

The Manufacturing Economic Update

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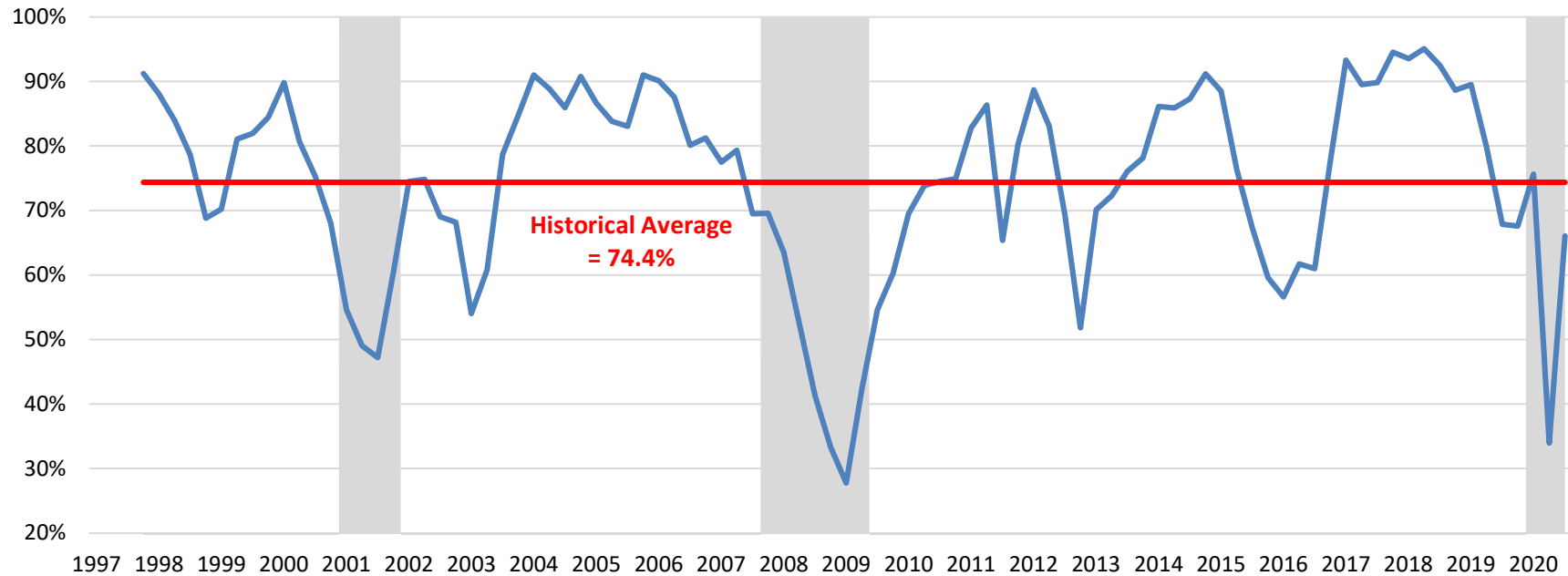
@chadmoutray



Updated September 11, 2020

NAM Manufacturers' Outlook Survey by Quarter, 1997-2020

(Recessions Are Highlighted with Gray Shading)

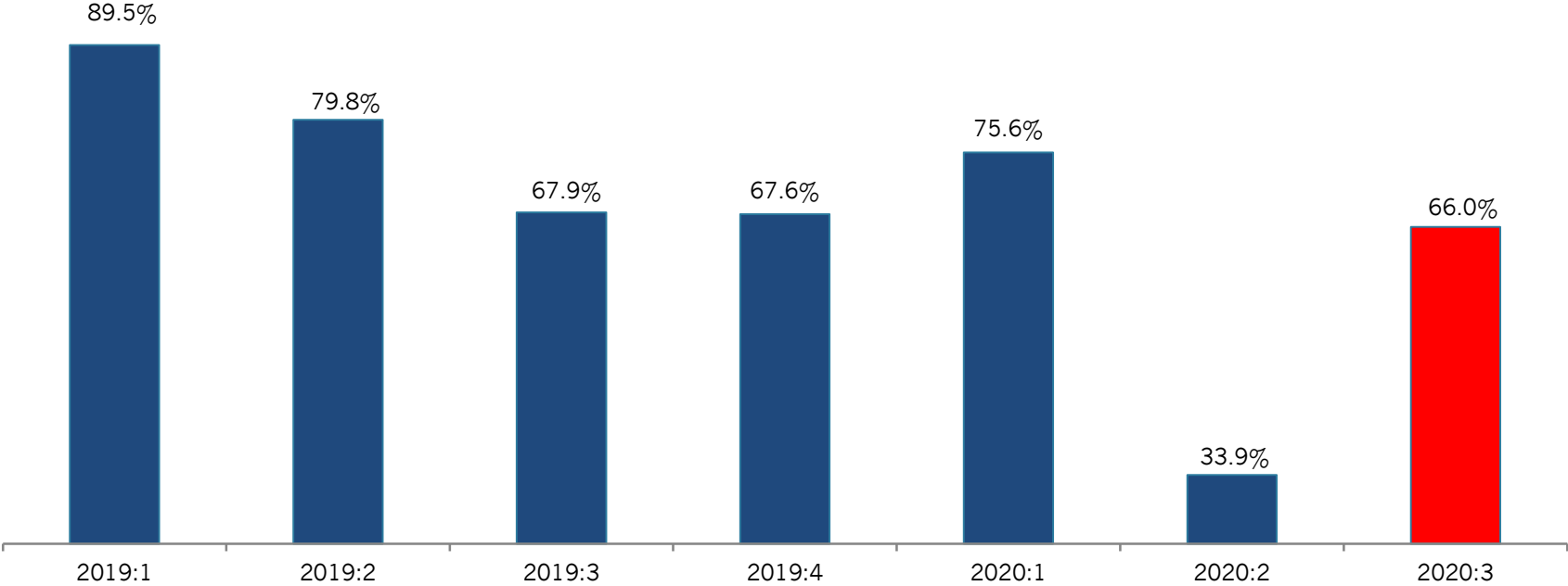


Note: Percentage of respondents who characterized the current business outlook as somewhat or very positive.



NAM Manufacturers' Outlook Survey by Quarter

(First Quarter 2019 – Third Quarter 2020)

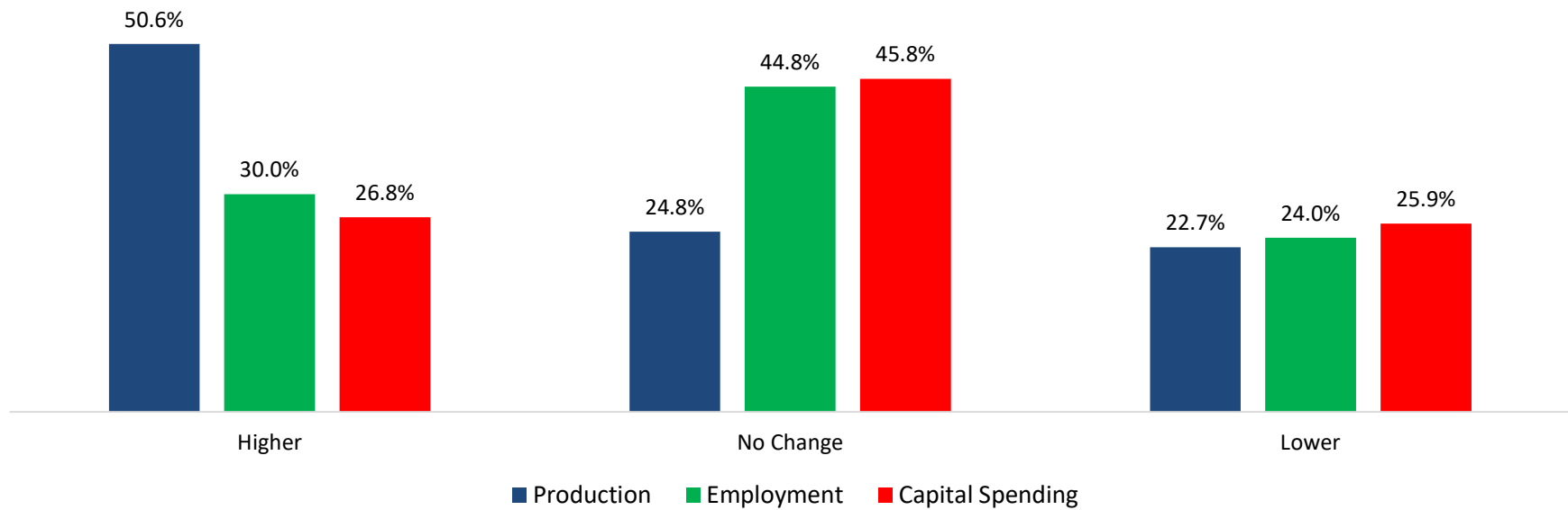


Note: Percentage of respondents who characterized the current business outlook as somewhat or very positive.



NAM Manufacturers' Outlook Survey

(Change in Manufacturing Activity in Third Quarter Relative to Second Quarter 2020)

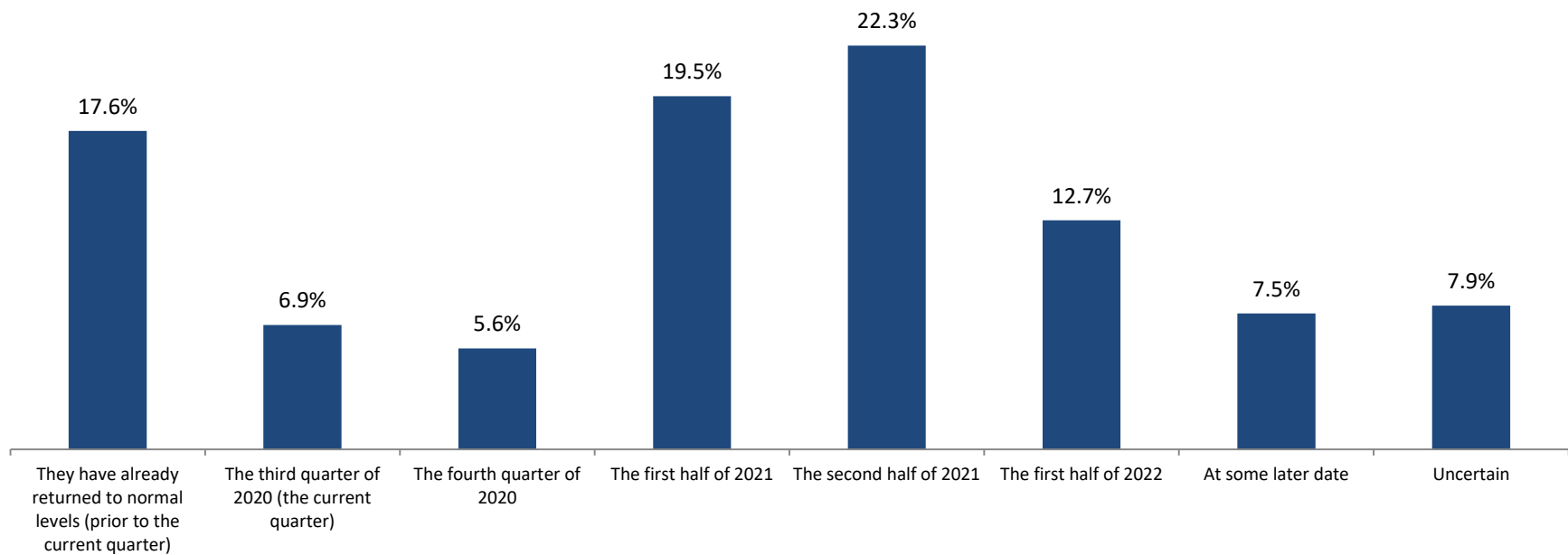


Source: NAM Manufacturers' Outlook Survey

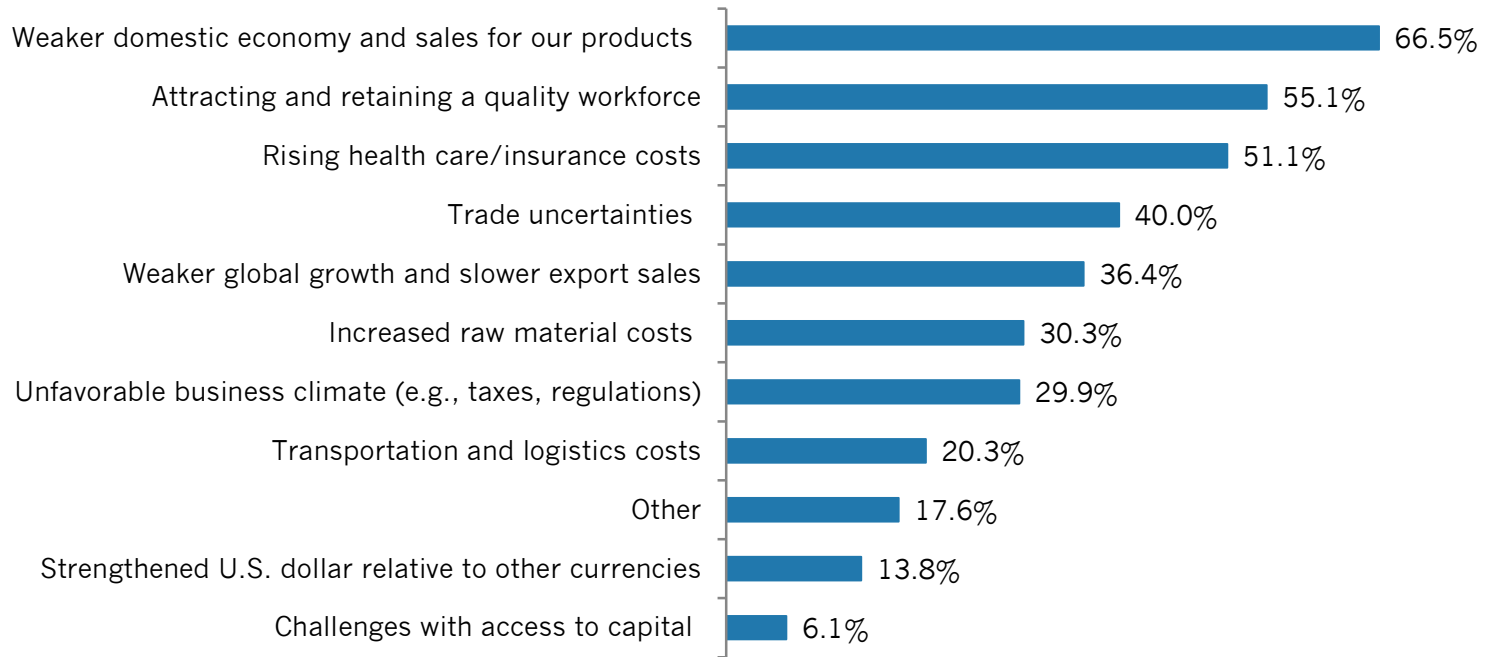


NAM Manufacturers' Outlook Survey, Third Quarter 2020

When Firms Expect Revenues to Return to Pre-COVID-19 Levels



NAM Manufacturers' Outlook Survey Primary Business Challenges (Third Quarter 2020)

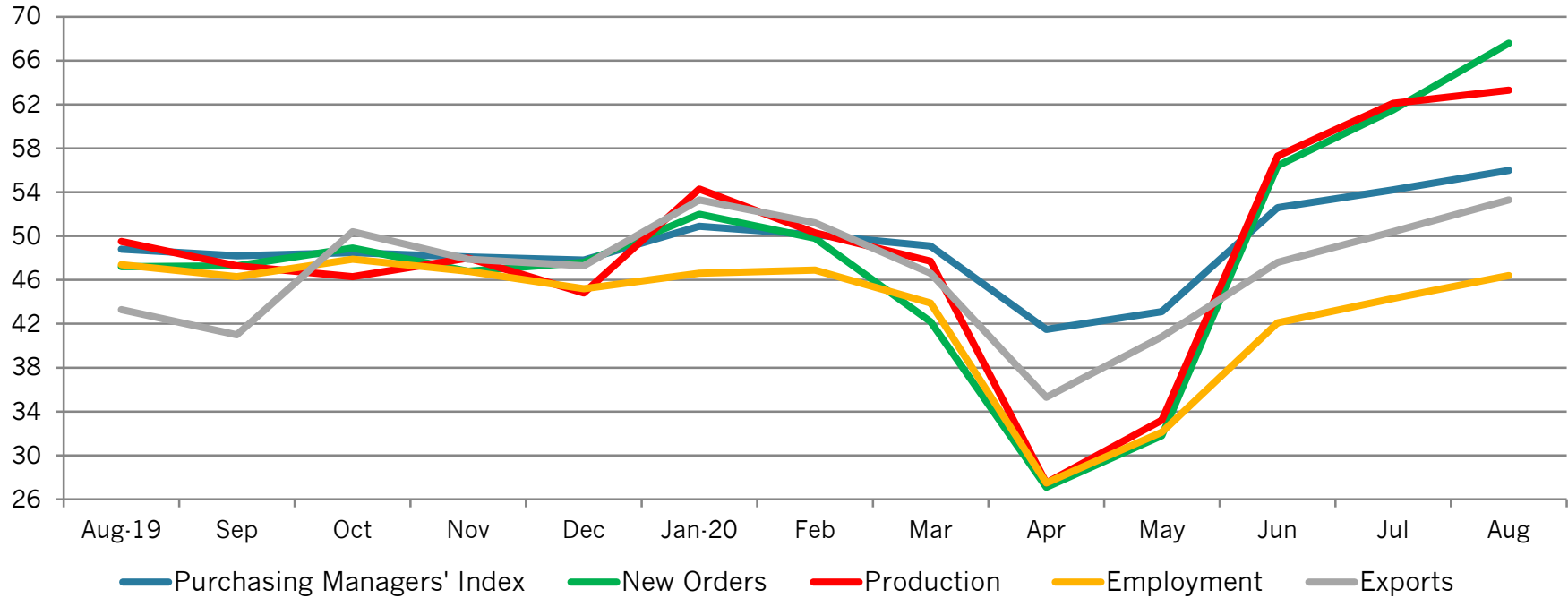


Note: Respondents were able to check all that apply. Therefore, responses exceed 100 percent.



ISM® Manufacturing Purchasing Managers' Index®

(August 2019 – August 2020)

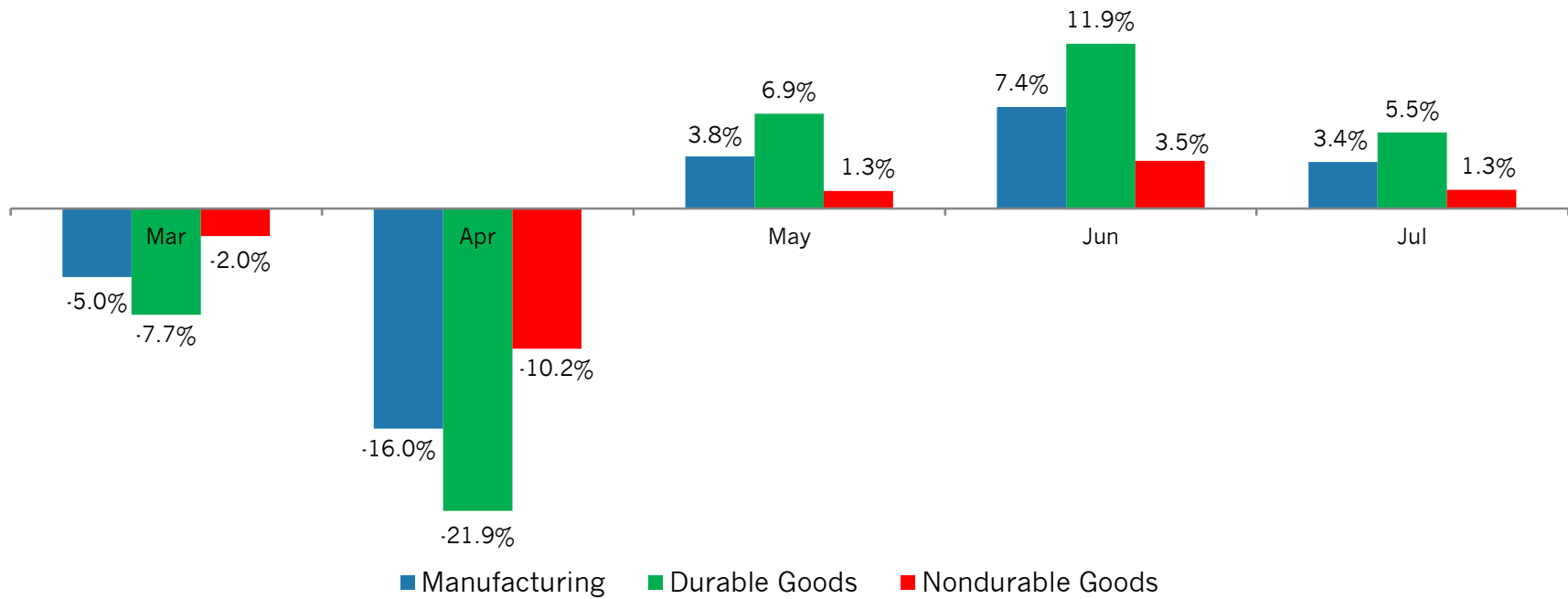


Source: Institute for Supply Management



Monthly Percentage Changes in Manufacturing Production

(March – July 2020)

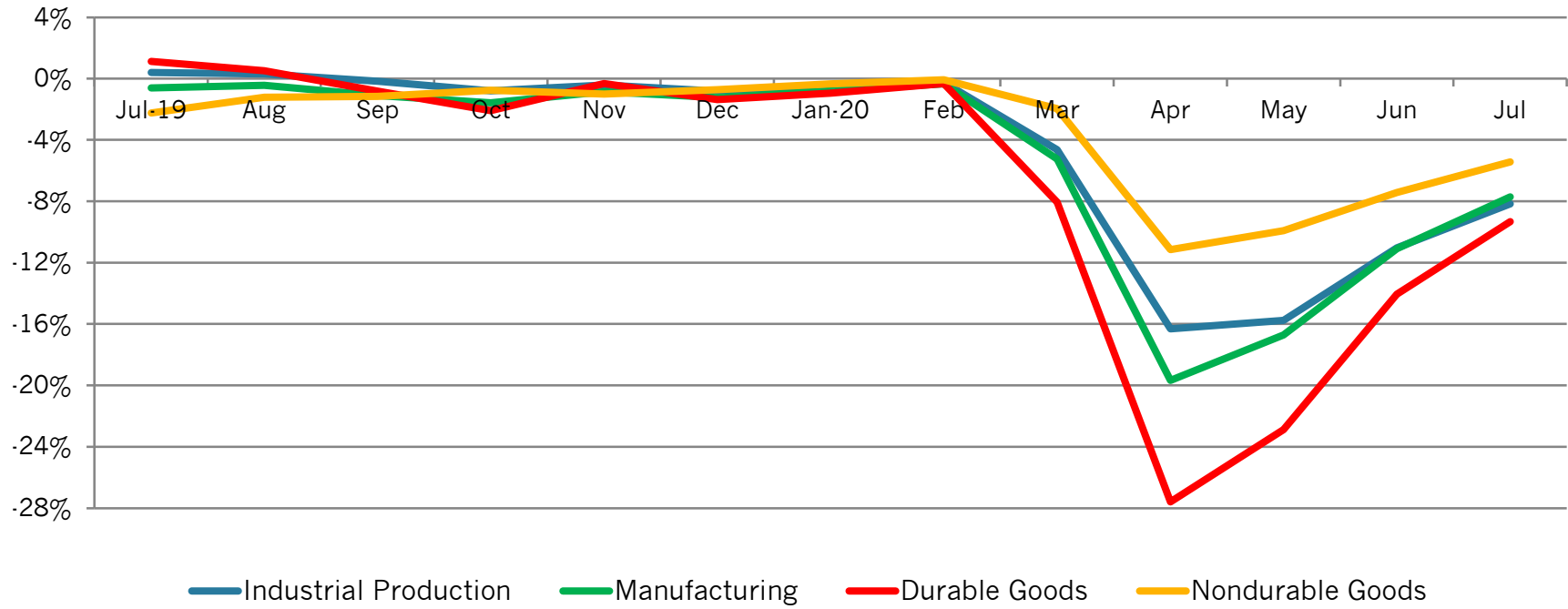


Source: Federal Reserve Board



Year-Over-Year Industrial Production Growth

(July 2019 – July 2020)



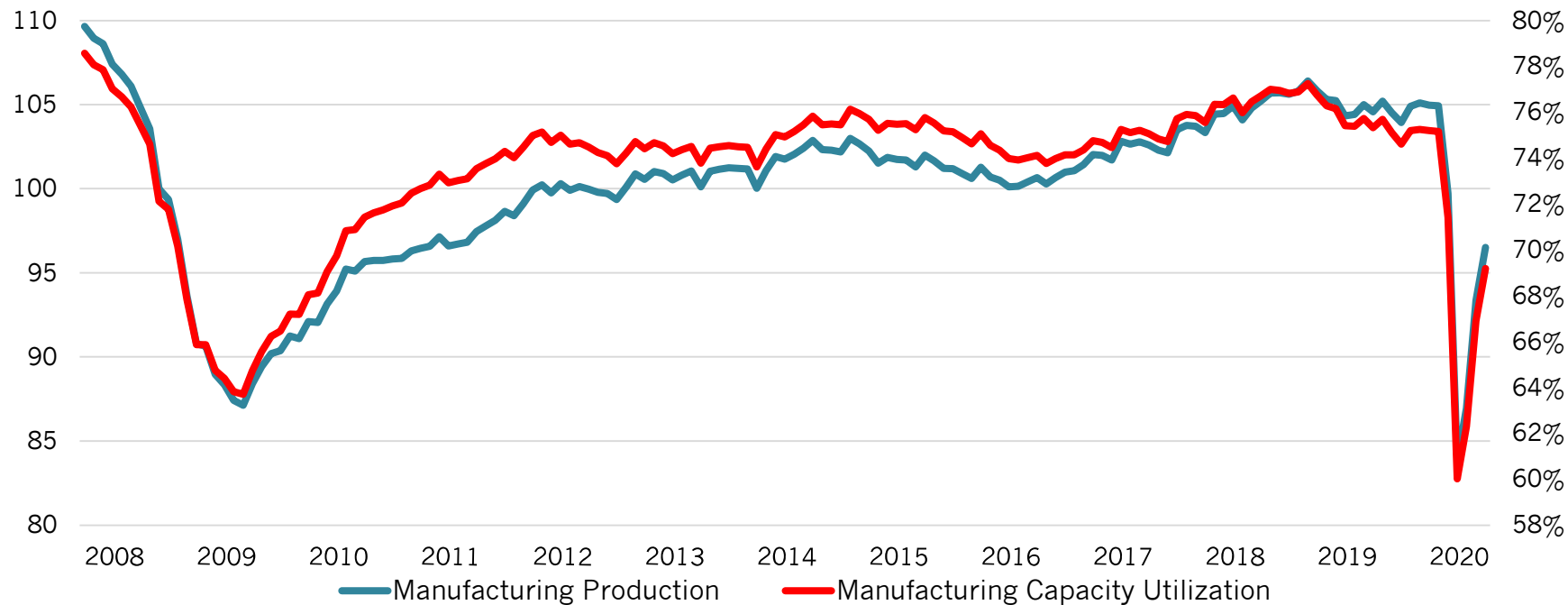
Source: Federal Reserve Board



Manufacturing
Production (SIC)
(2012=100)

Manufacturing Production and Capacity Utilization (January 2008 to July 2020)

Manufacturing
Capacity
Utilization (SIC)

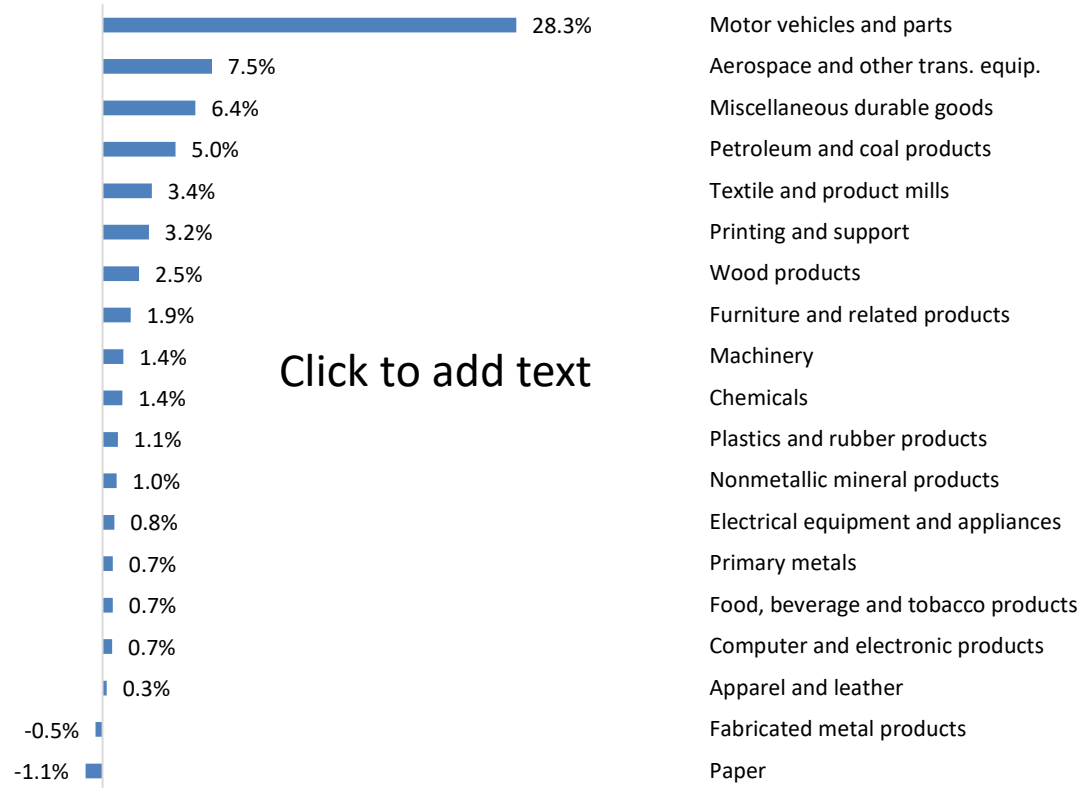


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Source: Federal Reserve Board



Monthly Percentage Change in Manufacturing Production by Major Sector, July 2020



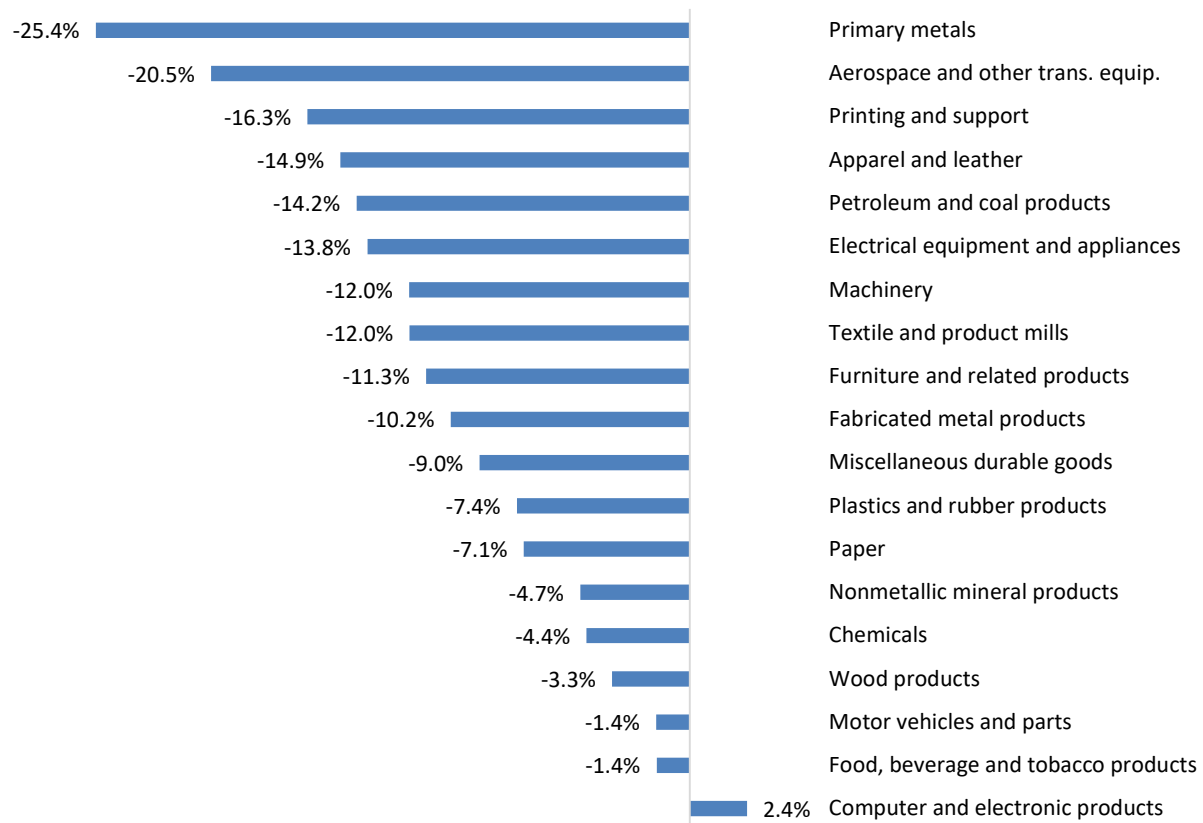
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Source: Federal Reserve Board



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

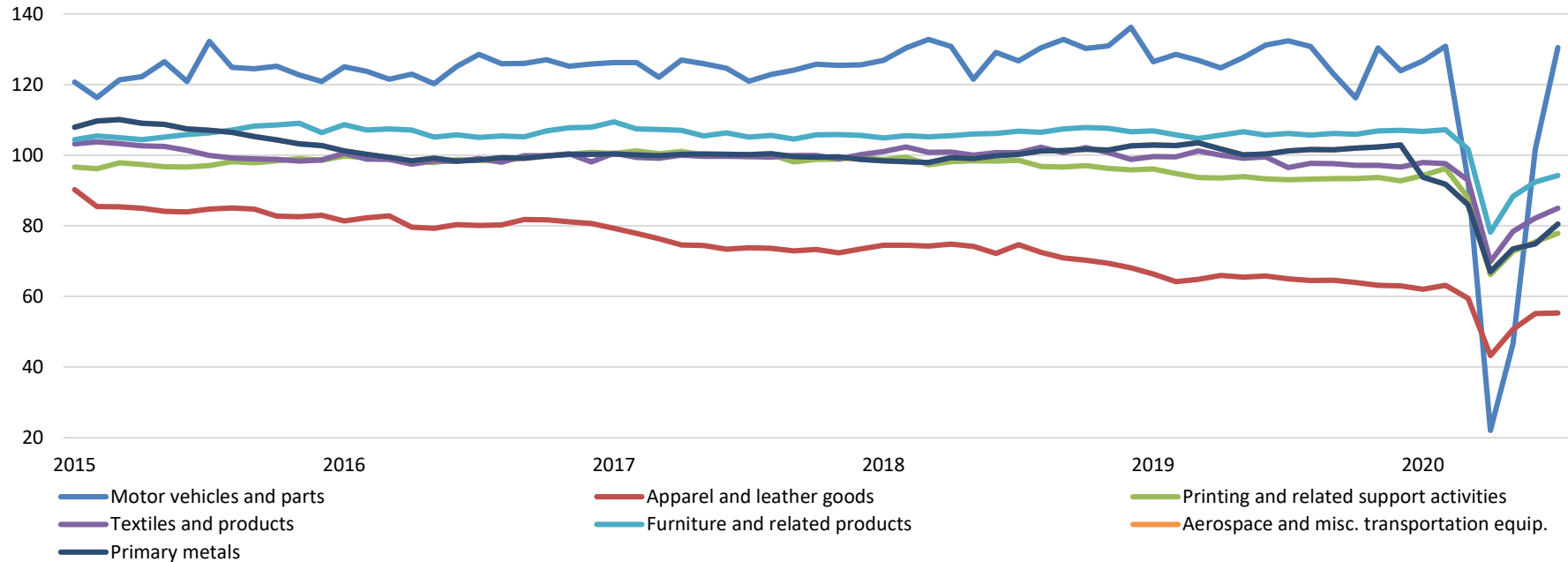


Source: Federal Reserve Board



Largest Grouping of Declines by Manufacturing Sector, February to April 2020

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



Declines by Manufacturing Sector, February to April (February to July in Parenthesis)

Motor vehicles and parts	-83.1% (-0.3%)
Apparel and leather goods	-31.5% (-12.4%)
Printing and related support activities	-31.2% (-19.1%)
Textiles and products	-28.4% (-13.0%)
Aerospace and miscellaneous transportation equipment	-27.0% (-12.3%)
Furniture and related products	-27.0% (-12.1%)
Primary metals	-25.5% (-24.6%)

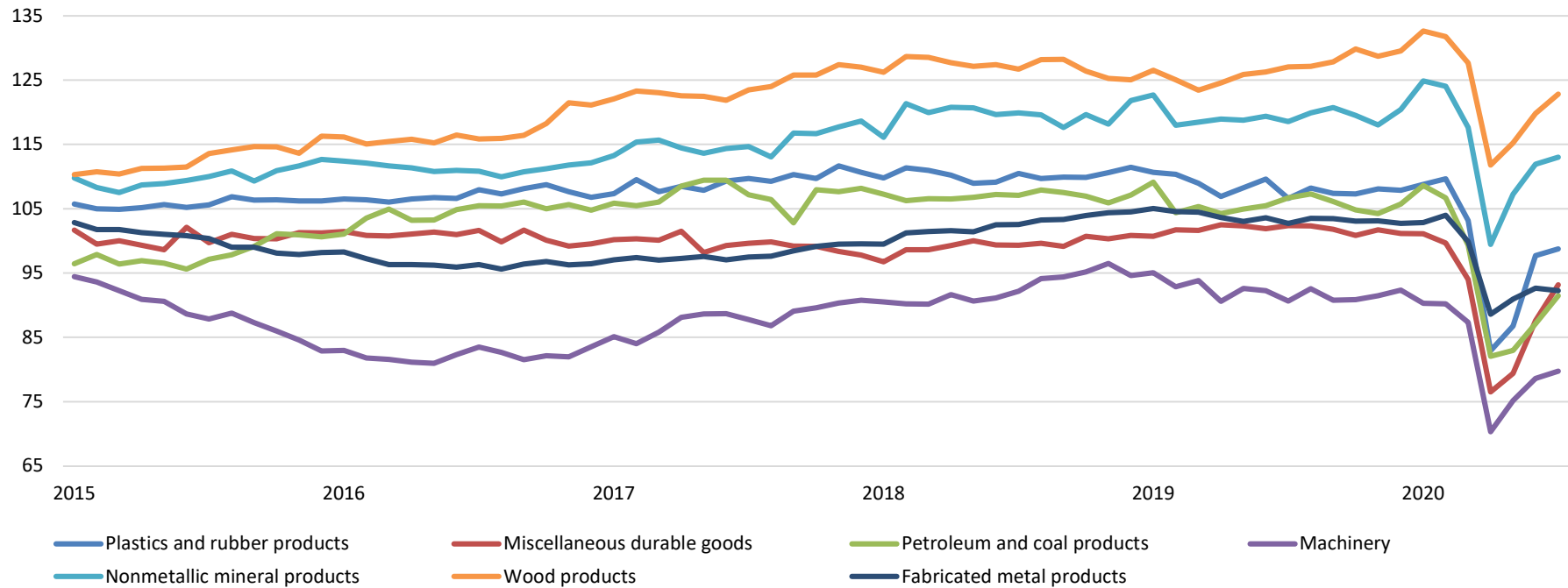


Source: Federal Reserve Board



Middle Grouping of Declines by Manufacturing Sector, February to April 2020

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



Declines by Manufacturing Sector, February to April (February to July in Parenthesis)

Plastics and rubber products, -24.4% (-9.9%)
 Miscellaneous durable goods, -23.2% (-6.5%)
 Petroleum and coal products, -23.1% (-14.2%)
 Machinery, -22.0% (-11.6%)
 Nonmetallic mineral products, -19.8% (-8.9%)
 Wood products, -15.1% (-6.8%)
 Fabricated metal products, -14.8% (-11.3%)

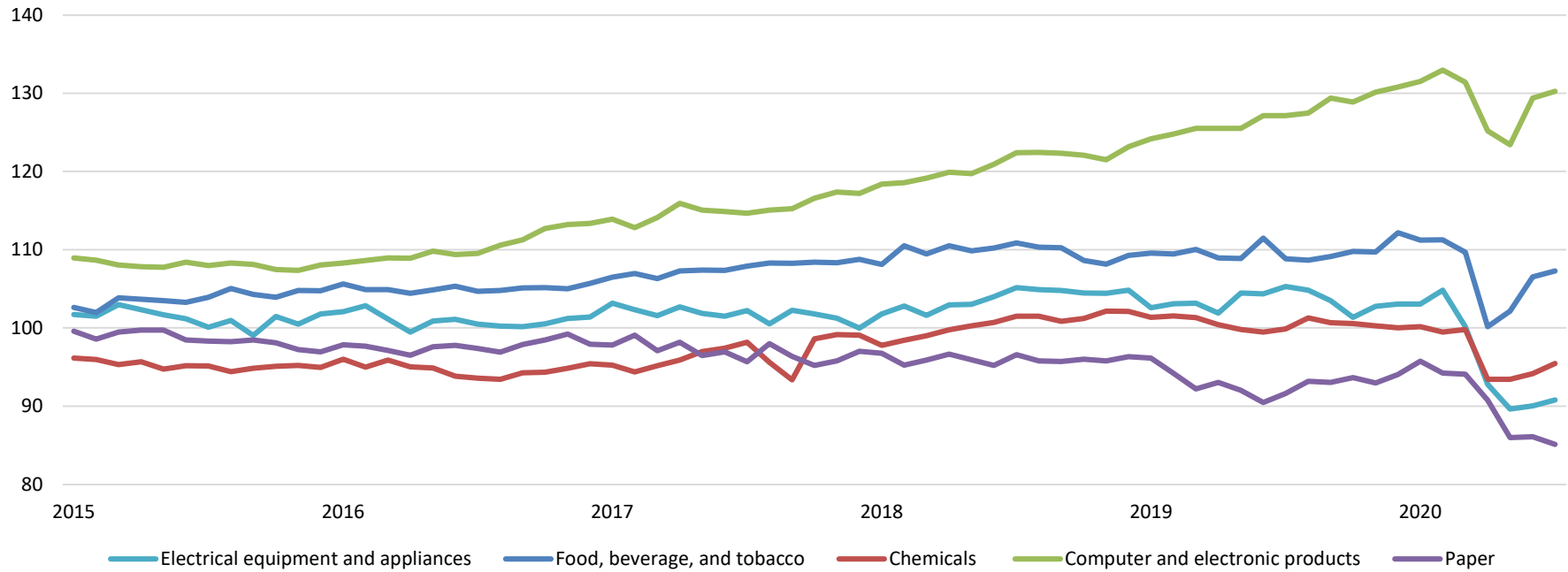


Source: Federal Reserve Board



Smallest Grouping of Declines by Manufacturing Sector, February to April 2020

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



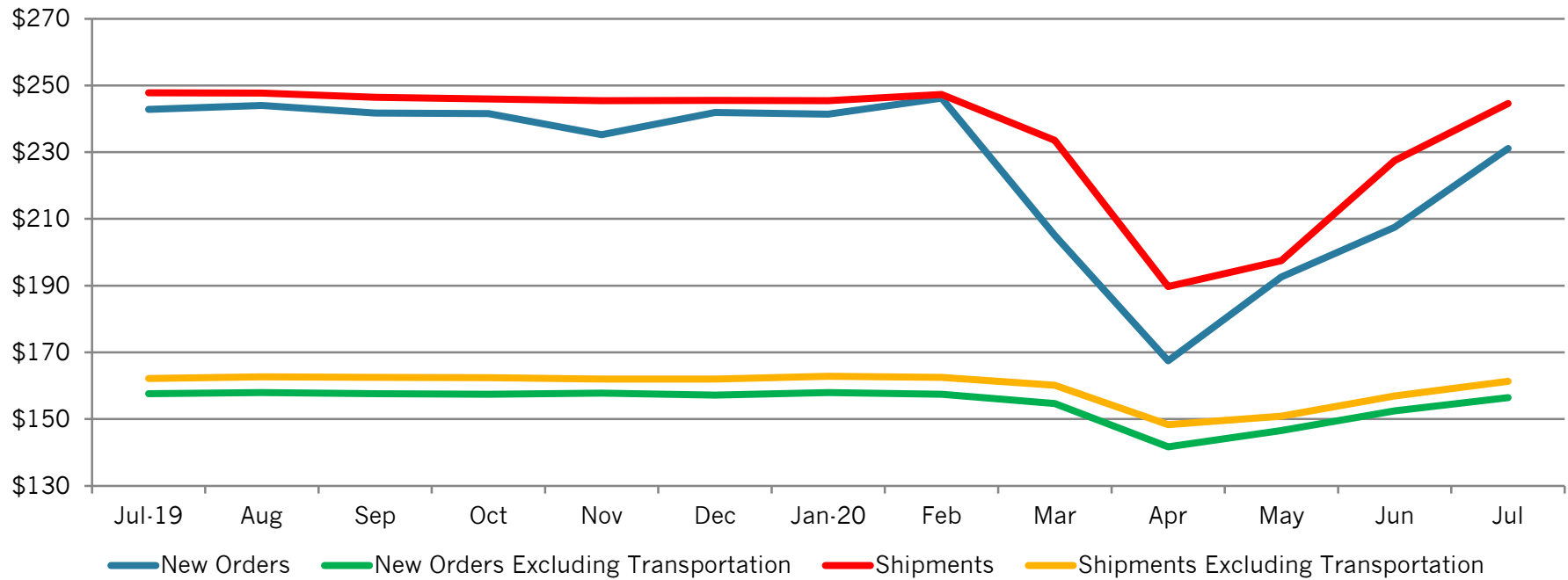
Source: Federal Reserve Board

Declines by Manufacturing Sector, February to April (February to July in Parenthesis)	
Electrical equipment and appliances	-11.5% (-13.4%)
Food, beverage and tobacco	-10.0% (-3.6%)
Chemicals	-6.1% (-4.0%)
Computer and electronic products	-5.9% (-2.1%)
Paper	-3.7% (-9.7%)



Manufactured Durable Goods Orders and Shipments

(July 2019 – July 2020, in Billions of Dollars)

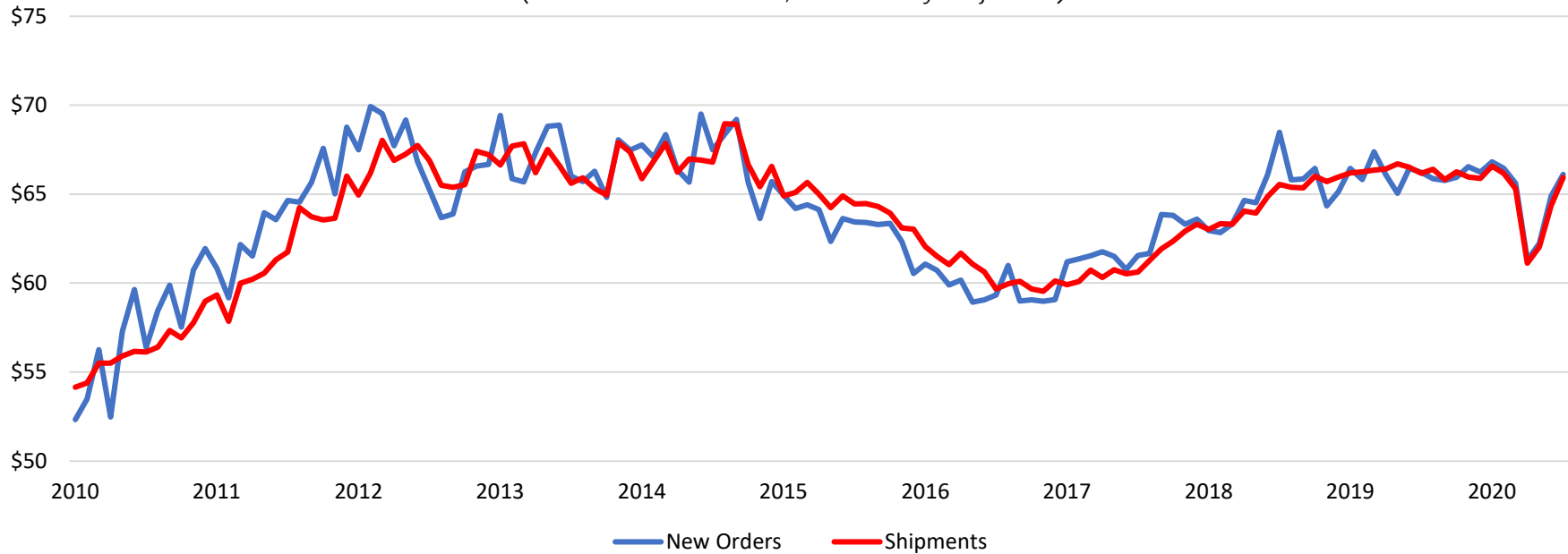


Source: U.S. Census Bureau



Core Capital Goods New Orders and Shipments, 2010–2020

(in Billions of Dollars, Seasonally Adjusted)



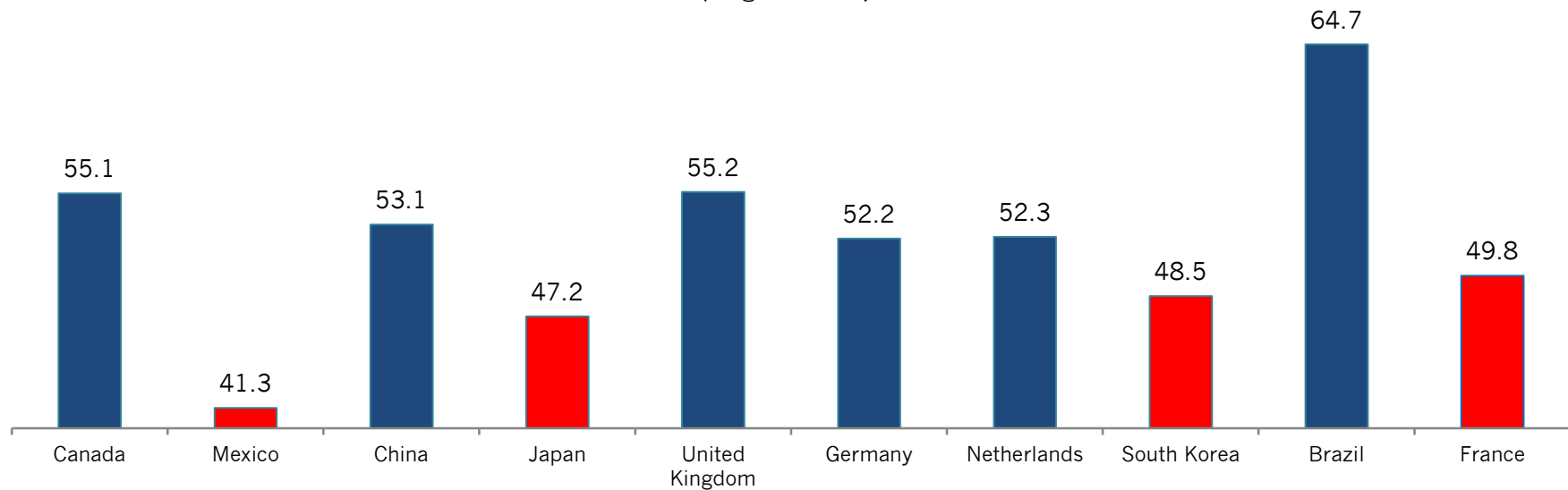
Note: "Core capital goods" are nondefense capital goods excluding aircraft.



Source: U.S. Census Bureau



IHS Markit Purchasing Managers' Indices® for the Top 10 Export Markets for U.S. Manufactured Goods (August 2020)



Global Manufacturing PMI: 51.8
Emerging Markets Manufacturing PMI: 52.5
Eurozone Manufacturing PMI: 51.7
U.S. Manufacturing PMI (Markit): 53.1

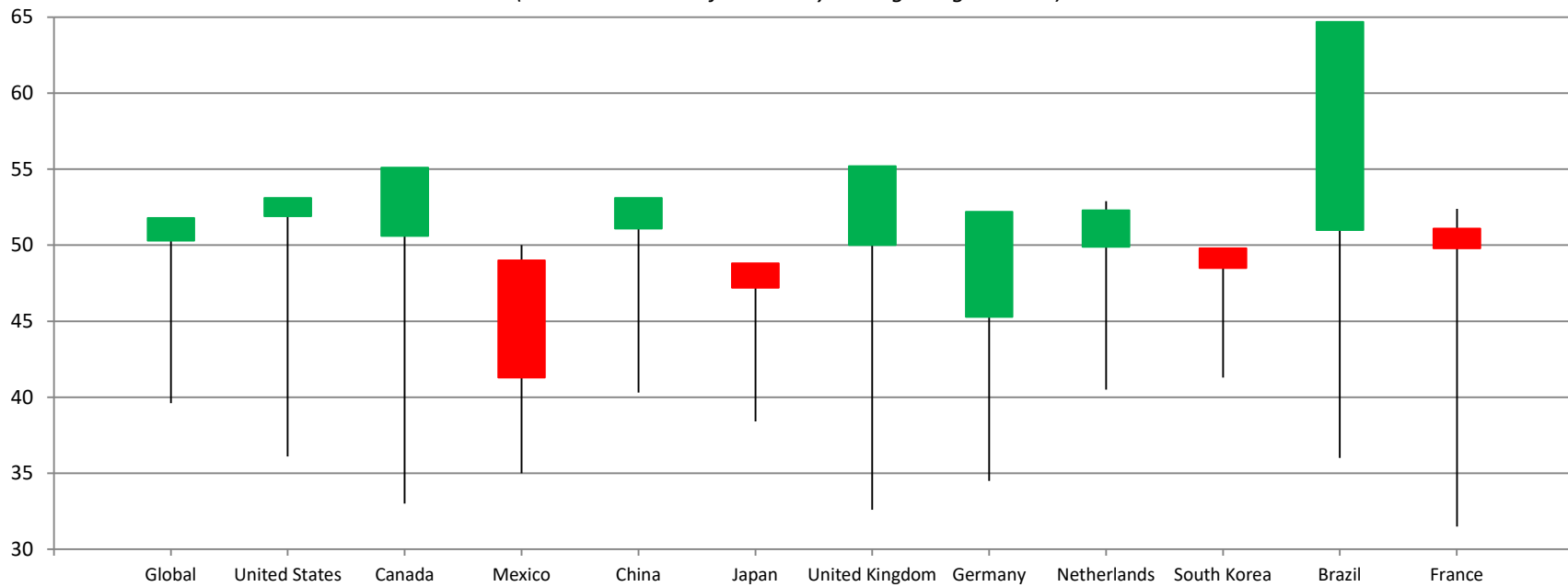


Source: IHS Markit
Note: Top 10 Export Markets Based on 2019 Data from the U.S. Commerce Department



Global IHS Markit Purchasing Managers' Indices[®], including for the Top 10 Export Markets for U.S. Manufactured Goods

(Candlestick Chart for January through August 2020)

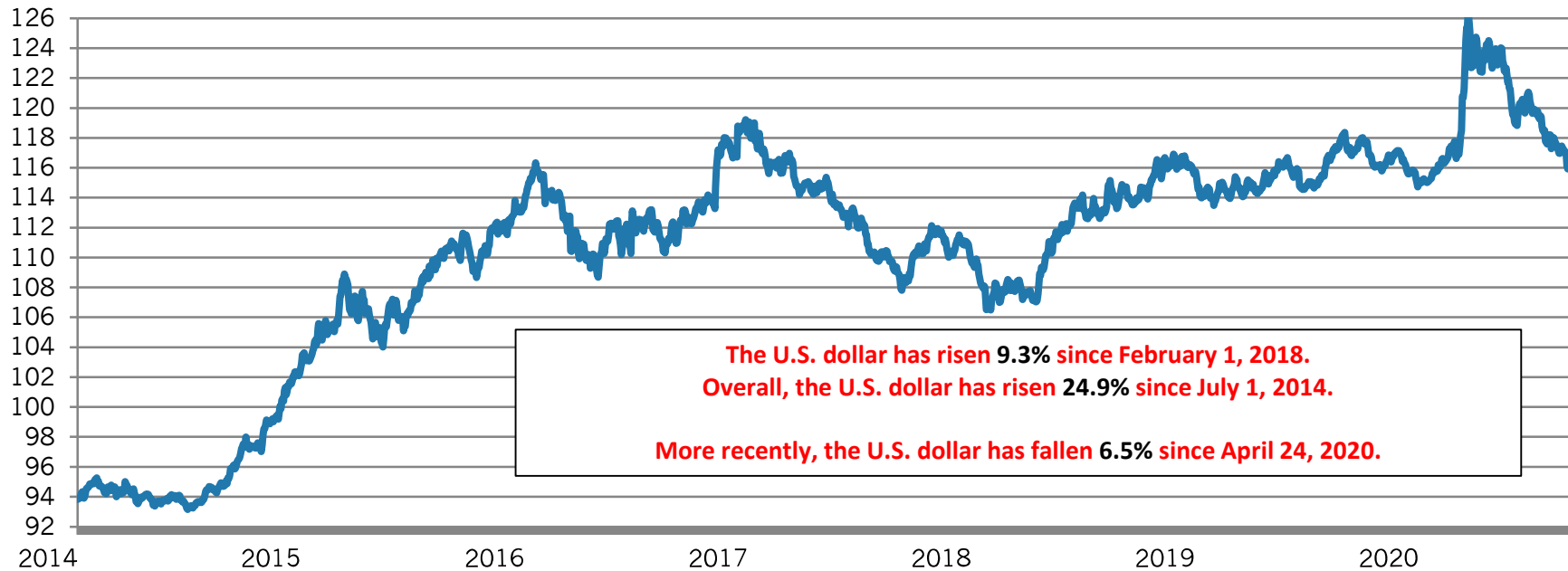


Source: IHS Markit
Note: Top 10 Export Markets Based on 2019 Data from the U.S. Commerce Department



Trade-Weighted U.S. Dollar Index Against Broad Index of Currencies, Goods and Services, 2014–2020

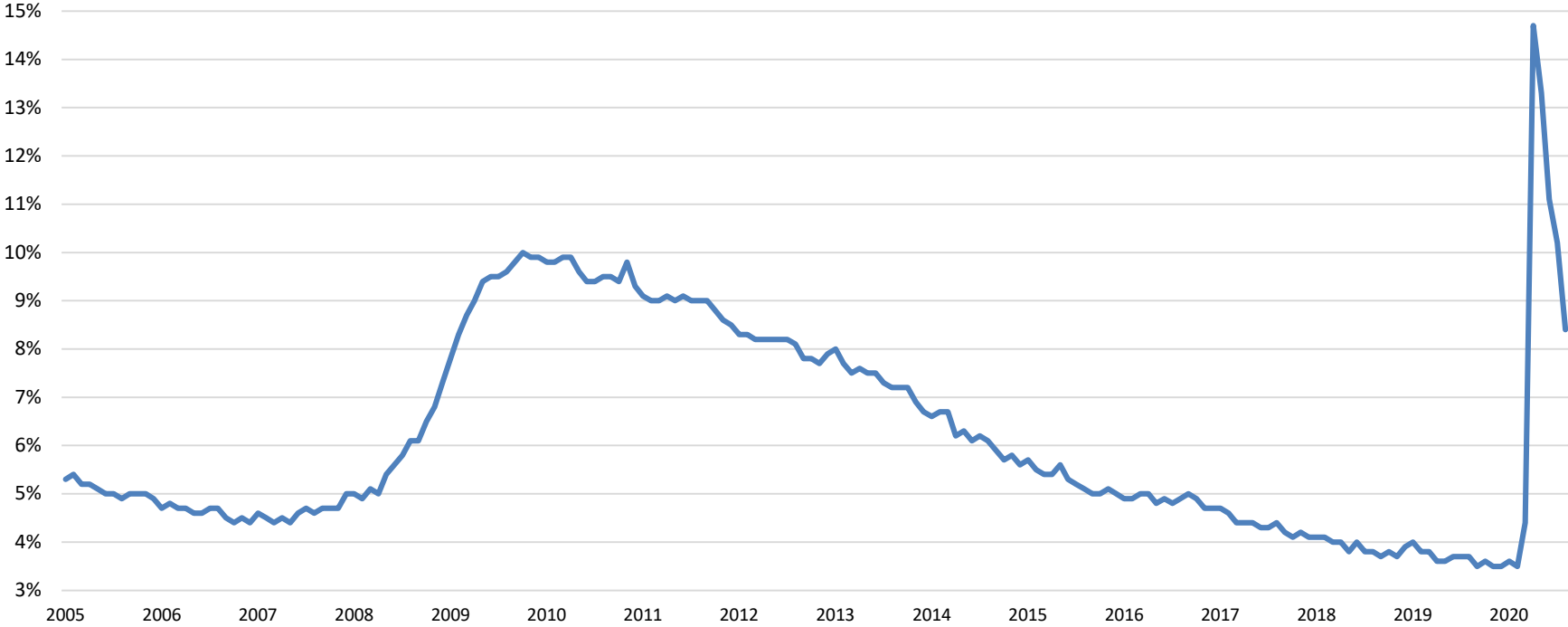
(Currency Units per U.S. Dollar, January 2006=100)



Source: Federal Reserve Board



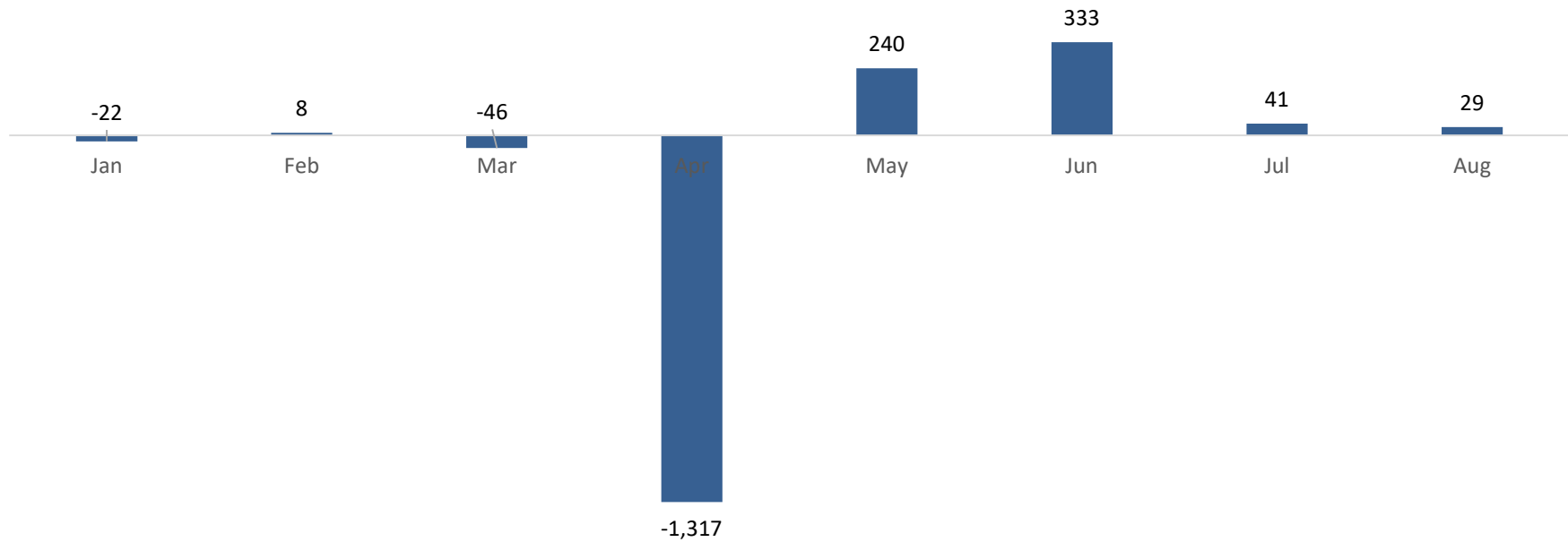
Monthly Unemployment Rate, 2005–2020



Source: Bureau of Labor Statistics



Monthly Change in Manufacturing Employment, 2020 (in Thousands of Workers)

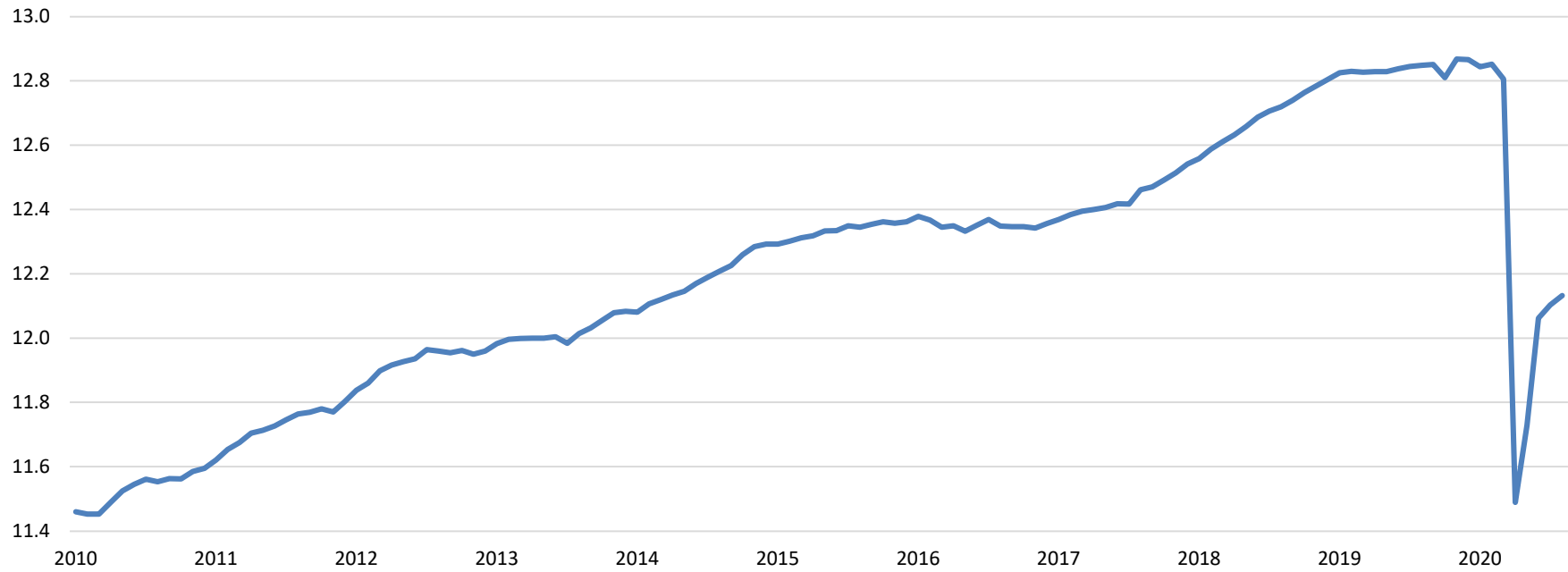


Source: Bureau of Labor Statistics

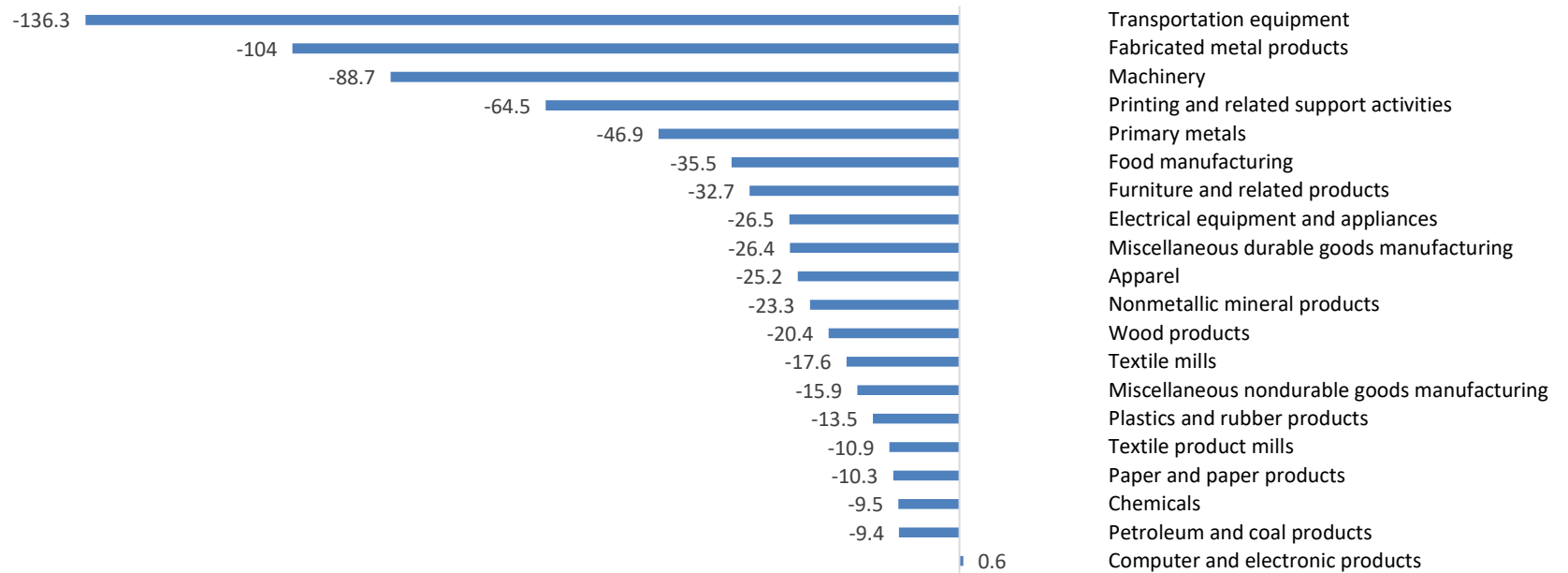


Monthly Employment in Manufacturing, 2010–2020

(in Millions of Workers)

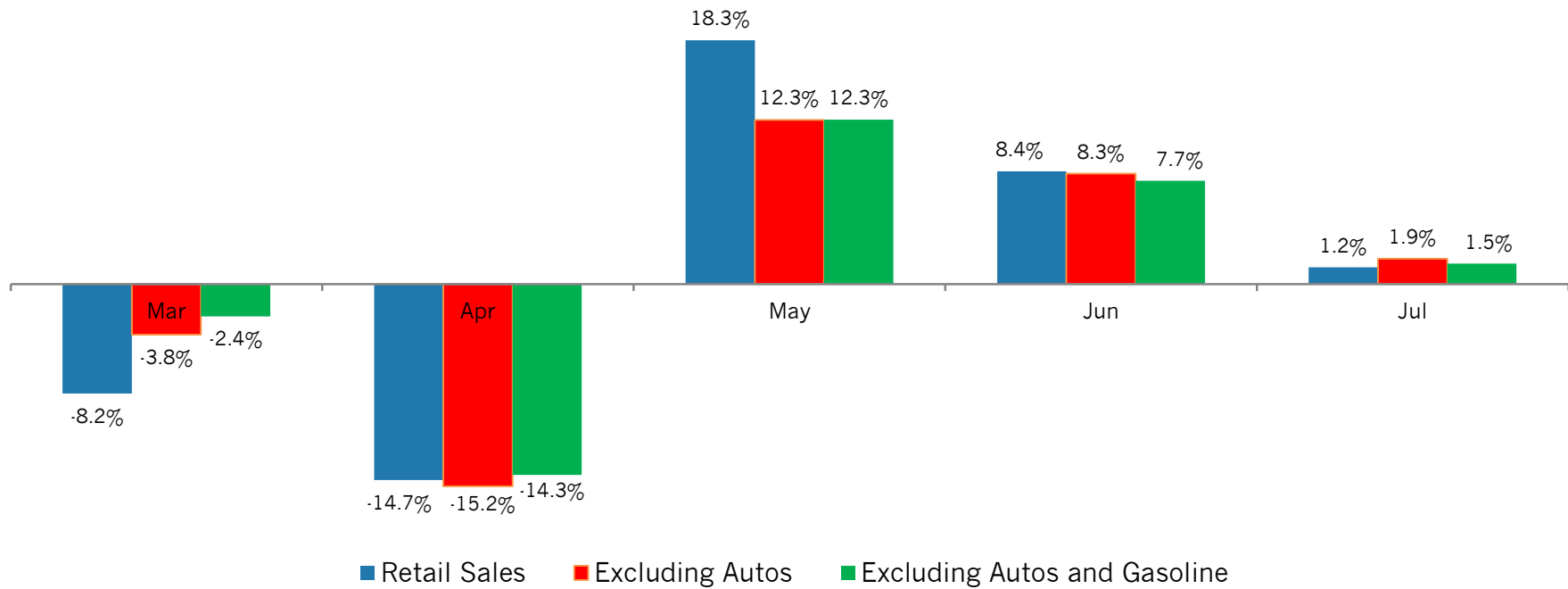


Changes in Manufacturing Employment by Sector Since February (in Thousands of Workers, February to August 2020)



Percentage Changes for Retail Spending by Month

(March – July 2020)

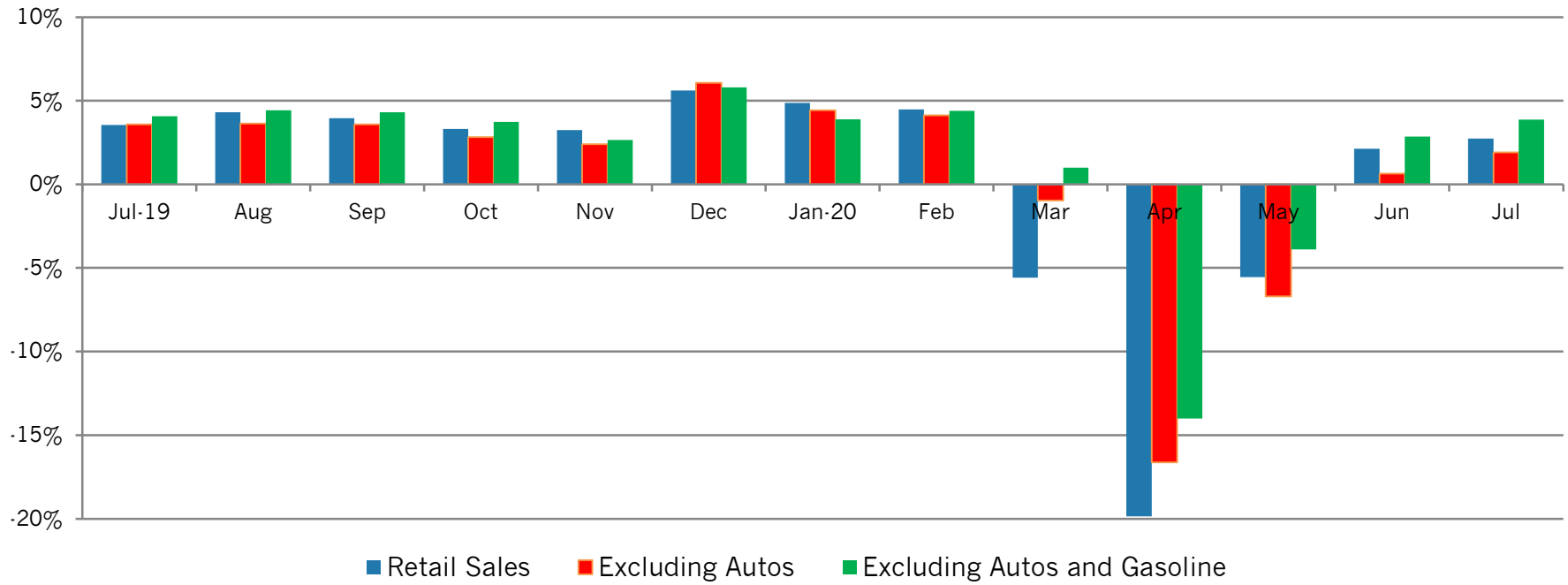


Source: Census Bureau



Year-Over-Year Growth in Retail Sales

(July 2019 – July 2020)

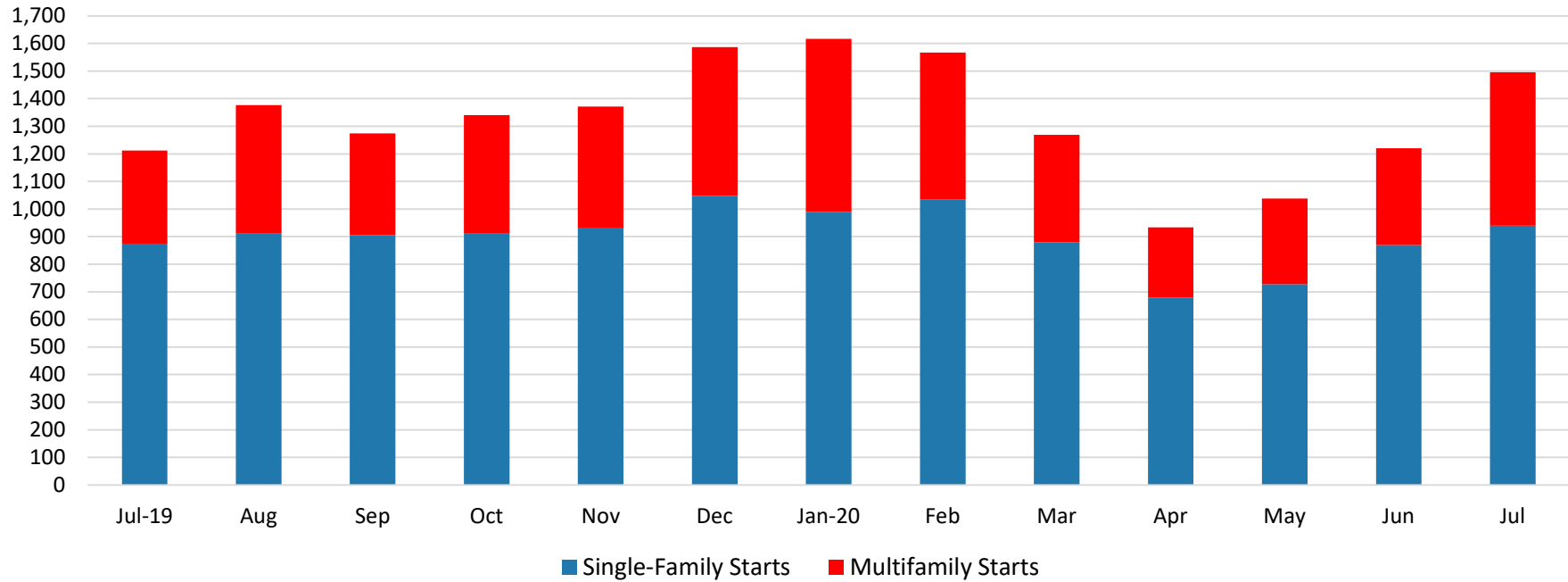


Source: Census Bureau



Housing Starts, July 2019 – July 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)

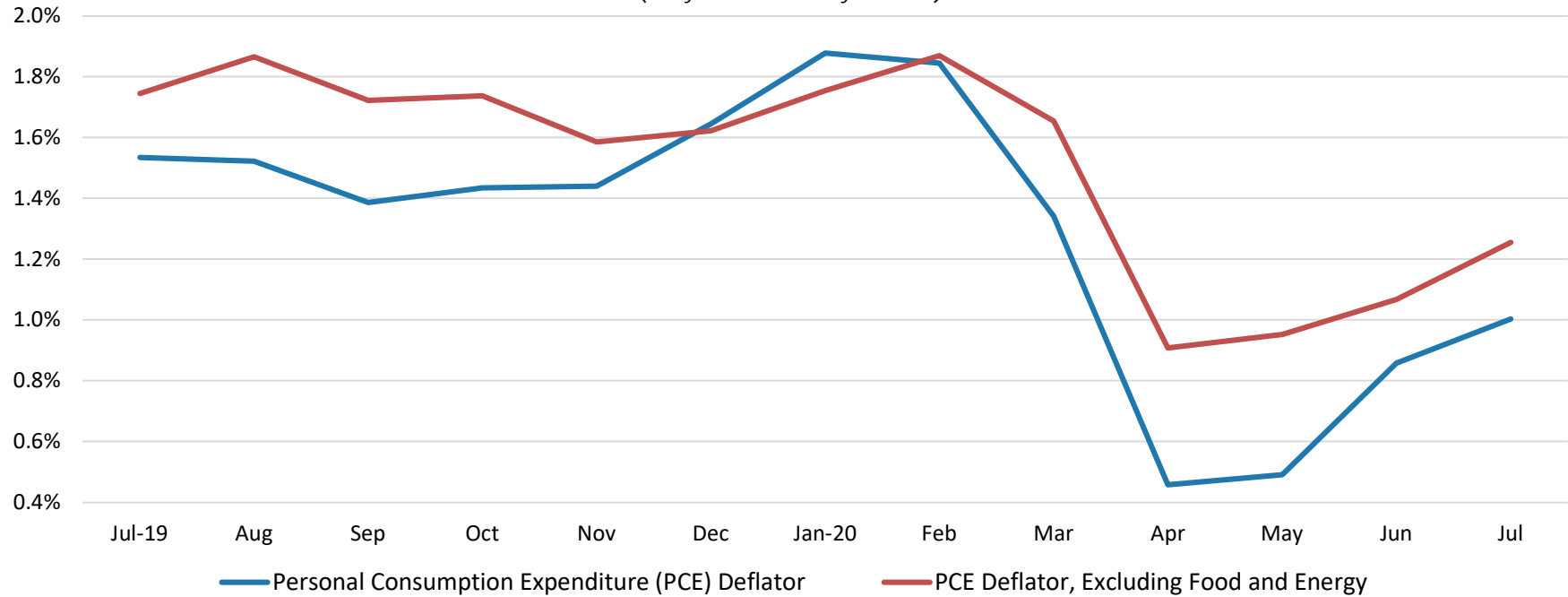


Source: U.S. Census Bureau



Year-Over-Year Percentage Changes in the PCE Deflator

(July 2019 – July 2020)



Source: Bureau of Economic Analysis



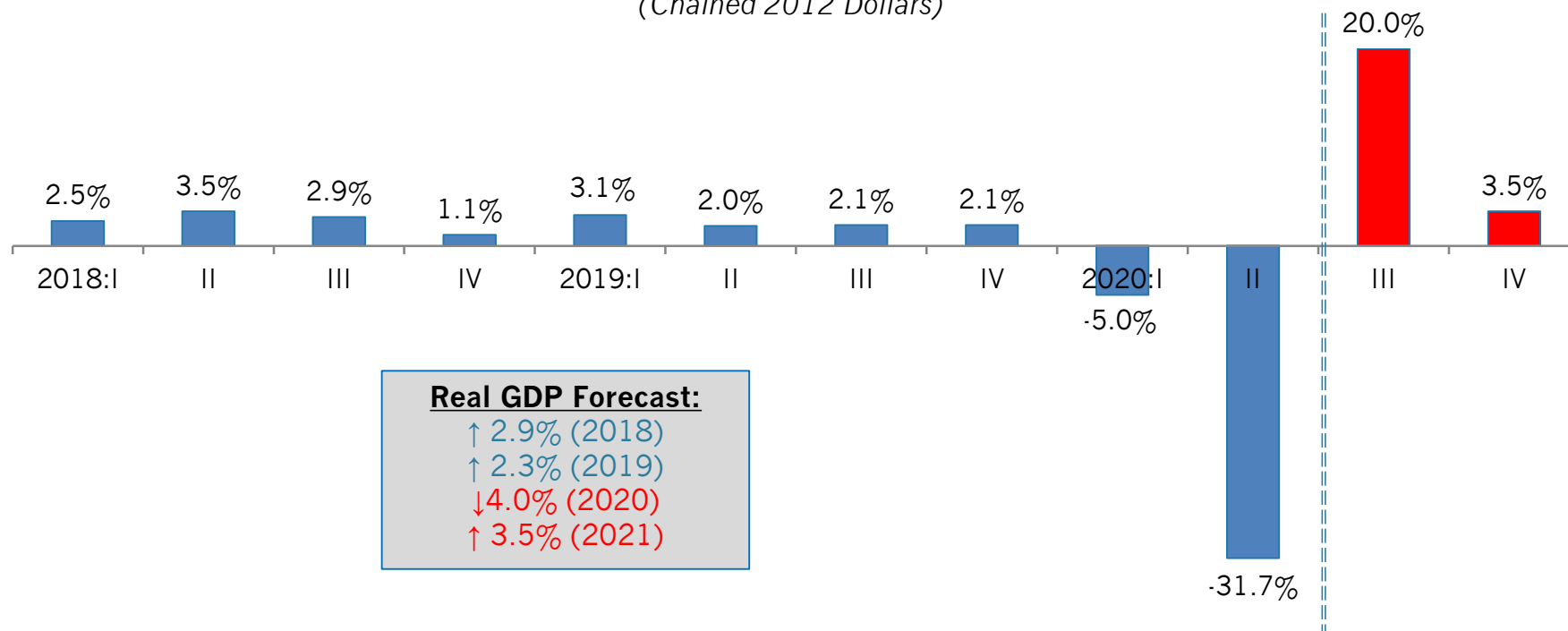
Economic Outlook

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Real Gross Domestic Product

(Chained 2012 Dollars)



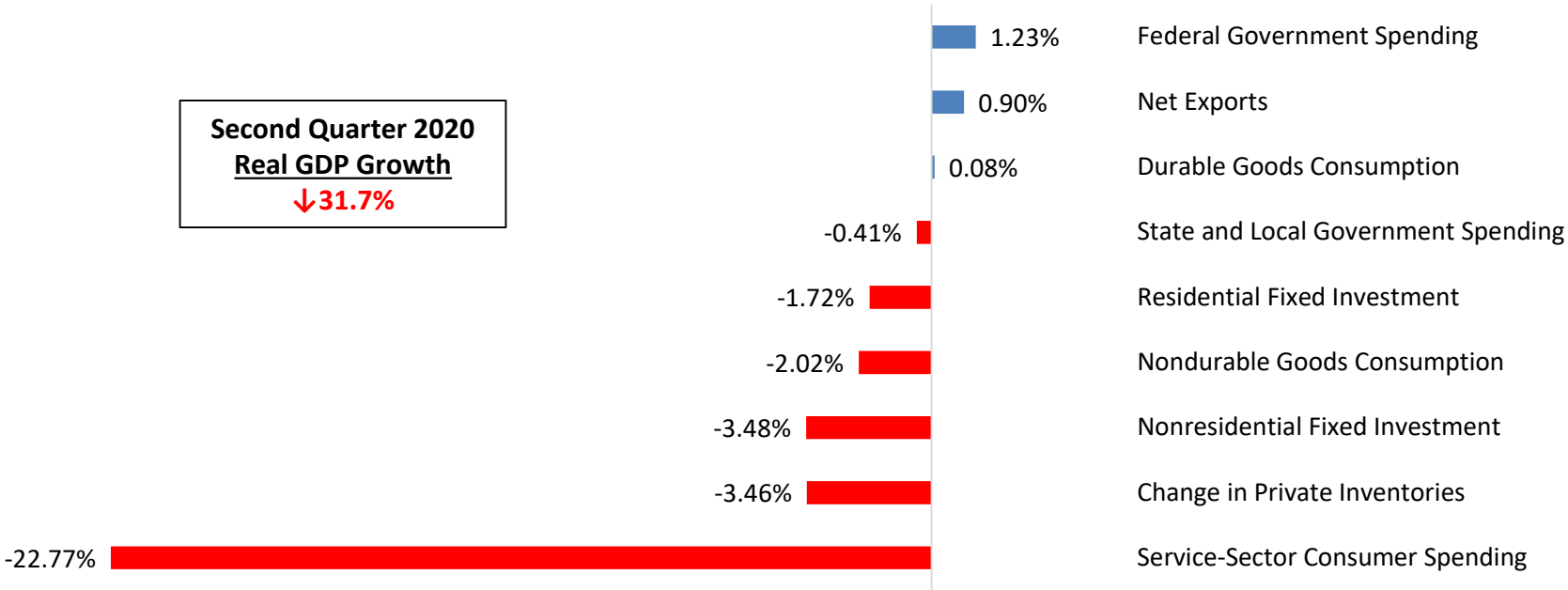
Real GDP Forecast:
 ↑ 2.9% (2018)
 ↑ 2.3% (2019)
 ↓ 4.0% (2020)
 ↑ 3.5% (2021)



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



Contributions to Percentage Change in Second Quarter 2020 Real GDP Growth

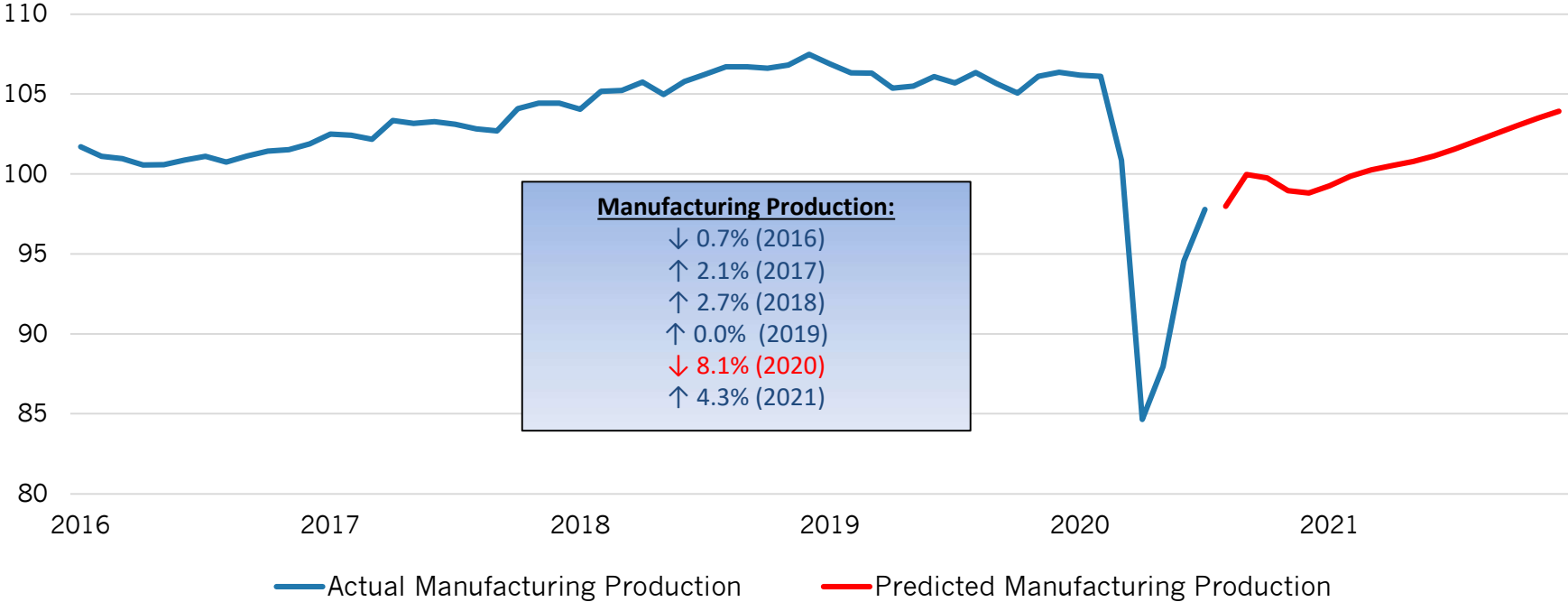


Source: Bureau of Economic Analysis



Actual and Predicted Manufacturing Production Growth

(NAICS, 2012=100)



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



	2020	2021
MANUFACTURING PRODUCTION	-8.1%	4.3%
Aerospace and other trans. equip.	-26.0%	-2.7%
Apparel and leather	-24.0%	-6.9%
Beverages	-3.5%	-0.5%
Chemicals	-1.6%	4.5%
Computer and electronic products	4.9%	6.6%
Electrical equipment and appliances	-2.0%	4.9%
Fabricated metal products	-2.6%	10.5%
Food	-2.8%	2.8%
Furniture and related products	-10.1%	3.0%
Machinery	-8.5%	6.6%
Miscellaneous manufacturing	-9.0%	4.5%
Motor vehicles and parts	-42.6%	-5.3%
Nonmetallic mineral products	-0.9%	7.3%
Paper	-0.6%	3.0%
Petroleum and coal products	-13.1%	-2.1%
Plastics and rubber products	-12.3%	0.9%
Primary metals	-15.6%	3.4%
Printing and support	-16.1%	-2.7%
Textile and product mills	-14.7%	-1.7%
Wood products	2.2%	6.9%
DURABLE GOODS PRODUCTION	-11.6%	5.3%
NONDURABLE GOODS PRODUCTION	-4.8%	2.4%
MINING PRODUCTION	-8.8%	-1.9%
UTILITIES PRODUCTION	-5.1%	1.2%



Source: Moody's Analytics Economic Model, August 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 <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 31.7% in the second quarter of 2020; for 2020 as a whole, down 4.1%
Unemployment Rate <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 as low as 7.5% by year's end; 8.4% in August
Manufacturing Employment <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 720,000 since Feb.; will likely be down 450,000 by year's end
Manufacturing Production <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 20.2% between Feb. and April before rebounding; output down 8.1% in 2020 overall relative to last year
Manufacturing Value-Added Output <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



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Questions?

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