

2016 Economic Outlook Symposium

Forecast Winners

Overall	Richard Yamarone - Bloomberg, LP	
GDP, current dollars	Hui Jiang - Kohler	
GDP price index, chain-type	Hui Jiang - Kohler	
Real GDP, chained dollars	Tom Guthrie - FM Fincorp	
Personal consumption expenditures	Hui Jiang - Kohler	
Business fixed investment	Kenny Vieth - ACT Research	
Residential investment	Robert J.Kolbe - RJK Enterprises, Inc.	
Change in private inventories	John Baker Welch - William Blair	
Net exports	John Silvia - Wells Fargo	
Government consumption expenditures and gross investment	Robert Dicianni - ArcelorMittal USA LLC	
Industrial production	Bryan Bezold - Ford Motor Company	
Car & light truck sales	Amy Ebben - ArcelorMittal	Evert Van Der Heide - Calvin College
Housing starts	Todd Tomalak - John Burns Real Estate Consulting	
Oil Price	Jeff Tennant - OSG USA, INC.	
Unemployment rate	David Lauer - US Bureau of Labor Statistics	
Inflation rate (CPI)	Kenny Vieth - ACT Research	Evert Van Der Heide - Calvin College
Treasury constant maturity one-year rate	Jan Pflugfelder - KOMET	Romina Soria - Wisconsin Department of Revenue
Treasury constant maturity ten-year rate	Jan Pflugfelder - KOMET	
J.P. Morgan broad nominal effective exchange rate	Kenny Vieth - ACT Research	

Table 1 - Median Forecast of GDP and Related Items

	2016	2017	2018	Q317	Q417	Q118	Q218	Q318	Q418
GDP, current dollars*	3.4%	4.1%	4.1%	5.2%	3.9%	4.0%	4.1%	4.2%	4.0%
GDP price index, chain-type*	1.5%	1.7%	1.8%	2.2%	1.6%	1.7%	1.7%	1.9%	1.9%
Real GDP, chained dollars*	1.8%	2.5%	2.3%	3.0%	2.6%	2.3%	2.3%	2.3%	2.2%
Personal consumption expenditures*	2.8%	2.6%	2.3%	2.4%	2.8%	2.5%	2.4%	2.4%	2.3%
Business fixed investment*	0.7%	5.4%	3.5%	3.9%	3.9%	3.9%	4.0%	3.9%	3.4%
Residential investment*	2.5%	-0.2%	3.3%	-6.0%	2.5%	4.1%	3.9%	3.9%	3.4%
Change in private inventories (billions of constant dollars)**	\$63.1	\$37.9	\$41.8	\$35.8	\$37.9	\$38.4	\$42.0	\$39.9	\$41.8
Net exports of goods and services (billions of constant dollars)**	-\$631.1	-\$602.7	-\$627.9	-\$595.5	-\$602.7	-\$612.3	-\$618.1	-\$625.0	-\$627.9
Government consumption expenditures and gross investment*	0.4%	-0.1%	0.6%	-0.1%	0.5%	0.6%	0.7%	0.7%	0.8%
Industrial production*	-0.1%	1.9%	1.9%	-0.3%	0.9%	1.9%	1.9%	1.9%	1.7%
Car & light truck sales (millions - calendar year including imports)***	17.5	17.1	17.0	17.1	17.2	17.0	16.9	16.9	16.9
Housing starts (millions)***	1.18	1.19	1.26	1.16	1.19	1.21	1.24	1.23	1.25
Oil price (dollars per barrel of West Texas Intermediate)**	\$49.20	\$52.31	\$53.18	\$48.16	\$52.31	\$52.90	\$52.23	\$52.00	\$53.18
Unemployment rate**	4.7%	4.2%	4.1%	4.3%	4.2%	4.1%	4.1%	4.1%	4.1%
Inflation rate (consumer price index)*	1.8%	1.8%	2.0%	2.0%	2.2%	2.1%	2.1%	2.0%	2.1%
Treasury constant maturity one-year rate**	0.76%	1.43%	2.01%	1.24%	1.43%	1.60%	1.74%	1.87%	2.01%
Treasury constant maturity ten-year rate**	2.13%	2.45%	3.01%	2.24%	2.45%	2.58%	2.72%	2.87%	3.01%
J.P. Morgan trade weighted OECD dollar*	3.7%	-4.1%	1.0%	-3.4%	0.7%	0.6%	0.5%	0.3%	0.0%

*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

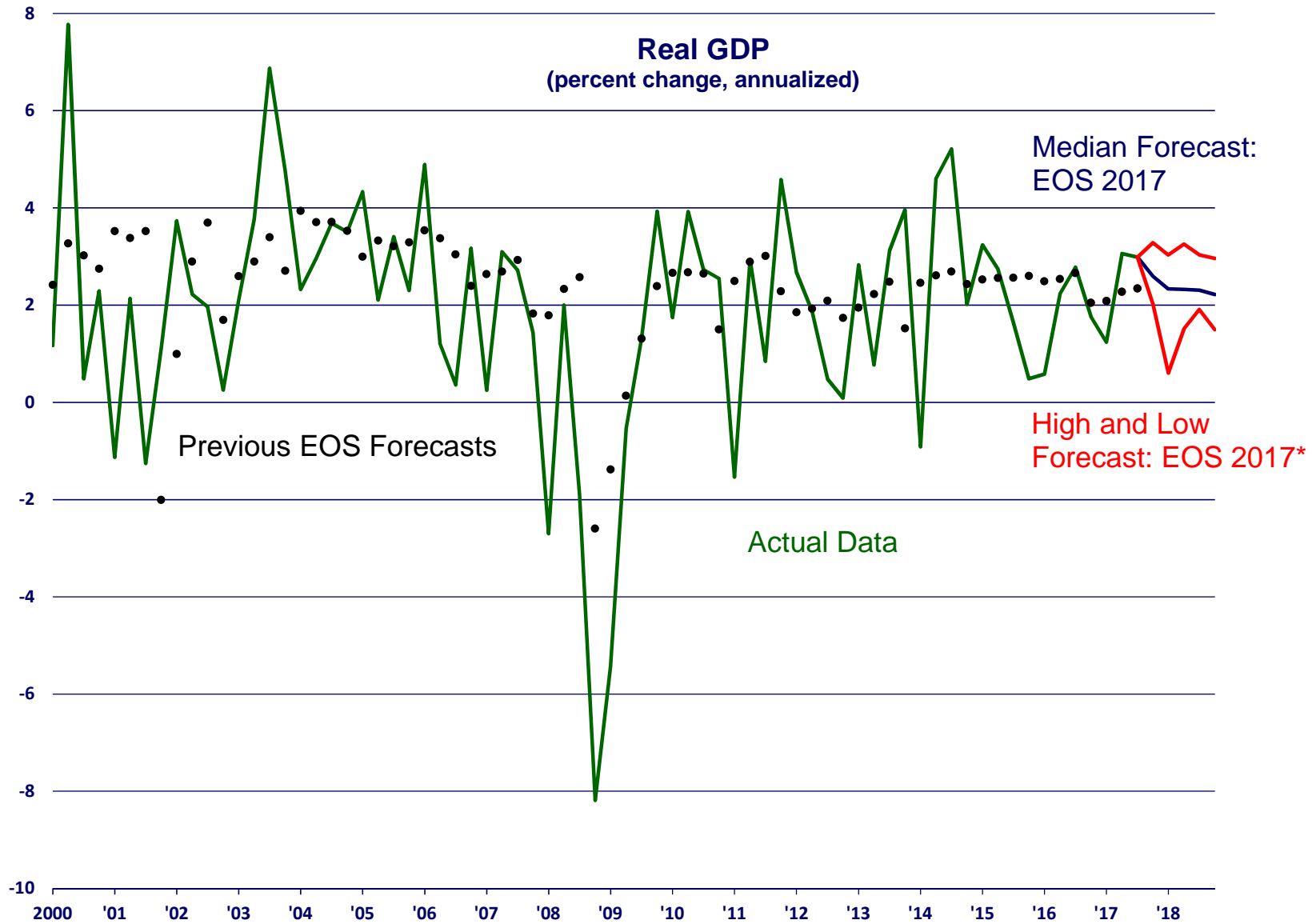
	2016	2017	2018	Q317	Q417	Q118	Q218	Q318	Q418
GDP, current dollars*	3.4%	4.1%	4.0%	5.2%	3.8%	3.7%	4.2%	4.2%	3.9%
GDP price index, chain-type*	1.5%	1.6%	1.8%	2.2%	1.3%	1.6%	1.7%	2.0%	1.9%
Real GDP, chained dollars*	1.8%	2.5%	2.2%	3.0%	2.7%	2.1%	2.4%	2.3%	2.2%
Personal consumption expenditures*	2.8%	2.5%	2.0%	2.4%	2.4%	2.0%	2.1%	2.1%	2.0%
Business fixed investment*	0.7%	5.3%	3.1%	3.9%	3.6%	3.5%	3.2%	3.2%	2.6%
Residential investment*	2.5%	-0.3%	3.9%	-6.0%	2.0%	4.6%	5.3%	3.8%	2.5%
Change in private inventories (billions of constant dollars)**	\$63.1	\$33.8	\$44.3	\$35.8	\$33.8	\$36.9	\$44.8	\$44.6	\$44.3
Net exports of goods and services (billions of constant dollars)**	-\$631.1	-\$605.1	-\$633.1	-\$595.5	-\$605.1	-\$606.8	-\$621.3	-\$628.9	-\$633.1
Government consumption expenditures and gross investment*	0.4%	0.0%	1.1%	-0.1%	1.0%	1.1%	1.2%	1.1%	1.0%
Industrial production*	-0.1%	2.0%	1.6%	-0.3%	1.1%	1.5%	1.9%	1.5%	1.8%
Car & light truck sales (millions - calendar year including imports)***	17.5	17.2	17.0	17.1	17.2	16.9	16.9	16.9	16.8
Housing starts (millions)***	1.18	1.20	1.27	1.16	1.21	1.21	1.23	1.24	1.25
Oil price (dollars per barrel of West Texas Intermediate)**	\$49.20	\$52.51	\$52.70	\$48.16	\$52.51	\$52.42	\$52.34	\$52.15	\$52.70
Unemployment rate**	4.7%	4.2%	4.1%	4.3%	4.2%	4.2%	4.2%	4.1%	4.1%
Inflation rate (consumer price index)*	1.8%	1.8%	2.0%	2.0%	2.3%	2.1%	1.9%	2.1%	2.2%
Treasury constant maturity one-year rate**	0.76%	1.43%	2.00%	1.24%	1.43%	1.56%	1.71%	1.86%	2.00%
Treasury constant maturity ten-year rate**	2.13%	2.47%	2.94%	2.24%	2.47%	2.58%	2.70%	2.83%	2.94%
J.P. Morgan trade weighted OECD dollar*	3.7%	-4.3%	2.6%	-3.4%	0.5%	0.7%	0.7%	0.5%	0.7%

*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

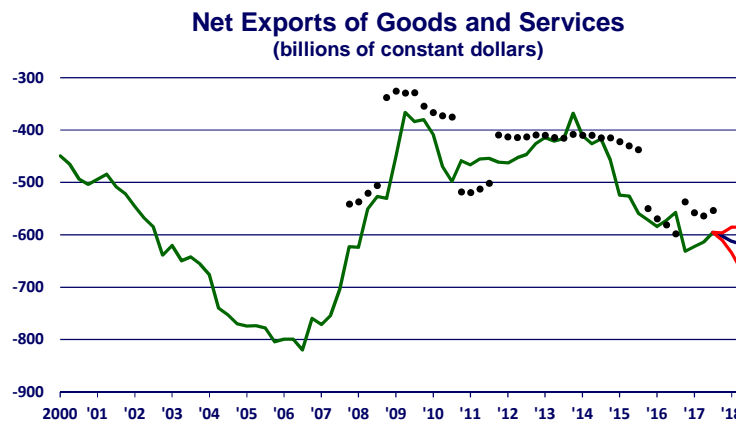
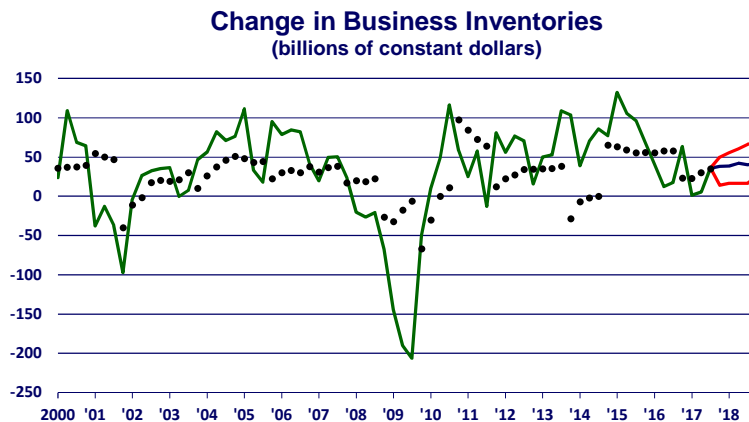
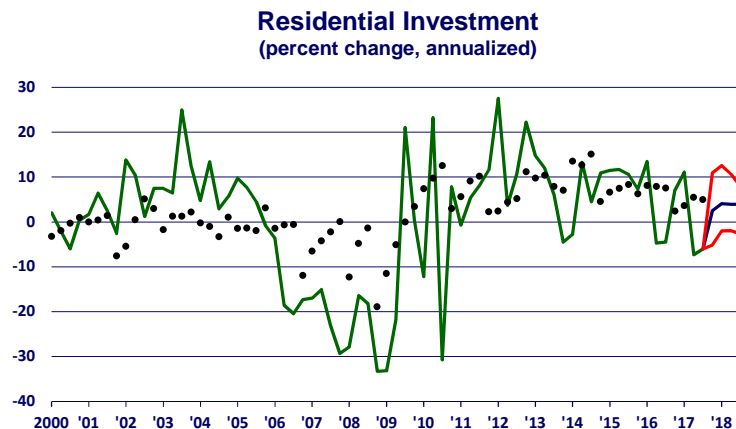
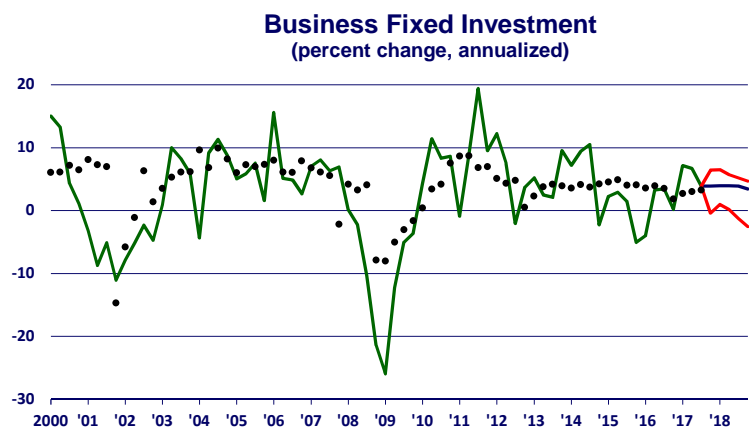
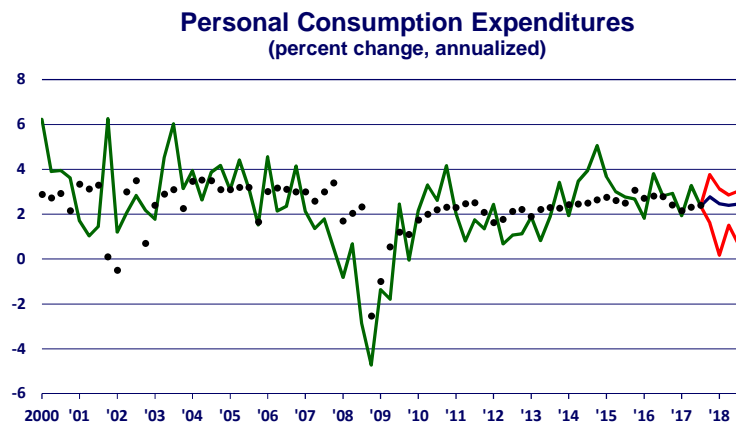
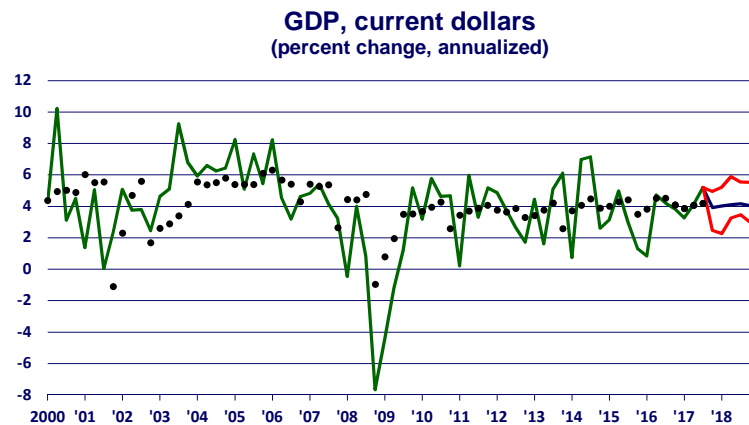


Figure 3 - Forecast of GDP and Related Items

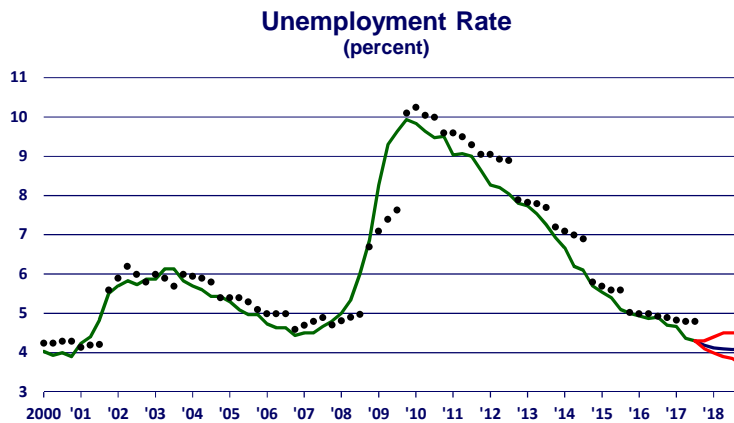
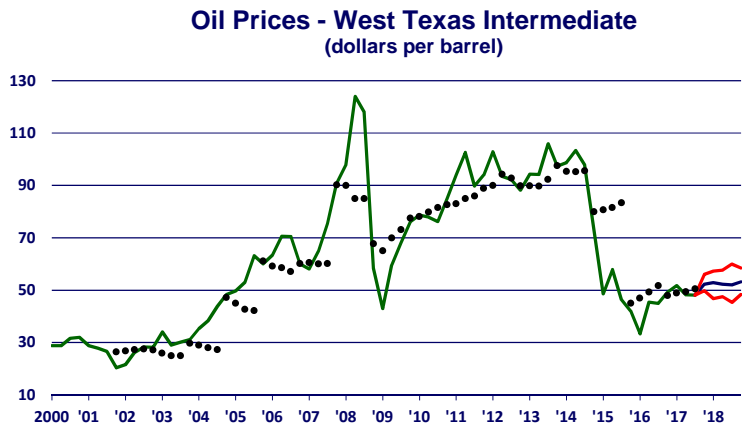
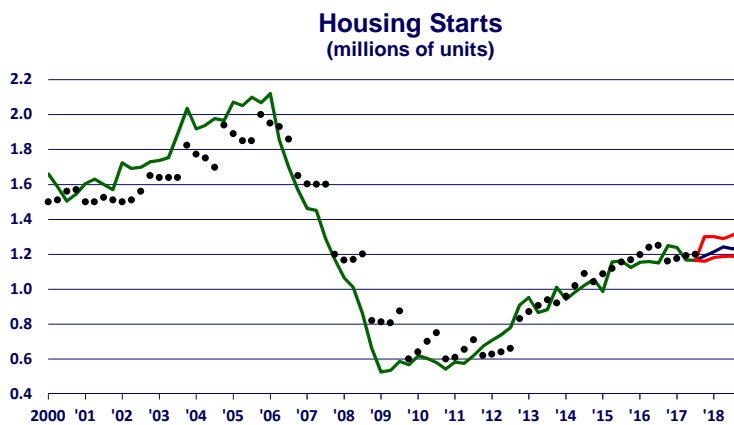
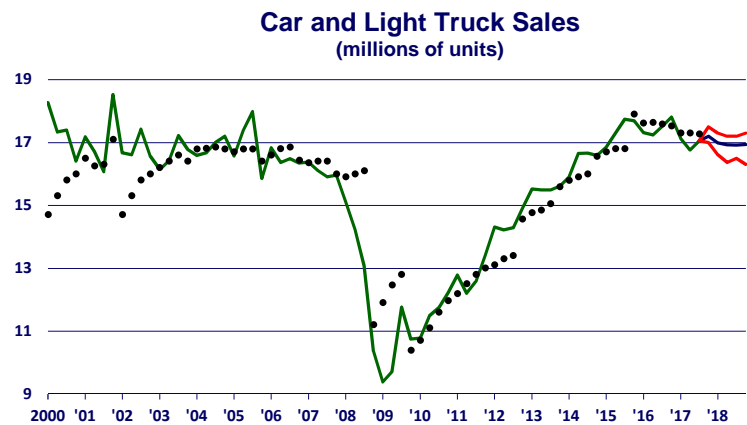
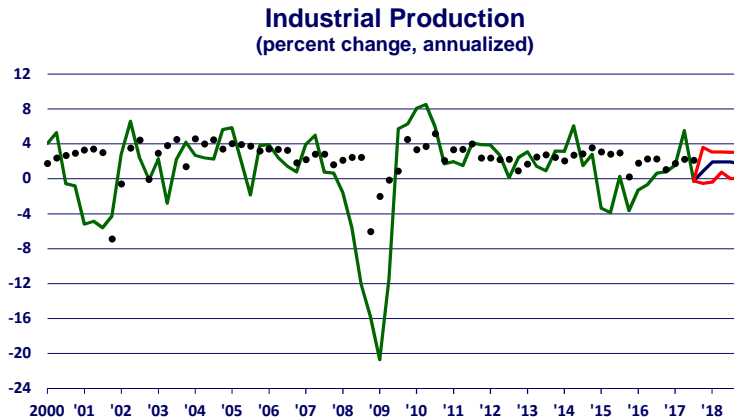
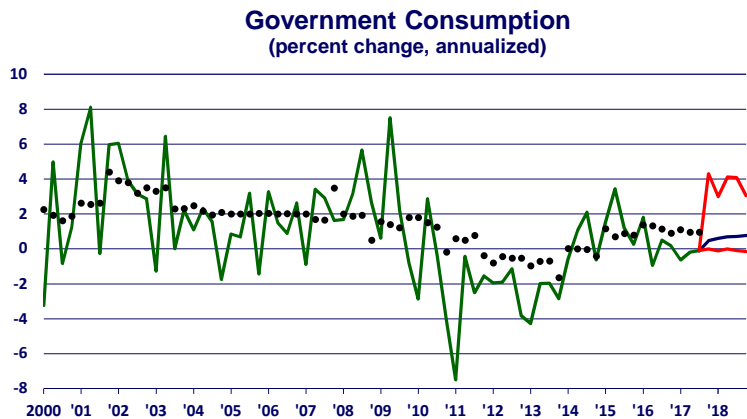
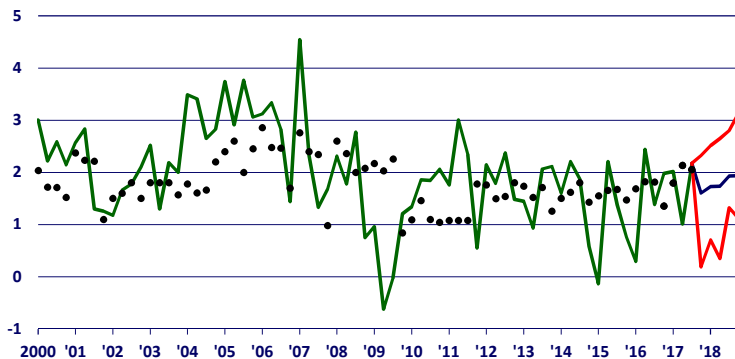
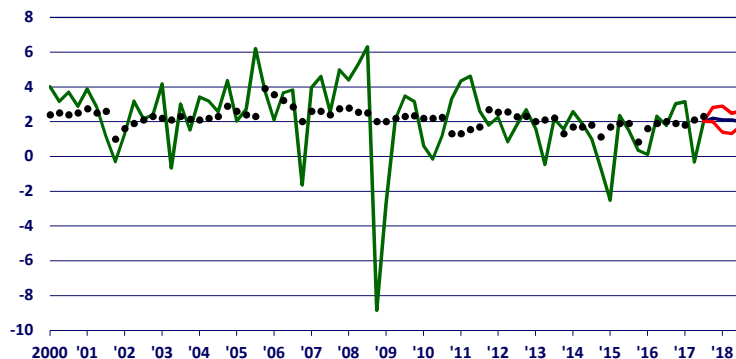


Figure 4 - Forecast of GDP and Related Items

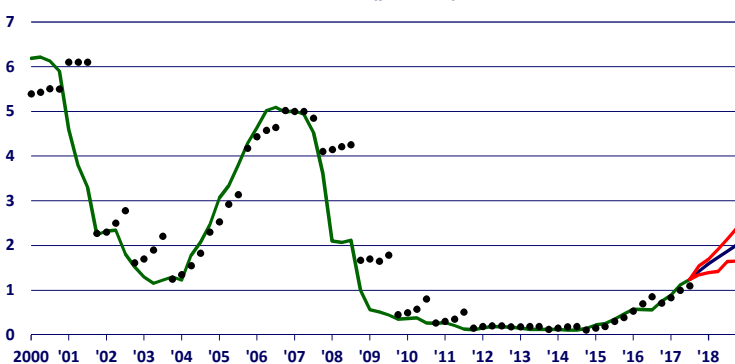
GDP Price Index, Chain-Type
(percent change, annualized)



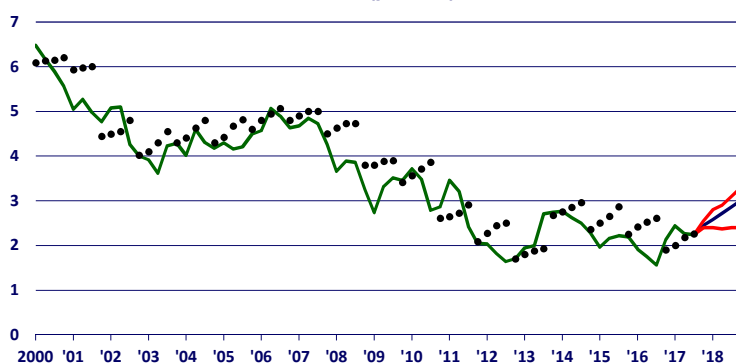
Inflation Rate (CPI)
(percent change, annualized)



Treasury One-Year Rate
(percent)



Treasury Ten-Year Rate
(percent)



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

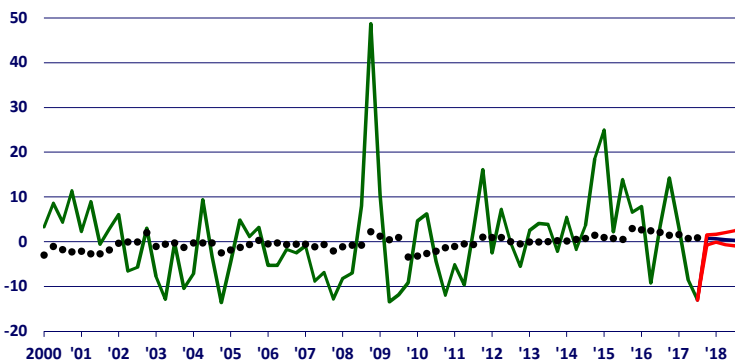


Table 3 - GDP, Current Dollars

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	3.4%			5.2%					
3		4.0%	5.7%		3.6%	5.9%	6.0%	5.3%	5.7%
1		4.3%	5.6%		4.5%	5.2%	5.6%	5.5%	5.9%
6		2.7%	5.6%		-1.7%	5.3%	5.9%	5.5%	5.5%
5		4.1%	4.7%		3.8%	3.5%	4.1%	6.1%	5.0%
10		4.2%	4.7%		4.3%	4.5%	4.9%	4.6%	4.6%
16		4.6%	4.6%		6.0%	5.0%	4.7%	4.4%	4.4%
13		4.1%	4.5%		3.8%	4.7%	3.9%	5.5%	4.1%
14		4.2%	4.5%		4.3%	4.5%	4.5%	4.5%	4.5%
7		4.4%	4.5%		4.9%	3.5%	5.8%	3.9%	4.7%
4		4.5%	4.4%		5.5%	4.6%	4.4%	4.2%	4.3%
19		4.0%	4.3%		3.3%	4.0%	6.0%	3.4%	3.7%
8		4.3%	4.2%		4.7%	4.1%	4.3%	4.4%	3.9%
15		4.2%	4.1%		4.2%	4.1%	4.1%	4.2%	4.1%
17		4.3%	4.0%		4.5%	3.8%	4.1%	4.2%	4.0%
12		4.0%	4.0%		3.4%	3.9%	4.0%	4.1%	3.9%
11		4.1%	4.0%		3.9%	4.0%	4.1%	4.0%	3.8%
20		4.2%	3.9%		4.2%	3.7%	4.0%	4.1%	4.0%
21		4.2%	3.7%		4.2%	2.9%	3.7%	4.3%	4.0%
24		4.1%	3.5%		3.7%	3.3%	0.4%	7.2%	3.3%
18		4.1%	3.5%		3.8%	3.1%	4.0%	3.6%	3.2%
26		3.6%	3.1%		2.0%	0.5%	3.9%	3.8%	4.2%
22		4.1%	3.0%		3.7%	2.3%	3.2%	3.5%	3.0%
25		4.1%	2.9%		3.9%	0.3%	3.3%	4.1%	4.0%
23		4.1%	2.8%		3.8%	2.3%	3.9%	3.9%	1.2%
27		3.8%	0.7%		2.5%	4.7%	3.3%	-2.2%	-2.7%
MEDIAN		4.1%	4.1%		3.9%	4.0%	4.1%	4.2%	4.0%
MEAN		4.1%	4.0%		3.8%	3.7%	4.2%	4.2%	3.9%
STD DEV		0.4%	1.0%		1.4%	1.3%	1.1%	1.6%	1.6%
HIGH		4.6%	5.7%		6.0%	5.9%	6.0%	7.2%	5.9%
LOW		2.7%	0.7%		-1.7%	0.3%	0.4%	-2.2%	-2.7%

Table 4 - GDP Price Index, Chain-type

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	1.5%			2.2%					
3		1.5%	2.9%		0.9%	2.8%	2.6%	2.8%	3.1%
6		0.1%	2.8%		-4.7%	2.5%	2.9%	2.8%	3.2%
1		2.0%	2.4%		2.7%	2.1%	2.5%	2.4%	2.8%
16		1.9%	2.4%		2.4%	2.6%	2.6%	2.2%	2.0%
5		1.6%	2.2%		1.3%	1.8%	2.5%	2.1%	2.4%
13		1.7%	2.2%		1.6%	2.1%	2.1%	2.5%	2.1%
10		1.7%	2.1%		1.7%	2.1%	2.2%	2.2%	2.0%
19		1.6%	2.1%		1.0%	1.5%	3.9%	1.3%	1.6%
11		1.8%	2.1%		2.0%	2.1%	2.1%	2.1%	1.9%
24		1.7%	1.9%		1.6%	1.8%	-1.0%	5.4%	1.7%
14		1.9%	1.9%		2.3%	2.1%	1.4%	1.7%	2.4%
7		1.7%	1.9%		1.6%	2.0%	1.9%	1.8%	1.7%
15		1.7%	1.8%		1.5%	1.6%	1.7%	2.0%	2.0%
21		1.7%	1.8%		1.5%	1.6%	1.7%	2.0%	2.0%
20		1.7%	1.8%		1.5%	1.6%	1.7%	2.0%	2.0%
18		1.7%	1.8%		1.7%	2.2%	1.0%	2.1%	1.8%
17		1.7%	1.8%		1.7%	1.5%	1.8%	1.9%	1.9%
4		1.8%	1.6%		2.1%	1.7%	1.5%	1.6%	1.7%
12		1.7%	1.6%		1.6%	1.6%	1.6%	1.6%	1.6%
25		1.7%	1.6%		1.6%	1.1%	1.8%	1.8%	1.7%
8		1.9%	1.6%		2.3%	1.4%	1.8%	1.7%	1.4%
23		1.5%	1.5%		0.9%	0.7%	0.4%	1.1%	3.9%
2		1.7%	1.5%		1.6%	2.1%	1.4%	1.4%	1.0%
22		1.6%	1.2%		1.4%	1.1%	1.1%	1.4%	1.1%
26		1.3%	0.9%		0.2%	-1.9%	1.4%	1.8%	2.5%
27		1.3%	-0.4%		0.2%	0.4%	-0.4%	-0.7%	-1.1%
MEDIAN		1.7%	1.8%		1.6%	1.7%	1.7%	1.9%	1.9%
MEAN		1.6%	1.8%		1.3%	1.6%	1.7%	2.0%	1.9%
STD DEV		0.3%	0.6%		1.3%	0.9%	1.0%	0.9%	0.9%
HIGH		2.0%	2.9%		2.7%	2.8%	3.9%	5.4%	3.9%
LOW		0.1%	-0.4%		-4.7%	-1.9%	-1.0%	-0.7%	-1.1%

Table 5 - Real GDP, Chained Dollars

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	1.8%			3.0%					
1		2.3%	3.0%		1.7%	3.0%	3.0%	3.0%	3.0%
2		3.6%	3.0%		7.2%	3.6%	-0.7%	4.0%	5.3%
3		2.5%	2.8%		2.7%	2.9%	3.3%	2.5%	2.4%
4		2.6%	2.7%		3.3%	2.8%	2.8%	2.6%	2.6%
5		2.5%	2.7%		2.9%	2.3%	2.8%	3.5%	2.3%
6		2.6%	2.7%		3.0%	2.6%	3.0%	2.6%	2.4%
7		2.6%	2.6%		3.3%	1.5%	3.8%	2.1%	3.0%
8		2.4%	2.5%		2.5%	2.3%	2.5%	2.6%	2.6%
9		2.6%	2.5%		3.1%	2.6%	2.3%	2.3%	2.8%
10		2.5%	2.5%		2.5%	2.3%	2.7%	2.4%	2.6%
11		2.4%	2.4%		2.3%	2.5%	2.5%	2.5%	2.3%
12		2.6%	2.4%		3.0%	2.3%	2.3%	2.5%	2.3%
13		2.3%	2.3%		2.1%	2.5%	1.7%	2.9%	2.0%
14		2.5%	2.3%		2.6%	2.3%	2.3%	2.2%	2.2%
15		2.5%	2.2%		2.6%	2.4%	2.3%	2.1%	2.1%
16		2.7%	2.2%		3.5%	2.3%	2.0%	2.2%	2.4%
17		2.5%	2.2%		2.7%	2.3%	2.3%	2.3%	2.0%
18		2.3%	2.2%		2.1%	1.6%	2.9%	2.3%	1.9%
19		2.4%	2.1%		2.2%	2.5%	2.1%	2.0%	2.0%
20		2.5%	2.1%		2.6%	2.0%	2.2%	2.0%	2.0%
21		2.5%	1.8%		2.6%	1.2%	1.9%	2.2%	2.0%
22		2.4%	1.8%		2.2%	1.2%	2.1%	2.0%	1.9%
23		2.6%	1.7%		3.2%	0.6%	2.7%	2.3%	1.3%
24		2.3%	1.6%		2.0%	1.5%	1.5%	1.7%	1.5%
25		2.4%	1.3%		2.2%	-0.7%	1.5%	2.3%	2.2%
26		2.2%	1.2%		1.6%	-1.3%	2.3%	1.9%	1.9%
27		2.4%	1.1%		2.3%	4.2%	3.6%	-1.5%	-1.7%
MEDIAN		2.5%	2.3%		2.6%	2.3%	2.3%	2.3%	2.2%
MEAN		2.5%	2.2%		2.7%	2.1%	2.4%	2.3%	2.2%
STD DEV		0.2%	0.5%		1.0%	1.1%	0.8%	0.9%	1.0%
HIGH		3.6%	3.0%		7.2%	4.2%	3.8%	4.0%	5.3%
LOW		2.2%	1.1%		1.6%	-1.3%	-0.7%	-1.5%	-1.7%

Table 6 - Personal Consumption Expenditures

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	2.8%			2.4%					
7		2.8%	3.5%		3.6%	3.1%	4.1%	3.2%	3.6%
1		2.6%	2.7%		2.7%	3.5%	2.9%	3.0%	1.4%
6		2.6%	2.7%		2.7%	2.6%	2.7%	2.7%	2.6%
4		2.7%	2.6%		3.2%	2.6%	2.8%	2.6%	2.6%
8		2.6%	2.6%		3.0%	2.5%	2.6%	2.6%	2.6%
3		2.4%	2.5%		2.2%	2.5%	2.7%	2.5%	2.5%
15		2.6%	2.5%		3.0%	2.6%	2.5%	2.4%	2.4%
12		2.8%	2.5%		3.8%	2.7%	2.5%	2.5%	2.2%
11		2.5%	2.5%		2.5%	2.5%	2.6%	2.4%	2.3%
10		2.6%	2.4%		2.8%	2.5%	2.3%	2.5%	2.5%
5		2.4%	2.4%		2.2%	2.1%	2.3%	2.7%	2.6%
16		2.8%	2.4%		3.5%	2.6%	2.3%	2.4%	2.5%
17		2.6%	2.4%		2.8%	2.3%	2.4%	2.4%	2.4%
9		-0.7%	2.3%		-9.6%	2.8%	3.5%	0.7%	2.3%
14		2.6%	2.3%		3.0%	2.5%	2.3%	2.2%	2.1%
20		2.6%	2.3%		3.0%	2.0%	2.4%	2.4%	2.2%
19		2.9%	2.2%		3.9%	1.0%	2.2%	2.8%	2.9%
18		2.5%	2.2%		2.3%	2.4%	2.2%	2.1%	2.1%
21		2.6%	2.1%		2.9%	1.0%	2.2%	2.8%	2.3%
24		2.4%	2.0%		2.1%	2.1%	1.5%	2.3%	2.1%
13		2.6%	2.0%		2.8%	2.3%	2.1%	1.9%	1.6%
23		2.4%	1.6%		2.0%	0.2%	1.4%	3.5%	1.5%
26		2.3%	1.3%		1.6%	-1.3%	2.5%	2.0%	2.1%
22		2.5%	1.2%		2.6%	0.3%	1.8%	1.4%	1.5%
25		2.2%	1.0%		1.1%	-3.0%	2.7%	2.9%	1.6%
27		2.6%	-0.2%		2.8%	2.2%	2.3%	-2.9%	-2.3%
2		3.6%	-1.2%		6.9%	4.5%	-5.9%	-1.8%	-1.3%
MEDIAN		2.6%	2.3%		2.8%	2.5%	2.4%	2.4%	2.3%
MEAN		2.5%	2.0%		2.4%	2.0%	2.1%	2.1%	2.0%
STD DEV		0.7%	0.9%		2.6%	1.5%	1.7%	1.4%	1.2%
HIGH		3.6%	3.5%		6.9%	4.5%	4.1%	3.5%	3.6%
LOW		-0.7%	-1.2%		-9.6%	-3.0%	-5.9%	-2.9%	-2.3%

Table 7 - Business Fixed Investment

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	0.7%			3.9%					
4		5.9%	5.6%		6.1%	6.5%	5.9%	5.2%	4.7%
16		6.0%	5.5%		6.4%	6.2%	5.1%	5.0%	5.5%
3		5.2%	5.1%		3.3%	5.1%	5.7%	5.4%	4.1%
12		5.7%	4.6%		5.0%	4.2%	4.2%	5.0%	5.0%
15		5.5%	4.5%		4.3%	4.1%	5.0%	4.5%	4.3%
10		5.8%	4.3%		5.5%	4.0%	4.7%	4.4%	4.3%
5		5.6%	4.3%		4.8%	4.3%	4.3%	4.2%	4.2%
8		5.7%	4.1%		5.1%	4.8%	4.1%	4.0%	3.7%
20		5.5%	4.1%		4.3%	3.6%	4.6%	4.3%	4.1%
6		5.2%	4.1%		3.0%	4.1%	5.1%	4.1%	3.0%
23		4.9%	3.8%		2.0%	4.5%	5.7%	2.9%	2.2%
21		5.5%	3.7%		4.2%	3.7%	4.1%	3.6%	3.4%
11		5.4%	3.7%		3.7%	3.8%	3.9%	3.6%	3.4%
22		5.1%	3.5%		2.6%	3.4%	3.4%	3.5%	3.7%
17		5.8%	3.4%		5.6%	2.5%	3.8%	3.9%	3.6%
19		4.7%	3.4%		1.0%	2.9%	4.9%	4.5%	1.5%
14		5.5%	3.2%		4.3%	3.9%	1.1%	3.3%	4.5%
9		4.3%	3.2%		-0.4%	6.7%	3.1%	6.7%	-3.5%
1		5.1%	3.0%		2.7%	3.0%	3.0%	3.0%	3.0%
26		6.2%	2.7%		6.9%	1.0%	3.9%	2.9%	3.2%
18		5.3%	2.7%		3.4%	2.9%	2.7%	2.6%	2.5%
13		5.4%	2.3%		3.8%	3.4%	0.5%	2.1%	3.4%
25		4.3%	1.7%		-0.4%	-5.1%	4.0%	4.5%	3.7%
27		2.9%	1.1%		-5.5%	7.2%	1.7%	-1.7%	-2.6%
7		4.6%	-0.1%		0.7%	1.4%	0.2%	-1.0%	-0.9%
24		5.4%	-1.4%		3.9%	-4.4%	-1.5%	-1.3%	1.5%
2		6.9%	-2.8%		9.9%	5.8%	-7.7%	-3.2%	-5.5%
MEDIAN		5.4%	3.5%		3.9%	3.9%	4.0%	3.9%	3.4%
MEAN		5.3%	3.1%		3.6%	3.5%	3.2%	3.2%	2.6%
STD DEV		0.7%	1.9%		2.8%	2.7%	2.8%	2.3%	2.6%
HIGH		6.9%	5.6%		9.9%	7.2%	5.9%	6.7%	5.5%
LOW		2.9%	-2.8%		-5.5%	-5.1%	-7.7%	-3.2%	-5.5%

Table 8 - Residential Investment

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	2.5%			-6.0%					
3		-2.1%	11.9%		-5.2%	7.5%	10.4%	13.3%	16.8%
7		1.7%	7.0%		10.7%	12.6%	2.0%	5.3%	8.5%
5		-2.5%	7.0%		-6.7%	7.1%	10.7%	6.8%	3.3%
17		-0.2%	6.9%		2.5%	9.8%	7.5%	5.9%	4.5%
8		-1.1%	6.9%		-1.0%	5.0%	8.0%	7.5%	7.0%
10		0.4%	6.1%		5.0%	5.0%	6.0%	7.0%	6.5%
14		-1.0%	5.7%		-0.8%	1.7%	5.9%	8.5%	6.8%
27		0.0%	5.1%		3.5%	18.1%	21.0%	-3.1%	-11.9%
18		0.3%	4.7%		4.5%	4.4%	5.8%	5.5%	3.2%
11		0.0%	4.2%		3.5%	4.8%	4.8%	4.0%	3.3%
4		-1.2%	4.1%		-1.7%	1.6%	3.9%	5.2%	5.9%
22		0.0%	3.5%		3.5%	4.6%	3.6%	3.4%	2.3%
15		-1.0%	3.4%		-0.8%	2.4%	3.9%	3.7%	3.5%
26		1.4%	3.3%		9.2%	1.8%	4.3%	3.4%	3.7%
20		-1.0%	3.2%		-0.8%	2.2%	3.5%	3.7%	3.6%
13		-1.4%	3.2%		-2.3%	0.4%	3.3%	5.6%	3.6%
23		1.8%	3.2%		10.9%	2.6%	3.5%	2.4%	4.2%
16		-0.2%	3.2%		2.4%	3.7%	5.2%	3.2%	0.6%
6		-0.2%	2.3%		2.6%	2.2%	2.7%	2.0%	2.3%
1		-4.4%	2.0%		-13.7%	-9.0%	31.7%	8.0%	-16.4%
24		2.3%	1.6%		13.3%	20.0%	-3.9%	4.0%	-11.3%
2		0.2%	1.0%		4.2%	9.1%	-2.0%	-2.6%	0.0%
19		2.2%	0.9%		12.8%	7.2%	-6.0%	-7.2%	10.9%
21		-0.4%	0.5%		1.6%	-0.5%	-0.4%	1.2%	1.9%
12		-2.1%	0.2%		-5.0%	-3.0%	0.0%	2.0%	2.0%
25		-0.6%	0.2%		0.7%	-2.0%	1.4%	1.4%	0.0%
MEDIAN		-0.2%	3.3%		2.5%	4.1%	3.9%	3.9%	3.4%
MEAN		-0.3%	3.9%		2.0%	4.6%	5.3%	3.8%	2.5%
STD DEV		1.5%	2.6%		6.1%	6.0%	7.3%	4.0%	6.7%
HIGH		2.3%	11.9%		13.3%	20.0%	31.7%	13.3%	16.8%
LOW		-4.4%	0.2%		-13.7%	-9.0%	-6.0%	-7.2%	-16.4%

Table 9 - Change in Private Inventories

Individual	Q4 value			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	\$63.1			\$35.8					
24		-\$3.4	\$70.0		-\$3.4	-\$10.4	\$112.9	\$101.2	\$70.0
5		\$50.0	\$70.0		\$50.0	\$45.0	\$58.0	\$66.0	\$70.0
3		\$50.8	\$68.7		\$50.8	\$45.3	\$57.0	\$66.9	\$68.7
4		\$48.0	\$61.3		\$48.0	\$60.4	\$60.7	\$61.0	\$61.3
15		\$45.4	\$58.1		\$45.4	\$55.7	\$60.1	\$60.9	\$58.1
17		\$38.3	\$57.5		\$38.3	\$51.2	\$52.7	\$55.9	\$57.5
20		\$45.4	\$55.3		\$45.4	\$55.8	\$58.2	\$57.1	\$55.3
27		\$40.0	\$55.0		\$40.0	\$43.0	\$45.0	\$50.0	\$55.0
21		\$45.4	\$53.1		\$45.4	\$55.5	\$58.4	\$56.9	\$53.1
16		\$39.6	\$45.9		\$39.6	\$38.4	\$35.1	\$40.5	\$45.9
8		\$50.0	\$45.0		\$50.0	\$50.0	\$50.0	\$48.0	\$45.0
10		\$24.1	\$44.3		\$24.1	\$16.3	\$31.9	\$35.4	\$44.3
13		\$42.9	\$43.9		\$42.9	\$51.2	\$52.6	\$49.5	\$43.9
23		\$37.8	\$39.6		\$37.8	\$38.4	\$38.9	\$39.4	\$39.6
11		\$38.0	\$39.3		\$38.0	\$38.1	\$38.6	\$39.2	\$39.3
6		\$36.1	\$38.2		\$36.1	\$36.6	\$37.1	\$37.6	\$38.2
18		\$16.0	\$37.7		\$16.0	\$44.3	\$47.4	\$34.8	\$37.7
1		\$32.4	\$37.4		\$32.4	\$33.9	\$37.7	\$38.0	\$37.4
25		\$36.0	\$36.5		\$36.0	\$36.5	\$35.5	\$36.0	\$36.5
19		\$0.2	\$36.0		\$0.2	\$30.2	\$60.4	\$46.6	\$36.0
2		\$36.5	\$35.1		\$36.5	\$36.2	\$35.8	\$35.4	\$35.1
12		\$35.0	\$30.0		\$35.0	\$35.0	\$35.0	\$35.0	\$30.0
14		\$15.3	\$27.9		\$15.3	\$46.5	\$12.6	\$15.9	\$27.9
7		\$39.0	\$26.0		\$39.0	-\$15.0	\$12.0	\$10.0	\$26.0
22		\$25.0	\$25.0		\$25.0	\$25.0	\$25.0	\$25.0	\$25.0
26		\$14.0	\$15.9		\$14.0	\$17.4	\$16.2	\$16.2	\$15.9
MEDIAN		\$37.9	\$41.8		\$37.9	\$38.4	\$42.0	\$39.9	\$41.8
MEAN		\$33.8	\$44.3		\$33.8	\$36.9	\$44.8	\$44.6	\$44.3
STD DEV		\$14.4	\$14.2		\$14.4	\$18.0	\$19.8	\$18.6	\$14.2
HIGH		\$50.8	\$70.0		\$50.8	\$60.4	\$112.9	\$101.2	\$70.0
LOW		-\$3.4	\$15.9		-\$3.4	-\$15.0	\$12.0	\$10.0	\$15.9

Table 10 - Net Exports of Goods and Services

Individual	Q4 value			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	-\$631.1			-\$595.5					
22		-\$596.4	-\$566.4		-\$596.4	-\$585.5	-\$585.4	-\$572.4	-\$566.4
27		-\$610.0	-\$570.0		-\$610.0	-\$590.0	-\$580.0	-\$575.0	-\$570.0
18		-\$592.4	-\$580.3		-\$592.4	-\$586.9	-\$582.1	-\$580.9	-\$580.3
12		-\$596.5	-\$597.8		-\$596.5	-\$597.5	-\$596.5	-\$595.4	-\$597.8
25		-\$597.0	-\$599.0		-\$597.0	-\$585.1	-\$591.0	-\$595.5	-\$599.0
6		-\$596.7	-\$607.2		-\$596.7	-\$508.8	-\$601.2	-\$604.2	-\$607.2
7		-\$600.0	-\$610.0		-\$600.0	-\$602.0	-\$595.0	-\$603.0	-\$610.0
13		-\$608.5	-\$613.6		-\$608.5	-\$619.1	-\$610.5	-\$613.5	-\$613.6
1		-\$600.7	-\$618.9		-\$600.7	-\$605.2	-\$609.7	-\$614.3	-\$618.9
19		-\$610.8	-\$624.1		-\$610.8	-\$591.7	-\$613.2	-\$610.5	-\$624.1
26		-\$603.3	-\$624.2		-\$603.3	-\$606.3	-\$615.2	-\$617.3	-\$624.2
2		-\$601.0	-\$627.0		-\$601.0	-\$609.0	-\$615.0	-\$624.0	-\$627.0
8		-\$602.0	-\$627.6		-\$602.0	-\$612.1	-\$621.0	-\$625.9	-\$627.6
14		-\$607.0	-\$628.2		-\$607.0	-\$619.5	-\$614.5	-\$621.8	-\$628.2
4		-\$601.7	-\$640.2		-\$601.7	-\$614.3	-\$622.0	-\$631.5	-\$640.2
23		-\$640.0	-\$641.0		-\$640.0	-\$634.4	-\$632.0	-\$640.1	-\$641.0
24		-\$600.0	-\$647.9		-\$600.0	-\$604.0	-\$686.1	-\$662.9	-\$647.9
5		-\$605.0	-\$650.0		-\$605.0	-\$635.0	-\$666.0	-\$680.0	-\$650.0
10		-\$610.7	-\$654.1		-\$610.7	-\$612.5	-\$627.8	-\$643.6	-\$654.1
21		-\$606.3	-\$655.6		-\$606.3	-\$616.4	-\$629.6	-\$646.0	-\$655.6
16		-\$592.6	-\$659.5		-\$592.6	-\$615.4	-\$635.5	-\$652.0	-\$659.5
17		-\$602.1	-\$662.7		-\$602.1	-\$614.6	-\$626.3	-\$643.6	-\$662.7
20		-\$606.8	-\$667.8		-\$606.8	-\$617.9	-\$633.4	-\$654.2	-\$667.8
11		-\$630.0	-\$670.0		-\$630.0	-\$640.0	-\$660.0	-\$680.0	-\$670.0
15		-\$606.8	-\$676.0		-\$606.8	-\$620.4	-\$639.5	-\$661.4	-\$676.0
3		-\$607.3	-\$740.7		-\$607.3	-\$634.3	-\$666.2	-\$701.9	-\$740.7
MEDIAN		-\$602.7	-\$627.9		-\$602.7	-\$612.3	-\$618.1	-\$625.0	-\$627.9
MEAN		-\$605.1	-\$633.1		-\$605.1	-\$606.8	-\$621.3	-\$628.9	-\$633.1
STD DEV		\$10.2	\$36.6		\$10.2	\$24.8	\$26.5	\$32.7	\$36.6
HIGH		-\$592.4	-\$566.4		-\$592.4	-\$508.8	-\$580.0	-\$572.4	-\$566.4
LOW		-\$640.0	-\$740.7		-\$640.0	-\$640.0	-\$686.1	-\$701.9	-\$740.7

Table 11 - Government Consumption Expenditures and Gross Investment

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	0.4%			-0.1%					
27		0.8%	4.3%		4.3%	4.9%	4.1%	4.1%	4.0%
3		0.1%	3.5%		1.5%	6.3%	4.5%	0.9%	2.4%
1		0.8%	3.0%		4.4%	3.0%	1.7%	4.4%	3.0%
5		0.0%	1.7%		0.8%	2.8%	4.2%	4.1%	-4.0%
23		1.2%	1.3%		5.9%	1.2%	1.2%	1.2%	1.4%
6		0.0%	1.3%		1.0%	1.0%	2.0%	1.0%	1.0%
11		0.0%	1.2%		0.8%	1.0%	1.2%	1.2%	1.2%
25		0.0%	1.0%		0.9%	1.0%	1.0%	1.0%	1.0%
22		-0.1%	1.0%		0.5%	1.1%	1.4%	0.8%	0.6%
24		0.4%	1.0%		2.7%	1.5%	-0.9%	-0.7%	3.9%
4		-0.1%	0.8%		0.7%	0.8%	0.8%	0.8%	0.9%
18		-0.1%	0.7%		0.5%	0.6%	0.6%	0.7%	0.8%
8		-0.2%	0.7%		0.2%	0.2%	0.8%	0.8%	0.8%
10		-0.3%	0.6%		-0.2%	0.6%	1.2%	0.5%	0.3%
21		-0.2%	0.6%		0.0%	0.5%	0.6%	0.7%	0.6%
20		-0.2%	0.6%		0.0%	0.4%	0.6%	0.7%	0.6%
15		-0.2%	0.6%		0.0%	0.5%	0.6%	0.7%	0.6%
9		-0.2%	0.6%		0.0%	0.4%	0.6%	0.7%	0.6%
14		-0.2%	0.6%		0.0%	0.4%	0.6%	0.7%	0.6%
2		-0.1%	0.6%		0.4%	-1.8%	1.5%	1.4%	1.2%
13		-0.2%	0.5%		0.0%	0.4%	0.6%	0.6%	0.3%
17		-0.2%	0.5%		0.3%	0.1%	0.3%	0.8%	0.8%
12		-0.2%	0.2%		0.0%	0.0%	0.0%	0.0%	1.0%
7		0.1%	0.2%		1.2%	0.3%	0.1%	0.3%	0.3%
16		-0.2%	0.2%		0.1%	0.8%	0.7%	-0.4%	-0.3%
19		-0.3%	-0.2%		-0.1%	-0.1%	-0.6%	-0.1%	-0.2%
26		-0.1%	-0.6%		0.6%	-3.6%	0.4%	0.3%	0.3%
MEDIAN		-0.1%	0.6%		0.5%	0.6%	0.7%	0.7%	0.8%
MEAN		0.0%	1.0%		1.0%	0.9%	1.1%	1.0%	0.9%
STD DEV		0.4%	1.0%		1.5%	1.8%	1.3%	1.2%	1.4%
HIGH		1.2%	4.3%		5.9%	6.3%	4.5%	4.4%	4.0%
LOW		-0.3%	-0.6%		-0.2%	-3.6%	-0.9%	-0.7%	-4.0%

Table 12 - Industrial Production

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	-0.1%			-0.3%					
16		2.3%	3.1%		2.4%	3.9%	3.4%	2.8%	2.2%
1		1.9%	3.0%		1.0%	3.1%	3.1%	3.0%	3.0%
6		1.6%	2.8%		-0.1%	1.9%	3.1%	3.0%	3.0%
15		2.4%	2.7%		3.1%	3.1%	3.1%	2.3%	2.4%
17		2.3%	2.7%		2.3%	2.4%	2.5%	2.8%	2.9%
20		2.4%	2.5%		3.1%	2.8%	2.9%	2.2%	2.3%
4		2.2%	2.4%		1.9%	2.6%	2.4%	2.2%	2.2%
8		1.7%	2.3%		0.3%	2.3%	2.3%	2.3%	2.3%
21		2.4%	2.2%		3.0%	2.7%	2.6%	1.8%	1.9%
9		2.6%	2.2%		3.6%	2.4%	2.0%	2.2%	2.2%
14		2.6%	2.2%		3.7%	2.3%	1.9%	2.3%	2.2%
10		1.9%	2.0%		0.9%	3.0%	2.0%	2.2%	0.9%
5		1.7%	1.9%		-0.1%	1.9%	2.1%	1.9%	1.6%
3		1.7%	1.9%		-0.1%	1.9%	2.1%	1.9%	1.6%
24		1.6%	1.7%		-0.1%	1.9%	1.5%	1.9%	1.5%
11		1.7%	1.7%		0.3%	1.9%	1.7%	1.7%	1.5%
25		1.5%	1.6%		-0.5%	-3.8%	1.5%	3.1%	5.8%
12		2.7%	1.5%		4.1%	1.5%	1.9%	1.5%	1.1%
18		1.0%	1.3%		-2.7%	0.8%	1.4%	1.2%	1.7%
2		1.6%	1.2%		-0.1%	1.1%	0.8%	1.5%	1.5%
23		1.5%	1.0%		-0.5%	1.1%	1.9%	0.8%	0.4%
26		2.2%	0.9%		2.2%	-0.4%	1.7%	1.1%	1.3%
7		1.5%	0.9%		-0.5%	1.5%	1.5%	0.4%	0.0%
13		2.0%	0.3%		1.4%	2.3%	1.9%	-5.2%	2.3%
22		1.7%	0.2%		0.3%	0.8%	0.0%	0.0%	0.0%
27		1.7%	-0.8%		0.3%	0.8%	-1.1%	-1.9%	-0.8%
19		1.9%	-1.1%		1.0%	-6.6%	0.8%	0.7%	0.8%
MEDIAN		1.9%	1.9%		0.9%	1.9%	1.9%	1.9%	1.7%
MEAN		2.0%	1.6%		1.1%	1.5%	1.9%	1.5%	1.8%
STD DEV		0.4%	1.0%		1.6%	2.1%	1.0%	1.7%	1.2%
HIGH		2.7%	3.1%		4.1%	3.9%	3.4%	3.1%	5.8%
LOW		1.0%	-1.1%		-2.7%	-6.6%	-1.1%	-5.2%	-0.8%

Table 13 - Car and Light Truck Sales (millions)

Individual	2016	2017	2018	Q317	Q417	Q118	Q218	Q318	Q418
	17.5			17.1					
x3		18.5	18.5						
x2		17.2	17.7						
22		17.7	17.5		17.5	17.0	17.0	18.0	18.0
2		17.0	17.4		17.0	17.2	17.1	17.2	17.4
27		17.2	17.2		17.4	17.8	17.4	17.0	16.7
4		17.1	17.2		17.6	17.3	17.3	17.2	17.1
18		17.1	17.2		17.2	17.2	17.2	17.2	17.1
24		17.2	17.1		17.2	17.2	17.1	17.1	17.1
23		17.1	17.1		17.1	17.3	17.2	16.9	17.1
6			17.1		17.1	17.1	17.1	17.1	17.0
15		17.1	17.1		17.4	17.0	17.1	17.1	17.0
17		17.1	17.1		17.6	17.1	17.1	17.1	17.0
14		17.1	17.0		17.3	17.0	17.0	17.0	17.0
12		17.1	17.0		17.2	17.1	17.0	17.0	16.9
25		17.3	17.0		17.3	16.7	16.8	16.9	17.0
3		17.0	17.0		17.2	16.9	17.1	16.9	16.8
5		17.0	16.9		17.2	16.9	16.9	16.9	16.8
7		17.1	16.9		17.4	16.9	16.6	16.8	17.1
8		17.0	16.8		17.2	16.8	16.8	16.7	16.7
11		17.2	16.8		17.1	16.9	16.8	16.8	16.8
13		17.0	16.8		17.2	16.8	16.9	16.8	16.6
26		16.7	16.7		16.8	16.7	16.8	16.7	16.6
16		17.1	16.6		17.5	17.1	16.6	16.5	16.3
1		17.0	16.6		16.8	14.8	16.8	17.6	17.3
x1		17.1	16.6						
19		17.1	16.5		17.3	16.6	16.2	16.5	16.7
10		17.1	16.5		17.5	16.6	16.3	16.6	16.3
9		17.0	16.1		17.1	16.5	16.4	16.1	15.5
MEDIAN		17.1	17.0		17.2	17.0	16.9	16.9	16.9
MEAN		17.2	17.0		17.2	16.9	16.9	16.9	16.8
STD DEV		0.3	0.4		0.2	0.5	0.3	0.3	0.4
HIGH		18.5	18.5		17.6	17.8	17.4	17.6	17.4
LOW		16.7	16.1		16.8	14.8	16.3	16.1	15.5

Table 14 - Housing Starts (millions)

Individual	2016	2017	2018	Q317	Q417	Q118	Q218	Q318	Q418
	1.18			1.16					
3		1.22	1.52		1.32	1.39	1.47	1.56	1.65
x1		1.18	1.40						
x2		1.18	1.40						
x3		1.40	1.40						
22		1.20	1.30		1.24	1.26	1.29	1.31	1.32
23		1.20	1.30		1.30	1.30	1.30	1.30	1.40
24		1.18	1.29		1.17	1.23	1.26	1.31	1.34
5		1.20	1.28		1.30	1.31	1.25	1.22	1.25
8		1.22	1.28		1.27	1.27	1.28	1.28	1.29
11		1.23	1.28		1.30	1.27	1.26	1.25	1.24
17		1.20	1.27		1.23	1.25	1.27	1.28	1.28
7		1.21	1.26		1.26	1.28	1.26	1.23	1.28
26		1.21	1.26		1.23	1.24	1.26	1.27	1.28
16		1.20	1.26		1.23	1.25	1.26	1.25	1.27
15		1.19	1.26		1.19	1.21	1.24	1.27	1.30
14		1.19	1.25		1.19	1.21	1.24	1.27	1.29
20		1.19	1.25		1.19	1.21	1.24	1.27	1.30
2		1.20	1.25		1.15	1.20	1.20	1.30	1.30
10		1.18	1.24		1.16	1.22	1.24	1.24	1.25
13		1.19	1.23		1.19	1.20	1.24	1.19	1.28
4		1.19	1.22		1.20	1.21	1.22	1.23	1.24
12		1.24	1.22		1.23	1.22	1.22	1.22	1.23
27		1.19	1.22		1.20	1.25	1.25	1.20	1.18
19		1.19	1.21		1.20	1.19	1.20	1.21	1.25
6			1.20		1.17	1.20	1.20	1.20	1.20
21		1.19	1.20		1.19	1.18	1.19	1.20	1.22
18		1.19	1.18		1.19	1.19	1.17	1.18	1.18
1		1.18	1.14		1.13	1.02	1.26	1.19	1.16
25		1.16	1.13		1.16	1.11	1.13	1.14	1.13
MEDIAN		1.19	1.26		1.19	1.21	1.24	1.23	1.25
MEAN		1.20	1.27		1.21	1.21	1.23	1.24	1.25
STD DEV		0.04	0.08		0.04	0.06	0.04	0.04	0.05
HIGH		1.40	1.52		1.30	1.31	1.29	1.31	1.34
LOW		1.16	1.13		1.13	1.02	1.13	1.14	1.13

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

Individual	Q4 value			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	\$49.20			\$48.16					
22		\$56.00	\$60.00		\$56.00	\$56.00	\$56.00	\$60.00	\$60.00
19		\$54.52	\$59.21		\$54.52	\$57.11	\$53.28	\$53.14	\$59.21
23		\$56.20	\$58.50		\$56.20	\$57.60	\$58.40	\$60.00	\$58.50
11		\$55.10	\$57.75		\$55.10	\$58.00	\$59.00	\$61.00	\$57.75
5		\$53.00	\$55.00		\$53.00	\$52.90	\$53.30	\$54.00	\$55.00
20		\$53.50	\$54.97		\$53.50	\$51.18	\$53.05	\$53.50	\$54.97
1		\$49.78	\$54.75		\$49.78	\$50.65	\$54.25	\$55.80	\$54.75
18		\$52.01	\$54.70		\$52.01	\$54.59	\$51.50	\$51.25	\$54.70
3		\$52.00	\$54.64		\$52.00	\$52.93	\$53.37	\$54.03	\$54.64
12		\$49.99	\$53.47		\$49.99	\$51.22	\$57.62	\$56.10	\$53.47
9		\$51.67	\$53.42		\$51.67	\$49.44	\$51.31	\$51.80	\$53.42
15		\$51.56	\$53.39		\$51.56	\$49.47	\$51.36	\$51.80	\$53.39
17		\$52.23	\$53.23		\$52.23	\$52.23	\$52.23	\$52.73	\$53.23
21		\$52.65	\$53.18		\$52.65	\$54.14	\$54.18	\$53.73	\$53.18
6		\$56.00	\$53.00		\$56.00	\$55.00	\$53.00	\$53.00	\$53.00
14		\$52.31	\$53.00		\$52.31	\$48.75	\$50.73	\$51.40	\$53.00
4		\$52.00	\$52.39		\$52.00	\$52.00	\$52.00	\$52.00	\$52.39
13		\$51.70	\$51.50		\$51.70	\$52.00	\$50.50	\$51.80	\$51.50
8		\$52.00	\$51.00		\$52.00	\$48.00	\$50.00	\$48.00	\$51.00
26		\$53.46	\$50.77		\$53.46	\$54.06	\$53.64	\$52.87	\$50.77
7		\$53.00	\$50.00		\$53.00	\$57.23	\$52.34	\$49.00	\$50.00
10		\$53.50	\$50.00		\$53.50	\$53.50	\$51.24	\$49.70	\$50.00
16		\$52.86	\$48.71		\$52.86	\$54.00	\$49.19	\$45.36	\$48.71
24		\$50.90	\$48.60		\$50.90	\$45.20	\$47.40	\$44.70	\$48.60
25		\$48.50	\$48.30		\$48.50	\$46.50	\$47.50	\$48.10	\$48.30
27		\$53.00	\$48.00		\$53.00	\$55.00	\$52.00	\$50.00	\$48.00
2		\$48.20	\$41.30		\$48.20	\$46.75	\$44.75	\$43.30	\$41.30
MEDIAN		\$52.31	\$53.18		\$52.31	\$52.90	\$52.23	\$52.00	\$53.18
MEAN		\$52.51	\$52.70		\$52.51	\$52.42	\$52.34	\$52.15	\$52.70
STD DEV		\$1.99	\$3.88		\$1.99	\$3.44	\$3.14	\$4.22	\$3.88
HIGH		\$56.20	\$60.00		\$56.20	\$58.00	\$59.00	\$61.00	\$60.00
LOW		\$48.20	\$41.30		\$48.20	\$45.20	\$44.75	\$43.30	\$41.30

Table 16 - Unemployment Rate

Individual	Q4 value			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	4.7%			4.3%					
12		4.1%	4.8%		4.1%	4.1%	4.4%	4.6%	4.8%
27		4.3%	4.7%		4.3%	4.2%	4.3%	4.6%	4.7%
24		4.3%	4.5%		4.3%	4.3%	4.4%	4.4%	4.5%
1		4.2%	4.4%		4.2%	4.8%	4.6%	4.5%	4.4%
11		4.2%	4.4%		4.2%	4.2%	4.2%	4.4%	4.4%
26		4.3%	4.3%		4.3%	4.4%	4.3%	4.3%	4.3%
23		4.2%	4.3%		4.2%	4.3%	4.3%	4.2%	4.3%
2		4.3%	4.2%		4.3%	4.4%	4.5%	4.3%	4.2%
25		4.1%	4.2%		4.1%	4.3%	4.5%	4.3%	4.2%
13		4.2%	4.2%		4.2%	4.1%	4.2%	4.2%	4.2%
17		4.2%	4.1%		4.2%	4.2%	4.2%	4.2%	4.1%
6		4.3%	4.1%		4.3%	4.2%	4.1%	4.1%	4.1%
19		4.4%	4.1%		4.4%	4.3%	4.3%	4.2%	4.1%
21		4.2%	4.1%		4.2%	4.1%	4.1%	4.1%	4.1%
20		4.2%	4.1%		4.2%	4.1%	4.1%	4.1%	4.1%
16		4.2%	4.0%		4.2%	4.1%	4.1%	4.1%	4.0%
7		4.2%	4.0%		4.2%	4.0%	3.9%	3.9%	4.0%
4		4.1%	4.0%		4.1%	4.1%	4.0%	4.0%	4.0%
9		4.2%	4.0%		4.2%	4.0%	4.0%	4.0%	4.0%
14		4.2%	4.0%		4.2%	4.0%	4.0%	4.0%	4.0%
15		4.2%	4.0%		4.2%	4.1%	4.0%	4.0%	4.0%
5		4.1%	3.9%		4.1%	4.0%	3.9%	4.0%	3.9%
8		4.1%	3.9%		4.1%	4.1%	4.0%	3.9%	3.9%
10		4.1%	3.8%		4.1%	4.0%	3.9%	3.8%	3.8%
22		4.2%	3.7%		4.2%	4.2%	3.9%	3.9%	3.7%
18		4.2%	3.7%		4.2%	4.1%	4.0%	3.9%	3.7%
3		4.1%	3.7%		4.1%	4.0%	3.8%	3.8%	3.7%
MEDIAN		4.2%	4.1%		4.2%	4.1%	4.1%	4.1%	4.1%
MEAN		4.2%	4.1%		4.2%	4.2%	4.2%	4.1%	4.1%
STD DEV		0.1%	0.3%		0.1%	0.2%	0.2%	0.2%	0.3%
HIGH		4.4%	4.8%		4.4%	4.8%	4.6%	4.6%	4.8%
LOW		4.1%	3.7%		4.1%	4.0%	3.8%	3.8%	3.7%

Table 17 - Consumer Price Index Inflation Rate

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	1.8%			2.0%					
1		1.7%	3.0%		2.1%	2.9%	3.1%	3.0%	3.0%
6		1.7%	2.5%		2.1%	2.3%	2.5%	2.7%	2.7%
13		1.8%	2.5%		2.5%	2.5%	2.5%	2.5%	2.5%
3		2.0%	2.4%		3.0%	2.0%	2.1%	2.6%	2.8%
11		1.8%	2.3%		2.2%	2.3%	2.3%	2.4%	2.4%
23		1.7%	2.3%		2.1%	2.2%	2.2%	2.3%	2.4%
27		1.7%	2.2%		2.0%	2.2%	2.3%	2.3%	2.2%
7		1.7%	2.2%		2.0%	2.4%	2.3%	2.2%	2.1%
2		1.7%	2.2%		2.0%	2.1%	2.2%	2.3%	2.3%
10		1.7%	2.2%		1.9%	2.2%	2.4%	2.3%	2.0%
12		1.7%	2.1%		2.1%	1.9%	2.1%	2.1%	2.3%
16		1.8%	2.1%		2.4%	2.3%	2.2%	2.0%	1.9%
24		1.7%	2.0%		2.1%	2.1%	2.1%	2.0%	2.0%
5		1.7%	2.0%		2.0%	1.8%	2.2%	1.9%	2.1%
8		2.0%	2.0%		3.0%	2.1%	2.1%	2.3%	1.4%
4		1.8%	1.9%		2.5%	2.0%	1.8%	1.9%	2.1%
9		1.8%	1.9%		2.5%	2.1%	1.4%	1.9%	2.3%
14		1.8%	1.9%		2.5%	2.1%	1.4%	1.9%	2.3%
19		1.9%	1.8%		2.8%	2.9%	-0.2%	1.9%	2.7%
18		1.7%	1.8%		2.1%	1.4%	1.8%	2.2%	1.9%
22		1.8%	1.8%		2.3%	2.9%	0.8%	1.6%	1.8%
15		1.9%	1.7%		2.8%	1.8%	1.3%	1.9%	1.9%
21		1.9%	1.7%		2.8%	1.8%	1.3%	1.9%	1.9%
20		1.9%	1.7%		2.8%	1.8%	1.3%	1.9%	1.9%
26		1.7%	1.7%		1.8%	1.7%	1.4%	1.9%	1.8%
17		1.9%	1.5%		2.8%	0.9%	1.7%	1.8%	1.8%
25		1.7%	1.5%		2.0%	1.1%	1.5%	1.6%	1.8%
MEDIAN		1.8%	2.0%		2.2%	2.1%	2.1%	2.0%	2.1%
MEAN		1.8%	2.0%		2.3%	2.1%	1.9%	2.1%	2.2%
STD DEV		0.1%	0.3%		0.4%	0.5%	0.6%	0.3%	0.4%
HIGH		2.0%	3.0%		3.0%	2.9%	3.1%	3.0%	3.0%
LOW		1.7%	1.5%		1.8%	0.9%	-0.2%	1.6%	1.4%

Table 18 - Treasury Constant Maturity - One-year Rate

Individual	Q4 value			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	0.76%			1.24%					
3		1.48%	2.66%		1.48%	1.73%	2.02%	2.28%	2.66%
5		1.48%	2.40%		1.48%	1.70%	2.00%	2.25%	2.40%
15		1.44%	2.39%		1.44%	1.66%	1.89%	2.14%	2.39%
26		1.34%	2.34%		1.34%	1.60%	1.81%	2.02%	2.34%
16		1.55%	2.24%		1.55%	1.63%	1.78%	2.05%	2.24%
20		1.44%	2.22%		1.44%	1.65%	1.81%	2.01%	2.22%
13		1.42%	2.22%		1.42%	1.62%	1.84%	2.03%	2.22%
4		1.41%	2.12%		1.41%	1.60%	1.72%	1.95%	2.12%
6		1.37%	2.10%		1.37%	1.50%	1.60%	1.70%	2.10%
8		1.55%	2.05%		1.55%	1.68%	1.80%	1.87%	2.05%
14		1.55%	2.05%		1.55%	1.68%	1.80%	1.87%	2.05%
18		1.41%	2.02%		1.41%	1.54%	1.77%	1.89%	2.02%
1		1.37%	2.00%		1.37%	1.40%	1.65%	1.74%	2.00%
27		1.50%	2.00%		1.50%	1.50%	1.75%	2.00%	2.00%
10		1.37%	1.98%		1.37%	1.76%	1.91%	1.91%	1.98%
11		1.41%	1.90%		1.41%	1.70%	1.70%	1.80%	1.90%
2		1.40%	1.80%		1.40%	1.40%	1.55%	1.80%	1.80%
7		1.35%	1.70%		1.35%	1.55%	1.65%	1.65%	1.70%
22		1.45%	1.70%		1.45%	1.60%	1.65%	1.65%	1.70%
23		1.50%	1.70%		1.50%	1.40%	1.40%	1.50%	1.70%
25		1.45%	1.70%		1.45%	1.50%	1.50%	1.70%	1.70%
24		1.35%	1.65%		1.35%	1.47%	1.59%	1.64%	1.65%
12		1.30%	1.60%		1.30%	1.30%	1.40%	1.50%	1.60%
19		1.47%	1.46%		1.47%	1.27%	1.42%	1.64%	1.46%
MEDIAN		1.43%	2.01%		1.43%	1.60%	1.74%	1.87%	2.01%
MEAN		1.43%	2.00%		1.43%	1.56%	1.71%	1.86%	2.00%
STD DEV		0.07%	0.29%		0.07%	0.13%	0.17%	0.21%	0.29%
HIGH		1.55%	2.66%		1.55%	1.76%	2.02%	2.28%	2.66%
LOW		1.30%	1.46%		1.30%	1.27%	1.40%	1.50%	1.46%

Table 19 - Treasury Constant Maturity - Ten-year Rate

Individual	Q4 value			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	2.13%			2.24%					
3		2.49%	3.74%		2.49%	2.86%	3.15%	3.44%	3.74%
5		2.48%	3.70%		2.48%	2.80%	3.10%	3.40%	3.70%
6		2.50%	3.30%		2.50%	2.70%	2.90%	3.10%	3.30%
11		2.45%	3.30%		2.45%	2.75%	2.80%	3.10%	3.30%
4		2.49%	3.27%		2.49%	2.71%	2.88%	3.09%	3.27%
23		2.70%	3.20%		2.70%	2.80%	2.80%	3.00%	3.20%
1		2.40%	3.19%		2.40%	2.46%	2.72%	2.78%	3.19%
16		2.47%	3.17%		2.47%	2.57%	2.75%	2.95%	3.17%
2		2.40%	3.10%		2.40%	2.60%	2.80%	3.10%	3.10%
13		2.47%	3.10%		2.47%	2.62%	2.83%	2.99%	3.10%
24		2.40%	3.07%		2.40%	2.60%	2.75%	3.00%	3.07%
15		2.44%	3.04%		2.44%	2.56%	2.74%	2.91%	3.04%
14		2.44%	3.04%		2.44%	2.56%	2.74%	2.91%	3.04%
20		2.44%	2.99%		2.44%	2.56%	2.72%	2.87%	2.99%
17		2.41%	2.95%		2.41%	2.53%	2.71%	2.86%	2.95%
25		2.55%	2.90%		2.55%	2.60%	2.60%	2.85%	2.90%
26		2.44%	2.83%		2.44%	2.62%	2.73%	2.83%	2.83%
8		2.49%	2.78%		2.49%	2.57%	2.66%	2.71%	2.78%
21		2.40%	2.75%		2.40%	2.45%	2.50%	2.60%	2.75%
18		2.60%	2.71%		2.60%	2.59%	2.37%	2.26%	2.71%
12		2.40%	2.50%		2.40%	2.40%	2.40%	2.40%	2.50%
10		2.46%	2.48%		2.46%	2.46%	2.51%	2.41%	2.48%
7		2.45%	2.40%		2.45%	2.65%	2.60%	2.50%	2.40%
27		2.49%	2.40%		2.49%	2.50%	2.65%	2.70%	2.40%
19		2.50%	2.33%		2.50%	2.20%	2.36%	2.60%	2.33%
22		2.33%	2.30%		2.33%	2.38%	2.37%	2.30%	2.30%
MEDIAN		2.45%	3.01%		2.45%	2.58%	2.72%	2.87%	3.01%
MEAN		2.47%	2.94%		2.47%	2.58%	2.70%	2.83%	2.94%
STD DEV		0.07%	0.38%		0.07%	0.14%	0.20%	0.30%	0.38%
HIGH		2.70%	3.74%		2.70%	2.86%	3.15%	3.44%	3.74%
LOW		2.33%	2.30%		2.33%	2.20%	2.36%	2.26%	2.30%

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

Individual	Q4 over Q4			Q317	Q417	Q118	Q218	Q318	Q418
	2016	2017	2018						
	3.7%			-3.4%					
24		-10.0%	10.3%		-5.4%	1.3%	3.5%	2.6%	2.5%
23		-2.9%	8.9%		2.0%	2.1%	2.3%	2.0%	2.2%
5		-3.4%	8.8%		1.5%	1.5%	2.0%	2.5%	2.5%
6		-5.8%	7.7%		-1.0%	0.0%	1.5%	2.5%	3.5%
1		-3.8%	6.6%		1.1%	-0.8%	2.1%	2.3%	2.9%
11		-4.7%	4.0%		0.2%	0.8%	0.9%	0.9%	1.3%
18		-3.6%	1.5%		1.3%	2.8%	-0.5%	0.5%	-1.3%
14		-4.1%	1.3%		0.8%	0.6%	0.5%	0.1%	0.1%
2		-3.9%	1.0%		1.0%	-1.5%	1.0%	1.5%	0.0%
13		-4.5%	0.6%		0.4%	1.0%	0.4%	-0.3%	-0.4%
7		-5.5%	0.5%		-0.7%	1.3%	1.2%	-0.8%	-1.2%
25		-4.6%	0.3%		0.3%	0.1%	0.0%	0.3%	-0.1%
26		-5.5%	0.2%		-0.7%	0.2%	0.1%	0.0%	-0.1%
4		0.6%	0.0%		5.7%	0.0%	0.0%	0.0%	0.0%
19		-4.2%	-1.4%		0.7%	1.7%	-1.4%	-2.8%	1.2%
16		-4.1%	-1.9%		0.7%	0.3%	-0.6%	-1.0%	-0.6%
10		-3.8%	-3.2%		1.1%	-0.1%	-1.1%	-1.0%	-1.1%
MEDIAN		-4.1%	1.0%		0.7%	0.6%	0.5%	0.3%	0.0%
MEAN		-4.3%	2.6%		0.5%	0.7%	0.7%	0.5%	0.7%
STD DEV		2.0%	4.1%		2.1%	1.0%	1.3%	1.5%	1.5%
HIGH		0.6%	10.3%		5.7%	2.8%	3.5%	2.6%	3.5%
LOW		-10.0%	-3.2%		-5.4%	-1.5%	-1.4%	-2.8%	-1.3%

Table 21a - Individual Forecasts for 2018

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	5.6%	2.4%	3.0%	2.7%	3.0%	2.0%	\$37.4	-\$618.9	3.0%
2	-2.0%	1.5%	3.0%	-1.2%	-2.8%	1.0%	\$35.1	-\$627.0	0.6%
3	5.7%	2.9%	2.8%	2.5%	5.1%	11.9%	\$68.7	-\$740.7	3.5%
4	4.4%	1.6%	2.7%	2.6%	5.6%	4.1%	\$61.3	-\$640.2	0.8%
5	4.7%	2.2%	2.7%	2.4%	4.3%	7.0%	\$70.0	-\$650.0	1.7%
6	5.6%	2.8%	2.7%	2.7%	4.1%	2.3%	\$38.2	-\$607.2	1.3%
7	4.5%	1.9%	2.6%	3.5%	-0.1%	7.0%	\$26.0	-\$610.0	0.2%
8	4.2%	1.6%	2.5%	2.6%	4.1%	6.9%	\$45.0	-\$627.6	0.7%
9			2.5%	2.3%	3.2%				0.6%
10	4.7%	2.1%	2.5%	2.4%	4.3%	6.1%	\$44.3	-\$654.1	0.6%
11	4.0%	2.1%	2.4%	2.5%	3.7%	4.2%	\$39.3	-\$670.0	1.2%
12	4.0%	1.6%	2.4%	2.5%	4.6%	0.2%	\$30.0	-\$597.8	0.2%
13	4.5%	2.2%	2.3%	2.0%	2.3%	3.2%	43.9	-\$613.6	0.5%
14	4.5%	1.9%	2.3%	2.3%	3.2%	5.7%	\$27.9	-\$628.2	0.6%
15	4.1%	1.8%	2.2%	2.5%	4.5%	3.4%	\$58.1	-\$676.0	0.6%
16	4.6%	2.4%	2.2%	2.4%	5.5%	3.2%	\$45.9	-\$659.5	0.2%
17	4.0%	1.8%	2.2%	2.4%	3.4%	6.9%	\$57.5	-\$662.7	0.5%
18	3.5%	1.8%	2.2%	2.2%	2.7%	4.7%	\$37.7	-\$580.3	0.7%
19	4.3%	2.1%	2.1%	2.2%	3.4%	0.9%	\$36.0	-\$624.1	-0.2%
20	3.9%	1.8%	2.1%	2.3%	4.1%	3.2%	\$55.3	-\$667.8	0.6%
21	3.7%	1.8%	1.8%	2.1%	3.7%	0.5%	\$53.1	-\$655.6	0.6%
22	3.0%	1.2%	1.8%	1.2%	3.5%	3.5%	\$25.0	-\$566.4	1.0%
23	2.8%	1.5%	1.7%	1.6%	3.8%	3.2%	\$39.6	-\$641.0	1.3%
24	3.5%	1.9%	1.6%	2.0%	-1.4%	1.6%	\$70.0	-\$647.9	1.0%
25	2.9%	1.6%	1.3%	1.0%	1.7%	0.2%	\$36.5	-\$599.0	1.0%
26	3.1%	0.9%	1.2%	1.3%	2.7%	3.3%	\$15.9	-\$624.2	-0.6%
27	0.7%	-0.4%	1.1%	-0.2%	1.1%	5.1%	\$55.0	-\$570.0	4.3%
x1									
x2									
x3									
MEDIAN	4.1%	1.8%	2.3%	2.3%	3.5%	3.3%	\$41.8	-\$627.9	0.6%
MEAN	3.8%	1.8%	2.2%	2.0%	3.1%	3.9%	\$44.3	-\$633.1	1.0%
STD DEV	1.5%	0.6%	0.5%	0.9%	1.9%	2.6%	\$14.2	\$36.6	1.0%
HIGH	5.7%	2.9%	3.0%	3.5%	5.6%	11.9%	\$70.0	-\$566.4	4.3%
LOW	-2.0%	-0.4%	1.1%	-1.2%	-2.8%	0.2%	\$15.9	-\$740.7	-0.6%

Table 21b - Individual Forecasts for 2018

Individual	Industrial production	Car & light truck sales	Housing starts	Oil Price	Unemployment rate	Inflation rate (CPI)	Treasury constant maturity one-year rate	Treasury constant maturity ten-year rate	J.P. Morgan trade weighted OECD dollar
1	3.0%	16.6	1.1	\$54.75	4.4%	3.0%	2.00%	3.19%	6.6%
2	1.2%	17.4	1.25	\$41.30	4.2%	2.2%	1.80%	3.10%	1.0%
3	1.9%	17.0	1.52	\$54.64	3.7%	2.4%	2.66%	3.74%	
4	2.4%	17.2	1.22	\$52.39	4.0%	1.9%	2.12%	3.27%	0.0%
5	1.9%	16.9	1.28	\$55.00	3.9%	2.0%	2.40%	3.70%	8.8%
6	2.8%	17.1	1.20	\$53.00	4.1%	2.5%	2.10%	3.30%	7.7%
7	0.9%	16.9	1.26	\$50.00	4.0%	2.2%	1.70%	2.40%	0.5%
8	2.3%	16.8	1.28	\$51.00	3.9%	2.0%	2.05%	2.78%	
9	2.2%	16.1		\$53.42	4.0%	1.9%			
10	2.0%	16.5	1.24	\$50.00	3.8%	2.2%	1.98%	2.48%	-3.2%
11	1.7%	16.8	1.28	\$57.75	4.4%	2.3%	1.90%	3.30%	4.0%
12	1.5%	17.0	1.22	\$53.47	4.8%	2.1%	1.60%	2.50%	
13	0.3%	16.8	1.2	\$51.50	4.2%	2.5%	2.22%	3.10%	0.6%
14	2.2%	17.0	1.25	\$53.00	4.0%	1.9%	2.05%	3.04%	1.3%
15	2.7%	17.1	1.26	\$53.39	4.0%	1.7%	2.39%	3.04%	
16	3.1%	16.6	1.26	\$48.71	4.0%	2.1%	2.24%	3.17%	-1.9%
17	2.7%	17.1	1.27	\$53.23	4.1%	1.5%		2.95%	
18	1.3%	17.2	1.18	\$54.70	3.7%	1.8%	2.02%	2.71%	1.5%
19	-1.1%	16.5	1.21	\$59.21	4.1%	1.8%	1.46%	2.33%	-1.4%
20	2.5%		1.25	\$54.97	4.1%	1.7%	2.22%	2.99%	
21	2.2%		1.20	\$53.18	4.1%	1.7%		2.75%	
22	0.2%	17.5	1.30	\$60.00	3.7%	1.8%	1.70%	2.30%	
23	1.0%	17.1	1.30	\$58.50	4.3%	2.3%	1.70%	3.20%	8.9%
24	1.7%	17.1	1.29	\$48.60	4.5%	2.0%	1.65%	3.07%	10.3%
25	1.6%	17.0	1.13	\$48.30	4.2%	1.5%	1.70%	2.90%	0.3%
26	0.9%	16.7	1.26	\$50.77	4.3%	1.7%	2.34%	2.83%	0.2%
27	-0.8%	17.2	1.22	\$48.00	4.7%	2.2%	2.00%	2.40%	
x1		16.6	1.40						
x2		17.7	1.40						
x3		18.5	1.40						
MEDIAN	1.9%	17.0	1.26	\$53.18	4.1%	2.0%	2.01%	3.01%	1.0%
MEAN	1.6%	17.0	1.27	\$52.70	4.1%	2.0%	2.00%	2.94%	2.6%
STD DEV	1.0%	0.4	0.08	\$3.88	0.3%	0.3%	0.29%	0.38%	4.1%
HIGH	3.1%	18.5	1.52	\$60.00	4.8%	3.0%	2.66%	3.74%	10.3%
LOW	-1.1%	16.1	1.13	\$41.30	3.7%	1.5%	1.46%	2.30%	-3.2%

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