



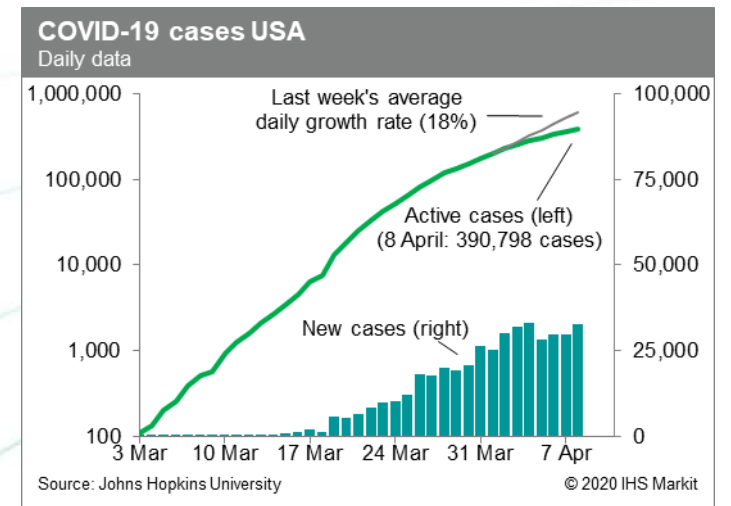
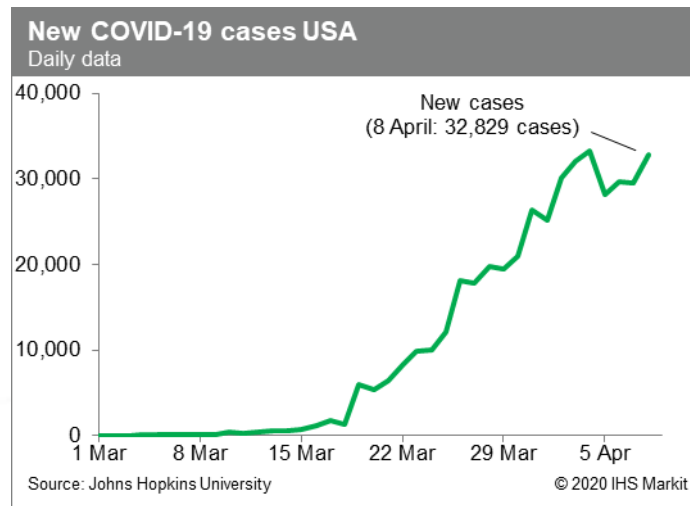
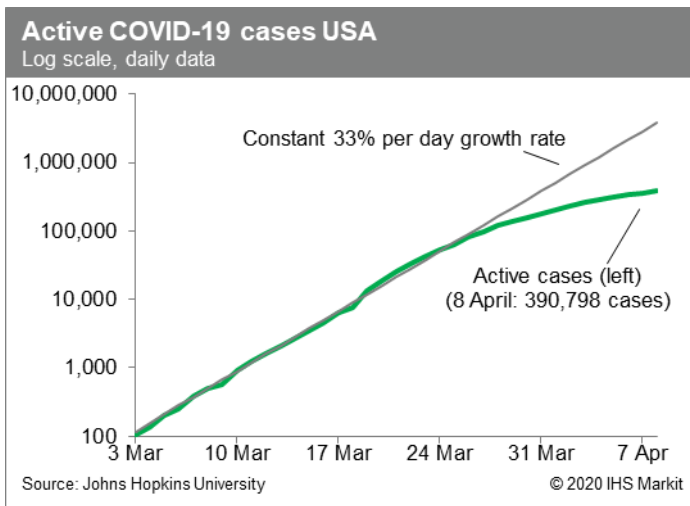
The US Economic Outlook

FTA Webinar

21 April 2020

Joel Prakken, Chief US Economist

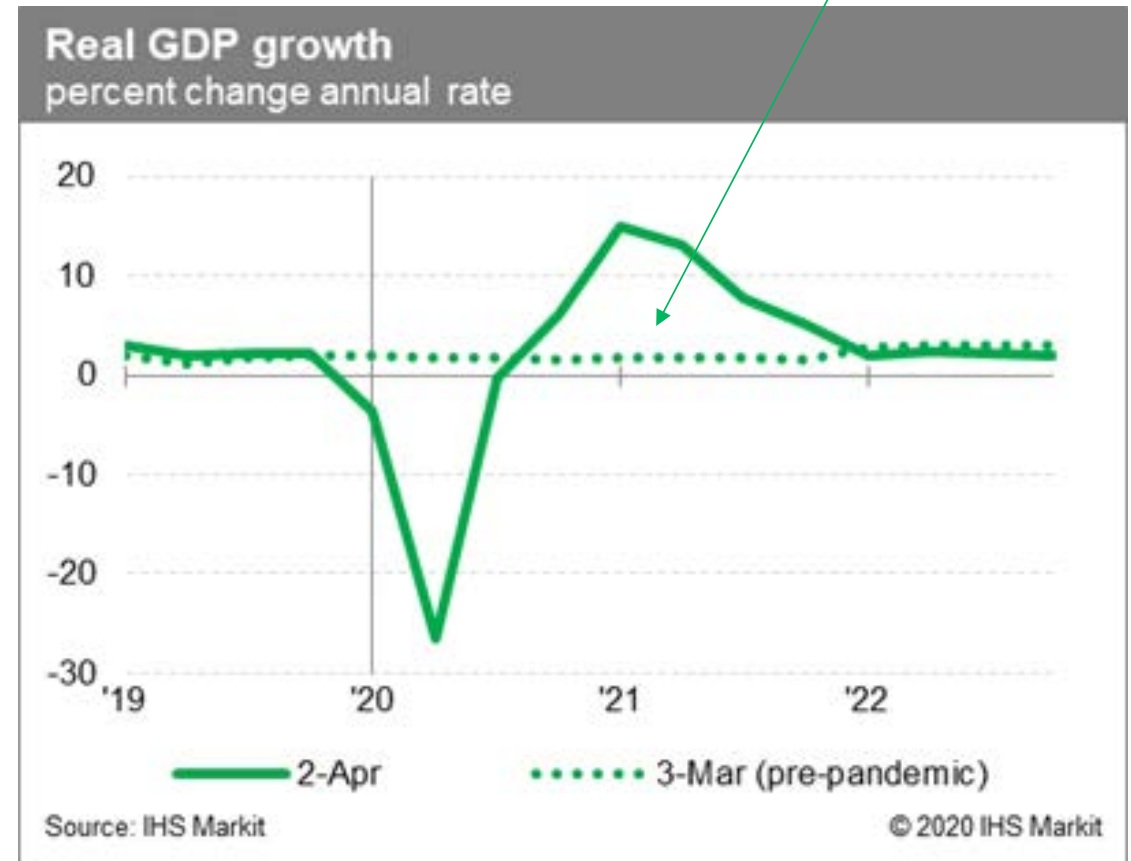
The US economic outlook: forecasting in the time of COVID-19



A forecaster's migraine headache

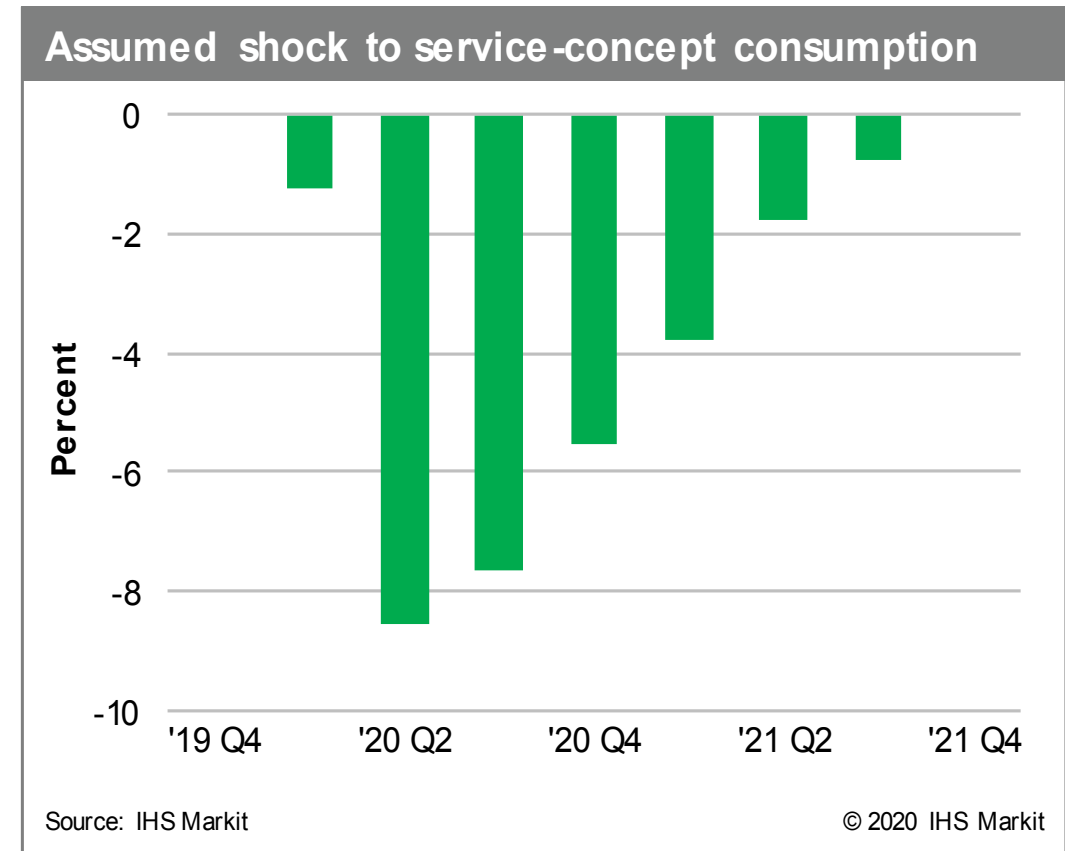
- Unprecedented magnitudes, uncertainty, volatility
- Areas of agreement
 - > Huge contraction in Q2; less of one in Q1
 - > Recovery start: lifting policies of distancing; depends on course of pandemic...and vice-versa
 - > Shape of recovery (“U”, “V”, “swoosh”): how much destroyed? The longer pandemic, the more anemic the recovery
- Areas of disagreement
 - > Course of pandemic; post-pandemic reticence
 - > Catch-up vs make-up, esp in services (2 haircuts...)
- Strength, efficacy of policy response
 - > Monetary: Fed is “all in”
 - > Fiscal: 3 Acts (so far); big, but messy
- Challenge: keeping forecast up to date

We used to agonize over that dotted line

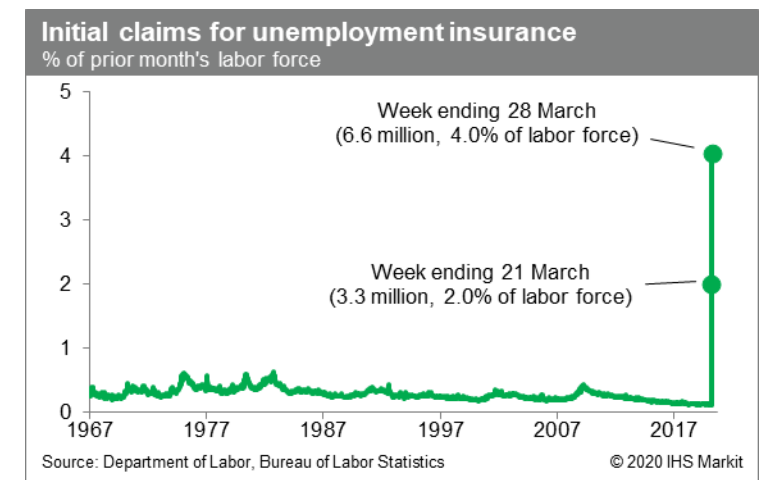
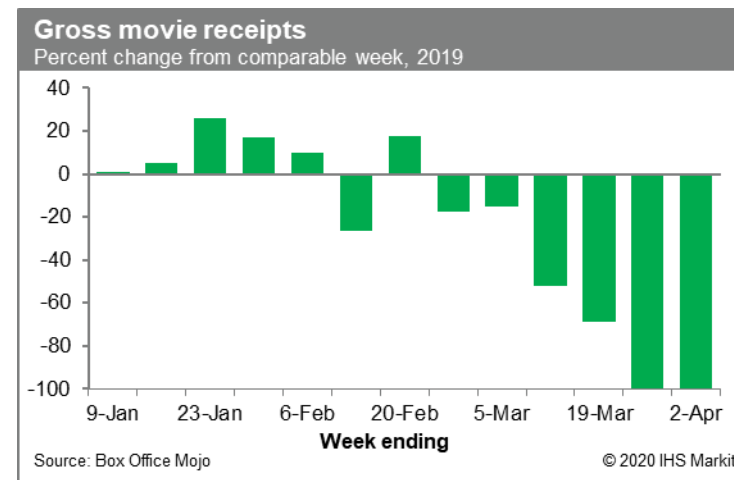
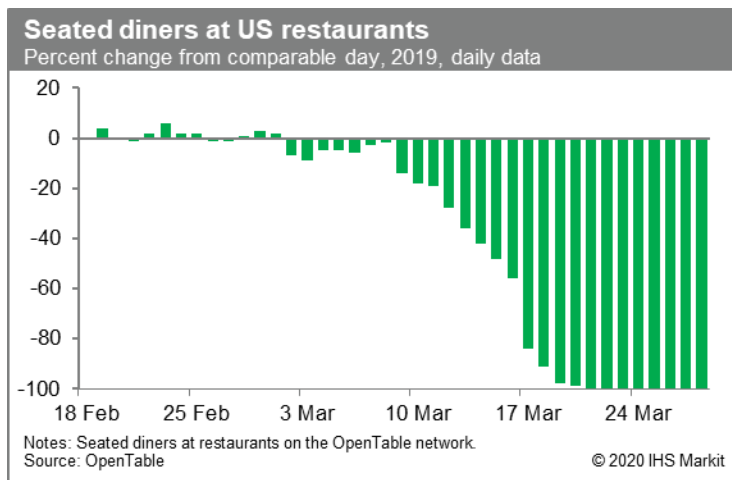
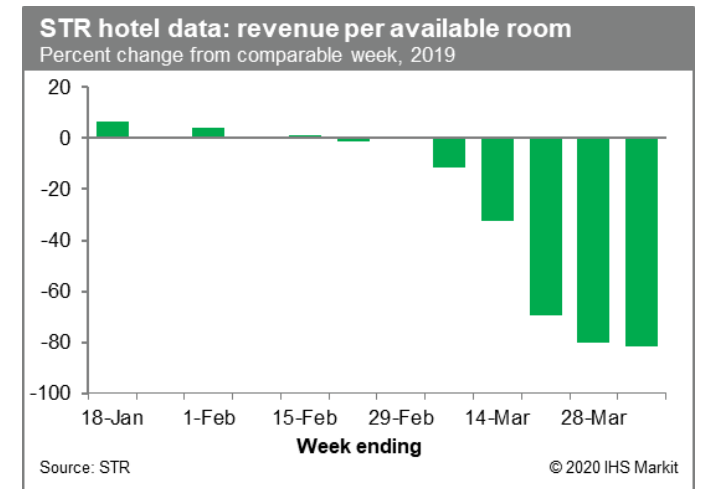
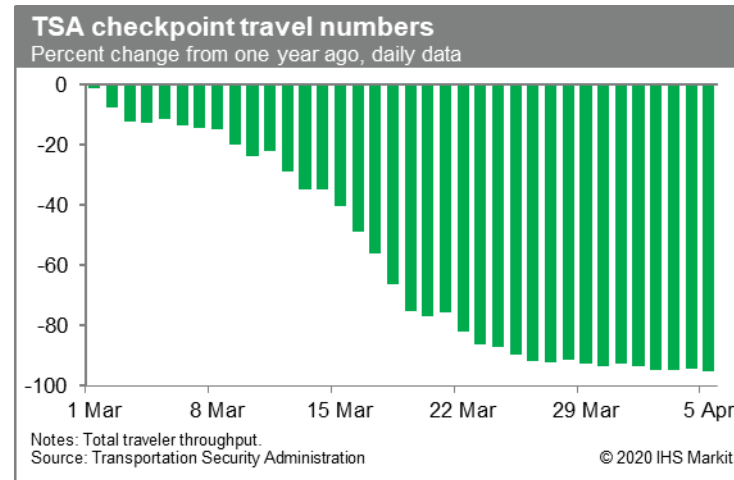
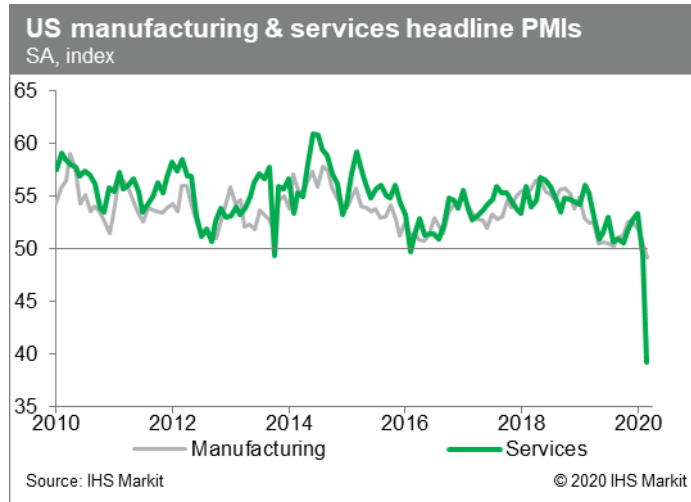


A “consumer-led” contraction (and recovery)

- Government and public health officials are, in essence, dictating consumers to increase saving out of current income
 - > And which activities to be cut back on
- Keynes’ “paradox of thrift”...with a vengeance!
- “Multiplier(?) -accelerator” effects
 - > Investment (including PCE-durable goods) can show bigger swings than the “consumption” that “leads” the contraction
- Reversal of shock doesn’t mean spending returns to previous level, only that it reverts to the original relationship to income
 - > But, in the meantime, income may have fallen
 - > Hence, recovery can take longer than the reversal of the shock
- And, it doesn’t mean we’re spending on the same items as before
 - > There could be a new distribution of total consumer spending if habits changed during the episode – think ahead!



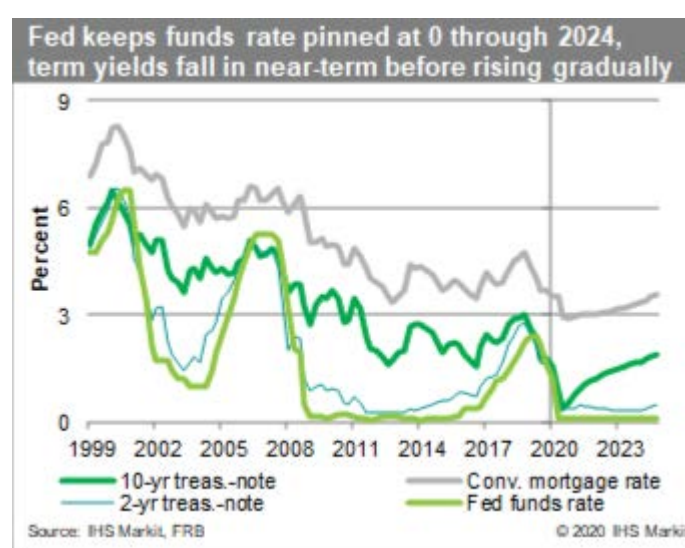
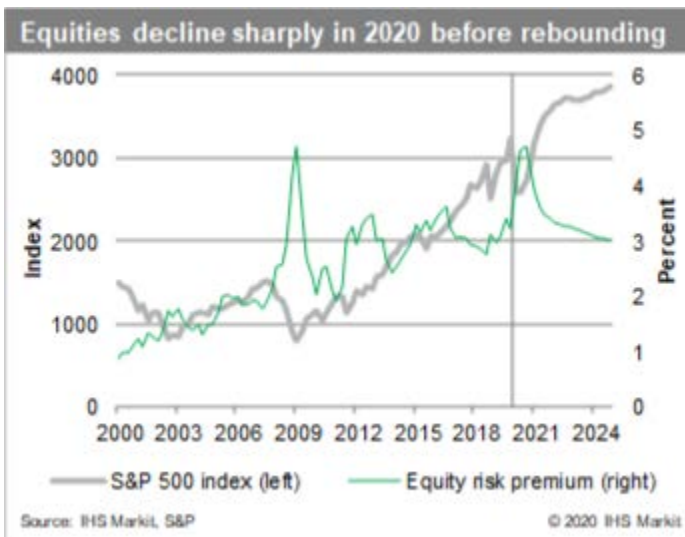
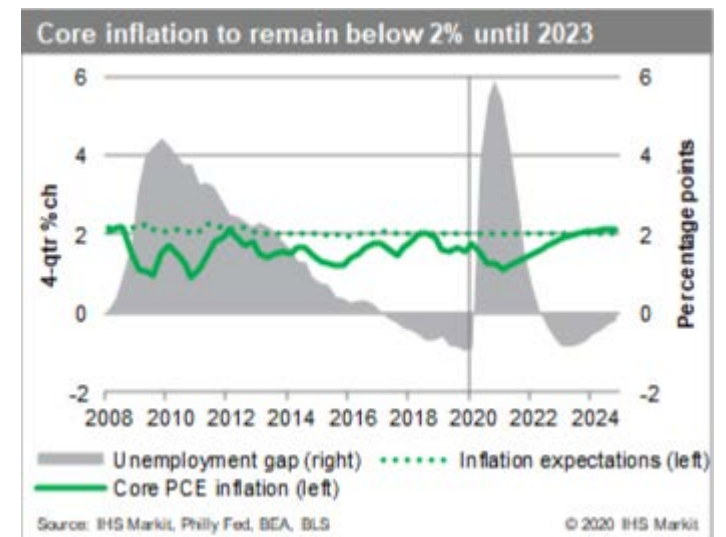
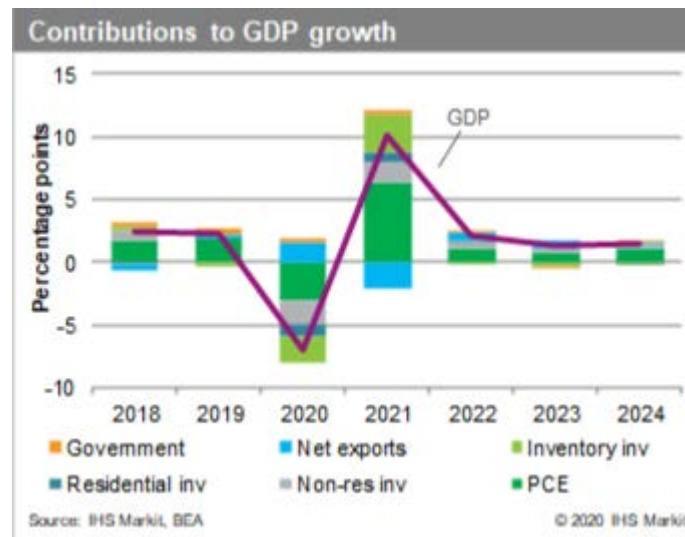
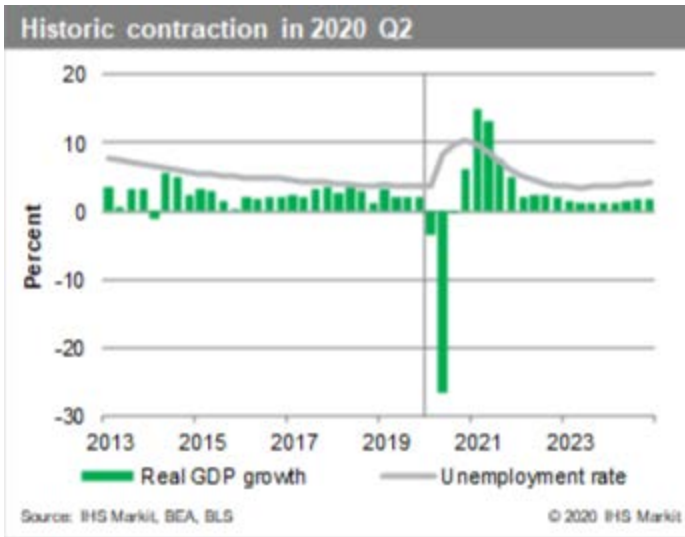
Social distancing has shut down parts of the economy



Projections of COVID-19 deaths (Institute for Health Metrics & Evaluations)



Forecast at a glance

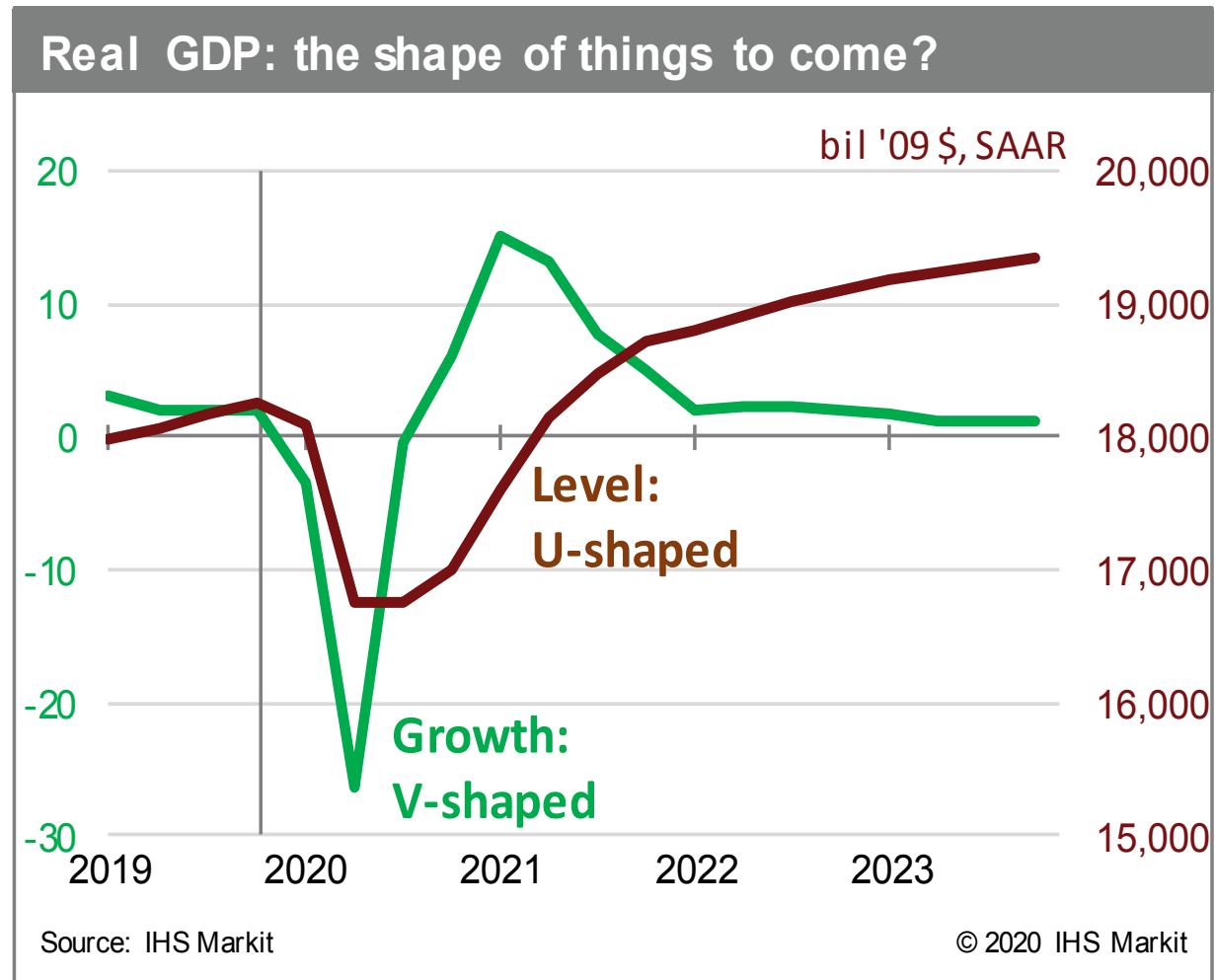


Forecast overview

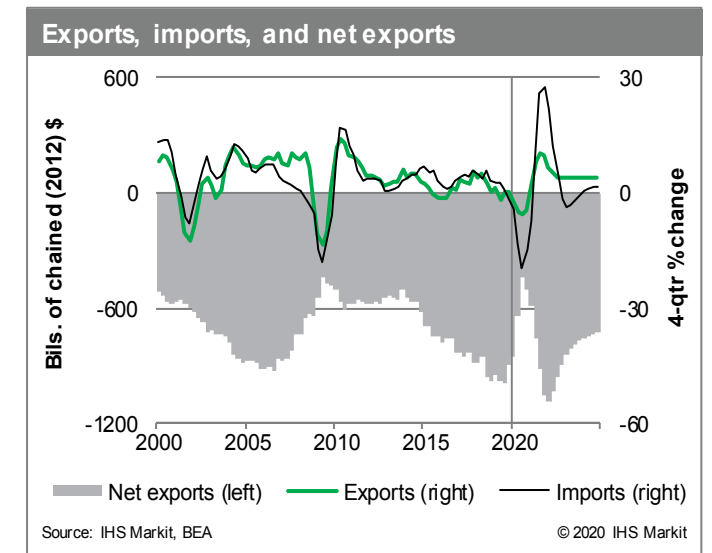
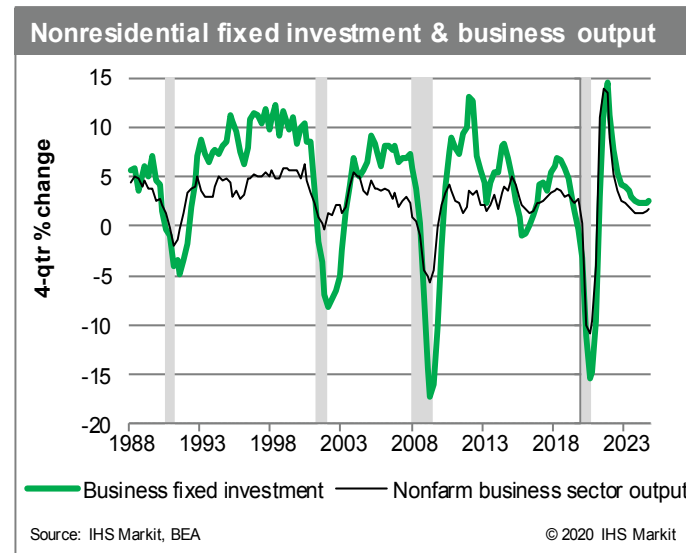
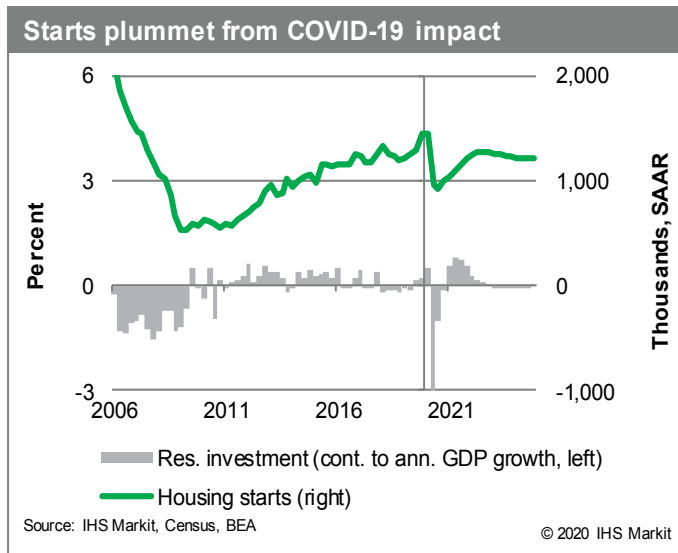
	2019	2020	2021	2022	2023	2024
Real GDP*	2.3	-7.0	10.1	2.2	1.2	1.5
		1.7	1.7	1.7	1.8	2.1
Pvt Final Dom Dem*	2.1	-8.0	10.6	2.0	1.3	1.7
		1.7	1.7	2.1	2.5	2.6
Unemployment Rate**	3.5	10.3	6.0	3.7	3.7	4.1
		3.6	3.8	4.0	4.3	4.3
Core PCE Inflation*	1.6	1.3	1.4	1.8	2.1	2.1
		1.9	1.9	1.9	1.8	1.9

* Q4 to Q4 percent change, ** Q4 average
 Note: Prior base forecast values (published 3 March) shown below each line.
 Source: IHS Markit © 2020 IHS Markit

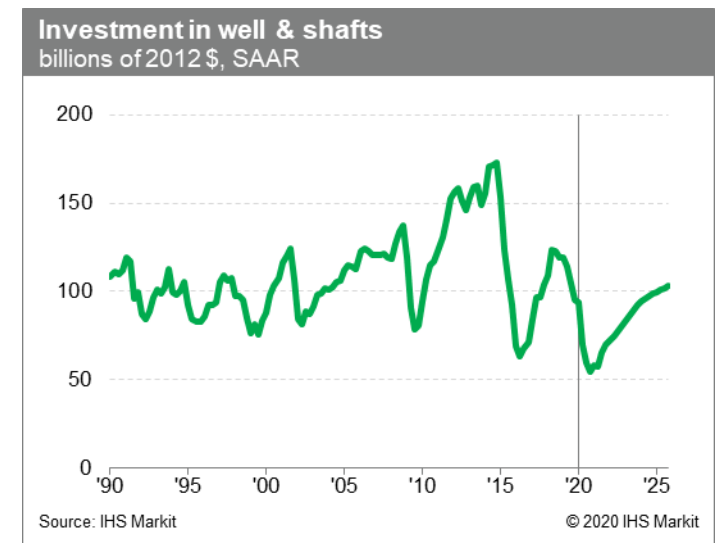
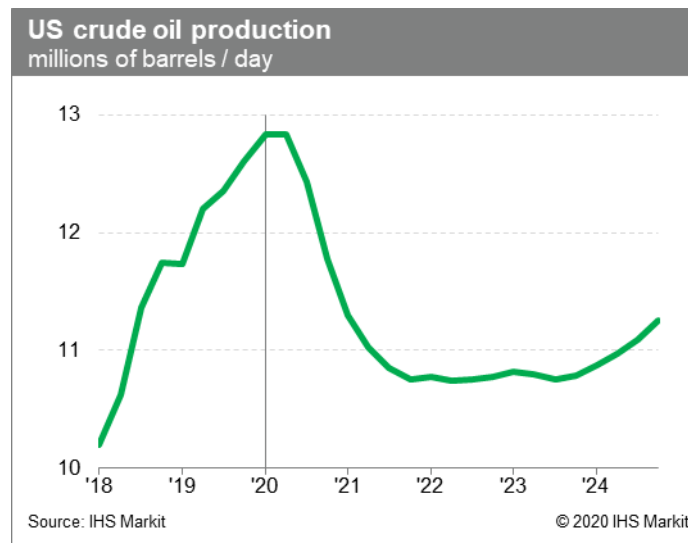
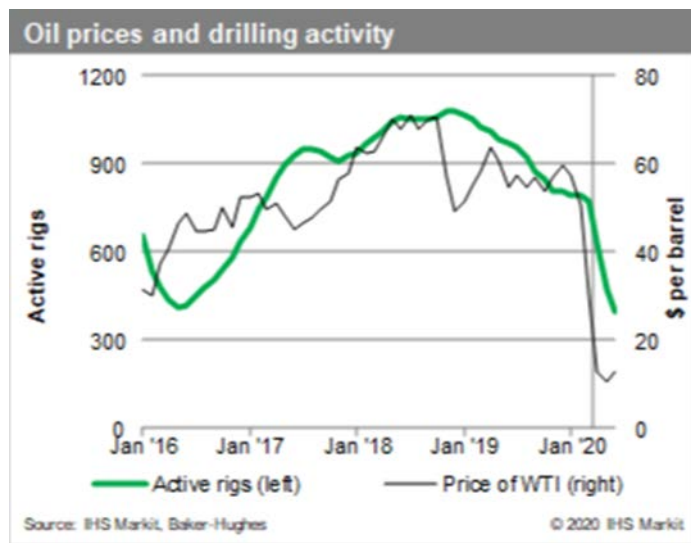
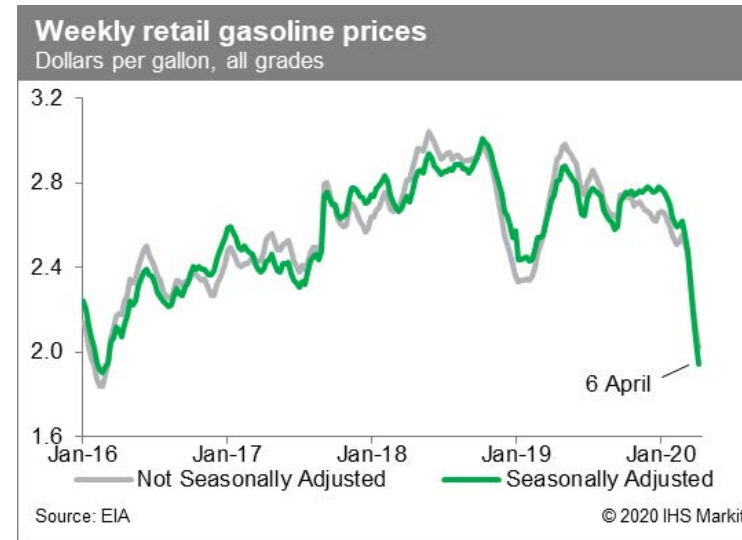
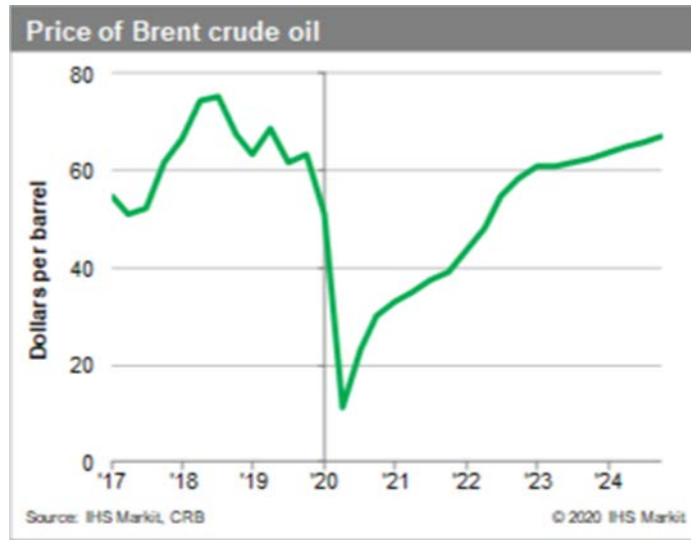
V-shaped or U-shaped? It depends...



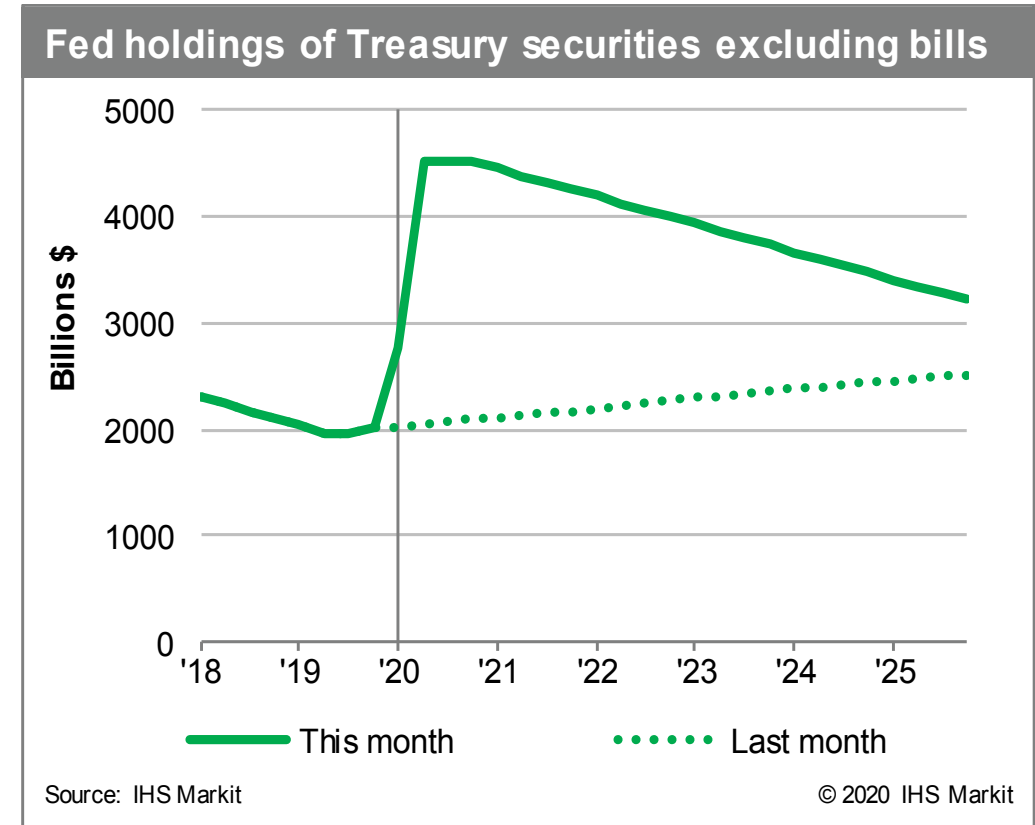
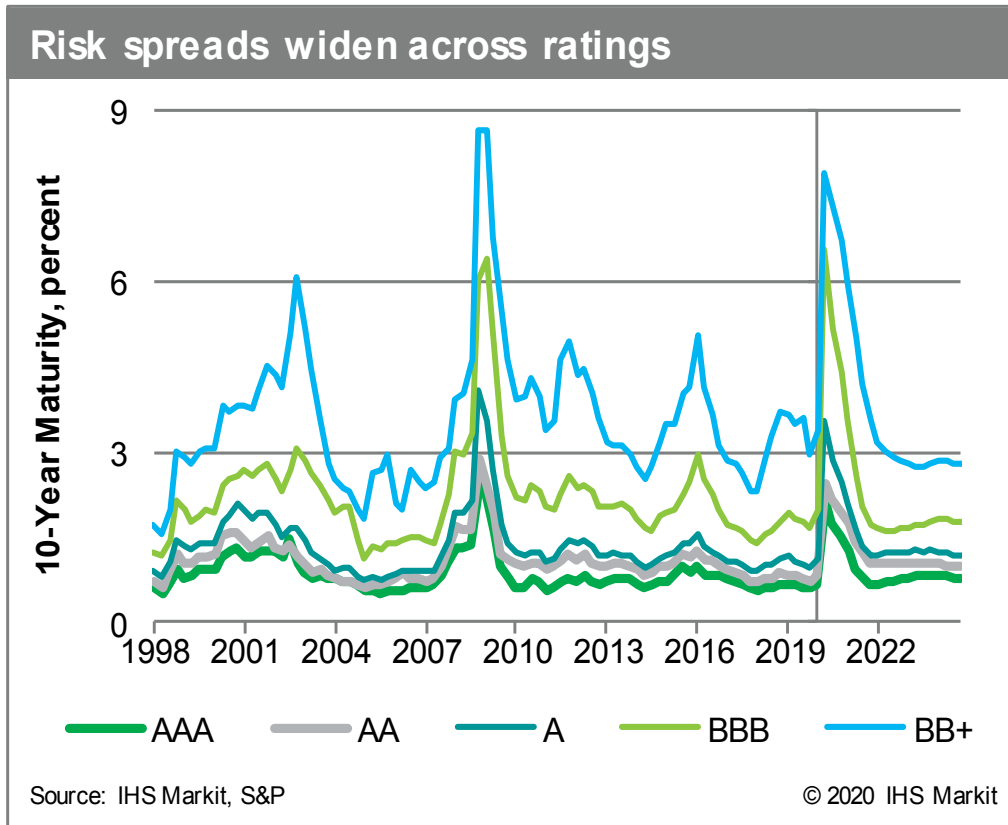
Sectoral color and observations



Energy: a net macro negative



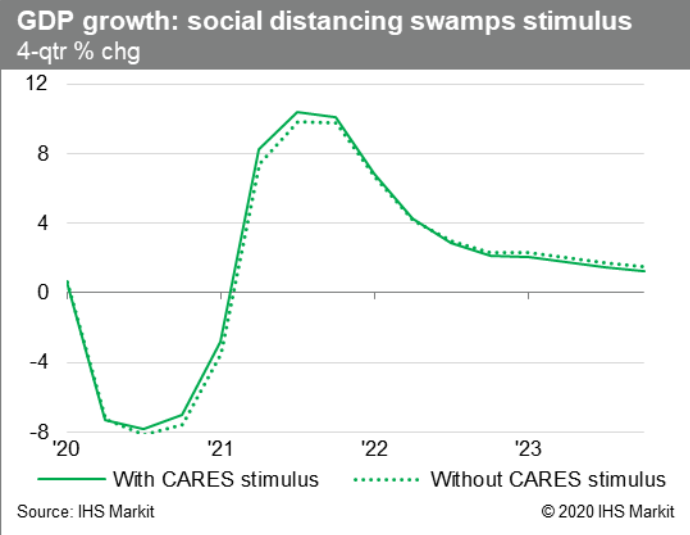
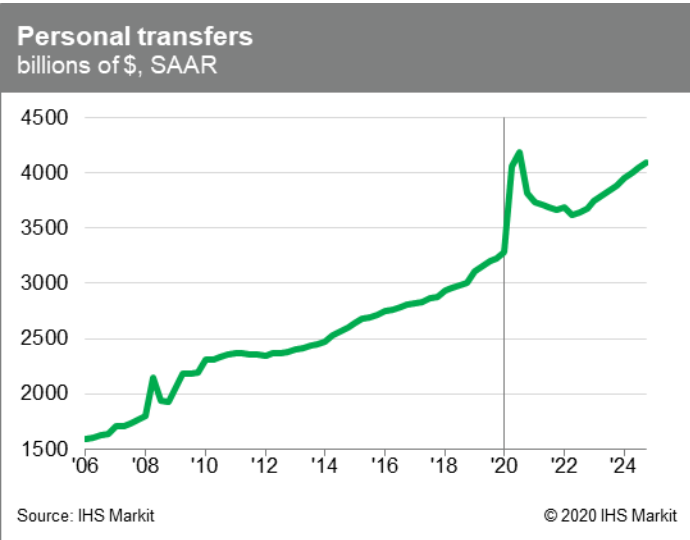
The Fed's “alphabet soup” of programs, massive QE backstops financial markets



The CARES Act: strong dose of prevention, but only a little “stimulus”

What's in the CARES Act	
Billions of dollars	
Recovery rebates to individuals	292
Expand & extend unemployment benefits	260
Small business loans & grants	377
Loans & loan guarantees for large businesses & govt	510
Support for state & local govt	150
Health-related spending	180
SNAP, child nutrition & housing support	42
FEMA disaster assistance funds	45
Education spending	32
Support for transportation industries	72
Reduce / delay taxes	300
TOTAL	2,260

Source: IHS Markit, JCT, CRFB. WSJ © 2020 IHS Markit



IHS Markit US Base Forecast (2 Apr '20): 2020:Q1 - 2024:Q4
Major Economic Indicators

	2019.1	2019.2	2019.3	2019.4	2020.1	2020.2	2020.3	2020.4	2021.1	2021.2	2021.3	2021.4	2022.1	2022.2	2022.3	2022.4	2019	Q4/Q4 % change or annual avg.					2024
																		2020	2021	2022	2023		
Key Indicators of Real Activity																							
Real gross domestic product*	3.1	2.0	2.1	2.1	-3.5	-26.5	-0.2	6.2	15.1	13.1	7.7	5.0	2.0	2.4	2.3	2.0	2.3	-6.9	10.1	2.2	1.3	1.5	
Contributions to growth:																							
Final sales	2.7	2.9	2.1	3.2	-2.7	-26.1	5.6	7.6	9.9	9.5	5.1	4.0	1.9	2.8	2.7	2.2	2.7	-4.8	6.8	2.4	1.6	1.7	
To domestic purchasers	1.9	3.6	2.3	1.7	-3.4	-29.2	2.1	8.6	11.1	12.0	7.7	6.0	2.4	1.9	1.6	1.1	2.4	-6.4	9.1	1.7	1.1	1.5	
Net exp. of goods & services	0.7	-0.7	-0.1	1.5	0.7	3.1	3.5	-1.0	-1.3	-2.6	-2.5	-2.0	-0.5	0.9	1.1	1.1	0.4	1.6	-2.3	0.7	0.5	0.2	
Change in private inventories	0.4	-0.9	0.0	-1.0	-0.8	-0.4	-5.8	-1.4	5.2	3.6	2.6	1.0	0.1	-0.4	-0.5	-0.2	-0.4	-2.1	3.3	-0.3	-0.3	-0.1	
Major components of real GDP:																							
Personal consumption expend.*	1.1	4.6	3.2	1.8	-4.7	-32.2	8.4	12.7	11.5	12.8	7.4	6.2	2.2	1.7	1.4	1.0	2.7	-5.7	9.4	1.6	1.2	1.7	
Nonres. fixed investment*	4.4	-1.0	-2.3	-2.4	-6.1	-29.2	-19.5	0.6	17.4	18.5	13.4	8.9	4.6	4.3	4.3	3.9	-0.4	-14.4	14.5	4.3	2.7	2.5	
Residential investment*	-1.0	-3.0	4.6	6.5	10.8	-59.0	-24.0	-1.3	18.2	27.8	24.9	17.8	7.3	4.4	2.6	0.3	1.7	-23.6	22.1	3.6	-1.0	-0.7	
Change in private inventories**	98.6	59.0	59.0	11.1	-29.3	-49.0	-310.4	-374.6	-147.9	15.5	135.2	185.2	190.7	170.9	147.7	138.0	56.9	-190.8	47.0	161.8	103.7	62.3	
Exports of goods & services*	4.1	-5.7	1.0	2.1	-5.1	-17.3	0.1	5.9	16.7	11.1	7.9	4.8	3.8	4.2	3.9	4.1	0.3	-4.5	10.0	4.0	3.9	3.9	
Imports of goods & services*	-1.5	0.0	1.8	-8.4	-8.9	-33.5	-24.8	14.4	27.6	33.8	28.6	19.8	6.7	-3.1	-4.7	-4.2	-2.1	-15.0	27.3	-1.4	-0.3	1.8	
Gov't consump. & gross invest.*	2.9	4.8	1.7	2.5	1.7	0.6	1.8	1.2	1.8	1.4	1.3	0.8	0.6	0.2	0.2	-0.5	3.0	1.3	1.3	0.1	-0.4	0.2	
Pvt. housing starts (thous. units)	1213	1256	1282	1441	1443	954	926	989	1035	1092	1154	1210	1245	1265	1269	1266	1298	1078	1123	1261	1247	1212	
Light vehicle sales (mil. units)	16.8	17.0	17.0	16.7	15.2	10.0	13.6	14.1	14.7	15.0	15.2	15.3	15.4	15.5	15.6	15.7	16.9	13.2	15.1	15.6	15.8	15.8	
Industrial production, total*	-1.9	-2.3	1.1	0.2	-7.3	-35.4	-19.4	-7.6	13.5	15.6	10.7	5.8	2.3	2.6	2.7	2.6	-0.7	-18.3	11.3	2.6	1.4	1.1	
Industrial production, mfg*	-1.8	-3.3	0.7	-0.6	-8.0	-43.6	-21.4	-8.0	16.7	18.9	13.0	7.1	2.8	3.1	3.2	3.2	-1.3	-21.7	13.8	3.1	1.4	1.2	
Capacity utilization (mfg, %)	76.4	75.5	75.4	75.0	73.3	63.3	59.7	58.8	61.4	64.6	66.9	68.2	68.8	69.4	70.0	70.5	75.6	63.8	65.3	69.7	71.1	71.5	
Nonfarm payroll employ. (mil.)	150.2	150.6	151.2	151.8	152.6	145.0	140.2	138.6	139.2	141.3	143.9	146.6	148.7	150.4	151.8	152.8	150.9	144.1	142.7	151.0	154.2	154.6	
Private nonfarm hours*	0.2	-0.7	2.7	1.2	1.1	-26.3	-14.6	-2.8	6.1	11.2	11.3	9.8	6.8	5.1	3.9	2.8	0.8	-11.3	9.6	4.6	0.8	-0.2	
Civilian unemployment rate (%)	3.9	3.6	3.6	3.5	3.6	8.4	9.9	10.3	9.8	8.6	7.2	6.0	5.1	4.4	4.0	3.7	3.7	8.0	7.9	4.3	3.6	3.9	
Prices, Productivity, & Costs																							
GDP chain-type price index*	1.1	2.4	1.8	1.3	1.3	1.4	1.6	1.3	1.3	1.4	1.4	1.4	1.6	1.6	1.7	1.9	1.6	1.4	1.3	1.7	2.1	2.2	
CPI, all items (all urban)*	0.9	3.0	1.8	2.4	1.6	-6.3	3.7	3.1	2.4	2.2	2.2	2.2	2.8	2.9	3.3	3.1	2.0	0.4	2.3	3.0	2.4	2.5	
CPI excl food & energy (all urb)*	2.2	2.2	2.8	2.0	2.5	1.2	1.1	1.4	1.5	1.6	1.7	1.8	2.0	2.0	2.1	2.2	2.3	1.6	1.6	2.1	2.3	2.4	
PCE price index*	0.4	2.4	1.5	1.4	1.5	-2.3	1.8	1.8	1.6	1.6	1.6	1.7	2.1	2.1	2.3	2.4	1.4	0.7	1.6	2.2	2.1	2.2	
PCE price excl food & energy*	1.1	1.9	2.1	1.3	1.9	1.0	0.9	1.2	1.2	1.4	1.4	1.5	1.7	1.7	1.9	2.0	1.6	1.2	1.4	1.8	2.1	2.1	
PPI (finished goods)*	-2.7	4.7	-1.2	3.3	-1.9	-11.6	9.7	9.5	3.4	2.2	2.1	2.1	2.8	3.2	3.7	3.3	1.0	1.0	2.5	3.3	2.4	2.4	
Compensation per hour*	9.7	2.7	-0.1	2.1	2.7	-2.9	1.8	2.3	2.8	3.3	3.9	3.9	4.0	3.5	3.3	3.4	3.5	1.0	3.5	3.5	3.4	3.6	
Output per hour*	3.8	2.6	-0.3	1.2	-6.2	-10.9	16.2	11.1	13.4	5.6	-1.2	-3.1	-4.2	-2.1	-1.1	-0.4	1.8	1.9	3.5	-2.0	0.6	2.0	
Unit labor cost*	5.7	0.1	0.2	0.9	9.4	9.0	-12.3	-7.9	-9.4	-2.2	5.2	7.3	8.5	5.8	4.5	3.8	1.7	-0.9	0.0	5.6	2.8	1.6	
CoreLogic house price index***	0.7	0.9	0.9	1.2	1.3	0.4	0.3	0.3	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.7	3.7	2.3	2.2	2.5	2.7	2.7	
Price of WTI crude oil (\$/barrel)	54.83	59.78	56.37	56.94	46.02	12.09	23.48	30.13	33.23	35.49	37.79	39.76	43.14	47.28	52.46	55.80	56.98	27.93	36.57	49.67	58.34	61.67	
Price of Brent crude oil (\$/barrel)	63.17	68.89	61.93	63.38	50.89	11.33	23.00	30.00	33.00	35.17	37.33	39.00	43.54	48.30	54.59	58.59	64.34	28.80	36.13	51.26	61.50	65.43	
Selected Financial Variables																							
Federal funds rate	2.40	2.40	2.19	1.64	1.23	0.09	0.10	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	2.16	0.38	0.12	0.13	0.13	0.13	
Yield on 10-Yr Treasury Notes (%)	2.65	2.33	1.80	1.79	1.56	0.81	0.39	0.53	0.76	0.96	1.07	1.17	1.23	1.31	1.39	1.45	2.14	0.82	0.99	1.35	1.59	1.80	
Baa corporate bond yield	4.97	4.60	4.02	3.91	3.92	5.00	4.33	4.24	4.26	4.09	3.91	3.76	3.73	3.80	3.87	3.95	4.38	4.37	4.01	3.84	4.10	4.26	
Broad trade-weighted US\$	127.3	128.3	129.6	129.5	131.2	139.4	139.6	139.2	139.6	137.8	135.8	133.7	131.6	129.8	128.4	127.2	128.7	137.3	136.7	129.3	125.4	123.2	
S&P 500 stock price index***	13.1	3.8	1.2	8.5	-20.0	-0.1	6.1	7.9	8.2	6.7	3.0	1.8	1.6	1.1	0.9	0.0	28.9	-8.5	21.0	3.7	1.0	3.0	
Incomes & Related Measures																							
Corporate profits w/ IVA & CCAdj*	-14.3	16.0	-0.9	10.6	-43.8	-67.2	61.8	71.0	115.5	61.5	14.6	-0.1	-10.4	-3.7	-0.7	0.3	2.2	-15.5	41.3	-3.7	-0.2	6.3	
Real disposable personal income*	4.5	1.5	2.1	1.6	2.7	9.9	2.0	-7.0	3.8	4.2	2.4	1.9	1.2	-1.0	0.7	0.7	2.4	1.7	3.1	0.4	1.6	2.0	
Personal saving rate (%)	8.5	7.8	7.7	7.6	9.3	19.3	18.1	14.1	12.6	10.9	9.9	9.0	8.8	8.1	8.0	7.9	7.9	15.2	10.6	8.2	8.2	8.5	
Fed. surplus (unified, FY, bil. \$)	-1489.0	-223.8	-949.1	-1426.4	-1824.0	-1673.5	-2830.2	-2701.7	-2872.5	-1179.9	-1823.1	-1924.4	-2198.7	-433.2	-1127.9	-1360.7	-984.4	-1938.5	-2144.3	-1421.1	-1089.5	-1098.8	

* Percent change at annual rate
** Billions of chained (2009) dollars
*** Quarterly percent change not annualized