2018 Automotive Outlook Symposium

Forecast Winners

Overall	Gabriel Ehrlich - RSQE	
GDP, current dollars	Kenny Vieth - ACT RESEARCH	
GDP price index, chain-type	Bernard J.Paniak - BJP Economics	
Real GDP, chained dollars	Bill Witte - Witte Econometrics/FTR	
Personal consumption expenditures	Evert Van Der Heide - Calvin College	
Business fixed investment	Kenny Vieth - ACT RESEARCH	
Residential investment	Rajeev Dhawan - Georgia State University	
Change in private inventories	Lawrence Nelson - Macroeconomic Advisers by IHS Markit	William Hickey - DTE Energy
Net exports	William Hickey - DTE Energy	
Government consumption expenditures and gross investment	Mark Zandi - Moody's Analytics	Mark Zhang - Navistar
Industrial production	Bill Witte - Witte Econometrics/FTR	
Car & light truck sales	Evert Van Der Heide - Calvin College	
Car & light truck sales Housing starts	Evert Van Der Heide - Calvin College Arun Raha - Eaton	Rajeev Dhawan - Georgia State University
		Rajeev Dhawan - Georgia State University
Housing starts	Arun Raha - Eaton	Rajeev Dhawan - Georgia State University
Housing starts Oil Price	Arun Raha - Eaton Bernard J.Paniak - BJP Economics	Rajeev Dhawan - Georgia State University Lawrence Nelson - Macroeconomic Advisers by IHS Markit
Housing starts Oil Price Unemployment rate	Arun Raha - Eaton Bernard J.Paniak - BJP Economics Bill Witte - Witte Econometrics/FTR	
Housing starts Oil Price Unemployment rate Inflation rate (CPI)	Arun Raha - Eaton Bernard J.Paniak - BJP Economics Bill Witte - Witte Econometrics/FTR William Hickey - DTE Energy	

Table 1 - Median Forecast of GDP and Related Items

	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
GDP, current dollars*	5.2%	3.9%	3.9%	3.8%	3.7%	4.1%	4.2%	4.1%	3.8%	3.8%	3.7%
GDP price index, chain-type*	2.1%	1.6%	1.9%	0.9%	1.9%	1.8%	2.0%	2.0%	2.0%	1.9%	2.1%
Real GDP, chained dollars*	3.0%	2.3%	1.9%	3.2%	1.9%	2.2%	2.1%	2.2%	2.0%	1.8%	1.8%
Personal consumption expenditures*	2.6%	2.0%	1.8%	1.2%	2.7%	2.2%	2.2%	2.1%	2.2%	2.0%	1.8%
Business fixed investment*	7.0%	3.0%	2.5%	2.7%	2.8%	2.9%	3.4%	2.9%	2.6%	2.5%	2.3%
Residential investment*	-3.3%	0.5%	1.9%	-2.8%	1.1%	1.8%	2.4%	2.0%	1.5%	1.2%	2.0%
Change in private inventories (billions of constant dollars)**	\$96.8	\$76.9	\$63.7	\$128.4	\$90.3	\$80.0	\$76.9	\$63.5	\$59.9	\$60.6	\$63.7
Net exports of goods and services (billions of constant dollars)**	-\$955.7	-\$907.5	-\$953.7	-\$899.3	-\$905.8	-\$904.9	-\$907.5	-\$911.8	-\$910.2	-\$929.5	-\$953.7
3overnment consumption expenditures and gross investment*	1.5%	2.1%	1.2%	2.4%	2.3%	2.0%	1.3%	1.3%	2.0%	0.6%	0.7%
Industrial production*	4.0%	0.6%	0.7%	-0.4%	0.7%	1.3%	1.1%	0.9%	0.9%	0.7%	0.8%
Car & light truck sales (millions - calendar year - including imports)***	17.2	16.8	16.6	16.9	16.8	16.8	16.8	16.7	16.6	16.6	16.6
Housing starts (millions)***	1.25	1.21	1.24	1.19	1.22	1.22	1.23	1.23	1.23	1.24	1.25
Oil price (dollars per barrel of West Texas Intermediate)**	\$58.97	\$63.50	\$60.00	\$54.86	\$61.20	\$62.40	\$63.50	\$63.00	\$62.87	\$61.75	\$60.00
Unemployment rate**	3.8%	3.6%	3.7%	3.9%	3.7%	3.6%	3.6%	3.7%	3.7%	3.7%	3.7%
Inflation rate (consumer price index)*	2.2%	1.6%	1.8%	0.9%	1.7%	1.8%	1.8%	1.8%	1.7%	1.9%	1.8%
Treasury constant maturity 1-year rate**	2.67%	2.60%	2.55%	2.54%	2.55%	2.57%	2.60%	2.55%	2.55%	2.55%	2.55%
Treasury constant maturity 10-year rate**	3.03%	2.75%	2.85%	2.65%	2.60%	2.68%	2.75%	2.77%	2.85%	2.81%	2.85%
J.P. Morgan trade weighted OECD dollar*	4.2%	1.5%	2.3%	-1.3%	0.5%	1.0%	1.0%	0.1%	0.5%	1.0%	1.0%

^{*}Annual: Q4 over Q4 Quarterly: Quarter to Quarter change, annual rate

^{**}Annuals are Q4 value

^{***}Annuals are yearly average

Table 2 - Mean Forecast of GDP and Related Items

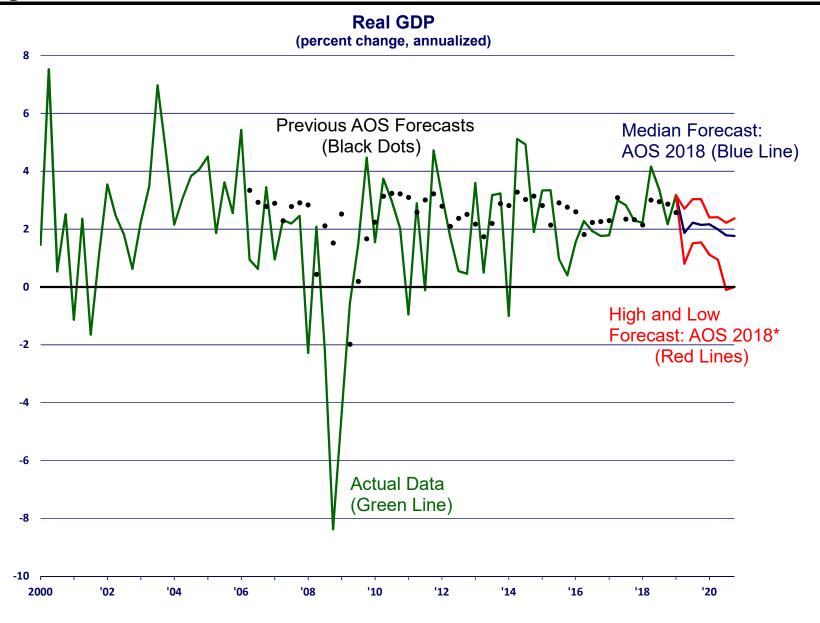
	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
GDP, current dollars*	5.2%	3.9%	3.1%	3.8%	3.4%	3.9%	4.6%	3.5%	3.2%	2.4%	3.2%
GDP price index, chain-type*	2.1%	1.4%	1.7%	0.9%	1.6%	1.6%	1.7%	1.8%	1.7%	1.6%	1.7%
Real GDP, chained dollars*	3.0%	2.1%	1.6%	3.2%	0.9%	2.2%	2.4%	2.1%	1.4%	1.5%	1.5%
Personal consumption expenditures*	2.6%	1.9%	1.6%	1.2%	2.3%	2.0%	2.0%	1.8%	1.4%	1.6%	1.6%
Business fixed investment*	7.0%	3.0%	2.0%	2.7%	2.7%	3.3%	3.5%	2.6%	1.4%	2.0%	2.1%
Residential investment*	-3.3%	0.8%	1.4%	-2.8%	1.2%	2.5%	2.5%	2.4%	0.5%	1.1%	1.6%
Change in private inventories (billions of constant dollars)**	\$96.8	\$73.2	\$56.4	\$128.4	\$84.3	\$76.4	\$73.2	\$70.7	\$62.1	\$61.7	\$56.4
Net exports of goods and services (billions of constant dollars)**	-\$955.7	-\$885.1	-\$903.6	-\$899.3	-\$885.2	-\$882.9	-\$885.1	-\$887.8	-\$891.6	-\$895.5	-\$903.6
3overnment consumption expenditures and gross investment*	1.5%	2.2%	1.3%	2.4%	2.8%	1.9%	1.5%	1.5%	2.3%	0.2%	1.4%
Industrial production*	4.0%	0.7%	0.7%	-0.4%	0.7%	1.2%	1.1%	0.6%	0.9%	0.5%	0.9%
Car & light truck sales (millions - calendar year - including imports)***	17.2	16.8	16.6	16.9	16.8	16.8	16.8	16.6	16.6	16.5	15.9
Housing starts (millions)***	1.25	1.22	1.23	1.19	1.22	1.23	1.23	1.23	1.23	1.24	1.23
Oil price (dollars per barrel of West Texas Intermediate)**	\$58.97	\$62.77	\$59.94	\$54.86	\$61.48	\$62.73	\$62.77	\$61.79	\$62.07	\$61.45	\$59.94
Unemployment rate**	3.8%	3.7%	3.8%	3.9%	3.7%	3.7%	3.7%	3.7%	3.7%	3.8%	3.8%
Inflation rate (consumer price index)*	2.2%	1.7%	1.7%	0.9%	2.2%	1.9%	1.8%	1.7%	1.7%	1.8%	1.7%
Treasury constant maturity 1-year rate**	2.67%	2.59%	2.58%	2.54%	2.54%	2.57%	2.59%	2.58%	2.57%	2.57%	2.58%
Treasury constant maturity 10-year rate**	3.03%	2.76%	2.93%	2.65%	2.61%	2.68%	2.76%	2.83%	2.88%	2.91%	2.93%
J.P. Morgan trade weighted OECD dollar*	4.2%	0.8%	2.4%	-1.3%	0.6%	0.9%	0.7%	0.3%	0.6%	0.9%	0.6%

^{*}Annual: Q4 over Q4 Quarterly: Quarter to Quarter change, annual rate

^{**}Annuals are Q4 value

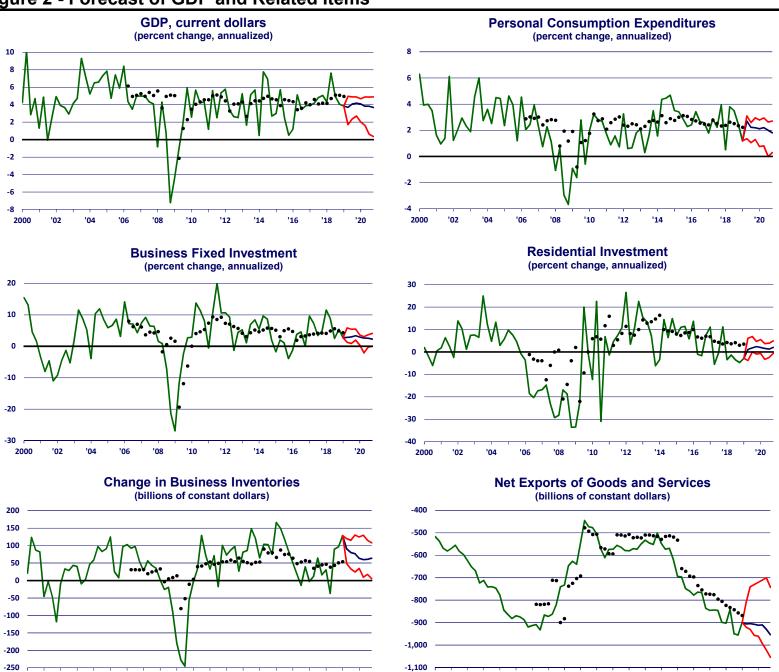
^{***}Annuals are yearly average

Figure 1 - Forecast of GDP and Related Items



^{*} Excludes the two highest and lowest forecasts.

Figure 2 - Forecast of GDP and Related Items



'18

Figure 3 - Forecast of GDP and Related Items

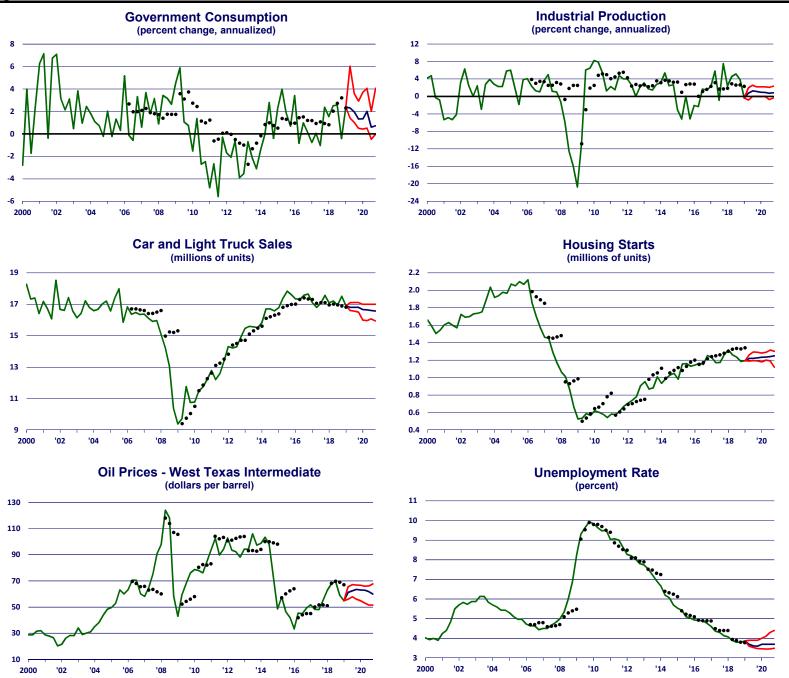
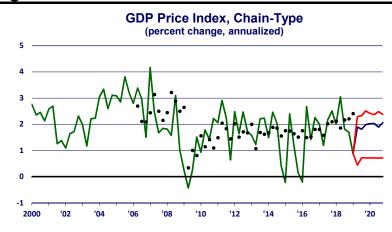
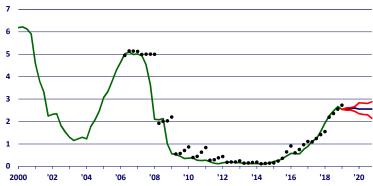


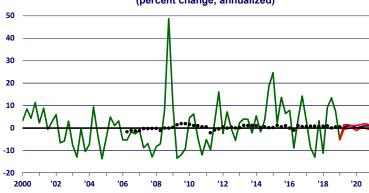
Figure 4 - Forecast of GDP and Related Items







J.P. Morgan Trade Weighted Dollar (percent change, annualized)



Inflation Rate (CPI) (percent change, annualized)



Treasury Ten-Year Rate (percent)



Table 3 - GDP, Current Dollars

		Q4 over Q4	ı								
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	F 20/			2.00/							
22	5.2%	E 40/	<i>1 E0/</i>	3.8%	4 00/	0.00/	20 5%	4 40/	4 40/	17.00/	0.00/
23		5.4%	-4.5%		-1.2%	0.0%	20.5%	1.1%	-1.1%	-17.0%	0.0%
3		4.7%	4.8%		5.6%	4.7%	4.7%	4.7%	4.9%	4.9%	4.8%
5		4.6%	4.9%		5.0%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
1		4.6%	4.9%		4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
9		4.3%	4.5%		4.2%	4.6%	4.4%	4.6%	4.8%	4.4%	4.3%
7		4.3%	4.5%		4.2%	4.6%	4.4%	4.6%	4.8%	4.4%	4.3%
6		4.3%	2.9%		4.0%	4.7%	4.5%	4.0%	2.9%	2.1%	2.8%
8		4.2%	3.0%		4.2%	4.6%	4.3%	4.0%	2.9%	2.4%	2.7%
17		4.2%	4.3%		5.1%	3.8%	4.0%	4.2%	4.4%	4.2%	4.2%
14		4.1%	4.0%		3.8%	4.1%	4.9%	3.9%	4.2%	3.9%	3.9%
15		4.0%	4.3%		3.7%	4.2%	4.3%	4.6%	4.7%	4.1%	3.9%
12		3.9%	3.8%		3.8%	4.2%	3.7%	4.1%	3.8%	3.8%	3.7%
2		3.8%	2.0%		3.8%	3.8%	3.8%	2.0%	2.0%	2.0%	2.0%
13		3.8%	3.9%		3.6%	4.1%	3.7%	4.4%	3.7%	3.8%	3.5%
11		3.8%	4.1%		3.3%	3.2%	4.9%	4.1%	4.4%	3.8%	4.1%
18		3.8%	4.2%		3.2%	3.9%	4.2%	4.6%	4.0%	4.4%	3.7%
4		3.6%	4.6%		3.3%	3.7%	3.5%	4.2%	4.6%	4.6%	4.9%
16		3.5%	0.5%		3.5%	4.0%	2.7%	2.8%	1.6%	-0.6%	-1.9%
22		3.4%	3.4%		3.2%	3.5%	3.0%	3.0%	3.6%	3.5%	3.4%
10		3.3%	2.1%		3.0%	3.4%	2.8%	2.2%	1.9%	1.9%	2.6%
20		3.0%	0.5%		-0.8%	5.4%	3.5%	-0.5%	-2.8%	2.4%	2.9%
19		2.8%	2.6%		2.5%	2.4%	2.5%	2.6%	2.6%	2.4%	2.6%
21		2.2%	1.3%		1.7%	1.8%	1.5%	2.4%	1.8%	0.6%	0.4%
21		2.270	1.070		1.170	1.070	1.070	2.170	1.070	0.070	0.170
MEDIAN		3.9%	3.9%		3.7%	4.1%	4.2%	4.1%	3.8%	3.8%	3.7%
MEAN		3.9%	3.1%		3.4%	3.9%	4.6%	3.5%	3.2%	2.4%	3.2%
STD DEV		0.7%	2.1%		1.6%	1.1%	3.5%	1.4%	1.9%	4.4%	1.7%
HIGH		5.4%	4.9%		5.6%	5.4%	20.5%	4.9%	4.9%	4.9%	4.9%
LOW		2.2%	-4.5%		-1.2%	0.0%	1.5%	-0.5%	-2.8%	-17.0%	-1.9%

Table 4 - GDP Price Index, Chain-type

		Q4 over Q4	l.								
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	2.1%			0.9%							
17		2.1%	2.3%		3.0%	2.2%	2.2%	2.3%	2.2%	2.4%	2.3%
3		2.0%	2.3%		2.7%	2.2%	2.1%	2.3%	2.3%	2.3%	2.3%
14		1.9%	2.2%		1.9%	2.5%	2.5%	2.1%	2.5%	2.1%	2.1%
7		1.9%	2.4%		2.2%	2.3%	2.2%	2.4%	2.4%	2.5%	2.4%
15		1.9%	2.4%		2.2%	2.3%	2.2%	2.4%	2.3%	2.4%	2.3%
9		1.9%	2.4%		2.1%	2.3%	2.2%	2.4%	2.4%	2.5%	2.4%
6		1.9%	1.7%		2.3%	2.1%	2.2%	2.0%	1.3%	1.4%	2.1%
8		1.9%	1.6%		2.3%	1.8%	2.5%	1.8%	1.8%	1.1%	1.8%
22		1.8%	2.0%		2.1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
18		1.7%	2.2%		2.1%	1.8%	1.9%	2.3%	2.0%	2.4%	2.0%
12		1.6%	2.1%		1.8%	1.9%	1.9%	2.1%	2.1%	2.1%	2.1%
13		1.6%	2.1%		1.8%	1.9%	2.0%	2.1%	2.0%	2.1%	2.1%
19		1.6%	1.7%		1.9%	1.1%	2.5%	1.8%	1.8%	1.4%	1.8%
11		1.5%	1.9%		1.9%	1.1%	2.2%	1.8%	2.1%	1.8%	1.8%
10		1.2%	1.8%		1.2%	1.4%	1.4%	1.4%	2.1%	1.4%	2.1%
20		1.2%	1.0%		1.2%	1.4%	1.4%	0.7%	1.1%	0.7%	1.4%
2		1.1%	1.1%		1.2%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
4		0.9%	2.2%		0.7%	1.1%	1.1%	1.8%	2.1%	2.5%	2.5%
16		0.9%	0.4%		0.4%	0.7%	1.4%	2.5%	0.4%	-0.7%	-0.7%
1		0.8%	0.7%		0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
21		0.5%	0.5%		0.4%	0.4%	0.4%	0.4%	0.7%	0.7%	0.4%
23		-0.1%	0.8%		-1.3%	0.0%	0.0%	1.8%	0.4%	0.4%	0.7%
MEDIAN		1.6%	1.9%		1.9%	1.8%	2.0%	2.0%	2.0%	1.9%	2.1%
MEAN		1.4%	1.7%		1.6%	1.6%	1.7%	1.8%	1.7%	1.6%	1.7%
STD DEV		0.6%	0.6%		0.9%	0.7%	0.7%	0.6%	0.7%	0.8%	0.8%
HIGH		2.1%	2.4%		3.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
LOW		-0.1%	0.4%		-1.3%	0.0%	0.0%	0.4%	0.4%	-0.7%	-0.7%

Table 5 - Real GDP, Chained Dollars

		Q4 over Q4	.								
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	3.0%			3.2%							
1	3.070	4.0%	4.5%	3.270	4.1%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
2		3.1%	2.0%		3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%
3		2.7%	2.5%		2.7%	2.4%	2.6%	2.0%	2.6%	2.5%	2.5%
4		2.7%	2.3%		2.7%	2.4%	2.4%	2.3%	2.4%	2.5%	2.4%
5		2.7%	2.3%		2.0%	2.0%	2.4%	2.4%	2.4%	2.1%	2.4%
			2.2% 1.2%								
6		2.4%			1.7%	2.5%	2.3%	1.9%	1.6%	0.7%	0.7%
7		2.4%	2.0%		2.0%	2.2%	2.1%	2.2%	2.3%	1.8%	1.9%
8		2.4%	1.4%		1.9%	2.7%	1.8%	2.2%	1.1%	1.3%	0.9%
9		2.4%	2.0%		2.0%	2.2%	2.1%	2.2%	2.3%	1.8%	1.9%
10		2.3%	2.1%		2.1%	1.9%	2.1%	2.1%	2.1%	2.1%	2.1%
11		2.3%	2.2%		1.4%	2.1%	2.6%	2.3%	2.2%	2.0%	2.3%
12		2.3%	1.7%		1.9%	2.3%	1.7%	2.0%	1.7%	1.7%	1.6%
13		2.2%	1.8%		1.8%	2.2%	1.7%	2.3%	1.6%	1.7%	1.4%
14		2.2%	1.8%		1.9%	1.5%	2.3%	1.7%	1.7%	1.8%	1.8%
15		2.2%	1.9%		1.5%	1.8%	2.1%	2.2%	2.3%	1.6%	1.6%
16		2.1%	0.2%		1.6%	2.3%	1.5%	1.1%	1.9%	-0.9%	-1.3%
17		2.1%	1.9%		2.0%	1.6%	1.8%	1.9%	2.1%	1.8%	1.9%
18		2.1%	2.0%		1.0%	2.1%	2.3%	2.3%	2.0%	2.0%	1.7%
19		2.1%	1.8%		1.7%	1.7%	1.8%	1.9%	1.8%	1.7%	1.9%
20		1.8%	-0.5%		-2.0%	3.9%	2.1%	-1.3%	-3.8%	1.6%	1.4%
21		1.8%	0.7%		0.8%	1.7%	1.4%	2.1%	0.9%	-0.1%	0.0%
22		1.7%	1.4%		1.2%	1.5%	1.0%	1.0%	1.6%	1.5%	1.4%
23		-2.5%	-1.6%		-17.9%	0.0%	6.8%	4.4%	-6.3%	-2.2%	-2.2%
MEDIAN		2.3%	1.9%		1.9%	2.2%	2.1%	2.2%	2.0%	1.8%	1.8%
MEAN		2.1%	1.6%		0.9%	2.2%	2.4%	2.1%	1.4%	1.5%	1.5%
STD DEV		1.1%	1.1%		4.2%	0.8%	1.2%	1.0%	2.1%	1.2%	1.3%
HIGH		4.0%	4.5%		4.1%	4.5%	6.8%	4.5%	4.5%	4.5%	4.5%
LOW		-2.5%	-1.6%		-17.9%	0.0%	1.0%	-1.3%	-6.3%	-2.2%	-2.2%

Table 6 - Personal Consumption Expenditures

Commonstration Color Col			Q4 over Q4	ı								
4 2.9% 1.7% 3.7% 3.8% 3.0% -0.5% 3.6% 2.0% 1.7% 3 2.5% 2.6% 3.1% 2.9% 3.0% 2.7% 2.6% 2.5% 2.5% 2.5% 2.5% 2.5% 2.5% 2.5% 2.5% 2.5% 2.6% 2.8% 3.0% 2.6% 2.6% 2.6% 2.6% 2.4% 2.3% 11 2.2% 2.0% 2.8% 2.4% 2.2% 2.6% 2.4% 2.3% 1.8	Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
3 2.5% 2.6% 3.1% 2.9% 3.0% 2.7% 2.6% 2.5% 2.5% 7 2.3% 2.9% 3.0% 2.4% 2.6% 2.8% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 2.8% 3.0% 3.0% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% <td></td> <td>2.6%</td> <td></td> <td></td> <td>1.2%</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		2.6%			1.2%							
7 2.3% 2.9% 3.0% 2.4% 2.6% 2.8% 3.0% 3.0% 3.0% 3.0% 9 2.3% 2.9% 3.0% 3.0% 2.4% 2.6% 2.8% 3.0% 3.0% 3.0% 18 2.3% 2.9% 3.0% 3.0% 2.3% 2.6% 2.6% 2.6% 2.2% 2.0% 2.0% 15 2.3% 2.5% 3.0% 2.3% 2.6% 2.6% 2.6% 2.6% 2.4% 2.3% 11 2.2% 2.0% 2.8% 2.3% 2.5% 2.1% 2.2% 1.8% 1.8% 12 2.1% 2.2% 2.9% 2.8% 2.4% 2.2% 2.4% 2.2% 2.2% 2.1% 14 2.1% 1.5% 3.2% 2.6% 1.4% 1.5% 2.2% 1.4% 1.1% 1.7 2.1% 2.5% 2.9% 2.1% 2.1% 2.3% 2.5% 2.1% 2.2% 2.2% 2.1% 1.1% 1.7 2.1% 2.5% 2.9% 2.1% 2.1% 2.3% 2.5% 2.6% 2.6% 2.6% 2.7% 1.3 2.0% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2%	4		2.9%	1.7%		3.7%	3.8%	3.0%	-0.5%	3.6%	2.0%	1.7%
9 2.3% 2.9% 3.0% 2.4% 2.6% 2.8% 3.0% 3.0% 3.0% 18 2.3% 2.0% 3.1% 2.5% 2.4% 2.0% 2.2% 2.0% 2.0% 2.0% 15 2.3% 2.5% 2.4% 2.6% 2.6% 2.6% 2.4% 2.3% 11 2.2% 2.0% 2.8% 2.3% 2.5% 2.1% 2.2% 1.8% 1.8% 12 2.1% 2.2% 2.8% 2.4% 2.2% 2.4% 2.2% 2.2% 2.1% 1.8% 1.8% 12 2.1% 2.2% 2.8% 2.4% 2.2% 2.4% 2.2% 2.2% 2.1% 1.1% 1.5% 3.2% 2.6% 1.4% 1.5% 2.2% 1.4% 1.1% 1.7 2.1% 2.5% 2.9% 2.1% 2.1% 2.3% 2.5% 2.1% 2.2% 2.4% 2.2% 2.2% 2.1% 1.8 1.1% 1.7 2.1% 2.5% 2.9% 2.1% 2.1% 2.3% 2.5% 2.6% 2.7% 1.4 2.0% 2.4% 2.3% 2.3% 2.4% 2.3% 2.5% 2.6% 2.7% 1.2 2.0% 2.2% 2.2% 2.2% 2.2% 2.2% 2.2% 2.	3		2.5%	2.6%		3.1%	2.9%	3.0%	2.7%	2.6%	2.5%	2.5%
18 2.3% 2.0% 3.1% 2.5% 2.4% 2.0% 2.2% 2.0% 2.0% 15 2.3% 2.5% 3.0% 2.3% 2.6% 2.6% 2.6% 2.4% 2.3% 11 2.2% 2.0% 2.8% 2.3% 2.5% 2.1% 2.2% 1.8% 1.8% 12 2.1% 2.2% 2.8% 2.4% 2.2% 2.2% 2.1% 14 2.1% 1.5% 3.2% 2.6% 1.4% 1.5% 2.2% 2.1% 17 2.1% 2.5% 2.9% 2.1% 2.3% 2.5% 2.6% 2.7% 1 2.0% 2.4% 2.3% 2.3% 2.4% 2.2%	7		2.3%	2.9%		3.0%	2.4%	2.6%	2.8%	3.0%	3.0%	3.0%
15 2.3% 2.5% 3.0% 2.3% 2.6% 2.6% 2.4% 2.3% 11 2.2% 2.0% 2.8% 2.3% 2.5% 2.1% 2.2% 1.8% 1.8% 12 2.1% 2.2% 2.8% 2.4% 2.2% 2.4% 2.2% 2.2% 2.1% 14 2.1% 1.5% 3.2% 2.6% 1.4% 1.5% 2.2% 2.1% 17 2.1% 2.5% 2.9% 2.1% 2.1% 2.3% 2.5% 2.6% 2.7% 1 2.0% 2.4% 2.3% 2.3% 2.4% 2.3% 2.4% 2.6% 2.3% 13 2.0% 2.2%	9		2.3%	2.9%		3.0%	2.4%	2.6%	2.8%	3.0%	3.0%	3.0%
11 2.2% 2.0% 2.8% 2.3% 2.5% 2.1% 2.2% 1.8% 1.8% 12 2.1% 2.2% 2.8% 2.4% 2.2% 2.2% 2.2% 2.1% 1.1% 14 2.1% 1.5% 3.2% 2.6% 1.4% 1.5% 2.2% 1.4% 1.1% 17 2.1% 2.5% 2.9% 2.1% 2.1% 2.3% 2.5% 2.6% 2.7% 1 2.0% 2.4% 2.3% 2.3% 2.4% 2.3% 2.6% 2.3% 13 2.0% 2.2% 2.3% 2.3% 2.2%<	18		2.3%	2.0%		3.1%	2.5%	2.4%	2.0%	2.2%	2.0%	2.0%
12 2.1% 2.2% 2.8% 2.4% 2.2% 2.4% 2.2% 2.1% 14 2.1% 1.5% 3.2% 2.6% 1.4% 1.5% 2.2% 1.4% 1.1% 17 2.1% 2.5% 2.9% 2.1% 2.1% 2.3% 2.5% 2.6% 2.7% 1 2.0% 2.4% 2.3% 2.3% 2.4% 2.3% 2.4% 2.6% 2.3% 13 2.0% 2.2% 2.3% 2.3% 2.4% 2.3% 2.4% 2.2%	15		2.3%	2.5%		3.0%	2.3%	2.6%	2.6%	2.6%	2.4%	2.3%
14 2.1% 1.5% 3.2% 2.6% 1.4% 1.5% 2.2% 1.4% 1.1% 17 2.1% 2.5% 2.9% 2.1% 2.1% 2.3% 2.5% 2.6% 2.7% 1 2.0% 2.4% 2.3% 2.3% 2.4% 2.6% 2.3% 13 2.0% 2.2% 2.3% 2.3% 2.2%	11		2.2%	2.0%		2.8%	2.3%	2.5%	2.1%	2.2%	1.8%	1.8%
17 2.1% 2.5% 2.9% 2.1% 2.3% 2.5% 2.6% 2.7% 1 2.0% 2.4% 2.3% 2.3% 2.4% 2.3% 2.4% 2.6% 2.3% 13 2.0% 2.2% 2.3% 2.3% 2.2% 2.4% 1.5% 1.2%	12		2.1%	2.2%		2.8%	2.4%	2.2%	2.4%	2.2%	2.2%	2.1%
1 2.0% 2.4% 2.3% 2.4% 2.3% 2.4% 2.6% 2.3% 13 2.0% 2.2% 2.3% 2.3% 2.2% 2.2% 2.2% 2.2% 2.0% 2.0% 5 2.0% 2.2% 2.1% 2.2% 2.2% 2.2% 2.2% 2.1% 2.2% 2.0% 1.1% 1.2% 1.2% 1.2% 1.4% 1.2% 1.4% 1.2%<	14		2.1%	1.5%		3.2%	2.6%	1.4%	1.5%	2.2%	1.4%	1.1%
13 2.0% 2.2% 2.3% 2.2% 2.2% 2.2% 2.0% 2.2% 2.0% 2.2% 2.0% 1.3% 1.2% 1.4% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 2.2% 2.1% 2.2% 2.1% 2.2% 2.1% 2.2% 2.0% 1.1% 2	17		2.1%	2.5%		2.9%	2.1%	2.1%	2.3%	2.5%	2.6%	2.7%
5 2.0% 2.2% 2.0% 1.8% 10 1.7% 1.6% 1.8% 1.8% 1.8% 1.8% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.1% 1.2% 1.2% 1.1% 1.4% 1.1% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.2% 1.4% 1.2% <td>1</td> <td></td> <td>2.0%</td> <td>2.4%</td> <td></td> <td>2.3%</td> <td>2.3%</td> <td>2.4%</td> <td>2.3%</td> <td>2.4%</td> <td>2.6%</td> <td>2.3%</td>	1		2.0%	2.4%		2.3%	2.3%	2.4%	2.3%	2.4%	2.6%	2.3%
20 1.9% -0.6% 2.8% 1.8% 1.6% 0.2% -3.5% -0.6% 1.7% 6 1.8% 1.0% 2.3% 1.9% 1.7% 1.5% 1.3% 0.7% 0.4% 8 1.7% 1.2% 2.3% 2.0% 1.5% 1.2% 1.5% 1.2% 0.9% 10 1.7% 1.6% 1.8% 1.8% 1.8% 2.4% 1.5% 1.2% 1.2% 1.2% 21 1.6% 0.6% 2.4% 1.2% 1.4% 0.8% 1.2% 0.2% 0.3% 16 1.5% 0.2% 1.7% 2.0% 1.3% 1.2% 0.9% -0.2% -1.1% 22 1.4% 1.8% 2.7% 1.1% 0.8% 1.9% 1.1% 2.1% 2.0% 19 1.2% 1.2% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.4% 2 0.9% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% <td< td=""><td>13</td><td></td><td>2.0%</td><td>2.2%</td><td></td><td>2.3%</td><td>2.3%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.0%</td></td<>	13		2.0%	2.2%		2.3%	2.3%	2.2%	2.2%	2.2%	2.2%	2.0%
6 1.8% 1.0% 2.3% 1.9% 1.7% 1.5% 1.3% 0.7% 0.4% 8 1.7% 1.2% 2.3% 2.0% 1.5% 1.2% 1.2% 0.9% 10 1.7% 1.6% 1.8% 1.8% 1.8% 2.4% 1.5% 1.2% 1.2% 21 1.6% 0.6% 2.4% 1.2% 1.4% 0.8% 1.2% 0.2% 0.3% 16 1.5% 0.2% 1.7% 2.0% 1.3% 1.2% 0.9% -0.2% -1.1% 22 1.4% 1.8% 2.7% 1.1% 0.8% 1.9% 1.1% 2.1% 2.0% 19 1.2% 1.2% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.4% 2 0.9% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.0% 0.0% 1.6% 1.6% 5.9% 0.0% 0.0% 0.0% 1.0% <td< td=""><td>5</td><td></td><td>2.0%</td><td>2.2%</td><td></td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td></td<>	5		2.0%	2.2%		2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
6 1.8% 1.0% 2.3% 1.9% 1.7% 1.5% 1.3% 0.7% 0.4% 8 1.7% 1.2% 2.3% 2.0% 1.5% 1.2% 1.2% 0.9% 10 1.7% 1.6% 1.8% 1.8% 1.8% 2.4% 1.5% 1.2% 1.2% 21 1.6% 0.6% 2.4% 1.2% 1.4% 0.8% 1.2% 0.2% 0.3% 16 1.5% 0.2% 1.7% 2.0% 1.3% 1.2% 0.9% -0.2% -1.1% 22 1.4% 1.8% 2.7% 1.1% 0.8% 1.9% 1.1% 2.1% 2.0% 19 1.2% 1.2% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.4% 2 0.9% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.0% 0.0% 1.6% 1.6% 5.9% 0.0% 0.0% 0.0% 1.0% <td< td=""><td>20</td><td></td><td>1.9%</td><td>-0.6%</td><td></td><td>2.8%</td><td>1.8%</td><td>1.6%</td><td>0.2%</td><td>-3.5%</td><td>-0.6%</td><td>1.7%</td></td<>	20		1.9%	-0.6%		2.8%	1.8%	1.6%	0.2%	-3.5%	-0.6%	1.7%
10 1.7% 1.6% 1.8% 1.8% 1.8% 2.4% 1.5% 1.2% 1.2% 21 1.6% 0.6% 2.4% 1.2% 1.4% 0.8% 1.2% 0.2% 0.3% 16 1.5% 0.2% 1.7% 2.0% 1.3% 1.2% 0.9% -0.2% -1.1% 22 1.4% 1.8% 2.7% 1.1% 0.8% 1.9% 1.1% 2.1% 2.0% 19 1.2% 1.2% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.4% 2 0.9% 0.8%			1.8%	1.0%		2.3%	1.9%	1.7%	1.5%	1.3%	0.7%	0.4%
21 1.6% 0.6% 2.4% 1.2% 1.4% 0.8% 1.2% 0.2% 0.3% 16 1.5% 0.2% 1.7% 2.0% 1.3% 1.2% 0.9% -0.2% -1.1% 22 1.4% 1.8% 2.7% 1.1% 0.8% 1.9% 1.1% 2.1% 2.0% 19 1.2% 1.2% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.4% 2 0.9% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.0% <td>8</td> <td></td> <td>1.7%</td> <td>1.2%</td> <td></td> <td>2.3%</td> <td>2.0%</td> <td>1.5%</td> <td>1.2%</td> <td>1.5%</td> <td>1.2%</td> <td>0.9%</td>	8		1.7%	1.2%		2.3%	2.0%	1.5%	1.2%	1.5%	1.2%	0.9%
16 1.5% 0.2% 1.7% 2.0% 1.3% 1.2% 0.9% -0.2% -1.1% 22 1.4% 1.8% 2.7% 1.1% 0.8% 1.9% 1.1% 2.1% 2.0% 19 1.2% 1.2% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.4% 2 0.9% 0.8%<	10		1.7%	1.6%		1.8%	1.8%	1.8%	2.4%	1.5%	1.2%	1.2%
22 1.4% 1.8% 2.7% 1.1% 0.8% 1.9% 1.1% 2.1% 2.0% 19 1.2% 1.2% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.4% 2 0.9% 0.8% 0.0%	21		1.6%	0.6%		2.4%	1.2%	1.4%	0.8%	1.2%	0.2%	0.3%
19 1.2% 1.2% 1.4% 1.1% 1.4% 1.1% 1.2% 1.2% 1.4% 2 0.9% 0.8% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.8% 1.4% 1.6% 1.6% 1.6% 0.0% 0.7% 0.9% 2.1% 1.0% 1	16		1.5%	0.2%		1.7%	2.0%	1.3%	1.2%	0.9%	-0.2%	-1.1%
2 0.9% 0.8% 0.0% <t< td=""><td>22</td><td></td><td>1.4%</td><td>1.8%</td><td></td><td>2.7%</td><td>1.1%</td><td>0.8%</td><td>1.9%</td><td>1.1%</td><td>2.1%</td><td>2.0%</td></t<>	22		1.4%	1.8%		2.7%	1.1%	0.8%	1.9%	1.1%	2.1%	2.0%
23 0.5% -0.8% -2.2% 0.0% 3.1% 3.1% -5.9% 0.0% 0.0% MEDIAN 2.0% 1.8% 2.7% 2.2% 2.2% 2.1% 2.2% 2.0% 1.8% MEAN 1.9% 1.6% 2.3% 2.0% 2.0% 1.8% 1.4% 1.6% 1.6% STD DEV 0.5% 1.0% 1.2% 0.8% 0.7% 0.9% 2.1% 1.0% 1.0% HIGH 2.9% 2.9% 3.7% 3.8% 3.1% 3.1% 3.6% 3.0% 3.0%	19		1.2%	1.2%		1.4%	1.1%	1.4%	1.1%	1.2%	1.2%	1.4%
MEDIAN 2.0% 1.8% 2.7% 2.2% 2.2% 2.1% 2.2% 2.0% 1.8% MEAN 1.9% 1.6% 2.3% 2.0% 2.0% 1.8% 1.4% 1.6% 1.6% STD DEV 0.5% 1.0% 1.2% 0.8% 0.7% 0.9% 2.1% 1.0% 1.0% HIGH 2.9% 2.9% 3.7% 3.8% 3.1% 3.1% 3.6% 3.0% 3.0%	2		0.9%	0.8%		0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
MEAN 1.9% 1.6% 2.3% 2.0% 2.0% 1.8% 1.4% 1.6% 1.6% STD DEV 0.5% 1.0% 1.2% 0.8% 0.7% 0.9% 2.1% 1.0% 1.0% HIGH 2.9% 2.9% 3.7% 3.8% 3.1% 3.1% 3.6% 3.0% 3.0%	23		0.5%	-0.8%		-2.2%	0.0%	3.1%	3.1%	-5.9%	0.0%	0.0%
MEAN 1.9% 1.6% 2.3% 2.0% 2.0% 1.8% 1.4% 1.6% 1.6% STD DEV 0.5% 1.0% 1.2% 0.8% 0.7% 0.9% 2.1% 1.0% 1.0% HIGH 2.9% 2.9% 3.7% 3.8% 3.1% 3.1% 3.6% 3.0% 3.0%												
MEAN 1.9% 1.6% 2.3% 2.0% 2.0% 1.8% 1.4% 1.6% 1.6% STD DEV 0.5% 1.0% 1.2% 0.8% 0.7% 0.9% 2.1% 1.0% 1.0% HIGH 2.9% 2.9% 3.7% 3.8% 3.1% 3.1% 3.6% 3.0% 3.0%	MEDIAN		2.0%	1.8%		2.7%	2.2%	2.2%	2.1%	2.2%	2.0%	1.8%
STD DEV 0.5% 1.0% 1.2% 0.8% 0.7% 0.9% 2.1% 1.0% 1.0% HIGH 2.9% 2.9% 3.7% 3.8% 3.1% 3.1% 3.6% 3.0% 3.0%	MEAN											
HIGH 2.9% 2.9% 3.7% 3.8% 3.1% 3.6% 3.0% 3.0%	STD DEV											

¹¹ Federal Reserve Bank of Chicago - Twenty-Sixth Annual Automotive Outlook Symposium May 31, 2019

Table 7 - Business Fixed Investment

		Q4 over Q4	1								
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	7.0%			2.7%							
6		5.7%	1.6%		7.9%	6.5%	5.6%	4.0%	2.3%	0.0%	0.1%
8		4.9%	1.7%		7.1%	5.8%	4.2%	3.5%	1.4%	0.7%	1.1%
3		4.6%	4.8%		5.0%	5.2%	5.5%	5.2%	4.9%	4.8%	4.5%
4		4.3%	2.7%		5.1%	5.4%	3.8%	2.4%	-4.3%	5.3%	7.8%
18		4.1%	2.2%		5.9%	3.9%	4.0%	2.6%	2.5%	1.9%	1.8%
16		4.0%	0.9%		4.5%	4.4%	4.3%	3.6%	2.7%	-1.5%	-1.1%
9		3.2%	3.1%		1.9%	3.7%	4.3%	3.2%	3.0%	3.4%	2.8%
7		3.2%	3.1%		1.9%	3.7%	4.3%	3.2%	3.0%	3.4%	2.8%
11		3.1%	3.3%		3.8%	2.9%	2.8%	3.1%	2.8%	3.2%	4.1%
12		3.1%	2.6%		1.5%	5.3%	2.7%	3.1%	2.4%	2.6%	2.3%
17		3.0%	3.6%		3.3%	2.9%	3.1%	3.5%	3.9%	3.7%	3.3%
10		3.0%	2.8%		3.3%	2.9%	2.9%	2.8%	2.8%	2.8%	2.8%
13		2.9%	2.2%		1.1%	5.3%	2.6%	2.5%	1.8%	2.4%	2.0%
1		2.8%	2.8%		2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
2		2.8%	2.8%		2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
15		2.7%	2.9%		1.2%	3.0%	3.9%	3.1%	3.0%	3.1%	2.3%
22		2.4%	1.0%		3.0%	2.5%	1.4%	0.4%	0.7%	1.6%	1.5%
19		2.3%	2.4%		2.3%	2.0%	2.3%	2.4%	2.4%	2.3%	2.5%
14		2.2%	2.1%		2.8%	1.4%	1.9%	2.2%	2.8%	1.6%	1.6%
21		1.7%	-1.6%		1.9%	-1.4%	3.6%	-1.4%	-2.1%	-2.1%	-0.7%
20		1.5%	-0.3%		1.3%	0.9%	1.0%	-0.6%	-0.6%	-0.3%	0.1%
23		-0.5%	-1.8%		-11.3%	0.0%	7.6%	2.9%	-9.7%	0.0%	0.0%
MEDIAN		3.0%	2.5%		2.8%	2.9%	3.4%	2.9%	2.6%	2.5%	2.3%
MEAN		3.0%	2.0%		2.7%	3.3%	3.5%	2.6%	1.4%	2.0%	2.1%
STD DEV		1.3%	1.6%		3.6%	1.9%	1.4%	1.4%	3.1%	1.8%	1.9%
HIGH		5.7%	4.8%		7.9%	6.5%	7.6%	5.2%	4.9%	5.3%	7.8%
LOW		-0.5%	-1.8%		-11.3%	-1.4%	1.0%	-1.4%	-9.7%	-2.1%	-1.1%

Table 8 - Residential Investment

Name			Q4 over Q4	ı								
22 5.7% 2.7% 13.0% 6.0% 7.5% 1.6% 6.0% 1.2% 2.2% 4 5.6% 5.8% 9.0% 14.5% 2.4% 16.9% -9.1% 9.5% 7.6% 6 3.5% 4.2% 0.9% 7.8% 8.4% 5.6% 3.7% 2.8% 5.0% 8 1.9% 2.1% -0.7% 6.9% 4.7% 2.0% 3.3% 1.3% 1.9% 16 1.8% 0.3% 3.5% 3.8% 2.8% 1.4% 1.0% -0.8% -0.6% 2 1.5% 0.0% 2	Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
22 5.7% 2.7% 13.0% 6.0% 7.5% 1.6% 6.0% 1.2% 2.2% 4 5.6% 5.8% 9.0% 14.5% 2.4% 16.9% -9.1% 9.5% 7.6% 6 3.5% 4.2% 0.9% 7.8% 8.4% 5.6% 3.7% 2.8% 5.0% 8 1.9% 2.1% -0.7% 6.9% 4.7% 2.0% 3.3% 1.3% 1.9% 16 1.8% 0.3% 3.5% 3.8% 2.8% 1.4% 1.0% -0.8% -0.6% 2 1.5% 0.0% 2												
4 5.6% 5.8% 9.0% 14.5% 2.4% 16.9% -9.1% 9.5% 7.6% 6 3.5% 4.2% 0.9% 7.8% 8.4% 5.6% 3.7% 2.8% 5.0% 8 1.9% 2.1% 0.0% 6.9% 4.7% 2.0% 3.3% 1.3% 1.9% 16 1.8% 0.3% 3.5% 3.8% 2.8% 1.4% 1.0% -0.8% -0.6% 2 1.5% 0.0% 5.0% 2.0% 2.0% -5.8% 2.0% <td></td> <td>-3.3%</td> <td></td> <td></td> <td>-2.8%</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td> • •</td> <td></td>		-3.3%			-2.8%						• •	
6 3.5% 4.2% 0.9% 7.8% 8.4% 5.6% 3.7% 2.8% 5.0% 8 1.9% 2.1% -0.7% 6.9% 4.7% 2.0% 3.3% 1.3% 1.9% 16 1.8% 0.3% 3.5% 3.8% 2.8% 1.4% 1.0% -0.8% -0.6% 2 1.5% 0.0% 5.0% 2.0% 2.0% 2.0% -5.8% 2.0% 2.0% 2.0% 1.1 0.8% 2.0% 2.6% 2.0% 1.5% 1.5% 1.5% 0.1% 5.1% 1 0.8% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0												
8 1.9% 2.1% -0.7% 6.9% 4.7% 2.0% 3.3% 1.3% 1.9% 16 1.8% 0.3% 3.5% 3.8% 2.8% 1.4% 1.0% -0.8% -0.6% 2 1.5% 0.0% 2.0% 1.1% 1.0% 1.0% 1.0% 1.0%												
16 1.8% 0.3% 3.5% 3.8% 2.8% 1.4% 1.0% -0.8% -0.6% 2 1.5% 0.0% 5.0% 2.0% <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>												
2 1.5% 0.0% 5.0% 2.0% 2.0% -5.8% 2.0% 2.0% 2.0% 11 0.8% 2.0% 2.6% 2.0% 1.5% 1.5% 1.5% 0.1% 5.1% 1 0.8% 2.0% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 2.0% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3% 1.3%												
11 0.8% 2.0% 2.6% 2.0% 1.5% 1.5% 1.5% 0.1% 5.1% 1 0.8% 2.0% 1.1% 2.8% 2.8% 1.0 1.3% <td></td>												
1 0.8% 2.0% 1.3% <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
21 0.8% -5.0% 6.1% 3.3% -3.2% 6.8% -9.4% -6.5% -9.8% 19 0.6% 2.0% 2.0% 1.3% 2.0% 2.0% 2.0% 2.0% 14 0.6% 1.4% 3.1% 3.1% -1.0% -0.8% 1.1% 2.8% 2.8% 10 0.4% 1.5% 1.3% 1.3% 2.0% 2.0% 1.3% 1.3% 3 -0.1% 3.7% -0.6% 0.9% 2.3% 3.2% 3.7% 3.9% 3.8% 23 -0.1% -3.3% -0.7% 0.0% 3.4% 0.0% -3.3% -6.6% -3.4% 13 -0.3% 3.0% -3.2% 2.1% 3.0% 2.8% 2.2% 3.9% 3.1% 18 -0.4% 0.7% -1.5% 1.1% 1.5% 1.0% 1.0% 1.0% 0.0% 12 -0.7% 2.6% -2.4% 0.3% 2.1% 2.2% <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>												
19 0.6% 2.0% 2.0% 1.3% 2.0% 2.0% 2.0% 2.0% 14 0.6% 1.4% 3.1% 3.1% -1.0% -0.8% 1.1% 2.8% 2.8% 10 0.4% 1.5% 1.3% 1.3% 2.0% 2.0% 1.3%												
14 0.6% 1.4% 3.1% 3.1% -1.0% -0.8% 1.1% 2.8% 2.8% 10 0.4% 1.5% 1.3% 1.3% 2.0% 2.0% 1.3% 1.3% 1.3% 3 -0.1% 3.7% -0.6% 0.9% 2.3% 3.2% 3.7% 3.9% 3.8% 23 -0.1% -3.3% -0.7% 0.0% 3.4% 0.0% -3.3% -6.6% -3.4% 13 -0.3% 3.0% -3.2% 2.1% 3.0% 2.8% 2.2% 3.9% 3.1% 18 -0.4% 0.7% -1.5% 1.1% 1.5% 1.0% 1.0% 1.0% 0.0% 12 -0.7% 2.6% -2.4% 0.3% 2.1% 2.2% 1.8% 3.5% 2.9% 7 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.9% 2.1% 15 -1.0% 2.1% </td <td>21</td> <td></td> <td>0.8%</td> <td>-5.0%</td> <td></td> <td>6.1%</td> <td>3.3%</td> <td>-3.2%</td> <td>6.8%</td> <td>-9.4%</td> <td>-6.5%</td> <td>-9.8%</td>	21		0.8%	-5.0%		6.1%	3.3%	-3.2%	6.8%	-9.4%	-6.5%	-9.8%
10 0.4% 1.5% 1.3% 1.3% 2.0% 2.0% 1.3% 1.3% 1.3% 3 -0.1% 3.7% -0.6% 0.9% 2.3% 3.2% 3.7% 3.9% 3.8% 23 -0.1% -3.3% -0.7% 0.0% 3.4% 0.0% -3.3% -6.6% -3.4% 13 -0.3% 3.0% -3.2% 2.1% 3.0% 2.8% 2.2% 3.9% 3.1% 18 -0.4% 0.7% -1.5% 1.1% 1.5% 1.0% 1.0% 1.0% 0.0% 12 -0.7% 2.6% -2.4% 0.3% 2.1% 2.2% 1.8% 3.5% 2.9% 7 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.9% 2.1% 15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2%			0.6%	2.0%		2.0%	1.3%	2.0%	2.0%	2.0%	2.0%	
3 -0.1% 3.7% -0.6% 0.9% 2.3% 3.2% 3.7% 3.9% 3.8% 23 -0.1% -3.3% -0.7% 0.0% 3.4% 0.0% -3.3% -6.6% -3.4% 13 -0.3% 3.0% -3.2% 2.1% 3.0% 2.8% 2.2% 3.9% 3.1% 18 -0.4% 0.7% -1.5% 1.1% 1.5% 1.0% 1.0% 1.0% 0.0% 12 -0.7% 2.6% -2.4% 0.3% 2.1% 2.2% 1.8% 3.5% 2.9% 7 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6%	14		0.6%	1.4%		3.1%	3.1%	-1.0%	-0.8%	1.1%	2.8%	2.8%
23 -0.1% -3.3% -0.7% 0.0% 3.4% 0.0% -3.3% -6.6% -3.4% 13 -0.3% 3.0% -3.2% 2.1% 3.0% 2.8% 2.2% 3.9% 3.1% 18 -0.4% 0.7% -1.5% 1.1% 1.5% 1.0% 1.0% 1.0% 0.0% 12 -0.7% 2.6% -2.4% 0.3% 2.1% 2.2% 1.8% 3.5% 2.9% 7 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.9% 2.1% 15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 1.1% 1.8% 2.4% 2.0% 1.5% 1.2% 2.0% MEDIAN 0.8%	10		0.4%	1.5%		1.3%	1.3%	2.0%	2.0%	1.3%	1.3%	1.3%
13 -0.3% 3.0% -3.2% 2.1% 3.0% 2.8% 2.2% 3.9% 3.1% 18 -0.4% 0.7% -1.5% 1.1% 1.5% 1.0% 1.0% 1.0% 0.0% 12 -0.7% 2.6% -2.4% 0.3% 2.1% 2.2% 1.8% 3.5% 2.9% 7 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 4.7% -5.8% -2.0% -0.7% -1.3% -0.7% 0.7% MEDIAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9%	3		-0.1%	3.7%		-0.6%	0.9%	2.3%	3.2%	3.7%	3.9%	3.8%
18 -0.4% 0.7% -1.5% 1.1% 1.5% 1.0% 1.0% 0.0% 12 -0.7% 2.6% -2.4% 0.3% 2.1% 2.2% 1.8% 3.5% 2.9% 7 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.9% 2.1% 15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 4.7% -5.8% -2.0% -0.7% -1.3% -0.7% 0.7% MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8%	23		-0.1%	-3.3%		-0.7%	0.0%	3.4%	0.0%	-3.3%	-6.6%	-3.4%
12 -0.7% 2.6% -2.4% 0.3% 2.1% 2.2% 1.8% 3.5% 2.9% 7 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.9% 2.1% 15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 4.7% -5.8% -2.0% -0.7% -1.3% -0.7% 0.7% MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%	13		-0.3%	3.0%		-3.2%	2.1%	3.0%	2.8%	2.2%	3.9%	3.1%
7 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.8% 2.1% 9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.9% 2.1% 15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 4.7% -5.8% -2.0% -0.7% -1.3% -0.7% 0.7% MEDIAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.2% 2.0% MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5%	18		-0.4%	0.7%		-1.5%	1.1%	1.5%	1.0%	1.0%	1.0%	0.0%
9 -0.8% 1.8% -3.8% 0.2% 3.3% 2.9% 1.5% 0.9% 2.1% 15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 4.7% -5.8% -2.0% -0.7% -1.3% -0.7% 0.7% MEDIAN 0.5% 1.9% 1.1% 1.8% 2.4% 2.0% 1.5% 1.2% 2.0% MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%	12		-0.7%	2.6%		-2.4%	0.3%	2.1%	2.2%	1.8%	3.5%	2.9%
15 -1.0% 2.1% -4.0% -0.3% 3.3% 3.4% 2.0% 1.1% 2.1% 17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 4.7% -5.8% -2.0% -0.7% -1.3% -0.7% 0.7% MEDIAN 0.5% 1.9% 1.1% 1.8% 2.4% 2.0% 1.5% 1.2% 2.0% MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%	7		-0.8%	1.8%		-3.8%	0.2%	3.3%	2.9%	1.5%	0.8%	2.1%
17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 4.7% -5.8% -2.0% -0.7% -1.3% -0.7% 0.7% MEDIAN 0.5% 1.9% 1.1% 1.8% 2.4% 2.0% 1.5% 1.2% 2.0% MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%	9		-0.8%	1.8%		-3.8%	0.2%	3.3%	2.9%	1.5%	0.9%	2.1%
17 -1.0% -1.2% -6.6% 1.6% 4.0% 0.1% -2.7% -2.5% 0.4% 20 -1.6% -0.5% 4.7% -5.8% -2.0% -0.7% -1.3% -0.7% 0.7% MEDIAN 0.5% 1.9% 1.1% 1.8% 2.4% 2.0% 1.5% 1.2% 2.0% MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%	15		-1.0%	2.1%		-4.0%	-0.3%	3.3%	3.4%	2.0%	1.1%	2.1%
MEDIAN 0.5% 1.9% 1.1% 1.8% 2.4% 2.0% 1.5% 1.2% 2.0% MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%	17		-1.0%	-1.2%		-6.6%	1.6%	4.0%	0.1%	-2.7%	-2.5%	0.4%
MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%	20		-1.6%	-0.5%		4.7%	-5.8%	-2.0%	-0.7%	-1.3%	-0.7%	0.7%
MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%												
MEAN 0.8% 1.4% 1.2% 2.5% 2.5% 2.4% 0.5% 1.1% 1.6% STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%	MEDIAN		0.5%	1.9%		1.1%	1.8%	2.4%	2.0%	1.5%	1.2%	2.0%
STD DEV 1.9% 2.3% 4.5% 3.8% 2.5% 4.0% 3.7% 3.3% HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%												
HIGH 5.7% 5.8% 13.0% 14.5% 8.4% 16.9% 6.0% 9.5% 7.6%												

Table 9 - Change in Private Inventories

		Q4 value									
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	***			* 4 0 0 4							
40	\$96.8	# 4400	0.1.10.1	\$128.4	* 407.0	# 400 F	# 4400	* 444 *		6444 6	04404
16		\$140.6	\$140.1		\$137.9	\$139.5	\$140.6	\$141.3	\$142.6	\$141.0	\$140.1
20		\$135.0	\$15.0		-\$25.0	\$67.0	\$135.0	\$25.0	-\$72.5	\$5.0	\$15.0
1		\$130.3	\$133.0		\$129.0	\$129.7	\$130.3	\$131.0	\$131.6	\$132.3	\$133.0
10		\$112.0	\$108.0		\$120.0	\$115.0	\$112.0	\$111.0	\$110.0	\$109.0	\$108.0
19		\$102.0	\$100.0		\$114.0	\$115.0	\$102.0	\$125.0	\$130.0	\$115.0	\$100.0
23		\$100.0	\$100.0		\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0
2		\$95.0	\$85.0		\$97.3	\$100.0	\$95.0	\$90.0	\$89.0	\$88.0	\$85.0
11		\$80.0	\$80.0		\$80.0	\$80.0	\$80.0	\$80.0	\$80.0	\$80.0	\$80.0
3		\$77.4	\$62.4		\$111.4	\$94.4	\$77.4	\$61.5	\$61.8	\$62.1	\$62.4
7		\$77.2	\$68.3		\$99.6	\$85.8	\$77.2	\$75.1	\$74.0	\$71.3	\$68.3
9		\$77.2	\$68.3		\$99.6	\$85.8	\$77.2	\$75.1	\$74.0	\$71.3	\$68.3
17		\$76.6	\$51.0		\$107.1	\$96.1	\$76.6	\$64.8	\$57.3	\$51.1	\$51.0
13		\$67.3	\$50.9		\$80.0	\$70.5	\$67.3	\$62.1	\$58.0	\$58.6	\$50.9
21		\$65.0	\$65.0		\$95.0	\$80.0	\$65.0	\$70.0	\$75.0	\$70.0	\$65.0
22		\$64.2	\$36.3		\$66.9	\$74.2	\$64.2	\$52.4	\$43.6	\$36.3	\$36.3
12		\$64.0	\$49.2		\$83.0	\$69.8	\$64.0	\$61.3	\$55.6	\$53.0	\$49.2
8		\$60.0	\$5.0		\$50.0	\$55.0	\$60.0	\$38.0	\$32.0	\$20.0	\$5.0
6		\$54.4	\$4.4		\$51.0	\$54.1	\$54.4	\$48.8	\$37.7	\$17.5	\$4.4
15		\$39.6	\$60.4		\$78.8	\$50.7	\$39.6	\$43.4	\$52.0	\$56.3	\$60.4
18		\$24.7	\$61.0		\$48.2	\$33.2	\$24.7	\$46.0	\$48.9	\$59.0	\$61.0
14		\$19.5	\$88.4		\$45.5	-\$19.2	\$19.5	\$18.9	\$9.4	\$43.6	\$88.4
4		-\$51.1	-\$190.0		\$85.6	\$4.0	-\$51.1	\$34.8	-\$23.6	-\$82.1	-\$190.0
										·	
MEDIAN		\$76.9	\$63.7		\$90.3	\$80.0	\$76.9	\$63.5	\$59.9	\$60.6	\$63.7
MEAN		\$73.2	\$56.4		\$84.3	\$76.4	\$73.2	\$70.7	\$62.1	\$61.7	\$56.4
STD DEV		\$41.5	\$64.1		\$34.8	\$36.8	\$41.5	\$33.1	\$48.4	\$46.6	\$64.1
HIGH		\$140.6	\$140.1		\$137.9	\$139.5	\$140.6	\$141.3	\$142.6	\$141.0	\$140.1
LOW		-\$51.1	-\$190.0		-\$25.0	-\$19.2	-\$51.1	\$18.9	-\$72.5	-\$82.1	-\$190.0

Table 10 - Net Exports of Goods and Services

		Q4 value									
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	*			4000							
4	-\$955.7	#	#500.0	-\$899.3	# 000 4	\$700.4	# 000 0	0057 4	00045	# 500.0	\$500.0
1		-\$692.0	-\$563.6		-\$809.4	-\$728.4	-\$692.0	-\$657.4	-\$624.5	-\$593.3	-\$563.6
23		-\$700.0	-\$750.0		-\$700.0	-\$700.0	-\$700.0	-\$700.0	-\$700.0	-\$700.0	-\$750.0
10		-\$730.0	-\$695.0		-\$750.0	-\$740.0	-\$730.0	-\$720.0	-\$710.0	-\$700.0	-\$695.0
14		-\$843.0	-\$904.0		-\$894.3	-\$869.0	-\$843.0	-\$830.0	-\$859.0	-\$872.0	-\$904.0
4		-\$858.4	-\$743.2		-\$894.6	-\$890.7	-\$858.4	-\$878.0	-\$834.4	-\$795.2	-\$743.2
16		-\$874.3	-\$799.4		-\$915.3	-\$925.6	-\$874.3	-\$870.5	-\$869.1	-\$835.5	-\$799.4
19		-\$875.0	-\$960.0		-\$875.0	-\$850.0	-\$875.0	-\$890.0	-\$900.0	-\$925.0	-\$960.0
2		-\$882.1	-\$847.3		- \$900.0	-\$891.0	-\$882.1	-\$873.3	-\$864.5	-\$855.9	-\$847.3
21		-\$885.0	-\$820.0		-\$920.0	-\$890.0	-\$885.0	-\$845.0	-\$835.0	-\$825.0	-\$820.0
22		-\$901.2	-\$952.4		-\$905.5	-\$905.0	-\$901.2	-\$903.6	-\$916.3	-\$933.9	-\$952.4
11		-\$903.0	-\$903.0		-\$898.0	-\$911.0	-\$903.0	-\$901.0	-\$904.0	-\$903.0	-\$903.0
13		-\$911.9	-\$977.1		-\$879.2	-\$891.7	-\$911.9	-\$928.0	-\$940.1	-\$958.6	-\$977.1
12		-\$918.6	-\$978.5		-\$896.9	-\$906.3	-\$918.6	-\$933.0	-\$947.0	-\$962.3	-\$978.5
15		-\$925.5	-\$1,054.7		-\$906.2	-\$901.2	-\$925.5	-\$953.8	-\$985.9	-\$1,022.1	-\$1,054.7
18		-\$926.1	-\$977.5		-\$920.6	-\$930.2	-\$926.1	-\$932.3	-\$943.9	-\$959.5	-\$977.5
17		-\$926.4	-\$999.2		-\$909.7	-\$925.0	-\$926.4	-\$934.7	-\$953.3	-\$970.6	-\$999.2
7		-\$931.3	-\$1,076.9		-\$907.2	-\$904.8	-\$931.3	-\$961.3	-\$996.3	-\$1,037.1	-\$1,076.9
9		-\$931.3	-\$1,076.9		-\$907.2	-\$904.9	-\$931.3	-\$961.3	-\$996.4	-\$1,037.2	-\$1,076.9
3		-\$936.2	-\$987.6		-\$907.4	-\$922.7	-\$936.2	-\$949.1	-\$961.6	-\$974.9	-\$987.6
20		-\$957.0	-\$900.0		-\$935.0	-\$920.0	-\$957.0	-\$920.0	-\$890.0	-\$880.0	-\$900.0
8		-\$980.0	-\$955.0		-\$920.0	-\$958.0	-\$980.0	-\$995.0	-\$990.0	-\$980.0	-\$955.0
6		-\$982.8	-\$957.2		-\$923.4	-\$958.1	-\$982.8	-\$994.4	-\$993.5	-\$980.1	-\$957.2
						·		·			
MEDIAN		-\$907.5	-\$953.7		-\$905.8	-\$904.9	-\$907.5	-\$911.8	-\$910.2	-\$929.5	-\$953.7
MEAN		-\$885.1	-\$903.6		-\$885.2	-\$882.9	-\$885.1	-\$887.8	-\$891.6	-\$895.5	-\$903.6
STD DEV		\$78.7	\$127.2		\$56.6	\$68.2	\$78.7	\$88.8	\$99.6	\$114.0	\$127.2
HIGH		-\$692.0	-\$563.6		-\$700.0	-\$700.0	-\$692.0	-\$657.4	-\$624.5	-\$593.3	-\$563.6
LOW		-\$982.8	-\$1,076.9		-\$935.0	-\$958.1	-\$982.8	-\$995.0	-\$996.4	-\$1,037.2	-\$1,076.9

Table 11 - Government Consumption Expenditures and Gross Investment

		Q4 over Q4	4								
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	1.5%			2.4%							
6		3.8%	1.7%		6.5%	3.6%	2.9%	2.8%	2.7%	1.3%	0.0%
8		3.8%	1.8%		6.0%	3.7%	3.1%	3.1%	2.4%	1.2%	0.4%
22		2.8%	0.5%		7.5%	1.0%	0.5%	-4.2%	7.1%	-0.5%	0.0%
2		2.7%	4.1%		2.2%	2.3%	4.1%	4.1%	4.1%	4.1%	4.1%
18		2.5%	0.8%		2.6%	2.7%	2.4%	0.5%	1.4%	0.3%	0.8%
21		2.4%	2.1%		2.2%	3.8%	1.2%	3.7%	2.5%	1.2%	1.2%
19		2.3%	2.4%		2.2%	2.5%	2.1%	2.2%	2.5%	2.4%	2.4%
13		2.3%	1.3%		4.3%	1.4%	1.0%	4.2%	0.4%	0.2%	0.4%
14		2.2%	1.4%		2.9%	2.3%	1.4%	0.4%	1.9%	1.9%	1.5%
12		2.2%	0.5%		3.8%	2.1%	0.5%	0.8%	0.8%	-0.2%	0.5%
15		2.1%	1.0%		3.2%	1.5%	1.3%	1.3%	2.4%	-0.1%	0.2%
7		2.1%	0.9%		3.2%	1.5%	1.3%	1.3%	2.4%	-0.1%	0.2%
9		2.1%	1.0%		3.2%	1.5%	1.3%	1.3%	2.4%	-0.1%	0.2%
1		2.1%	2.0%		1.9%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
3		2.1%	1.1%		2.3%	1.9%	1.7%	1.1%	1.1%	1.1%	1.1%
4		2.0%	3.9%		2.3%	2.3%	1.1%	2.8%	7.3%	-0.1%	5.7%
20		1.9%	1.6%		1.8%	2.4%	1.1%	1.6%	1.1%	1.4%	2.3%
17		1.7%	0.8%		2.3%	1.3%	1.0%	1.1%	2.0%	-0.2%	0.2%
11		1.7%	1.5%		1.4%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
16		1.4%	-0.1%		1.4%	1.0%	0.9%	0.9%	0.5%	-1.3%	-0.5%
10		0.8%	0.8%		0.3%	0.2%	0.4%	0.6%	1.0%	0.9%	0.6%
23		0.4%	-1.6%		-1.0%	0.0%	0.0%	0.0%	0.0%	-11.9%	6.6%
MEDIAN		2.1%	1.2%		2.3%	2.0%	1.3%	1.3%	2.0%	0.6%	0.7%
MEAN		2.2%	1.3%		2.8%	1.9%	1.5%	1.5%	2.3%	0.2%	1.4%
STD DEV		0.8%	1.2%		1.9%	1.0%	0.9%	1.7%	1.8%	2.9%	1.8%
HIGH		3.8%	4.1%		7.5%	3.8%	4.1%	4.2%	7.3%	4.1%	6.6%
LOW		0.4%	-1.6%		-1.0%	0.0%	0.0%	-4.2%	0.0%	-11.9%	-0.5%

Table 12 - Industrial Production

		Q4 over Q4	1								
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	4.0%			-0.4%							
10		2.4%	2.1%		2.8%	3.7%	3.6%	2.9%	2.5%	1.4%	1.8%
6		1.5%	0.5%		1.9%	2.4%	2.1%	1.2%	0.9%	-0.1%	0.1%
8		1.4%	0.6%		1.7%	2.6%	1.8%	1.4%	0.7%	0.0%	0.4%
18		1.4%	1.7%		1.6%	2.0%	2.2%	1.0%	1.2%	2.1%	2.4%
16		1.3%	0.2%		2.1%	1.5%	2.2%	1.4%	1.1%	-0.7%	-1.1%
4		1.3%	2.3%		0.6%	2.6%	2.4%	2.4%	2.4%	2.1%	2.4%
3		1.2%	1.8%		1.6%	1.6%	1.8%	1.7%	1.8%	1.9%	1.8%
22		1.1%	0.8%		2.0%	1.9%	1.0%	0.4%	0.7%	0.8%	1.1%
11		0.9%	0.6%		0.9%	1.8%	1.1%	0.6%	0.5%	0.6%	0.6%
21		0.8%	-0.2%		1.7%	0.7%	1.1%	0.4%	-0.4%	-0.4%	-0.4%
7		0.7%	0.9%		0.4%	1.5%	1.2%	1.0%	0.9%	0.8%	0.8%
2		0.6%	-1.1%		1.0%	1.1%	0.7%	-0.7%	-2.0%	-0.9%	-0.9%
19		0.6%	2.3%		1.3%	0.0%	1.5%	2.2%	2.2%	2.2%	2.5%
13		0.5%	1.1%		0.0%	1.1%	1.2%	0.5%	0.9%	1.5%	1.4%
12		0.2%	1.1%		0.0%	0.5%	0.8%	0.9%	1.0%	1.3%	1.4%
15		0.2%	1.0%		-0.4%	0.7%	0.9%	1.0%	1.2%	0.9%	0.8%
1		0.1%	0.3%		-0.1%	0.4%	0.4%	-0.1%	0.4%	0.4%	0.4%
14		0.1%	0.4%		0.2%	0.0%	0.4%	0.0%	0.4%	0.4%	0.7%
9		0.0%	0.0%		0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
23		-0.3%	0.0%		-0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20		-0.6%	-2.1%		-1.2%	1.8%	-2.5%	-5.7%	1.5%	-5.4%	1.5%
17		-0.6%	1.3%		-1.2%	-1.1%	0.2%	1.0%	1.5%	1.5%	1.2%
MEDIAN		0.6%	0.7%		0.7%	1.3%	1.1%	0.9%	0.9%	0.7%	0.8%
MEAN		0.7%	0.7%		0.7%	1.2%	1.1%	0.6%	0.9%	0.5%	0.9%
STD DEV		0.7%	1.0%		1.1%	1.1%	1.2%	1.6%	1.0%	1.6%	1.0%
HIGH		2.4%	2.3%		2.8%	3.7%	3.6%	2.9%	2.5%	2.2%	2.5%
LOW		-0.6%	-2.1%		-1.2%	-1.1%	-2.5%	-5.7%	-2.0%	-5.4%	-1.1%
-					•		- '		- '	- '	

Table 13 - Car and Light Truck Sales (millions)

Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	17.2			16.9							
16		17.4	16.8		17.2	17.8	17.5	16.8	17.0	16.8	16.6
3		17.1	16.9		17.2	17.1	17.1	17.0	17.0	16.9	16.8
1		17.1	17.2		17.1	17.2	17.1	17.1	17.3	17.2	17.1
23		17.1	16.7		17.0	17.0	17.3	17.0	16.7	16.6	16.5
8		16.9	16.6		17.0	17.0	16.9	16.8	16.8	16.4	16.3
6		16.9	16.6		17.0	17.0	16.9	16.8	16.8	16.4	16.3
4		16.9	16.9		16.9	17.0	16.9	16.8	16.9	17.0	17.0
10		16.9	17.0		16.9	16.9	16.9	16.9	17.0	17.0	17.0
2		16.9	16.7		16.9	16.9	16.8	16.6	16.7	16.8	16.8
12		16.9	16.8		16.6	17.0	16.9	16.8	16.8	16.8	16.7
x2		16.8	16.6		16.8	16.8	16.8	16.6	16.6	16.6	16.6
13		16.8	16.6		16.6	16.9	16.9	16.7	16.6	16.6	16.5
9		16.8	16.6		16.8	16.7	16.8	16.7	16.6	16.6	16.6
7		16.8	16.6		16.8	16.7	16.8	16.7	16.6	16.6	16.6
22		16.8	16.6		16.8	16.7	16.7	16.6	16.6	16.6	16.6
20		16.8	15.6		17.1	16.6	16.5	15.9	15.5	15.3	15.5
5		16.7	16.5		16.7	16.7	16.6	16.6	16.5	16.4	16.4
11		16.7	16.4		16.6	16.7	16.6	16.5	16.5	16.4	16.3
19		16.7	16.6		16.8	16.6	16.5	16.5	16.6	16.6	16.6
21		16.7	16.3		16.8	16.6	16.5	16.4	16.3	16.2	1.2
14		16.7	16.7		16.6	16.4	16.8	16.5	16.4	16.7	17.0
17		16.6	16.0		16.8	16.4	16.1	16.0	16.0	16.0	15.9
18		16.5	16.0		16.5	16.6	16.2	16.0	15.9	16.1	16.0
MEDIAN		16.8	16.6		16.8	16.8	16.8	16.7	16.6	16.6	16.6
MEAN		16.8	16.6		16.8	16.8	16.8	16.6	16.6	16.5	15.9
STD DEV		0.2	0.4		0.2	0.3	0.3	0.3	0.4	0.4	3.1
HIGH		17.4	17.2		17.2	17.8	17.5	17.1	17.3	17.2	17.1
LOW		16.5	15.6		16.5	16.4	16.1	15.9	15.5	15.3	1.2

Table 14 - Housing Starts (millions)

Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	1.25			1.19							
6		1.32	1.42		1.31	1.37	1.40	1.40	1.39	1.41	1.47
22		1.27	1.32		1.28	1.31	1.31	1.31	1.32	1.32	1.33
18		1.25	1.27		1.24	1.29	1.29	1.24	1.28	1.32	1.25
11		1.25	1.29		1.26	1.27	1.29	1.28	1.29	1.30	1.30
8		1.24	1.27		1.23	1.25	1.28	1.28	1.29	1.26	1.25
19		1.23	1.24		1.22	1.25	1.25	1.20	1.24	1.25	1.25
4		1.22	1.29		1.21	1.23	1.26	1.28	1.28	1.29	1.30
17		1.22	1.24		1.23	1.22	1.24	1.23	1.23	1.24	1.25
14		1.22	1.23		1.22	1.22	1.24	1.22	1.21	1.24	1.25
16		1.22	1.19		1.23	1.24	1.20	1.18	1.20	1.19	1.18
21		1.21	1.20		1.22	1.23	1.21	1.19	1.20	1.21	1.20
13		1.21	1.25		1.20	1.22	1.24	1.24	1.25	1.26	1.26
2		1.21	1.17		1.22	1.23	1.19	1.19	1.20	1.20	1.10
5		1.21	1.24		1.20	1.21	1.23	1.24	1.23	1.24	1.25
3		1.21	1.23		1.19	1.21	1.23	1.23	1.23	1.23	1.22
20		1.20	1.10		1.24	1.21	1.17	1.11	1.07	1.09	1.12
9		1.20	1.27		1.19	1.20	1.22	1.25	1.27	1.28	1.30
7		1.20	1.27		1.19	1.19	1.22	1.25	1.27	1.28	1.30
1		1.20	1.20		1.20	1.20	1.20	1.20	1.20	1.20	1.20
12		1.20	1.23		1.18	1.20	1.22	1.22	1.23	1.24	1.24
10		1.20	1.21		1.19	1.20	1.20	1.20	1.21	1.21	1.22
15		1.19	1.27		1.18	1.19	1.21	1.25	1.27	1.28	1.29
23		1.17	0.94		1.19	1.19	1.10	1.00	1.00	0.90	0.86
MEDIAN		1.21	1.24		1.22	1.22	1.23	1.23	1.23	1.24	1.25
MEAN		1.22	1.23		1.22	1.23	1.23	1.23	1.23	1.24	1.23
STD DEV		0.03	0.09		0.03	0.04	0.06	0.07	0.08	0.09	0.11
HIGH		1.32	1.42		1.31	1.37	1.40	1.40	1.39	1.41	1.47
LOW		1.17	0.94		1.18	1.19	1.10	1.00	1.00	0.90	0.86

Table 15 - Oil Price (West Texas Intermediate, Dollars Per Barrel)

		Q4 value									
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	450.07			454.00							
0	\$58.97	# 00.00	#04.00	\$54.86	# 00.07	Φ 7 4 00	\$00.00	\$00.07	004.44	004.44	#04.00
9		\$69.28	\$61.26		\$69.67	\$71.23	\$69.28	\$66.67	\$64.11	\$64.11	\$61.26
7		\$66.86	\$59.49		\$65.60	\$67.13	\$66.86	\$65.75	\$62.87	\$62.86	\$59.49
15		\$66.86	\$59.49		\$65.60	\$67.13	\$66.86	\$65.75	\$62.87	\$62.86	\$59.49
17		\$66.74	\$57.36		\$65.00	\$68.98	\$66.74	\$65.83	\$61.61	\$60.54	\$57.36
5		\$66.00	\$75.00		\$60.00	\$62.00	\$66.00	\$70.00	\$73.00	\$75.00	\$75.00
4		\$65.00	\$67.80		\$62.75	\$64.86	\$65.00	\$65.00	\$65.80	\$66.20	\$67.80
10		\$65.00	\$65.00		\$60.00	\$60.00	\$65.00	\$65.00	\$65.00	\$65.00	\$65.00
21		\$65.00	\$60.00		\$63.00	\$64.00	\$65.00	\$67.00	\$70.00	\$65.00	\$60.00
13		\$64.27	\$60.28		\$65.79	\$65.03	\$64.27	\$62.52	\$61.77	\$61.03	\$60.28
19		\$64.00	\$68.00		\$56.00	\$62.00	\$64.00	\$62.00	\$66.00	\$68.00	\$68.00
12		\$63.50	\$60.50		\$65.00	\$64.25	\$63.50	\$62.75	\$62.00	\$61.25	\$60.50
8		\$63.10	\$60.90		\$61.20	\$62.40	\$63.10	\$64.05	\$63.20	\$61.80	\$60.90
6		\$63.09	\$60.90		\$61.17	\$62.44	\$63.09	\$64.04	\$63.25	\$61.75	\$60.90
14		\$62.50	\$64.00		\$61.75	\$62.00	\$62.50	\$63.00	\$65.00	\$65.00	\$64.00
2		\$60.00	\$55.00		\$60.00	\$65.00	\$60.00	\$55.00	\$60.00	\$60.00	\$55.00
3		\$60.00	\$60.00		\$64.00	\$62.00	\$60.00	\$60.00	\$60.00	\$60.00	\$60.00
18		\$60.00	\$58.00		\$60.00	\$61.50	\$60.00	\$58.00	\$63.00	\$60.00	\$58.00
20		\$59.76	\$51.50		\$56.12	\$57.92	\$59.76	\$52.35	\$49.75	\$51.50	\$51.50
1		\$56.00	\$49.00		\$56.00	\$53.00	\$56.00	\$51.00	\$53.00	\$50.00	\$49.00
23		\$56.00	\$59.80		\$55.00	\$55.00	\$56.00	\$57.00	\$58.00	\$59.00	\$59.80
16		\$55.12	\$45.42		\$57.45	\$59.47	\$55.12	\$54.89	\$53.17	\$49.58	\$45.42
MEDIAN		\$63.50	\$60.00		\$61.20	\$62.40	\$63.50	\$63.00	\$62.87	\$61.75	\$60.00
MEAN		\$62.77	\$59.94		\$61.48	\$62.73	\$62.77	\$61.79	\$62.07	\$61.45	\$59.94
STD DEV		\$3.80	\$6.31		\$3.85	\$4.19	\$3.80	\$5.07	\$5.24	\$5.70	\$6.31
HIGH		\$69.28	\$75.00		\$69.67	\$71.23	\$69.28	\$70.00	\$73.00	\$75.00	\$75.00
LOW		\$55.12	\$45.42		\$55.00	\$53.00	\$55.12	\$51.00	\$49.75	\$49.58	\$45.42
		Ţ	Ŧ . • · · · · ·		¥00.00	700.00	700	700	Ţ.U 3	7.0.00	7.5

Table 16 - Unemployment Rate

		Q4 value									
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	3.8%			3.9%							
16		4.0%	4.4%		3.9%	4.0%	4.0%	4.1%	4.1%	4.2%	4.4%
23		4.0%	4.4%		3.9%	3.9%	4.0%	4.1%	4.2%	4.3%	4.4%
10		3.9%	3.9%		3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
20		3.9%	3.9%		3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
21		3.9%	4.4%		3.7%	3.8%	3.9%	4.0%	4.1%	4.3%	4.4%
4		3.8%	3.7%		3.8%	3.8%	3.8%	3.7%	3.7%	3.6%	3.7%
5		3.8%	4.2%		3.7%	3.8%	3.8%	3.9%	4.0%	4.1%	4.2%
19		3.8%	3.9%		3.9%	3.9%	3.8%	3.9%	3.9%	3.9%	3.9%
22		3.8%	4.5%		3.5%	3.6%	3.8%	4.0%	4.2%	4.4%	4.5%
17		3.7%	4.0%		3.7%	3.7%	3.7%	3.8%	3.7%	3.8%	4.0%
1		3.7%	3.7%		3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%
2		3.6%	4.0%		3.6%	3.6%	3.6%	3.7%	3.8%	3.9%	4.0%
14		3.6%	3.7%		3.7%	3.6%	3.6%	3.6%	3.7%	3.7%	3.7%
18		3.6%	3.7%		3.7%	3.6%	3.6%	3.8%	3.8%	3.8%	3.7%
8		3.6%	3.7%		3.6%	3.6%	3.6%	3.5%	3.6%	3.7%	3.7%
11		3.6%	3.7%		3.7%	3.7%	3.6%	3.5%	3.5%	3.7%	3.7%
15		3.6%	3.7%		3.7%	3.6%	3.6%	3.6%	3.6%	3.6%	3.7%
3		3.5%	3.5%		3.7%	3.6%	3.5%	3.5%	3.5%	3.5%	3.5%
12		3.5%	3.5%		3.6%	3.6%	3.5%	3.5%	3.5%	3.5%	3.5%
7		3.5%	3.5%		3.7%	3.5%	3.5%	3.5%	3.4%	3.5%	3.5%
9		3.5%	3.5%		3.7%	3.5%	3.5%	3.5%	3.4%	3.5%	3.5%
13		3.4%	3.5%		3.6%	3.5%	3.4%	3.5%	3.5%	3.5%	3.5%
6		3.4%	3.7%		3.6%	3.5%	3.4%	3.3%	3.2%	3.4%	3.7%
· ·		0.170	0.770		0.070	0.070	0.170	0.070	0.270	0.170	0.170
MEDIAN		3.6%	3.7%		3.7%	3.6%	3.6%	3.7%	3.7%	3.7%	3.7%
MEAN		3.7%	3.8%		3.7%	3.7%	3.7%	3.7%	3.7%	3.8%	3.8%
STD DEV		0.2%	0.3%		0.1%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%
HIGH		4.0%	4.5%		3.9%	4.0%	4.0%	4.1%	4.2%	4.4%	4.5%
LOW		3.4%	3.5%		3.5%	3.5%	3.4%	3.3%	3.2%	3.4%	3.5%

Table 17 - Consumer Price Index Inflation Rate

		Q4 over Q4	1								
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	2.2%			0.9%					. =		. =
7		2.6%	1.8%		4.4%	3.0%	2.2%	1.9%	1.5%	2.3%	1.5%
15		2.6%	1.8%		4.4%	3.0%	2.1%	1.8%	1.5%	2.2%	1.5%
14		2.4%	2.3%		3.2%	2.9%	2.5%	2.2%	2.1%	2.3%	2.5%
17		2.3%	1.5%		3.8%	2.7%	1.9%	1.4%	1.3%	1.7%	1.5%
6		2.2%	2.0%		3.4%	2.4%	2.2%	1.9%	1.7%	2.2%	2.2%
9		2.2%	1.8%		3.4%	2.4%	2.2%	1.9%	1.5%	2.3%	1.5%
3		2.1%	2.4%		3.2%	2.3%	2.0%	2.3%	2.4%	2.4%	2.5%
11		1.8%	1.8%		2.1%	2.1%	2.0%	1.8%	1.8%	1.8%	2.0%
18		1.7%	2.1%		2.5%	1.7%	1.6%	2.4%	2.0%	2.0%	2.0%
8		1.6%	2.1%		1.5%	2.0%	2.2%	2.2%	2.3%	1.8%	2.0%
12		1.6%	1.9%		2.3%	1.7%	1.7%	1.8%	2.0%	1.9%	1.9%
20		1.5%	1.1%		1.7%	1.8%	1.8%	1.3%	0.9%	1.1%	1.1%
4		1.5%	2.3%		1.3%	1.8%	2.1%	2.2%	2.3%	2.3%	2.3%
2		1.4%	1.6%		1.5%	1.7%	1.7%	1.5%	1.7%	1.7%	1.6%
5		1.4%	1.9%		1.5%	1.5%	1.6%	1.8%	1.9%	2.0%	2.0%
16		1.3%	0.7%		1.2%	1.5%	1.7%	1.6%	1.1%	0.1%	-0.1%
19		1.3%	1.9%		1.3%	1.4%	1.5%	1.7%	1.8%	2.0%	2.0%
21		1.2%	1.8%		1.1%	1.3%	1.6%	1.7%	1.8%	1.9%	1.8%
10		1.0%	1.0%		1.1%	1.1%	1.1%	1.1%	1.0%	1.0%	1.0%
1		1.0%	1.0%		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
23		1.0%	1.2%		1.0%	1.0%	1.0%	1.1%	1.2%	1.3%	1.4%
MEDIAN		1.6%	1.8%		1.7%	1.8%	1.8%	1.8%	1.7%	1.9%	1.8%
MEAN		1.7%	1.7%		2.2%	1.9%	1.8%	1.7%	1.7%	1.8%	1.7%
STD DEV		0.5%	0.5%		1.1%	0.6%	0.4%	0.4%	0.4%	0.6%	0.6%
HIGH		2.6%	2.4%		4.4%	3.0%	2.5%	2.4%	2.4%	2.4%	2.5%
LOW		1.0%	0.7%		1.0%	1.0%	1.0%	1.0%	0.9%	0.1%	-0.1%

Table 18 - Treasury Constant Maturity - One-year Rate

		Q4 value									
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	2.67%	2 2 4 2 4	0.400/	2.54%	0.000/	0.000/	0.040/	0.000/	0.000/	0.000/	0.400/
4		3.01%	3.48%		2.60%	2.89%	3.01%	3.23%	3.29%	3.39%	3.48%
20		2.70%	2.21%		2.55%	2.60%	2.70%	2.20%	1.90%	2.02%	2.21%
6		2.66%	2.79%		2.50%	2.61%	2.66%	2.83%	2.82%	2.79%	2.79%
8		2.66%	2.80%		2.50%	2.60%	2.66%	2.82%	2.82%	2.78%	2.80%
21		2.65%	2.40%		2.56%	2.60%	2.65%	2.55%	2.50%	2.45%	2.40%
23		2.65%	2.88%		2.55%	2.55%	2.65%	2.70%	2.75%	2.80%	2.88%
7		2.65%	2.82%		2.50%	2.56%	2.65%	2.76%	2.79%	2.80%	2.82%
3		2.62%	2.95%		2.59%	2.57%	2.62%	2.85%	2.87%	2.92%	2.95%
16		2.62%	2.60%		2.59%	2.61%	2.62%	2.67%	2.67%	2.64%	2.60%
2		2.60%	2.35%		2.60%	2.60%	2.60%	2.35%	2.35%	2.35%	2.35%
5		2.60%	2.80%		2.58%	2.58%	2.60%	2.65%	2.70%	2.75%	2.80%
1		2.55%	2.55%		2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%
19		2.55%	2.80%		2.50%	2.45%	2.55%	2.55%	2.65%	2.80%	2.80%
10		2.50%	2.50%		2.60%	2.60%	2.50%	2.50%	2.50%	2.50%	2.50%
18		2.50%	2.50%		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
17		2.50%	1.86%		2.50%	2.54%	2.50%	2.16%	2.07%	1.81%	1.86%
9		2.45%	2.14%		2.52%	2.50%	2.45%	2.43%	2.41%	2.34%	2.14%
11		2.45%	2.10%		2.50%	2.50%	2.45%	2.45%	2.35%	2.30%	2.10%
14		2.38%	2.42%		2.38%	2.40%	2.38%	2.35%	2.31%	2.36%	2.42%
MEDIAN MEAN STD DEV HIGH LOW		2.60% 2.59% 0.13% 3.01% 2.38%	2.55% 2.58% 0.36% 3.48% 1.86%		2.55% 2.54% 0.05% 2.60% 2.38%	2.57% 2.57% 0.09% 2.89% 2.40%	2.60% 2.59% 0.13% 3.01% 2.38%	2.55% 2.58% 0.25% 3.23% 2.16%	2.55% 2.57% 0.30% 3.29% 1.90%	2.55% 2.57% 0.34% 3.39% 1.81%	2.55% 2.58% 0.36% 3.48% 1.86%

Table 19 - Treasury Constant Maturity - Ten-year Rate

		Q4 value									
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	3.03%			2.65%	/						
4		3.12%	3.60%		2.69%	3.00%	3.12%	3.34%	3.41%	3.52%	3.60%
2		3.00%	3.00%		2.65%	2.80%	3.00%	3.00%	3.00%	3.00%	3.00%
16		2.94%	2.50%		2.78%	2.82%	2.94%	3.05%	3.00%	2.80%	2.50%
6		2.92%	3.08%		2.48%	2.68%	2.92%	3.14%	3.23%	3.21%	3.08%
8		2.90%	3.10%		2.48%	2.68%	2.90%	3.10%	3.20%	3.20%	3.10%
23		2.85%	2.99%		2.75%	2.75%	2.85%	2.90%	2.95%	2.97%	2.99%
21		2.80%	2.60%		2.70%	2.75%	2.80%	2.70%	2.65%	2.55%	2.60%
9		2.77%	3.02%		2.60%	2.69%	2.77%	2.85%	2.92%	2.97%	3.02%
7		2.77%	3.02%		2.60%	2.69%	2.77%	2.85%	2.92%	2.97%	3.02%
13		2.76%	2.82%		2.69%	2.70%	2.76%	2.77%	2.80%	2.81%	2.82%
20		2.75%	2.80%		2.60%	2.60%	2.75%	2.70%	2.80%	2.80%	2.80%
17		2.75%	3.04%		2.60%	2.68%	2.75%	2.81%	2.88%	2.93%	3.04%
3		2.75%	3.77%		2.62%	2.63%	2.75%	3.03%	3.29%	3.54%	3.77%
10		2.70%	2.70%		2.60%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
19		2.70%	3.50%		2.60%	2.60%	2.70%	2.75%	2.85%	3.25%	3.50%
1		2.68%	2.68%		2.68%	2.68%	2.68%	2.68%	2.68%	2.68%	2.68%
12		2.67%	2.75%		2.60%	2.61%	2.67%	2.70%	2.72%	2.74%	2.75%
11		2.65%	2.55%		2.60%	2.65%	2.65%	2.75%	2.70%	2.65%	2.55%
18		2.60%	2.70%		2.50%	2.60%	2.60%	2.70%	2.70%	2.70%	2.70%
15		2.54%	2.85%		2.51%	2.52%	2.54%	2.56%	2.66%	2.75%	2.85%
14		2.43%	2.55%		2.52%	2.50%	2.43%	2.38%	2.35%	2.44%	2.55%
MEDIA		0.750/	0.050/		0.000/	0.000/	0.750/	0.770	0.072/	0.0404	0.070/
MEDIAN		2.75%	2.85%		2.60%	2.68%	2.75%	2.77%	2.85%	2.81%	2.85%
MEAN		2.76%	2.93%		2.61%	2.68%	2.76%	2.83%	2.88%	2.91%	2.93%
STD DEV		0.15%	0.34%		0.08%	0.11%	0.15%	0.21%	0.25%	0.29%	0.34%
HIGH		3.12%	3.77%		2.78%	3.00%	3.12%	3.34%	3.41%	3.54%	3.77%
LOW		2.43%	2.50%		2.48%	2.50%	2.43%	2.38%	2.35%	2.44%	2.50%

Table 20 - J.P. Morgan Trade Weighted OECD Dollar

		Q4 over Q4	1								
Individual	2018	2019	2020	Q119	Q219	Q319	Q419	Q120	Q220	Q320	Q420
	4.00/			4.00/							
	4.2%			-1.3%							
2		3.5%	8.1%		1.5%	1.5%	1.8%	1.8%	2.0%	2.0%	2.1%
9		2.5%	4.7%		1.5%	1.5%	0.9%	0.9%	1.3%	1.2%	1.3%
8		2.2%	6.1%		1.5%	2.0%	0.0%	0.0%	2.0%	2.0%	2.0%
10		1.7%	6.1%		1.0%	1.0%	1.0%	1.5%	1.5%	1.5%	1.5%
23		1.7%	4.1%		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
20		1.6%	0.5%		0.2%	1.2%	1.5%	-1.4%	-1.7%	2.5%	1.2%
3		1.5%	0.0%		2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14		1.2%	3.5%		-0.5%	2.0%	1.0%	0.0%	1.0%	1.5%	1.0%
16		0.9%	-0.4%		0.5%	0.9%	0.8%	0.1%	0.5%	-0.4%	-0.6%
1		-0.3%	-4.2%		-1.0%	1.0%	1.0%	-1.2%	-1.1%	-1.0%	-1.0%
19		-0.8%	2.3%		0.0%	-0.5%	1.0%	1.2%	0.5%	0.5%	0.1%
4		-2.2%	0.9%		-1.0%	-0.3%	0.4%	0.9%	0.5%	0.3%	-0.8%
17		-2.3%	-0.3%		-0.2%	-0.2%	-0.6%	-1.2%	0.0%	0.4%	0.5%

MEDIAN	1.5%	2.3%	0.5%	1.0%	1.0%	0.1%	0.5%	1.0%	1.0%
MEAN	0.8%	2.4%	0.6%	0.9%	0.7%	0.3%	0.6%	0.9%	0.6%
STD DEV	1.7%	3.3%	1.1%	0.8%	0.6%	1.0%	1.1%	1.0%	1.0%
HIGH	3.5%	8.1%	2.8%	2.0%	1.8%	1.8%	2.0%	2.5%	2.1%
LOW	-2.3%	-4.2%	-1.0%	-0.5%	-0.6%	-1.4%	-1.7%	-1.0%	-1.0%

Table 21a - Individual Forecasts for 2019

	GDP current	GDP price index,	Real GDP, chained	Personal consumption	Business fixed	Residential	Change in private	Net	Government consumption expenditures and
Individual	dollars	Chain-type	dollars	expenditures	investment	investment	inventories	exports	gross investment
1	4.6%	0.8%	4.0%	2.0%	2.8%	0.8%	\$130.3	-\$692.0	2.1%
2	4.7%	2.0%	2.7%	2.5%	4.6%	-0.1%	\$77.4	-\$936.2	2.1%
3	3.6%	0.9%	2.7%	2.9%	4.3%	5.6%	-\$51.1	-\$858.4	2.0%
4	4.6%	2.2%	2.5%	2.0%					
5	4.3%	1.9%	2.4%	1.8%	5.7%	3.5%	\$54.4	-\$982.8	3.8%
6	4.3%	1.9%	2.4%	2.3%	3.2%	-0.8%	\$77.2	-\$931.3	2.1%
7	4.2%	1.9%	2.4%	1.7%	4.9%	1.9%	\$60.0	-\$980.0	3.8%
8	4.3%	1.9%	2.4%	2.3%	3.2%	-0.8%	\$77.2	-\$931.3	2.1%
9	3.3%	1.2%	2.3%	1.7%	3.0%	0.4%	\$112.0	-\$730.0	0.8%
10	3.8%	1.5%	2.3%	2.2%	3.1%	0.8%	\$80.0	-\$903.0	1.7%
11	3.8%	1.1%	3.1%	0.9%	2.8%	1.5%	\$95.0	-\$882.1	2.7%
12	3.9%	1.6%	2.3%	2.1%	3.1%	-0.7%	\$64.0	-\$918.6	2.2%
13	3.8%	1.6%	2.2%	2.0%	2.9%	-0.3%	67.3	-\$911.9	2.3%
14	4.1%	1.9%	2.2%	2.1%	2.2%	0.6%	\$19.5	-\$843.0	2.2%
15	4.0%	1.9%	2.2%	2.3%	2.7%	-1.0%	\$39.6	-\$925.5	2.1%
16	3.5%	0.9%	2.1%	1.5%	4.0%	1.8%	\$140.6	-\$874.3	1.4%
17	4.2%	2.1%	2.1%	2.1%	3.0%	-1.0%	\$76.6	-\$926.4	1.7%
18	3.8%	1.7%	2.1%	2.3%	4.1%	-0.4%	\$24.7	-\$926.1	2.5%
19	2.8%	1.6%	2.1%	1.2%	2.3%	0.6%	\$102.0	-\$875.0	2.3%
20	3.0%	1.2%	1.8%	1.9%	1.5%	-1.6%	\$135.0	-\$957.0	1.9%
21	2.2%	0.5%	1.8%	1.6%	1.7%	0.8%	\$65.0	-\$885.0	2.4%
22	3.4%	1.8%	1.7%	1.4%	2.4%	5.7%	\$64.2	-\$901.2	2.8%
23	5.4%	-0.1%	-2.5%	0.5%	-0.5%	-0.1%	\$100.0	-\$700.0	0.4%
X1									
X2									
MEDIAN	3.9%	1.6%	2.3%	2.0%	3.0%	0.5%	\$76.9	-\$907.5	2.1%
MEAN	3.9%	1.5%	2.1%	1.9%	3.0%	0.8%	\$73.2	-\$885.1	2.2%
STD DEV	0.7%	0.6%	1.1%	0.5%	1.3%	1.9%	\$41.5	\$78.7	0.8%
HIGH	5.4%	2.2%	4.0%	2.9%	5.7%	5.7%	\$140.6	-\$692.0	3.8%
LOW	2.2%	-0.1%	-2.5%	0.5%	-0.5%	-1.6%	-\$51.1	-\$982.8	0.4%

Table 21b - Individual Forecasts for 2019

ا مان نام ما	Industrial	Car & light	Housing	Oil Drian	Unemployment		Treasury constant maturity	Treasury constant maturity	J.P. Morgan trade weighted
Individual	production	truck sales	starts	Price	rate	(CPI)	one-year rate	ten-year rate	OECD dollar
1	0.1%	17.1	1.20	\$56.00	3.7%	1.0%	2.55%	2.68%	-0.3%
2	1.2%	17.1	1.21	\$60.00	3.5%	2.1%	2.62%	2.75%	1.5%
3	1.3%	16.9	1.22	\$65.00	3.8%	1.5%	3.01%	3.12%	-2.2%
4		16.7	1.21	\$66.00	3.8%	1.4%	2.60%		
5	1.5%	16.9	1.32	\$63.09	3.4%	2.2%	2.66%	2.92%	
6	0.7%	16.8	1.20	\$66.86	3.5%	2.6%	2.65%	2.77%	
7	1.4%	16.9	1.24	\$63.10	3.6%	1.6%	2.66%	2.90%	2.2%
8	0.0%	16.8	1.20	\$69.28	3.5%	2.2%	2.45%	2.77%	2.5%
9	2.4%	16.9	1.20	\$65.00	3.9%	1.0%	2.50%	2.70%	1.7%
10	0.9%	16.7	1.25		3.6%	1.8%	2.45%	2.65%	
11	0.6%	16.9	1.21	\$60.00	3.6%	1.4%	2.60%	3.00%	3.5%
12	0.2%	16.9	1.20	\$63.50	3.5%	1.6%		2.67%	
13	0.5%	16.8	1.21	\$64.27	3.4%			2.76%	
14	0.1%	16.7	1.22	\$62.50	3.6%	2.4%	2.38%	2.43%	1.2%
15	0.2%		1.19	\$66.86	3.6%	2.6%		2.54%	
16	1.3%	17.4	1.22	\$55.12	4.0%	1.3%	2.62%	2.94%	0.9%
17	-0.6%	16.6	1.22	\$66.74	3.7%	2.3%	2.50%	2.75%	-2.3%
18	1.4%	16.5	1.25	\$60.00	3.6%	1.7%	2.50%	2.60%	
19	0.6%	16.7	1.23	\$64.00	3.8%	1.3%	2.55%	2.70%	-0.8%
20	-0.6%	16.8	1.20	\$59.76	3.9%	1.5%	2.70%	2.75%	1.6%
21	0.8%	16.7	1.21	\$65.00	3.9%	1.2%	2.65%	2.80%	
22	1.1%	16.8	1.27		3.8%				
23	-0.3%	17.1	1.17	\$56.00	4.0%	1.0%	2.65%	2.85%	1.7%
X1		16.8							
X2		16.8							
EDIAN	0.6%	16.8	1.21	\$63.50	3.6%	1.6%	2.60%	2.75%	1.5%
EAN	0.7%	16.8	1.22	\$62.77	3.7%	1.7%	2.59%	2.76%	0.8%
TD DEV	0.7%	0.2	0.03	\$3.80	0.2%	0.5%	0.13%	0.15%	1.7%
IGH	2.4%	17.4	1.32	\$69.28	4.0%	2.6%	3.01%	3.12%	3.5%
DW .	-0.6%	16.5	1.17	\$55.12	3.4%	1.0%	2.38%	2.43%	-2.3%

Table 22a - Individual Forecasts for 2020

Individual	GDP current dollars	GDP price index, Chain-type	Real GDP, chained dollars	Personal consumption expenditures	Business fixed investment	Residential investment	Change in private inventories	Net exports	Government consumption expenditures and gross investment
1	4.9%	0.7%	4.5%	2.4%	2.8%	2.0%	\$133.0	-\$563.6	2.0%
2	4.8%	2.3%	2.5%	2.6%	4.8%	3.7%	\$62.4	-\$987.6	1.1%
3	4.6%	2.2%	2.3%	1.7%	2.7%	5.8%	-\$190.0	-\$743.2	3.9%
4	4.9%	2.7%	2.2%	2.2%					
5	2.9%	1.7%	1.2%	1.0%	1.6%	4.2%	\$4.4	-\$957.2	1.7%
6	4.5%	2.4%	2.0%	2.9%	3.1%	1.8%	\$68.3	-\$1,076.9	0.9%
7	3.0%	1.6%	1.4%	1.2%	1.7%	2.1%	\$5.0	-\$955.0	1.8%
8	4.5%	2.4%	2.0%	2.9%	3.1%	1.8%	\$68.3	-\$1,076.9	1.0%
9	2.1%	1.8%	2.1%	1.6%	2.8%	1.5%	\$108.0	-\$695.0	0.8%
10	4.1%	1.9%	2.2%	2.0%	3.3%	2.0%	\$80.0	-\$903.0	1.5%
11	2.0%	1.1%	2.0%	0.8%	2.8%	0.0%	\$85.0	-\$847.3	4.1%
12	3.8%	2.1%	1.7%	2.2%	2.6%	2.6%	\$49.2	-\$978.5	0.5%
13	3.9%	2.1%	1.8%	2.2%	2.2%	3.0%	50.9	-\$977.1	1.3%
14	4.0%	2.2%	1.8%	1.5%	2.1%	1.4%	\$88.4	-\$904.0	1.4%
15	4.3%	2.4%	1.9%	2.5%	2.9%	2.1%	\$60.4	-\$1,054.7	1.0%
16	0.5%	0.4%	0.2%	0.2%	0.9%	0.3%	\$140.1	-\$799.4	0.1%
17	4.3%	2.3%	1.9%	2.5%	3.6%	-1.2%	\$51.0	-\$999.2	0.8%
18	4.2%	2.2%	2.0%	2.0%	2.2%	0.7%	\$61.0	-\$977.5	0.8%
19	2.6%	1.7%	1.8%	1.2%	2.4%	2.0%	\$100.0	-\$960.0	2.4%
20	0.5%	1.0%	-0.5%	-0.6%	-0.3%	-0.5%	\$15.0	-\$900.0	1.6%
21	1.3%	0.5%	0.7%	0.6%	-1.6%	-5.0%	\$65.0	-\$820.0	2.1%
22	3.4%	2.0%	1.4%	1.8%	1.0%	2.7%	\$36.3	-\$952.4	0.5%
23	-4.5%	0.8%	-1.6%	-0.8%	-1.8%	-3.3%	\$100.0	-\$750.0	1.6%
X1									
X2									
MEDIAN	3.9%	2.0%	1.9%	1.8%	2.5%	1.9%	\$63.7	-\$953.7	1.2%
MEAN	3.1%	1.8%	1.6%	1.6%	2.0%	1.4%	\$56.4	-\$903.6	1.3%
STD DEV	2.1%	0.7%	1.1%	1.0%	1.6%	2.3%	\$64.1	\$127.2	1.2%
HIGH	4.9%	2.7%	4.5%	2.9%	4.8%	5.8%	\$140.1	-\$563.6	4.1%
LOW	-4.5%	0.4%	-1.6%	-0.8%	-1.8%	-5.0%	-\$190.0	-\$1,076.9	-1.6%

Table 22b - Individual Forecasts for 2020

	Industrial	Car & light	Housing	Oil	Unemployment	Inflation rate	Treasury constant maturity	Treasury constant maturity	J.P. Morgan trade weighted
Individual	production	truck sales	starts	Price	rate	(CPI)	one-year rate	ten-year rate	OECD dollar
						,	,	,	
1	0.3%	17.2	1.20	\$49.00	3.7%	1.0%	2.55%	2.68%	-4.2%
2	1.8%	16.9	1.23	\$60.00	3.5%	2.4%	2.95%	3.77%	0.0%
3	2.3%	16.9	1.29	\$67.80	3.7%	2.3%	3.48%	3.60%	0.9%
4		16.5	1.24	\$75.00	4.2%	1.9%	2.80%		
5	0.5%	16.6	1.42	\$60.90	3.7%	2.0%	2.79%	3.08%	
6	0.9%	16.6	1.27	\$59.49	3.5%	1.8%	2.82%	3.02%	
7	0.6%	16.6	1.27	\$60.90	3.7%	2.1%	2.80%	3.10%	6.1%
8	0.0%	16.6	1.27	\$61.26	3.5%	1.8%	2.14%	3.02%	4.7%
9	2.1%	17.0	1.21	\$65.00	3.9%	1.0%	2.50%	2.70%	6.1%
10	0.6%	16.4	1.29		3.7%	1.8%	2.10%	2.55%	
11	-1.1%	16.7	1.17	\$55.00	4.0%	1.6%	2.35%	3.00%	8.1%
12	1.1%	16.8	1.23	\$60.50	3.5%	1.9%		2.75%	
13	1.1%	16.6	1.25	\$60.28	3.5%			2.82%	
14	0.4%	16.7	1.23	\$64.00	3.7%	2.3%	2.42%	2.55%	3.5%
15	1.0%		1.27	\$59.49	3.7%	1.8%		2.85%	
16	0.2%	16.8	1.19	\$45.42	4.4%	0.7%	2.60%	2.50%	-0.4%
17	1.3%	16.0	1.24	\$57.36	4.0%	1.5%	1.86%	3.04%	-0.3%
18	1.7%	16.0	1.27	\$58.00	3.7%	2.1%	2.50%	2.70%	
19	2.3%	16.6	1.24	\$68.00	3.9%	1.9%	2.80%	3.50%	2.3%
20	-2.1%	15.6	1.10	\$51.50	3.9%	1.1%	2.21%	2.80%	0.5%
21	-0.2%	16.3	1.20	\$60.00	4.4%	1.8%	2.40%	2.60%	
22	0.8%	16.6	1.32		4.5%				
23	0.0%	16.7	0.94	\$59.80	4.4%	1.2%	2.88%	2.99%	4.1%
X1									
X2		16.6							
MEDIAN	0.7%	16.6	1.24	\$60.00	3.7%	1.8%	2.55%	2.85%	2.3%
MEAN	0.7%	16.6	1.23	\$59.94	3.8%	1.7%	2.58%	2.93%	2.4%
STD DEV	1.0%	0.4	0.09	\$6.31	0.3%	0.5%	0.36%	0.34%	3.3%
HIGH	2.3%	17.2	1.42	\$75.00	4.5%	2.4%	3.48%	3.77%	8.1%
LOW	-2.1%	17.2 15.6	0.94	\$45.42	3.5%	0.7%	1.86%	2.50%	-4.2%
	-2.170	15.0	0.34	Ψ+0.42	J.J /0	0.1 /0	1.0070	2.50 /0	- -7.2 /0

Contributors

Bryan Bezold and Nicholas Hess	Ford Motor Company
Charles Chesbrough	Cox Automotive
Carolyn Cerny	Continental
Ed Derbin	University of Michigan Flint
Rajeev Dhawan	Georgia State University
Robert DiCianni	ArcelorMittal USA LLC
Gabriel M. Ehrlich, Daniil Manaenkov, and Aditi Thapar	University of Michigan RSQE
William Hickey	DTE Energy
Hui Jiang	Kohler Co
Sam Kahan	ACT RESEARCH
Jack Kleinhenz	Kleinhenz & Associates
Kenneth Mac	General Motors
Lawrence Nelson	Macroeconomic Advisers by IHS Markit
Bernard J. Paniak	BJP Economics
Thomas J. Portz	Sterling Capital Management, Inc.
Arun Raha and Maira Trimble	Eaton
Jim Robey	W.E. Upjohn Institute for Employment Research
Brian E. Schwadron	U. S. Steel Corporation
Jim Stansell	House Fiscal Agency
Haig Stoddard	Wards Intelligence
Todd Tomalak	John Burns Real Estate Consulting
Evert Van Der Heide	Calvin College
Bill Witte	Witte Econometrics/FTR
Mark Zandi	Moody's Analytics
Mark Zhang	Navistar, Inc.