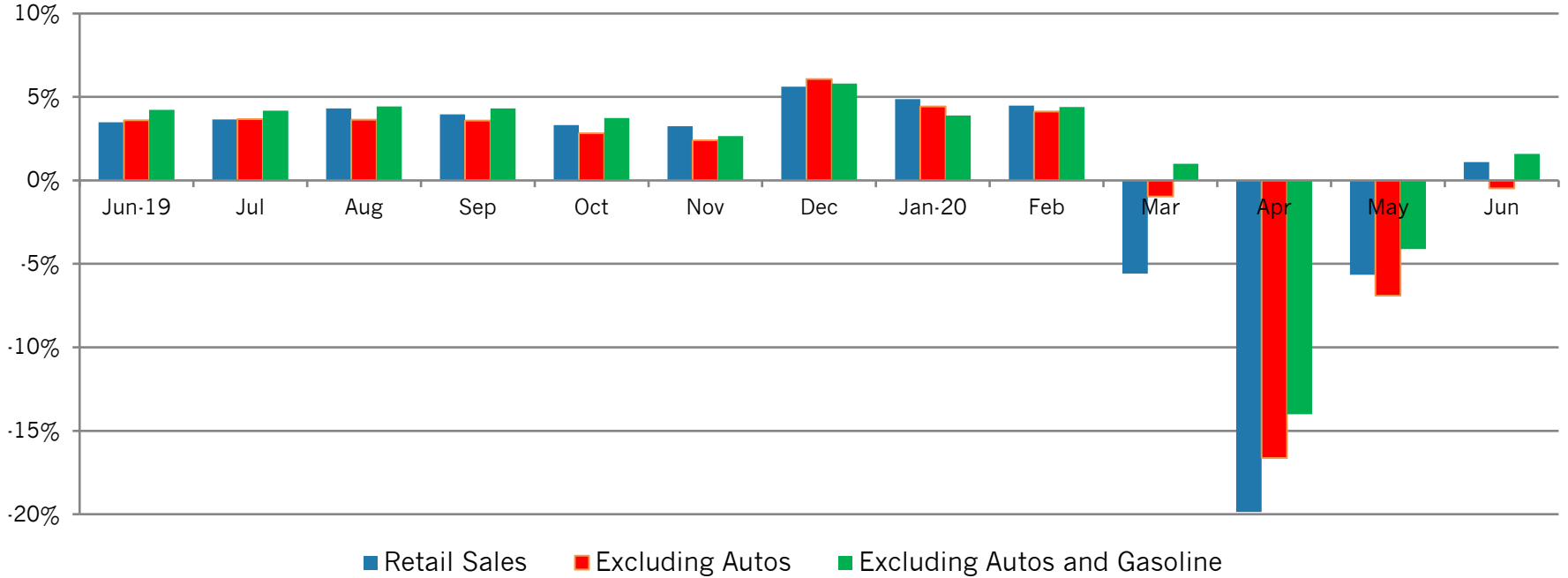
Source: Census Bureau





# Year-Over-Year Growth in Retail Sales

(June 2019 – June 2020)

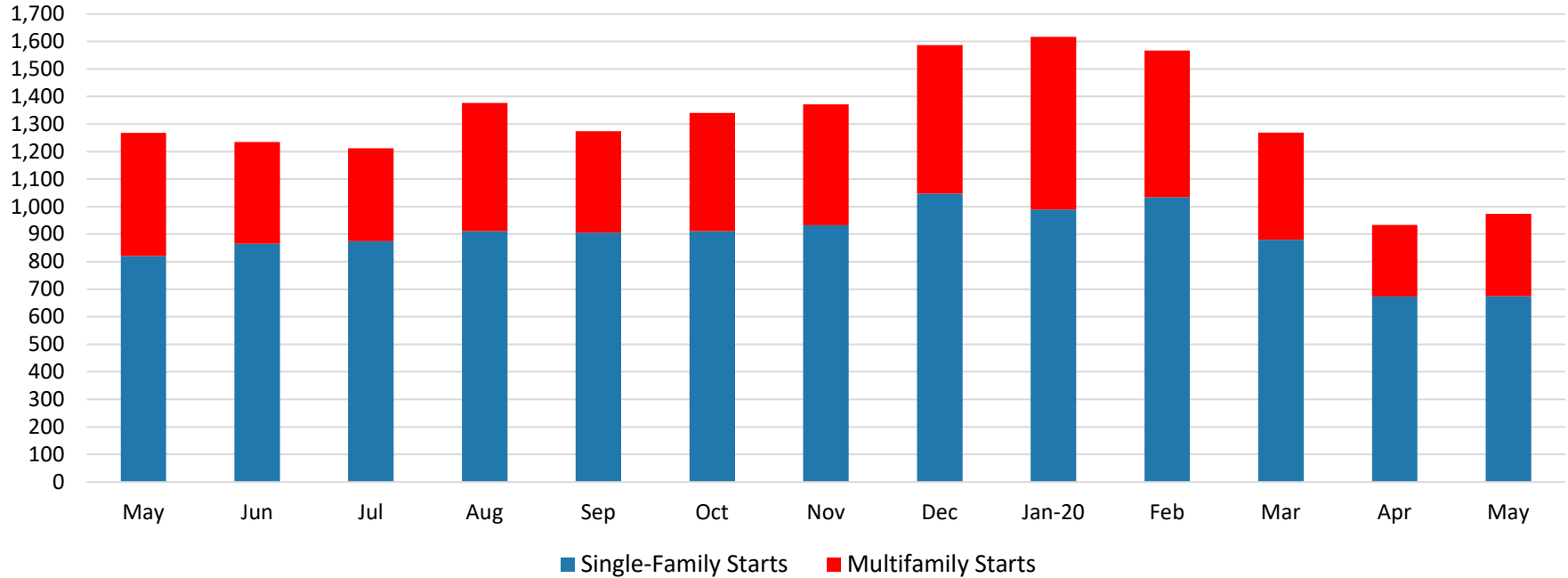


Source: Census Bureau



# Housing Starts, May 2019 – May 2020

(Seasonally Adjusted, at the Annual Rate, in Thousands of Units)

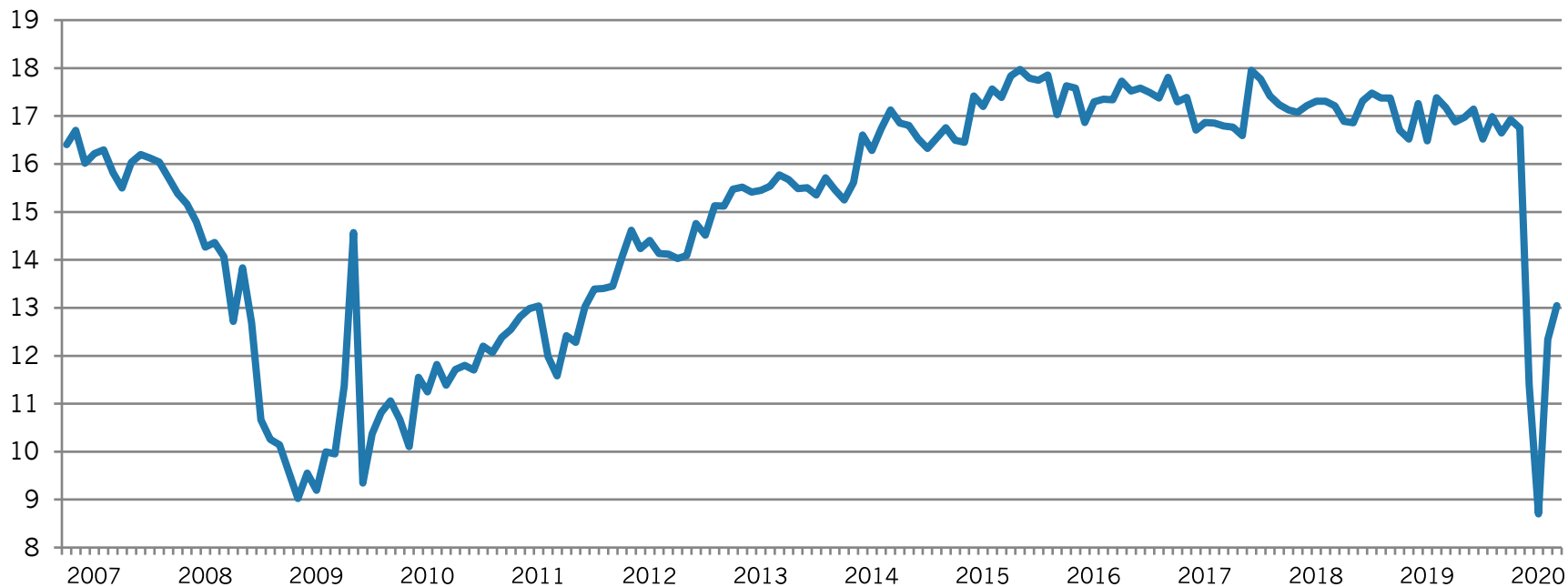


Source: U.S. Census Bureau



# Auto and Light Truck Vehicle Sales, 2007–2020

(in Millions of Units)

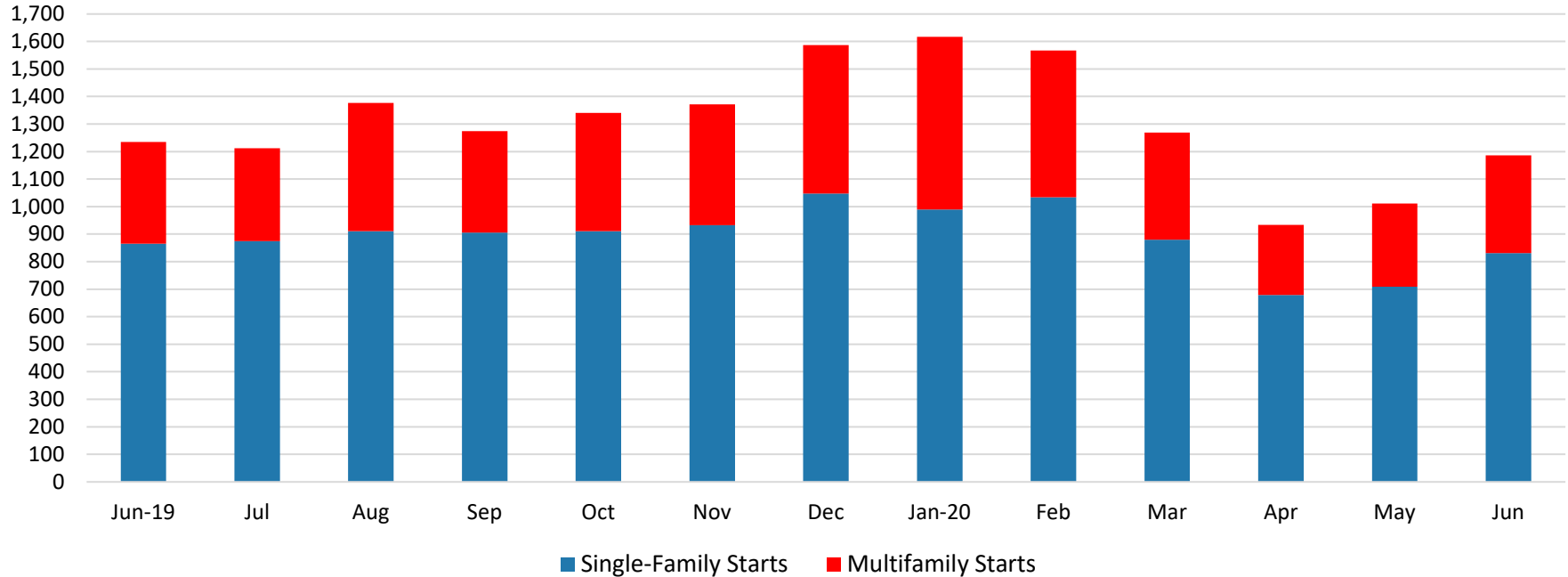


Source: Bureau of Economic Analysis



# Housing Starts, June 2019 – June 2020

(Seasonally Adjusted, at the Annual Rate, in Thousands of Units)



Source: U.S. Census Bureau



# Manufacturing Construction Spending, 2008–2020

(Value of Private Construction Put in Place, in Billions of Dollars)



Source: U.S. Census Bureau



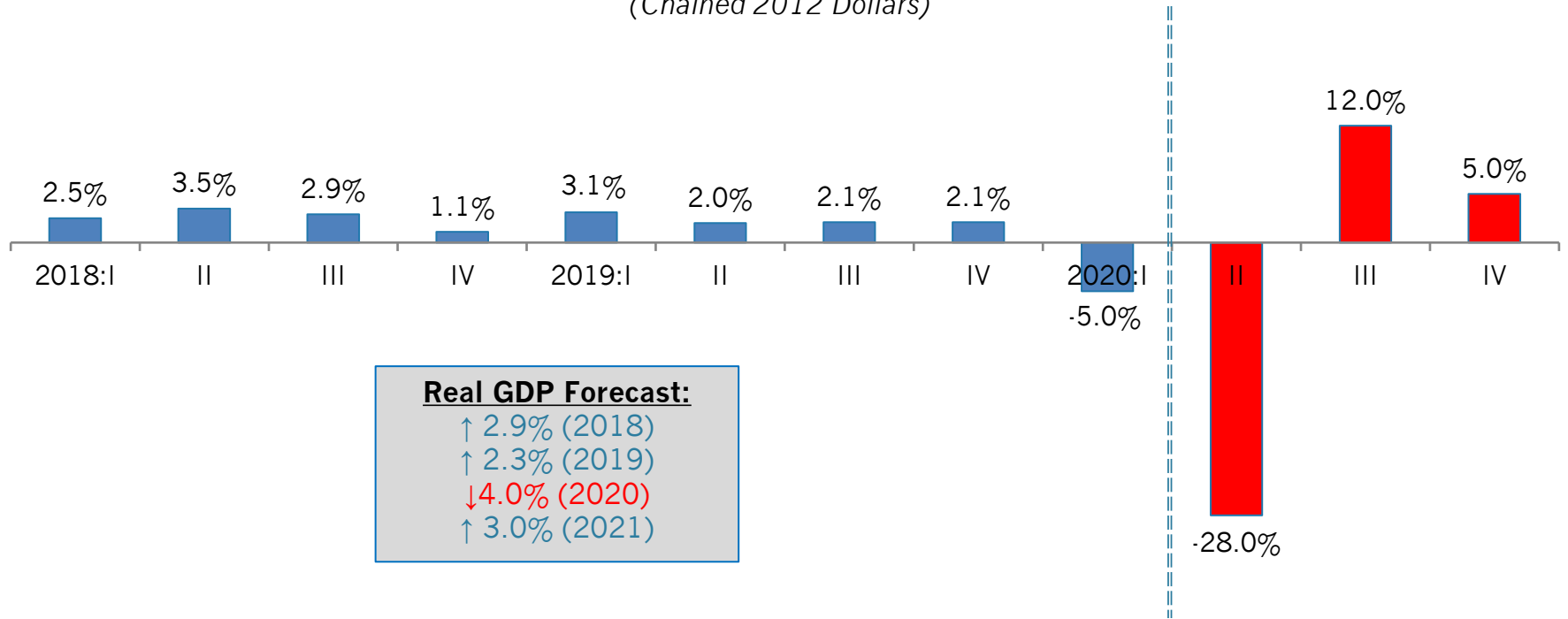
# Economic Outlook

MANUFACTURERS  
**MAKE**  
AMERICA



# Real Gross Domestic Product

(Chained 2012 Dollars)



**Real GDP Forecast:**  
↑ 2.9% (2018)  
↑ 2.3% (2019)  
↓ 4.0% (2020)  
↑ 3.0% (2021)

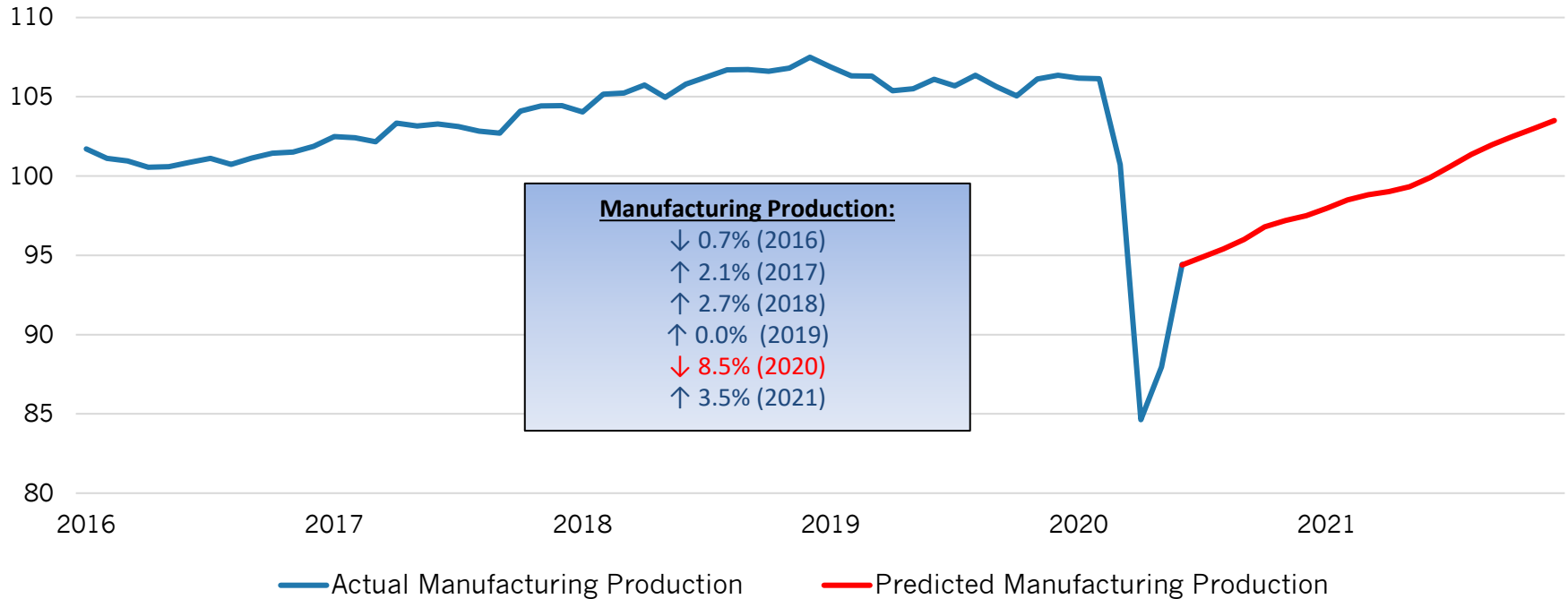


Source: Bureau of Economic Analysis, NAM calculations using Moody's Analytics simulation model



# Actual and Predicted Manufacturing Production Growth

(NAICS, 2012=100)



Source: Federal Reserve Board, NAM calculations using Moody's Analytics simulation model





|                                     | 2020   | 2021  |
|-------------------------------------|--------|-------|
| <b>MANUFACTURING PRODUCTION</b>     | -8.6%  | 3.8%  |
| Aerospace and other trans. equip.   | -13.1% | 2.7%  |
| Apparel and leather                 | -15.1% | -2.4% |
| Beverages                           | -3.5%  | 4.0%  |
| Chemicals                           | -4.0%  | 3.6%  |
| Computer and electronic products    | -6.8%  | 1.2%  |
| Electrical equipment and appliances | -8.3%  | 1.1%  |
| Fabricated metal products           | -11.2% | 5.6%  |
| Food                                | -1.7%  | 3.3%  |
| Furniture and related products      | -10.8% | 1.5%  |
| Machinery                           | -12.8% | 3.8%  |
| Miscellaneous manufacturing         | -11.0% | 2.5%  |
| Motor vehicles and parts            | -20.2% | 13.0% |
| Nonmetallic mineral products        | -6.3%  | 3.9%  |
| Paper                               | -3.1%  | -1.4% |
| Petroleum and coal products         | -3.4%  | 1.9%  |
| Plastics and rubber products        | -5.4%  | 3.8%  |
| Primary metals                      | -10.8% | 4.6%  |
| Printing and support                | -7.4%  | 1.0%  |
| Textile and product mills           | -8.0%  | 1.0%  |
| Wood products                       | -6.5%  | 3.1%  |
|                                     |        |       |
| <b>DURABLE GOODS PRODUCTION</b>     | -12.5% | 4.4%  |
| <b>NONDURABLE GOODS PRODUCTION</b>  | -3.5%  | 2.9%  |
| <b>MINING PRODUCTION</b>            | -0.4%  | 1.1%  |
| <b>UTILITIES PRODUCTION</b>         | -6.6%  | 0.7%  |



Source: Moody's Analytics Economic Model, July 2020 Baseline



| Recession Dates   |  |  |  |   |  |
|---|--|--|--|---|--|
|   | January to June 1980, and July 1981 to November 1982 | July 1990 to March 1991                    | March to November 2001                       | December 2007 to June 2009                          | February 2020 to TBD   |
| Gross Domestic Product<br><i>(largest quarterly decline during the recession period)</i>                              | -8% in the first quarter of 1980                     | -3.6% in the fourth quarter of 1990        | -1.7% in the third quarter of 2001           | -8.4% in the fourth quarter of 2008                 | Down 28% in the second quarter of 2020; for 2020 as a whole, down 4%   |
| Unemployment Rate<br><i>(peak unemployment rate during or right after the recession period)</i>                       | 10.8% on November and December 1983                  | 7.8% on June 1992                          | 6.3% on June 2003                            | 10% on October 2009                                 | 14.7% in April before starting to pull back to roughly 9% by the fall; 11.1% in June   |
| Manufacturing Employment<br><i>(total lost employment during or right after the recession period, peak to trough)</i> | 2.1 million workers between June 1981 and Dec. 1982  | 1.3 million between Mar. 1989 to July 1993 | 2.95 million between Sept. 2000 to Jan. 2004 | 2.3 million workers between Dec. 2007 and Feb. 2010 | 1.3 million workers lost between Feb. and April before rebounding; currently down around 750,000 or down 400,000 by year's end |
| Manufacturing Production<br><i>(total percentage of lost output in the sector, peak to trough)</i>                    | -9.1% between May 1981 to Nov. 1982                  | -2% between Aug. 1990 to Jan. 1992         | -6.1% between July 2000 to Oct. 2001         | -20.8% between Dec. 2007 to June 2009               | Down 20% between Feb. and April before rebounding; output down 8% in 2020 overall relative to last year                        |
| Manufacturing Value-Added Output<br><i>(total percentage change, peak to trough)</i>                                  |  |  |  | -11% between Q4:2006 to Q4:2009                     |  |



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, NAM Estimates Based on the Moody's Analytics Economic Model



# Questions?

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