Stock Market Swings and the Economic Outlook

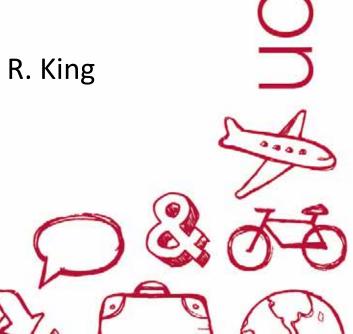
Chris Lawless and Michael R. King April 1, 2020











SAPISH

We acknowledge with respect the Lekwungen peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.













Welcome!

You're the only one in the room.

While you wait, check out the Session menu to take a quick tour of Collaborate.

mute Turn off/on camera

Speaker / camera

Ask a
quest

Click here

Chris Lawless



- Gustavson, Executive-in-Residence, since Nov 2019
- BCI, Chief Economist, 2001-2019
- BC Mininstry of Finance, Chief Economist, 1982-2001

Michael King



- Finance Prof, Gustavson since July 2019
- Ivey 2011-2019
- BIS, Senior Economist, 2008-2011
- BoC, Senior Economist, 2001-2008



Today's Agenda (April 1st – No kidding!)

- Logistics (5 mins)
 - Everyone on mute initially
 - Ask questions please!
 - Click "Raise hand" to queue for question (bottom of screen), then unmute when invited to speak.
 - Send questions via chat (bottom right).
- Schedule (55 mins)
 - 1. Timeline and market reaction (15 mins)
 - 2. Q & A on market reaction (10 mins)
 - 3. Economic outlook (15 mins)
 - 4. Q & A on economic outlook (10 mins)
 - 5. Final advice (5 mins)



Timeline and Market Reaction





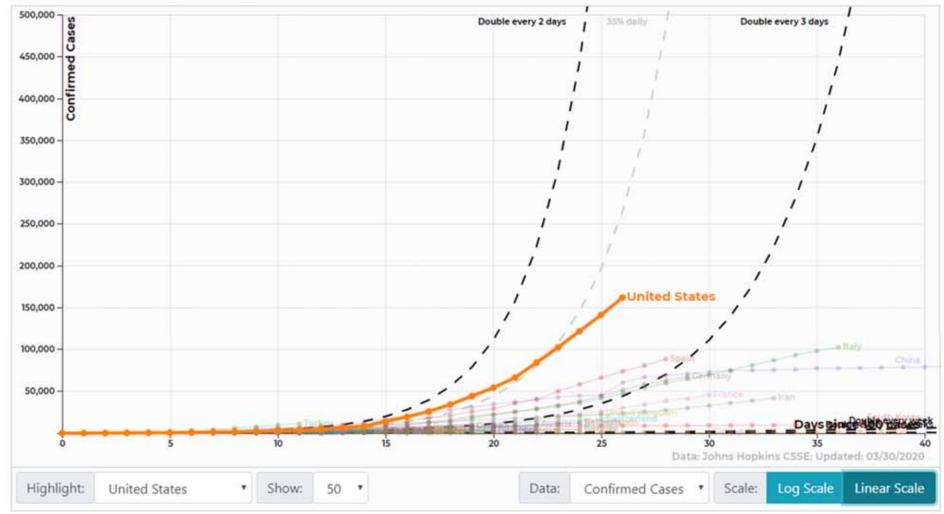






SAPISN

COVID-19 Cases by Country Global: 839,200 cases; 41,343 deaths (4.9%)



http://91-divoc.com/pages/covid-visualization/

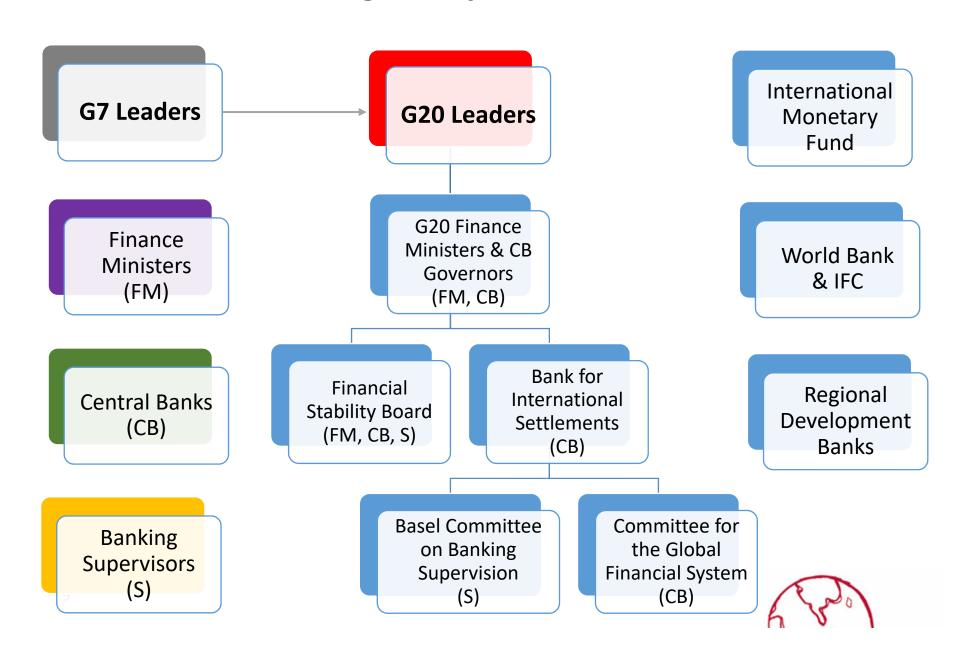
Canada: 8,548 confirmed cases. 96 deaths (as of March 31)

Key Events

- Mar 3 (T): G7 Fin Ministers & CB Governors "closely monitoring"
- Mar 4 (W): U.S. Federal Reserve and Bank of Canada cut rates
- Mar 11 (W): WHO declares COVID-19 pandemic
- Mar 13 (F): Finance, BoC & OSFI press conference
- Mar 15 (Sun): Fed <u>cuts rates</u> + <u>other actions</u>
- Mar 16 (M): G7 Leaders Statement "whatever is necessary";
 BoC cut rates
- Mar 18 (W): Canada announces \$27b <u>Economic Response</u>
- Mar 22-23 (Sun-M): U.S. Senate \$2T stimulus; voted down.
- Mar 25 (W): U.S. Senate passes \$2T package
- Mar 26 (Th): G20 leaders call; Canada announces <u>Economic</u> <u>Response Plan</u> \$52b
- Mar 30 (M): Canada announces 75% wage subsidy



Central banks addressing dislocations, but markets need to see globally coordinated action...



U.S. fiscal stimulus - Filling the ditch

\$2.1 trillion or ~10% of GDP

- \$1200 checks for adults
- \$600/week for laid off workers
- \$350 billion in forgivable loans to small businesses
- \$450 billion in loans to larger firms
- \$500 billion to back loans and help large firms
- \$25 billion for UI
- \$150 billion aid to states
- Tax deferrals



Canada – Fiscal support for individuals and firms

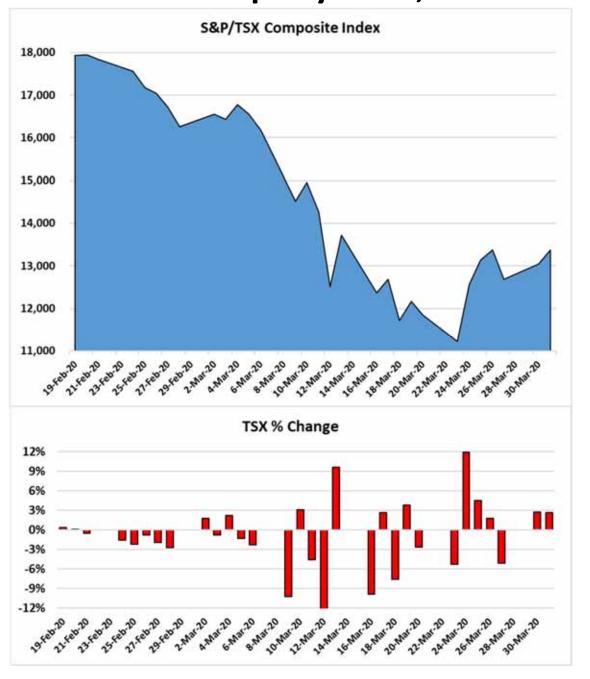
- Forecast at \$200 billion or 10% of GDP
- Individuals
 - Expanded employment insurance eligibility
 - Canada emergency response benefit
 - Canada child benefit increase
 - Mortgage support from FIs

Firms

- 75% wage subsidy to firms with 30%+ revenue decline
- Greater access to credit
- GST and income tax deferrals

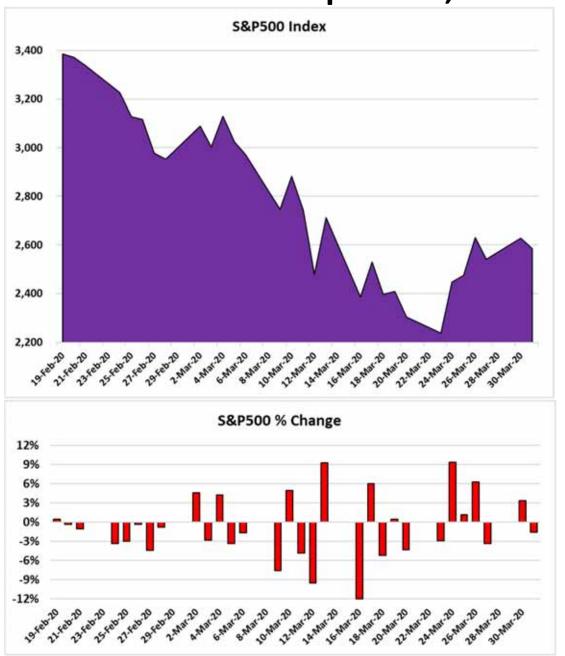


TSX drops by -39%, then recovers to -25%



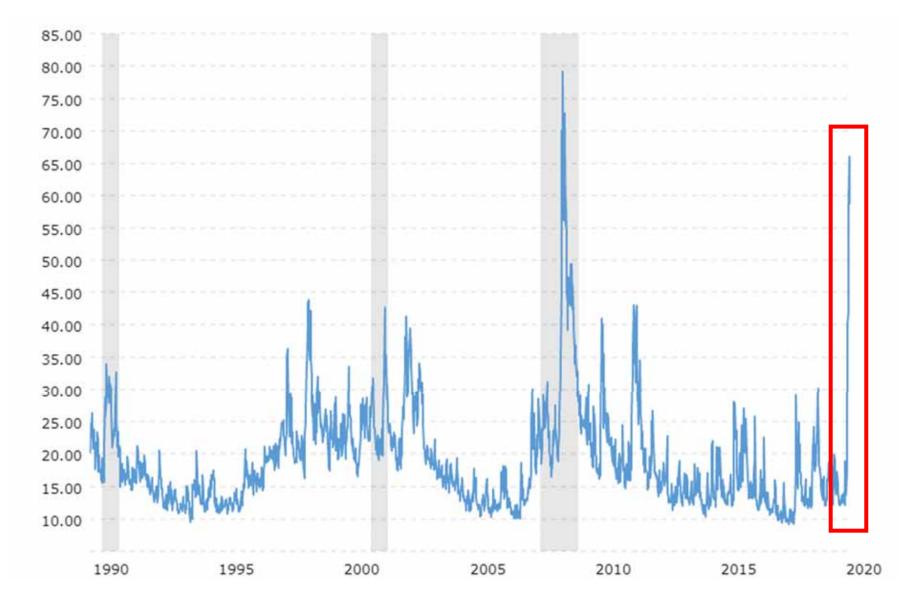
Date Close % Chg Cumulative 19-Feb-20 17,925 0.38% 0.4% 20-Feb-20 17,944 0.10% 0.5% 21-Feb-20 17,844 -0.56% -0.1% 24-Feb-20 17,563 -1.57% -1.6% 25-Feb-20 17,042 -0.79% -4.6% 27-Feb-20 16,717 -1.90% -6.5% 28-Feb-20 16,263 -2.72% -9.3% 2-Mar-20 16,553 1.78% -7.5% 3-Mar-20 16,780 2.17% -6.1% 5-Mar-20 16,554 -1.34% -7.4% 6-Mar-20 16,175 -2.29% -9.7% 9-Mar-20 14,958 3.06% -16.9% 11-Mar-20 14,270 -4.60% -21.5% 12-Mar-20 12,508 -12.34% -33.9% 13-Mar-20 12,685 2.63% -31.5% 18-Mar-20 12,685 2.63% -31.5% 18-Mar-20 11,721	U IU U U		•		
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24-Mar-20 12,571 11.96% -31.2% 25-Mar-20 13,139 4.52% -26.6% 26-Mar-20 13,371 1.77% -24.9% 27-Mar-20 12,688 -5.11% -30.0% 30-Mar-20 13,039 2.76% -27.2%	20-Mar-20	11,852	-2.62%	-37.9%	
25-Mar-20 13,139 4.52% -26.6% 26-Mar-20 13,371 1.77% -24.9% 27-Mar-20 12,688 -5.11% -30.0% 30-Mar-20 13,039 2.76% -27.2%	23-Mar-20	11,228	-5.26%	-43.1%	
26-Mar-20 13,371 1.77% -24.9% 27-Mar-20 12,688 -5.11% -30.0% 30-Mar-20 13,039 2.76% -27.2%	24-Mar-20	12,571	11.96%	-31.2%	
27-Mar-20 12,688 -5.11% -30.0% 30-Mar-20 13,039 2.76% -27.2%	25-Mar-20	13,139	4.52%	-26.6%	
30-Mar-20 13,039 2.76% -27.2%	26-Mar-20	13,371	1.77%	-24.9%	
'	27-Mar-20	12,688	-5.11%	-30.0%	
31-Mar-20 13,379 2.61% -24.6%	30-Mar-20	13,039	2.76%	-27.2%	
	31-Mar-20	13,379	2.61%	-24.6%	

S&P500 drops -38%, then recovers -23%



Date	Close	% Chg	Cumulative
19-Feb-20	3,386	0.47%	0.5%
20-Feb-20	3,373	-0.38%	0.1%
21-Feb-20	3,338	-1.05%	-1.0%
24-Feb-20	3,226	-3.35%	-4.3%
25-Feb-20	3,128	-3.03%	-7.3%
26-Feb-20	3,116	-0.38%	-7.7%
27-Feb-20	2,979	-4.42%	-12.1%
28-Feb-20	2,954	-0.82%	-13.0%
2-Mar-20	3,090	4.60%	-8.4%
3-Mar-20	3,003	-2.81%	-11.2%
4-Mar-20	3,130	4.22%	-6.9%
5-Mar-20	3,024	-3.39%	-10.3%
6-Mar-20	2,972	-1.71%	-12.0%
9-Mar-20	2,747	-7.60%	-19.6%
10-Mar-20	2,882	4.94%	-14.7%
11-Mar-20	2,741	-4.89%	-19.6%
12-Mar-20	2,481	-9.51%	-29.1%
13-Mar-20	2,711	9.29%	-19.8%
16-Mar-20	2,386	-11.98%	-31.8%
17-Mar-20	2,529	6.00%	-25.8%
18-Mar-20	2,398	-5.18%	-31.0%
19-Mar-20	2,409	0.47%	-30.5%
20-Mar-20	2,305	-4.34%	-34.9%
23-Mar-20	2,237	-2.93%	-37.8%
24-Mar-20	2,447	9.38%	-28.4%
25-Mar-20	2,476	1.15%	-27.2%
26-Mar-20	2630.07	6.24%	-21.0%
27-Mar-20	2541.47	-3.37%	-24.4%
30-Mar-20	2,626.65	3.35%	-21.0%
31-Mar-20	2,584.59	-1.60%	-22.6%

VIX rises from 16% to 71%, then declines to 47%



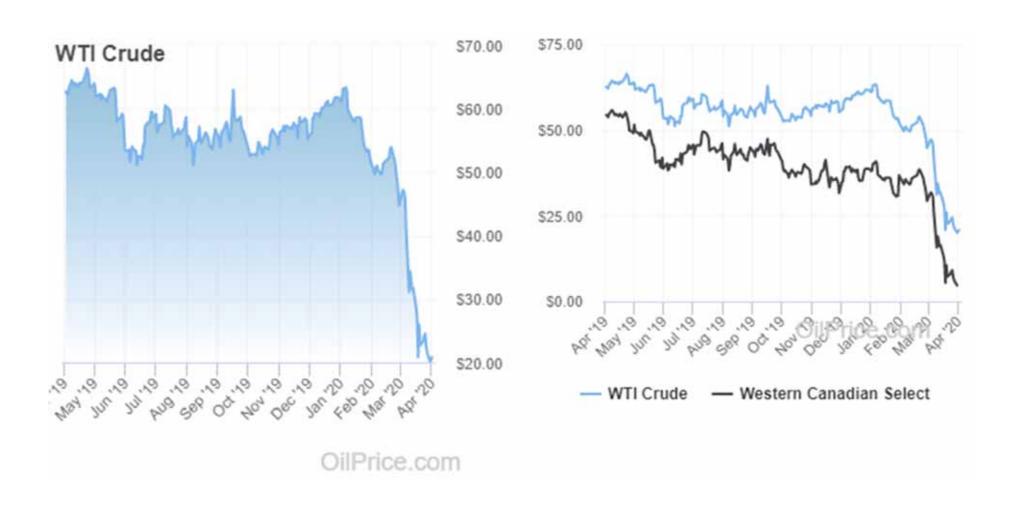
Source: Macrotrends

https://www.macrotrends.net/2603/vix-volatility-index-historical-chart

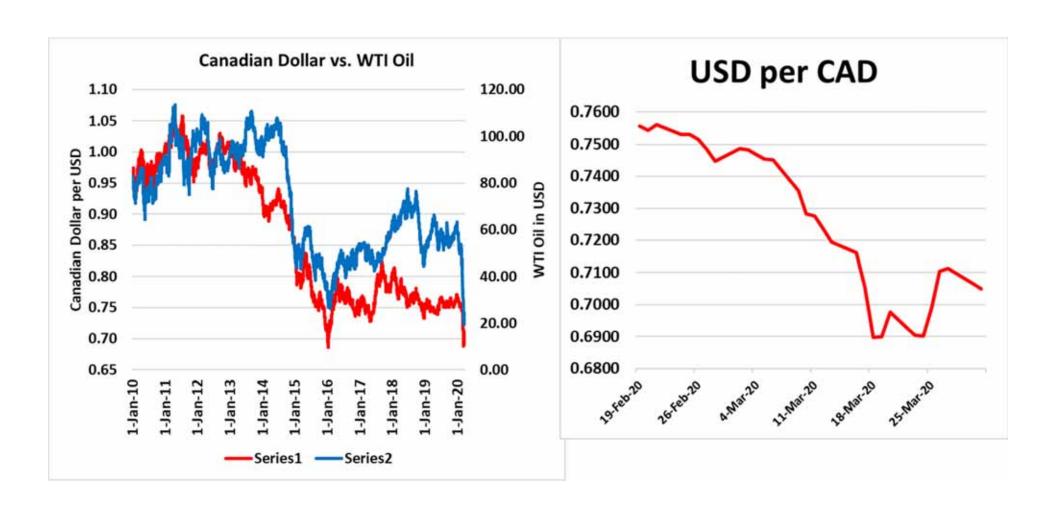
WTI Oil dropped to \$20 due to drop in demand and increase in supply (Russia vs Saudi Arabia)



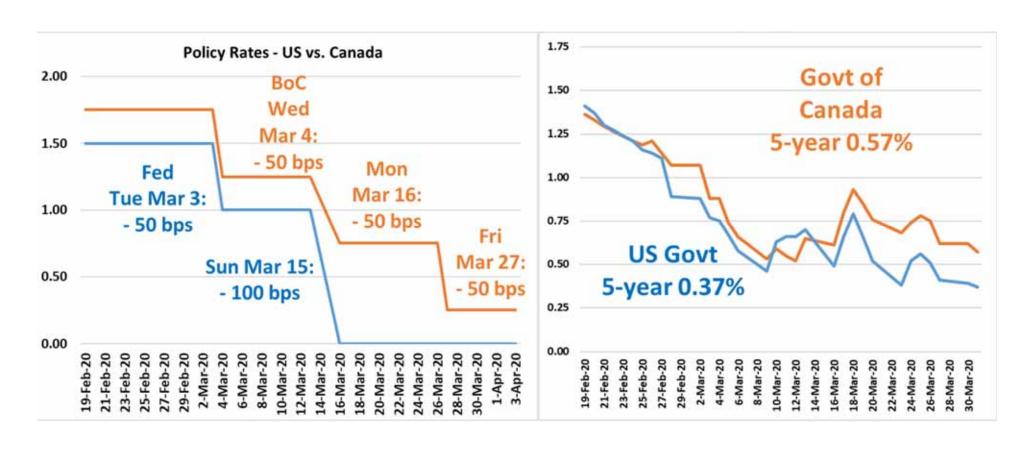
Western Canadian Select has fallen below \$5 / bbl



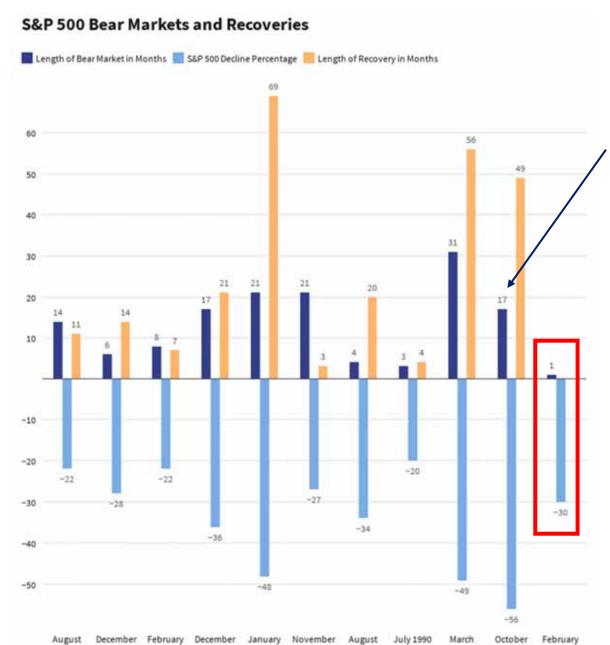
Canadian dollar has slid with oil



Both Federal Reserve and Bank of Canada cut rates by 150 bps



Benchmark interest rates are coming down in both countries...



The bear market following the Global Financial Crisis (-56%) lasted from October 2007 to March 2009.

It was followed by a **bull market** from March 9, 2009 to March 11, 2020 (+339%).

(R)= Bear market coincides with a recession



Questions on market reaction?



Economic Outlook













Bank of Canada January 2020 projections

Table 1: Projection for global economic growth

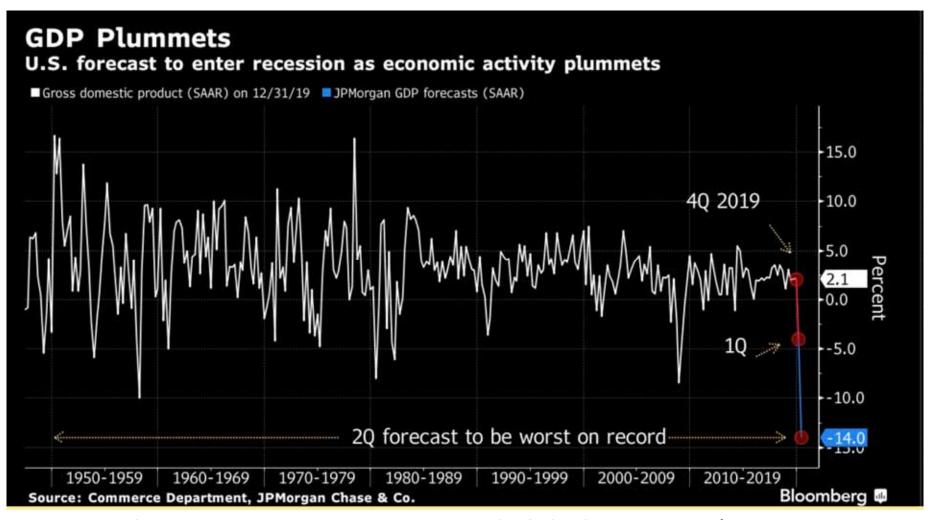
	Share of real global	P	Projected growth [†] (percent)			
United States	GDP* (percent)	2018	2019 2.3 (2.3)	2020	2021	
	15	2.9 (2.9)		1.9 1.9)	1.9 (1.7)	
Euro area	11	1.9 (1.9)	1.2 (1.1)	1.0 (1.0)	1.3 (1.4)	
Japan	4	0.3 (0.8)	1.1 (0.9)	0.6 (0.2)	1.2 (0.7)	
China	19	6.7 (6.6)	6.1 (6.1)	5.9 (5.9)	5.8 (5.7)	
Oil-importing EMEs [‡]	33	4.3 (4.3)	3.1 (3.2)	3.8 4.0)	4.2 (4.3)	
Rest of the world§	17	2.2 (2.1)	1.2 (1.2)	1.7 (1.7)	2.0 (2.1)	
World	100	3.7 (3.7)	2.9 (2.9)	3.1 (3.1)	3.3 (3.3)	

^{*} GDP shares are based on International Monetary Fund (IMF) estimates of the purchasing-power-parity valuation of country GDPs for 2018 from the IMF's October 2019 World Economic Outlook. The individual shares may not add up to 100 due to rounding.

[†] Numbers in parentheses are projections used in the previous Report.

More than 3 Million Americans Lost Their Jobs 3.0 million Last Week. See Your State. Official statistics have revealed how severely coronavirus has hurt the job market. But it may take several months before we know whether this economic disaster will resemble a storm or a long winter. 2.0 million U.S. stocks rose on Thursday as lawmakers in Washington BY QUOCTRUNG BUI advanced a highly anticipated \$2 trillion rescue package to bolster the American economy. - 1.5 million The climb came despite Labor Department figures released early Thursday that revealed a record number of unemployment claims, more evidence of the staggering economic toll of the coronavirus 1.0 million pandemic stacking up. 2008 recession 2008 2010 2012 2014 2016 2018 2020

Note: Official figures are seasonally adjusted. Source: Department of Labor



Mar 18: JP Morgan expects US Q2 GDP -14% q-o-q annualized

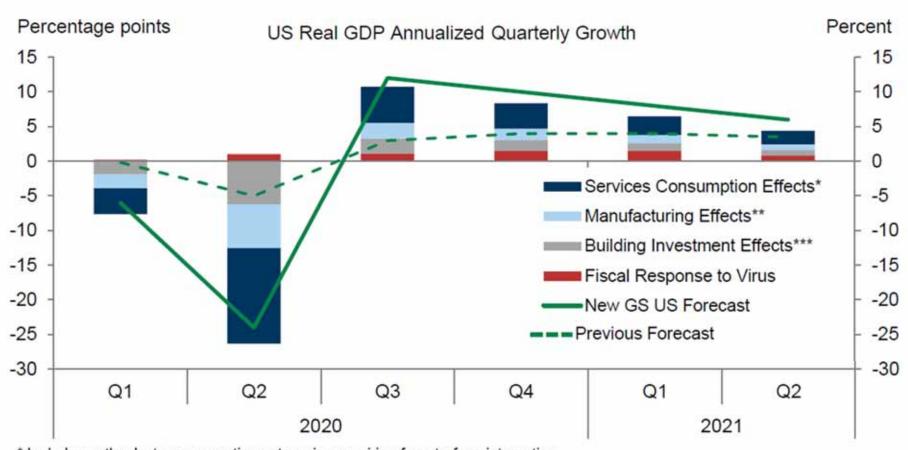
Mar 20: Goldman Sachs expects -24%

Mar 23: Morgan Stanley expects -30%

Mar 25: Capital Economics expects -40%

GS full-year 2020 GDP growth is -3.8% on annual basis.

Exhibit 3: A Sudden Stop in Q2, Followed by a Gradual Recovery



^{*} Includes cutbacks to consumption categories requiring face-to-face interaction.

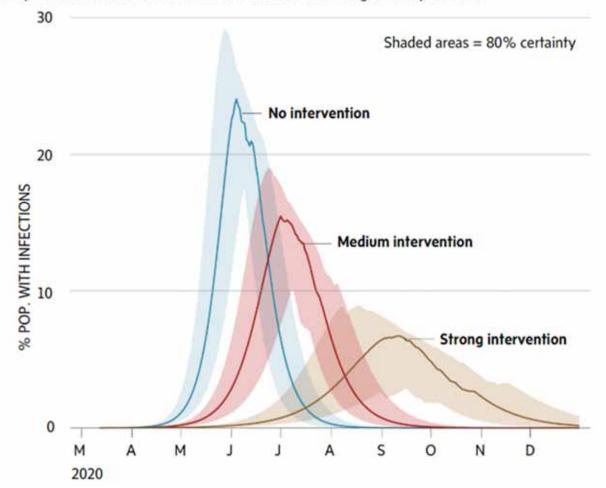
^{**} Includes reduced domestic and foreign demand for goods, supply chain disruptions, and plant shutdowns.

^{***} Includes cutbacks to structures investment, homebuilding, and home sales.

Why so much economic uncertainty?

THE POWER OF ISOLATION

Three scenarios show the impact of different levels of social distancing on a population that is susceptible to COVID-19. In the final case the wave of infections stretches out to nearly a year but peak infections and total number of cases are both significantly reduced.



SFU study summarized in Globe and Mail (March 21, 2020):

https://www.theglobeandmail.com/business/technology/science/article-when-does-social-distancing-end-these-graphs-show-where-were-heading/



Questions on economic outlook?



Some final advice

- Remember: we all suffer from behavioral biases
 - Overconfidence: Trade less and diversify
 - Regret: Set trading rules; use dollar-cost averaging
 - Confirmation bias: Be open to diverse views
 - Trend chasing: Avoid following the herd
 - **Hindsight bias:** Record your thoughts; review
 - Availability bias: Don't invest based on the news
- In this time of uncertainty, beware of "phishing"
 - No public official will be asking you for your credit card or banking information
 - Even if a link says "Click here to access your e-transfer from Prime Minister Trudeau", don't do it!

