

Global Outlook: 2020/2021

V=Vaccine

What Shape Will The Recovery Be?

V, U, W or L

Presented to

**ELECTRO-FEDERATION CANADA
ECONOMIC FORECAST SERIES – PART 1**

Presented by
Maureen Farrow
Economist/Strategist
ECONOMAP INC.
(416) 364-2999

June 23, 2020

The COVID-19 Pandemic Hits Hard

Global Cases Pass 8 Million June 16

Government Reaction Around The World is to:

- Shut down economic activity and lockdown social interaction.
- Use fiscal measures to support laid off workers and shut down businesses.
- Monetary policy injects liquidity.

Bottom-line: The Deepest sharpest recession since the Great Depression.

The Numbers – June 16, 2020

Country, Other	Total Cases	Total Deaths	Country, Other	Total Cases	Total Deaths
World	8,203,463	443,599	France	157,716	29,547
USA	2,198,515	118,813	Canada	99,426	8,213
Brazil	904,734	44,657	China	83,221	4,634
Russia	545,458	7,284	Belgium	60,155	9,663
India	353,641	11,903	Switzerland	31,154	1,954
UK	298,136	41,969	Japan	17,502	925
Spain	291,408	27,136	S. Korea	12,155	278
Italy	237,500	34,405	New Zealand	1,506	22
Iran	192,439	9,065	Vietnam	334	0
Germany	188,343	8,902			

Source: worldometers.info/coronavirus, June 16

Taming COVID-19

- **Global Population** 7.8 billion
- **Countries affected** 213
- **In Lockdown (physical distancing)** 4.0 billion plus
- **Cases as of June 16** 8+ million

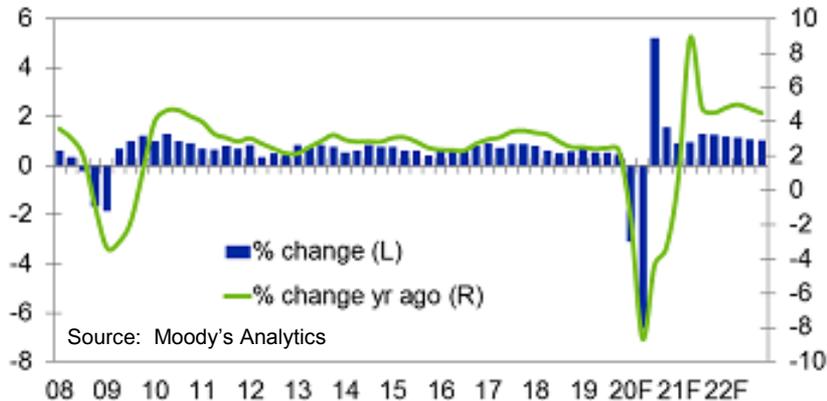
- Aim of lockdown is to flatten curve but to exit need to move from mitigation mode to suppression mode.
- Suppression = isolate, test, treat, trace. Countries that have done this are: China, South Korea, Vietnam, Singapore, New Zealand, Australia, Germany.
- How to manage subsequent waves (outbreaks) before population has immunity? Currently no solution but research underway.
- 40 plus diagnostics tests in the works.
- 100 plus vaccines in development.
- Clinical trial of therapeutics underway.

Global Economic Fallout

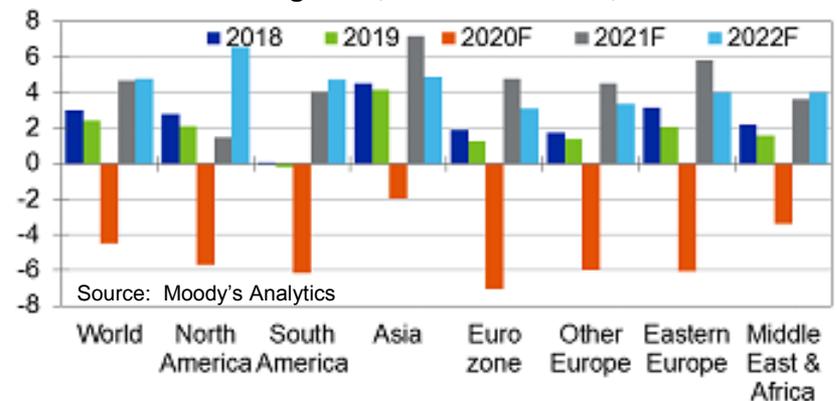
Deep, Sharp But Likely Short Recession

A Great Depression Likely Averted, But a Slow, Uncertain Recovery

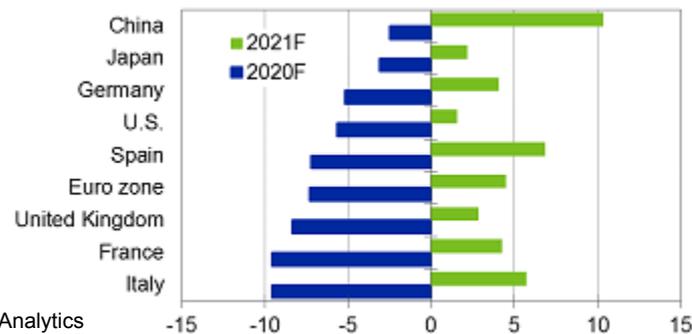
Massive Drop in Global GDP in 2020 H1
Global Real GDP



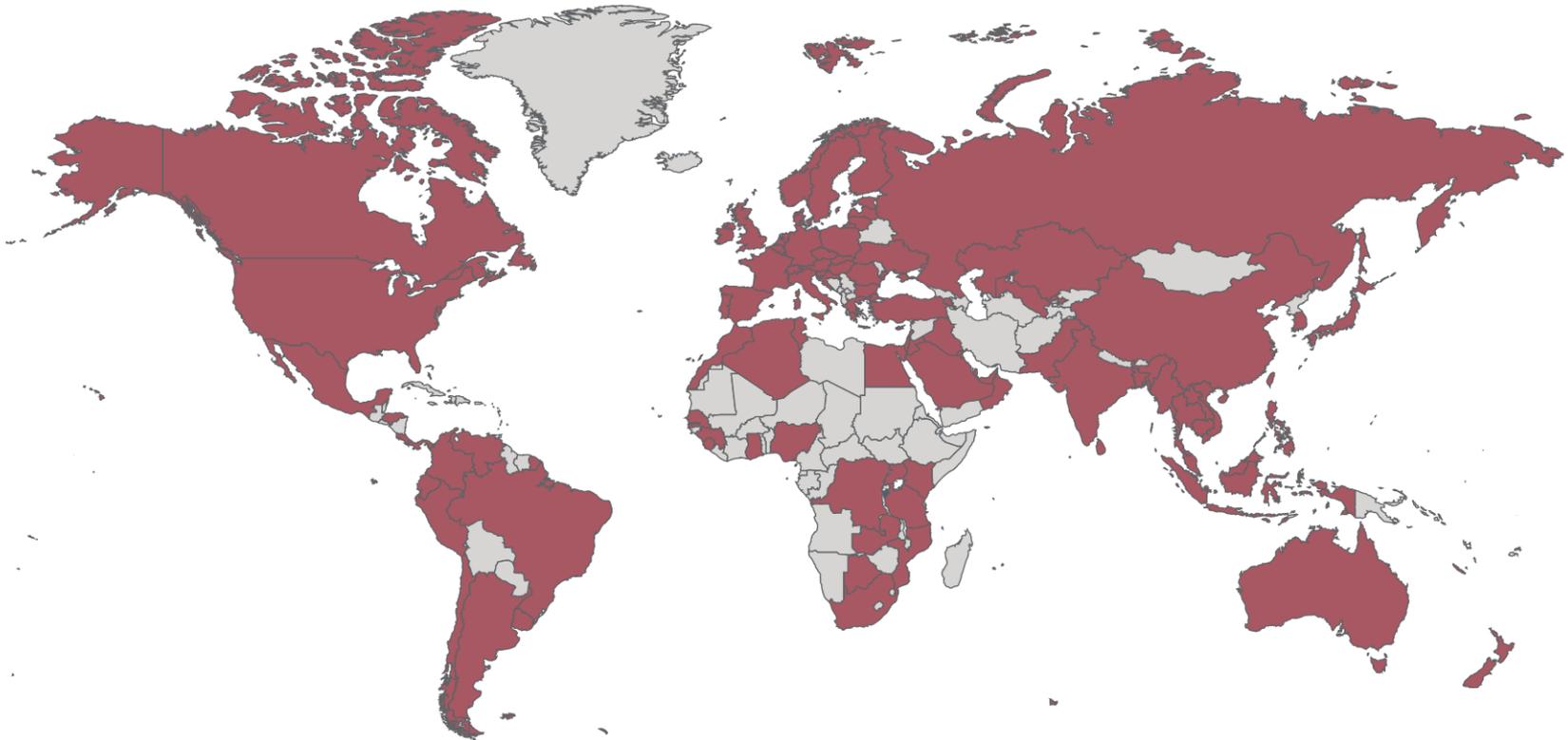
All Regions Sink into Recession
Real GDP growth, baseline forecast, %



European Economies Among The Hardest Hit
Real GDP growth, baseline forecast, %



Global Business Cycle Map



Source: Moody's Analytics

Global Policy Response

Monetary Response Central Banks

- Cut Rates
- Unlimited QE
- Commercial Paper Financing Facility etc.
- FED lender of last resort for entire economy

Fiscal Response

- WORLD US\$10 Trillion +
- USA US\$2.3 Trillion + 11% of GDP
- Canada \$250 Billion + 9.8% of GDP

Will these actions be enough? Depends on flattening the curve and getting a vaccine so a “new normal” can be reached.

Hoping For a V Shape Recession

Downside Risks

- Pandemic continues to spread and take lives.
- A second wave occurs.
- Vaccine and/or anti-viral drugs delayed.
- Need to transition economies only back to partial operation.
- Social unrest re: self-isolation, loss of income, children out of school.
- Governments fail to stay the course.
- So if not a “V” possibly a flat U or even a W shaped recovery path.

Forecasting An Uncertain Future

2 Scenarios

SCENARIO 1

Basis of forecast but there are downside risks. The curve is flattened allowing prudent opening up of economic activity. No significant new outbreaks that result in a renewed lockdown. Vaccine becomes widely available in 2021.

This results in economic activity levels getting back to pre-COVID-19 levels in North America, Europe, Japan and China. But this only returns the economies to the level of late 2019 by end of 2021 – means two years growth lost – means 4% growth basically lost in Canada.

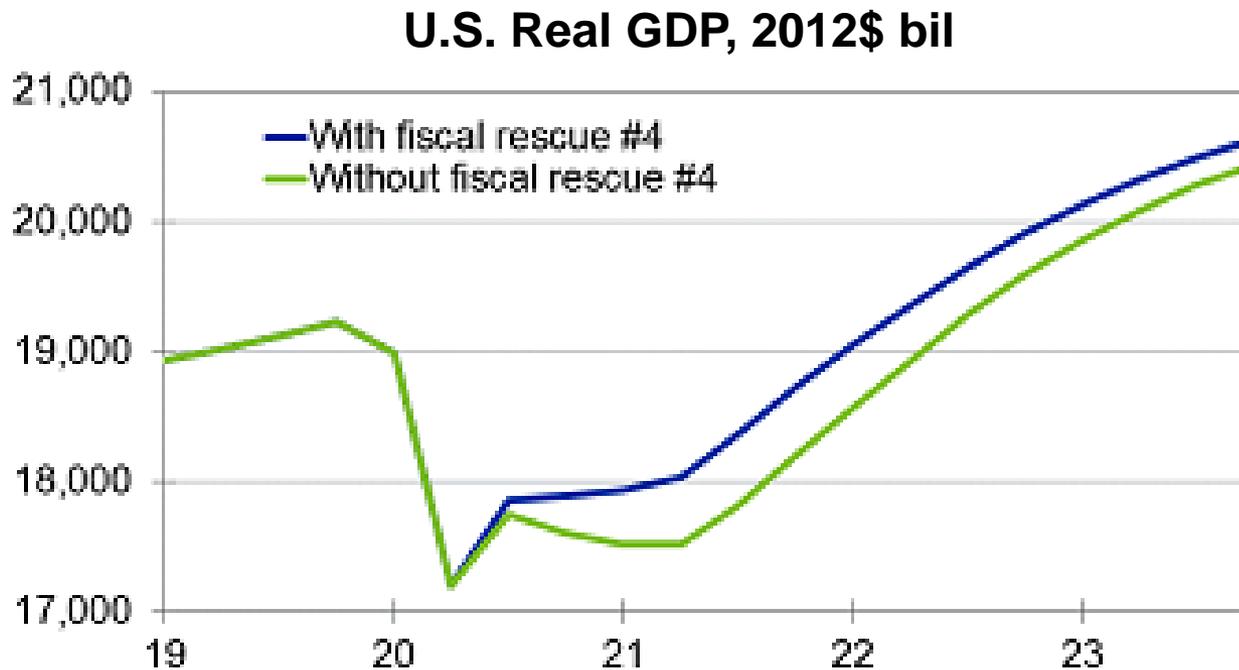
Monetary policy remains accommodative – low interest rates and low inflation. Shape of recovery after initial jump more like a “Flat W” than a “V”.

SCENARIO 2

Vaccine delayed until 2022 plus. The current opening up of economies results in a new severe outbreak of virus with widespread lockdowns. This forces governments to extend fiscal and monetary supports. This would likely result in deflation as demand collapses.

The result is a deeper longer recession with economies not getting back to pre-COVID levels before mid-decade. Risk of a Double-Dip Recession “W”.

Risk of Double-Dip Recession Without More Support To Finance the Recovery Phase



Source: BEA, Moody's Analytics

Pandemic Global Economy Shutdown/Recession Arrives Now Economies Opening Up Slowly Question: Will Exit be V, U, W or L Shaped? Forecasts Based on Scenario 1: Long, Slow Uncertain Recovery

	Real GDP Growth						
	2015	2016	2017	2018	2019	2020	2021
U.S.	2.9	1.6	2.4	2.9	2.3	-5.5	4.9
CHINA	6.9	6.7	6.8	6.6	6.1	2.0	8.0
JAPAN	1.3	0.5	2.2	0.3	0.7	-5.5	2.8
EUROZONE	2.0	1.9	2.7	1.9	1.2	-9.5	7.0
INDIA	8.0	8.3	7.0	6.1	4.2	-3.5	8.0
LATIN AMERICA	0.2	-0.4	1.9*	1.4*	0.7*	-6.0*	3.5*
CANADA	0.7	1.0	3.2	2.0	1.7	-6.0	5.5
WORLD	2.8	2.4	3.1	3.6	2.9	-4.7	5.2

**Ex-Venezuela*

Longer Term Implications to Consider Nations and Organizations Will be Looking for Resiliency!

- Debt issues globally.
CANADA: Deficit likely \$250+ billion 2020/21 and \$100 billion 2021/22. Plus large provincial deficits.
- Massive expansion in central bank's balance sheets.
- Sharp rise in private sector debt.
- Will limit government expenditures/investment and increase taxes.
- Will be difficult to grow out of this debt accumulation.

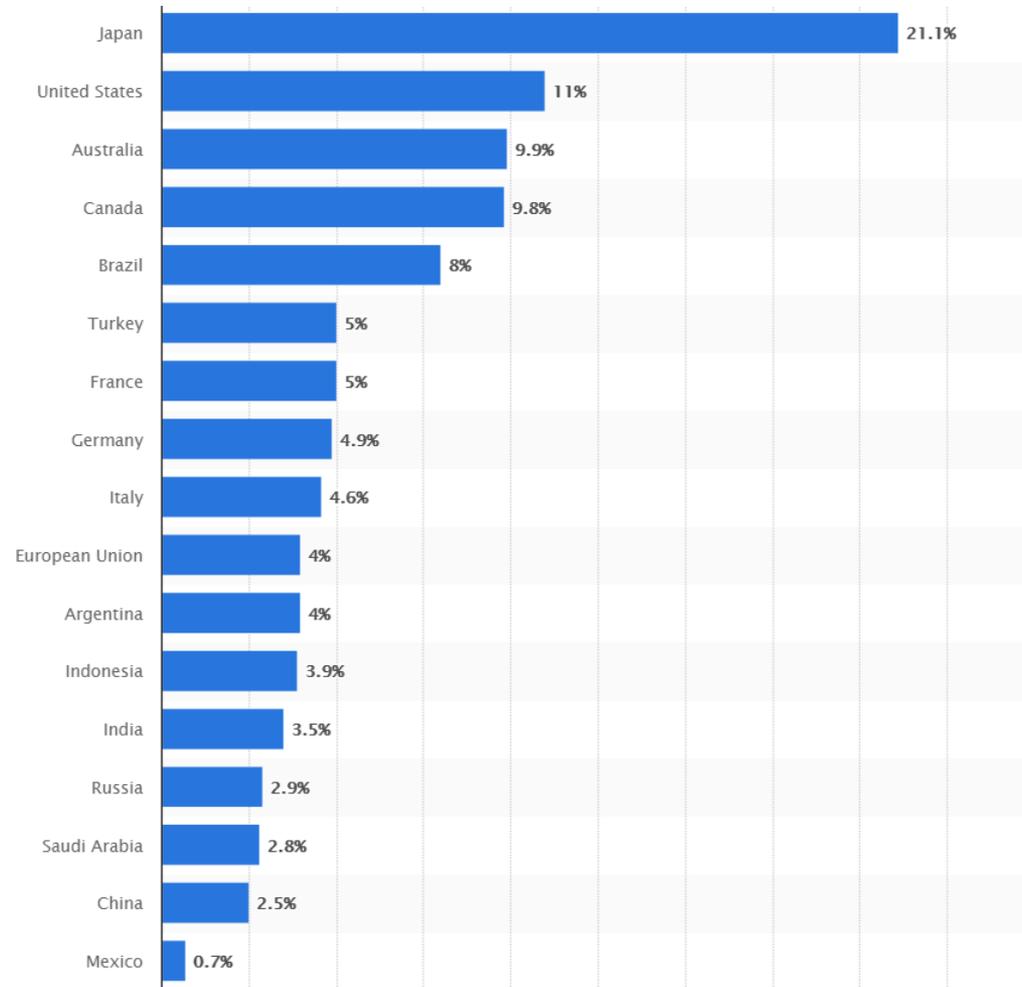
- National Healthcare systems will be strengthened. Public will demand investments in critical care and control of infectious diseases. Government spending will shift focus.

- Globalization will be de-globalization. Supply chain disruptions and overreliance on China will push supply chains to be less centralized. Lead to higher costs – but could create jobs. Trade and investment patterns will shift.

- Nature of work will change. Business travel ↓, Electronic communication ↑.

- Geopolitics will shift towards nationalism, away from multinationalism. Bad for Canada as a mid-sized nation.

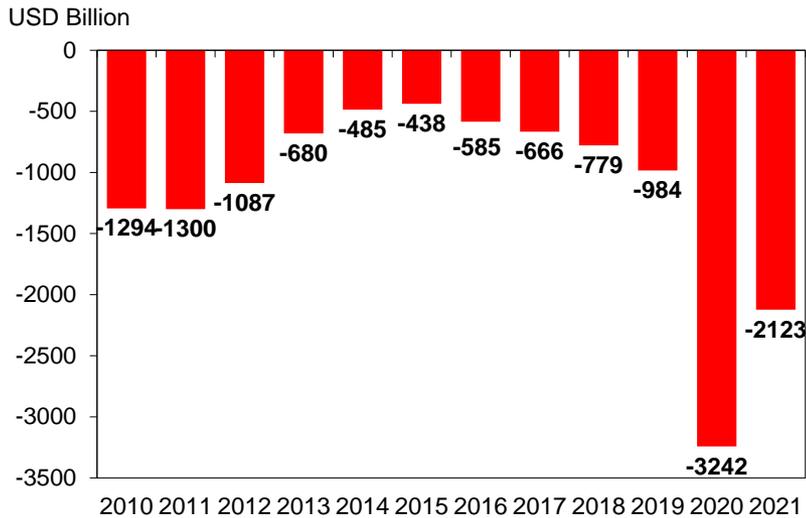
Value of COVID-19 Fiscal Stimulus Packages in G20 Countries as of May 2020, as share of GDP



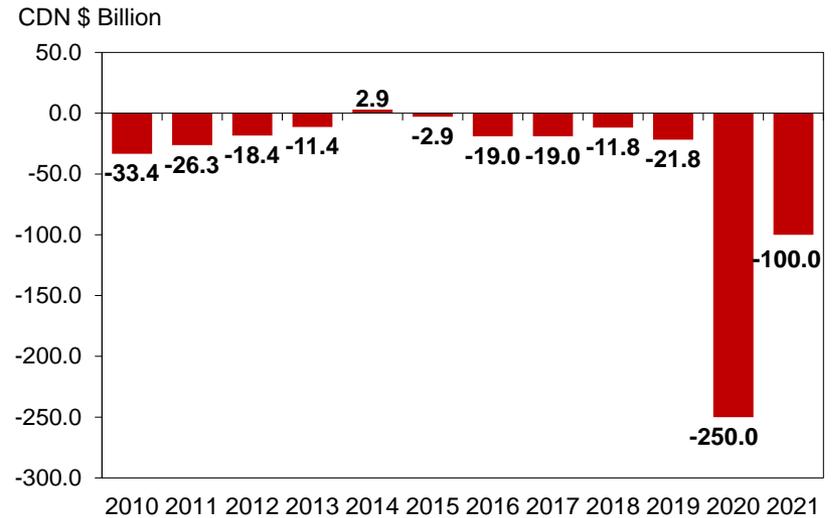
Source: statista.com

U.S. and Canadian Deficits to Balloon

U.S. Government Deficit



Canadian Government Deficit



Global Trade Implications

- Pre-COVID globalization was being challenged.
- Unlikely global demand and international trade will be the drivers going forward.
- WTO in April forecasted volume of merchandise trade would decline by between 13% and 30%.
- WTO does not expect trade volumes to recover to 2011-18 levels.
- 76 plus countries have restricted trade in medical, food products, etc.

Which way now in recovery phase?

- Trump and U.S. likely to continue with nationalistic policies.
- Trade conflicts between U.S. and China to continue.
- Biden White House will continue much of U.S./China conflict, but also be more supportive to multilateralism.
- U.S. leadership globally would be renewed under Biden.
- Need for G20 policy coordination.
- Brexit: U.K. could become the only G7 country with no free trade agreement with another G7 member.

Canadian Implications

- Difficult environment.
- Must make CUSMA; CETA and CPTPP work for Canadians.
- Sort out trade relations with China.
- Support multilateralism.

Canadian Exports Set to Plunge in 2020

	\$ Billions	Share of	Export growth		
		Cdn exports (% of total)	(nominal annual % change)		
	2019	2019	2019	2020*	2021*
Total exports	\$678	100%	2%	-20%	19%
Total services	133	20	4	-18	23
Total goods	545	80	1	-21	18
Advanced technology	21	3	6	-16	22
Aerospace	19	3	5	-35	6
Agri-food	75	11	1	-8	6
Automotive	86	13	4	-30	22
Chemicals and plastics	47	7	0	-11	8
Consumer goods	22	3	3	-9	10
Energy	124	18	1	-33	31
Forestry products	31	6	15	-16	12
Industrial machinery and equipment	32	5	6	-17	18
Ores and metals	81	12	3	-10	9
Total goods (excluding energy)	400	59	1	-17	15
Total goods (excluding energy and autos)	314	46	1	-14	13

* Forecast

Source: The Globe and Mail, June 18, 2020 / EDC Global Export Forecast, June 2020

Central Banks Response

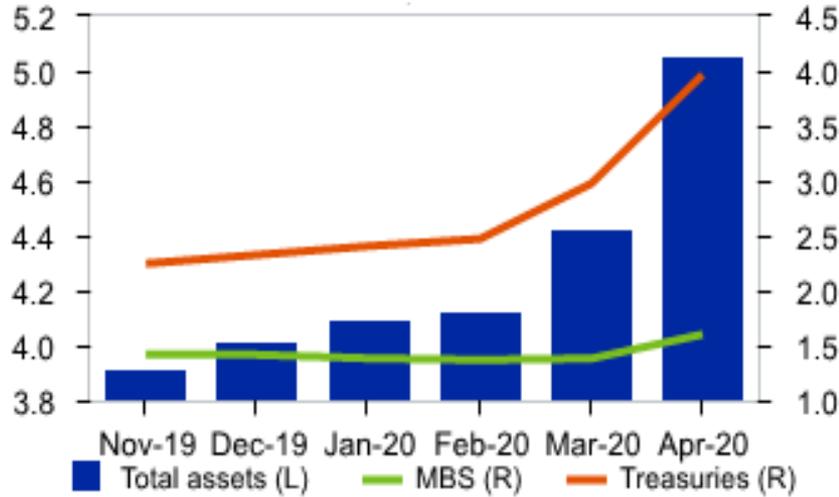
Liquidity, Liquidity, Liquidity

Watch For Policies to Implement “Yield Curve Control”

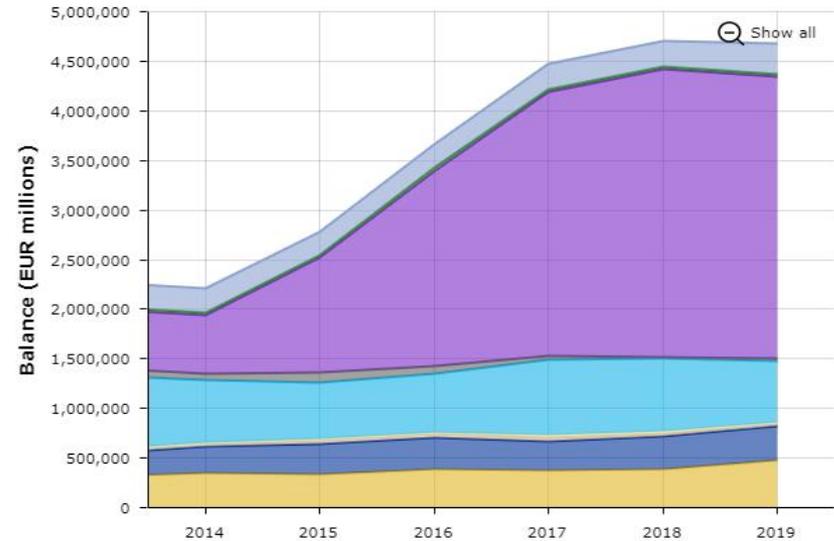
- Going into 2020 central banks had already hit the pause button and taken a dovish pivot.
- Post COVID-19 arrival, massive tilt to easing.
- **Federal Reserve:** Rates at zero; QE US\$500 billion Treasuries, US\$200 billion mortgage backed securities, now open ended adding MBS. Commercial paper financing facility and establishment of special purpose vehicle (SPV) to purchase securities. Term asset backed securities loan facility, secondary market corporate credit facility. Fed now the lender of last resort for entire economy. Expect to see forward guidance used. Rates to remain at rock bottom until at least 2022. Fed will begin to wind down credit facilities early 2021 – but balance sheet to remain elevated.
- **Bank of Canada:** Matched the Fed’s cut. Rates at 0-25 basis points. And introduced QE for first time. Will buy \$5 billion of GOC bonds weekly “until the recovery is well underway”. Likely equals \$100 billion. New program to purchase commercial paper. Recently announced scaling back two liquidity programs for short-term lending markets by limiting the frequency of market operations. Balance sheet expanded from \$125.1 billion March 18 pre-COVID to \$500+ billion at June 15. New Governor Tiff Macklem now in place. Focus shifts to supporting economic recovery from stabilizing financial markets.

Central Bank Balance Sheets Balloon

Fed's Balance Sheet (\$tril)



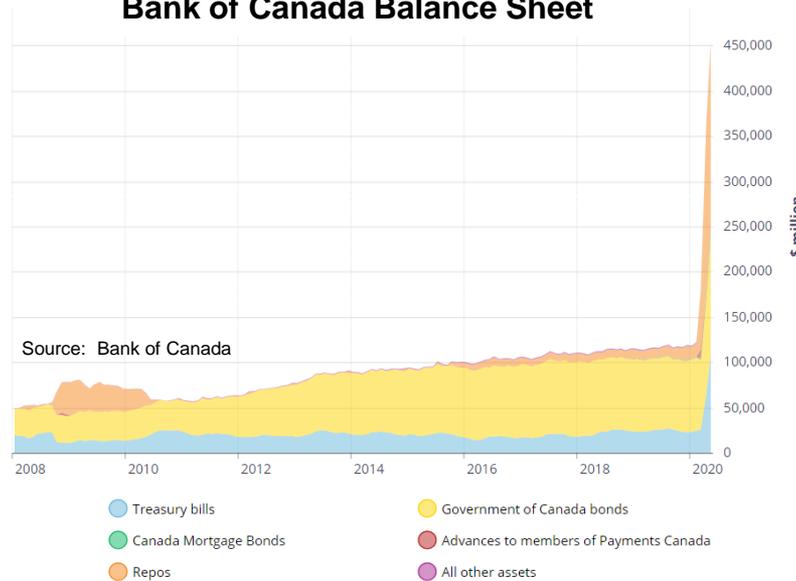
ECB Balance Sheet



Sources: Federal Reserve, Moody's Analytics

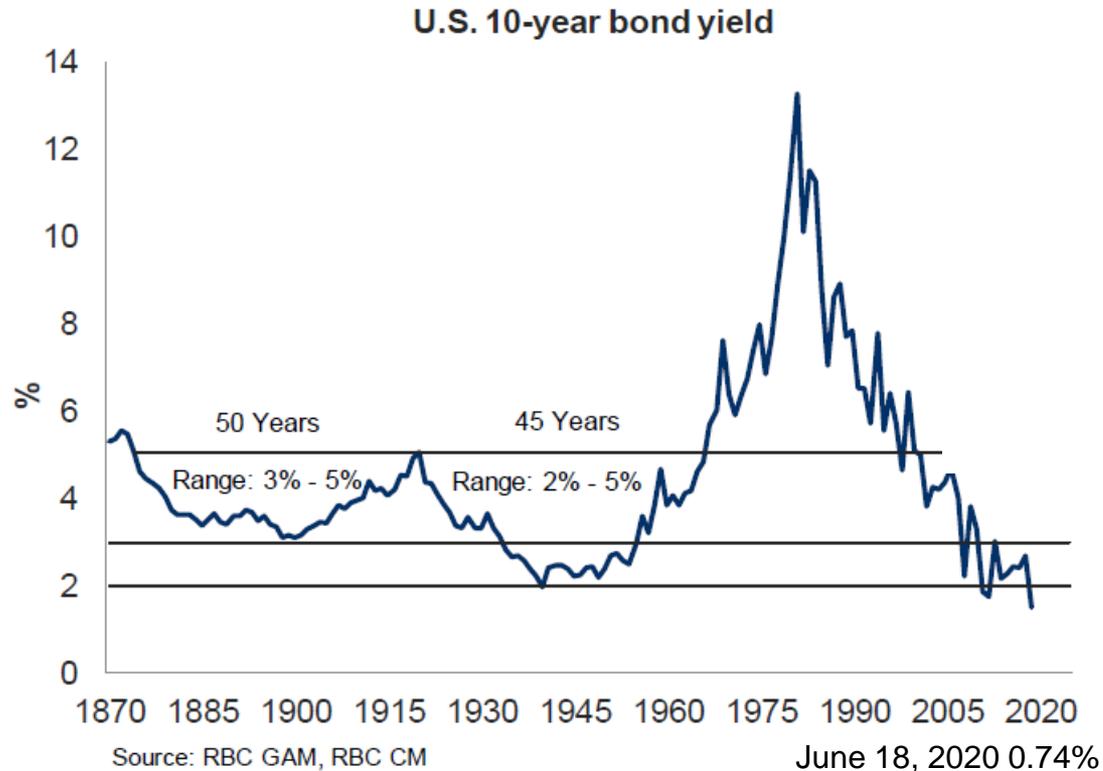
Source: European Central Bank

Bank of Canada Balance Sheet



A Very Long-Term Perspective for U.S. Long-Term Yields

Think “Low for Longer”



A longer-term perspective of bond yields shows that the late 60's through to the late 90's was a very unusual period for interest rates. Aside from then, yields have generally held within a range defined by 2-3% at the low and 5% at the peak. The recent drops below 2% are also extraordinary, even placed within the context of almost 150 years of U.S. interest rate history.

Average Yield for Canada 10 Yr+ Bonds

1936 – 2020

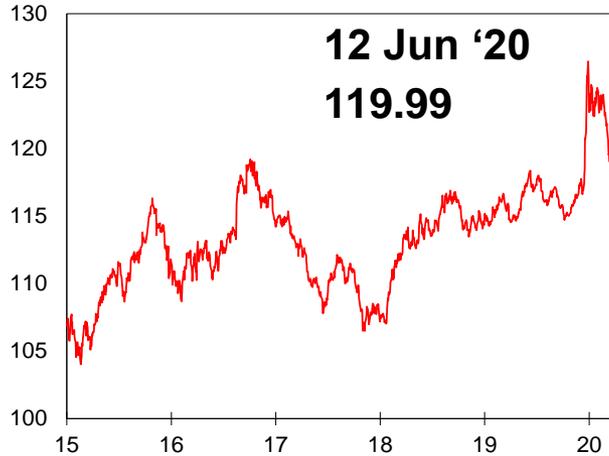


Source: Bank of Canada

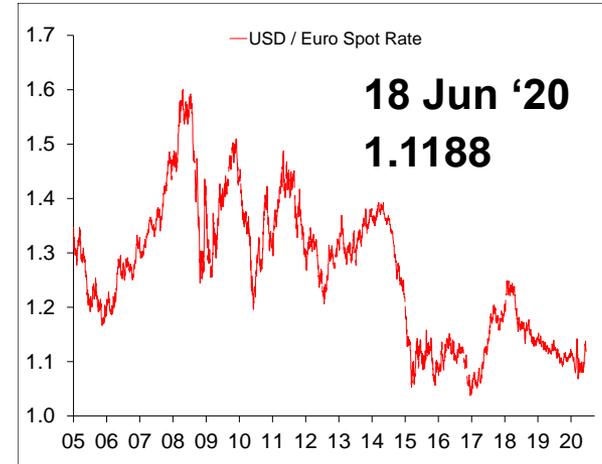
June 18, 2020 0.55%

Currencies

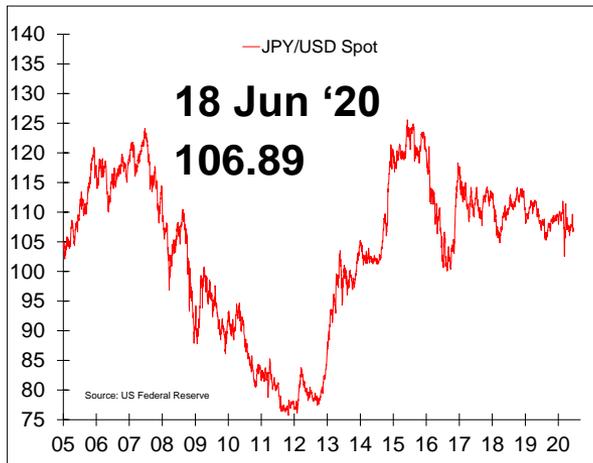
U.S. Dollar - Trade-weighted Broad Index



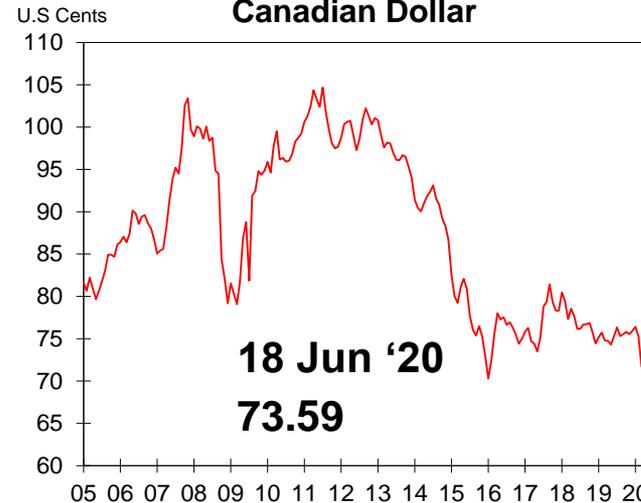
EURO



Japanese Yen



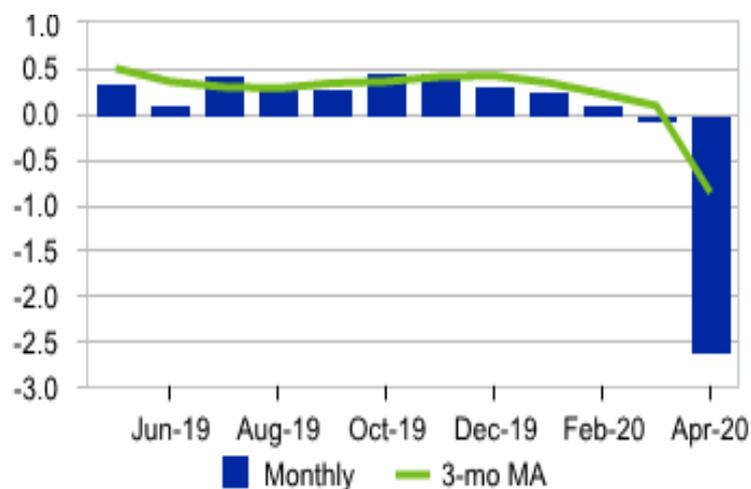
Canadian Dollar



Global Price Environment

Remains Relatively Well Behaved
Disinflationary Forces Taking Hold
Central Banks Concerned About Deflation Getting Embedded

Global CPI (% change)



Source: Moody's Analytics

Inflation Snapshot

Latest Data – May CPI % change year ago

Country	YoY	Direction
U.S.	+0.1	↘
Canada	-0.4	↘
U.K.	+0.8	↘
Germany	+0.6	↘
Euro Zone	+0.1	↘
China	+2.4	↘
Global*	+0.4	↘
Developed Economies*	-7.0	↘
Developing Economies*	+4.4	↘

*April

Source: ECONOMAP

Asia

Pandemic Started in Wuhan: Now Eyes on China to See if Virus Tamed and Recovery Back to “New Normal” is V, U or W Shape

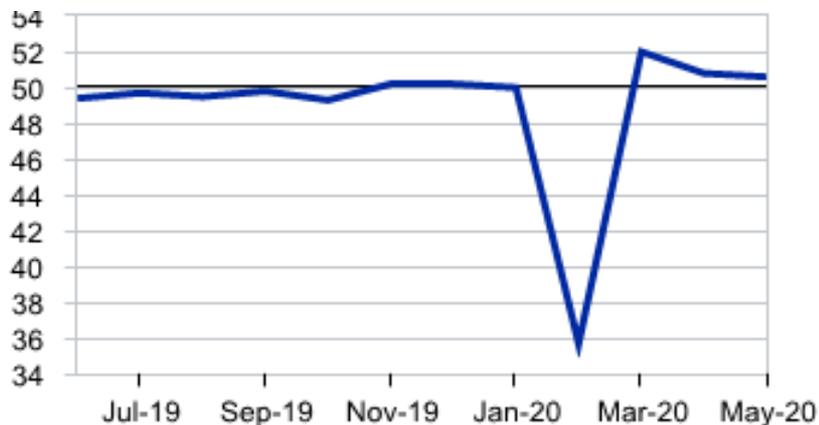
India – Hit by Pandemic

Japan – Continues to Stumble/Stimulates

The Bounce Back?

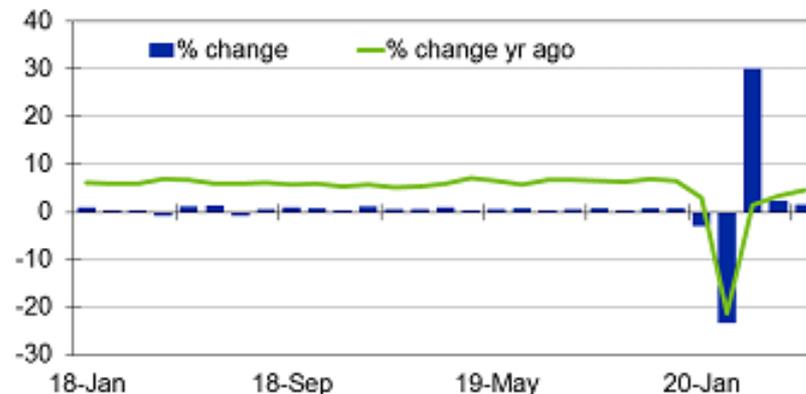
Will it be a Sustained V or U or W?

China Official Manufacturing Purchasing Managers Index
 > 50 is expansionary



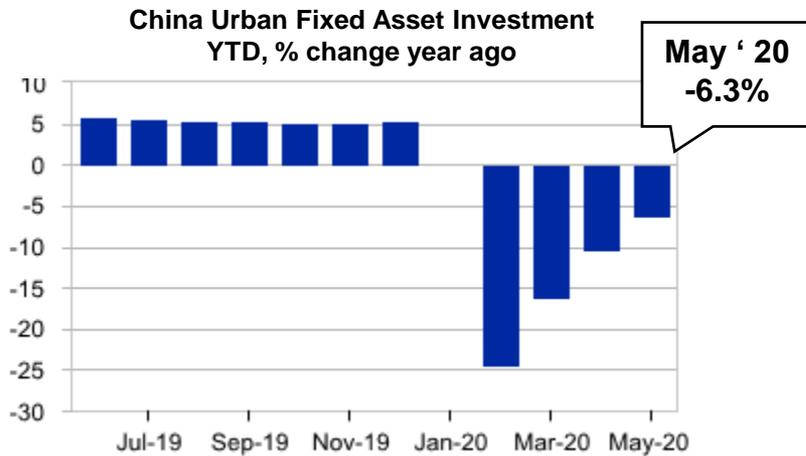
Source: Moody's Analytics

Chinese Factories on the Mend
 Industrial production, 2010=100

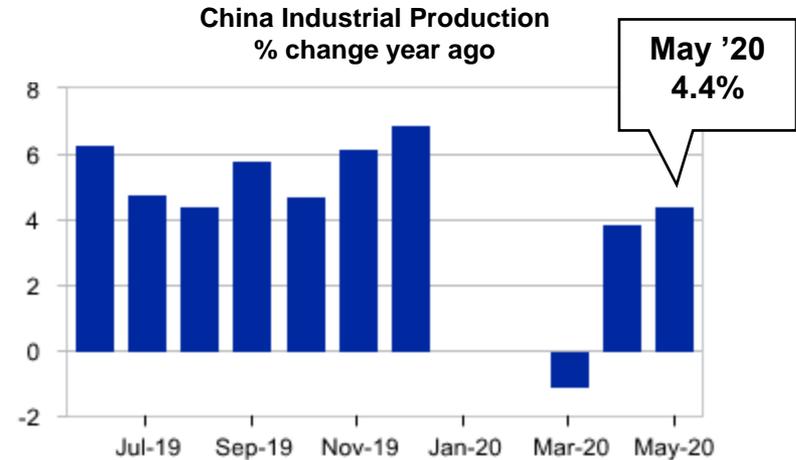


Source: National Bureau of Statistics, Moody's Analytics

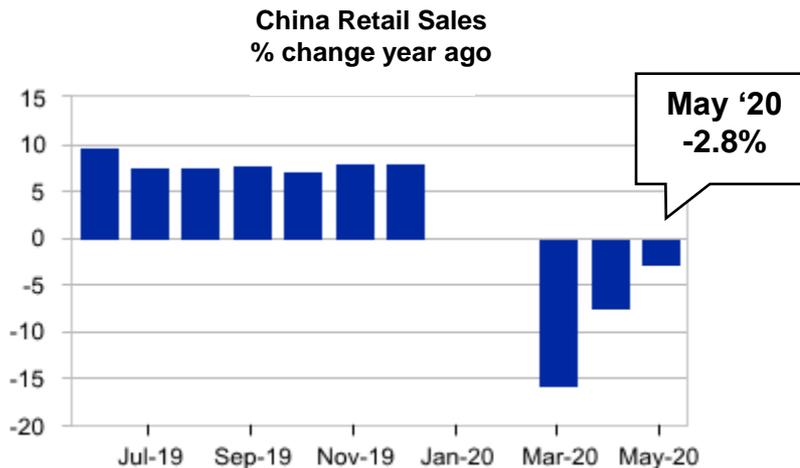
China on Recovery Path



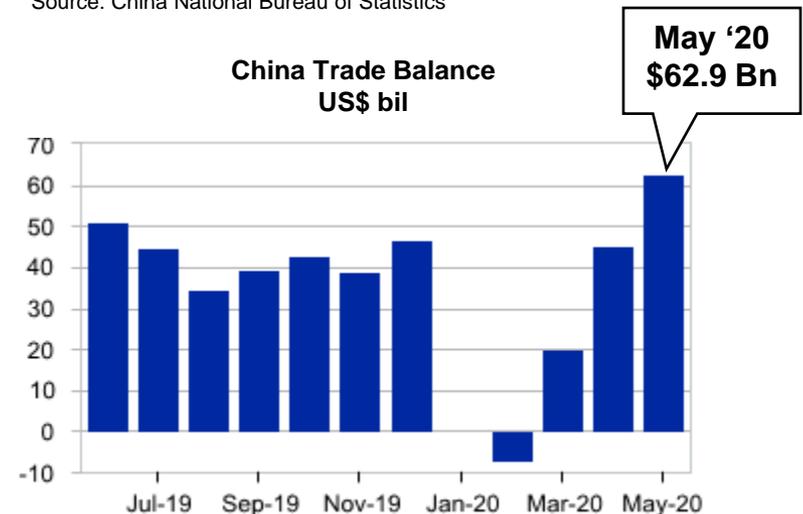
Source: China National Bureau of Statistics



Source: China National Bureau of Statistics



Source: China National Bureau of Statistics



Source: China General Administration of Customs

United States Economy Starts to Open Up

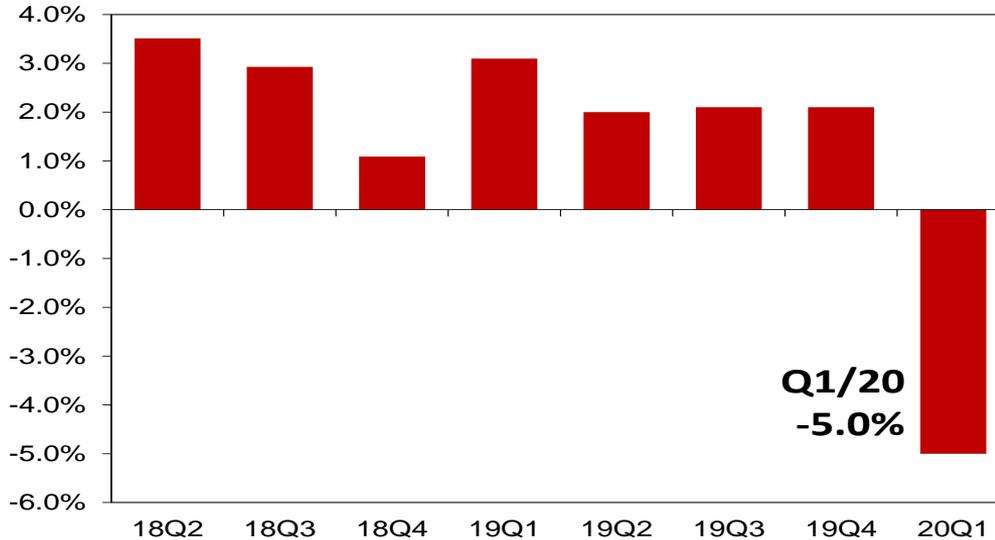
Risks:

- **Second Wave Arrives – Forces Renewed Lockdowns**
- **Recovery Stumbles**
- **U.S. Election?**
- **Massive Monetary and Fiscal Stimulus Extended**

U.S. Economy Takes Hit From Lack of Pandemic Preparedness

States Opening Up Economies – Question: Will There be a Second Wave?

Annualized QoQ % Change (Chained 2012 Dollars)



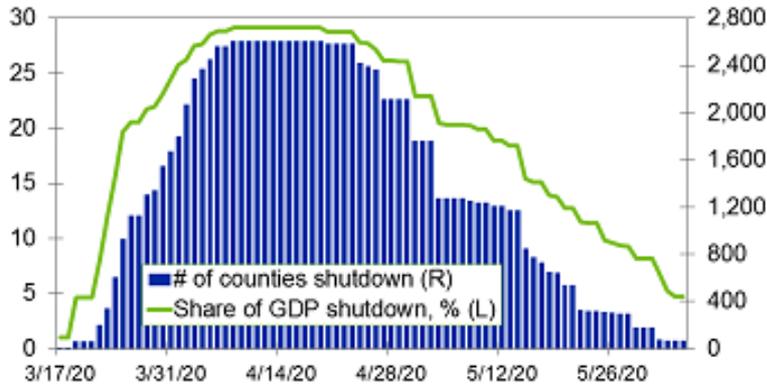
Year	GDP
2010	2.6%
2011	1.6%
2012	2.2%
2013	1.8%
2014	2.5%
2015	2.9%
2016	1.6%
2017	2.4%
2018	2.9%
2019	2.3%
2020	-5.5%
2021	4.9%

- Consumers key to exit/revival strategy.
- Unemployment will not return to pre-COVID levels until 2023 or later.
- Housing demand still healthy but construction interrupted and despite low mortgage rates consumers may be reluctant to purchase until employment secure.
- Business confidence deteriorates.
- Supply chain disruptions remain a challenge.
- Capex hit hard.
- Inflation contained.
- Fed in full support mode.
- Government stimulus package US\$2.3 Trillion plus runs out by September. Another package needed.

	QUARTERLY GROWTH PROFILE (QoQ% AR)			
	Q1	Q2	Q3	Q4
2014	-1.1	5.5	5.0	2.3
2015	3.2	3.0	1.3	0.1
2016	2.0	1.9	2.2	2.0
2017	2.3	2.2	3.2	3.5
2018	2.5	3.5	2.9	1.1
2019	3.1	2.0	2.1	2.1
2020	-5.0	-40.0	35.0	7.0
2021	5.5	5.0	4.0	3.5

United States Reopening

U.S. Lockdowns Winding Down
Share of GDP and # of countries shut down



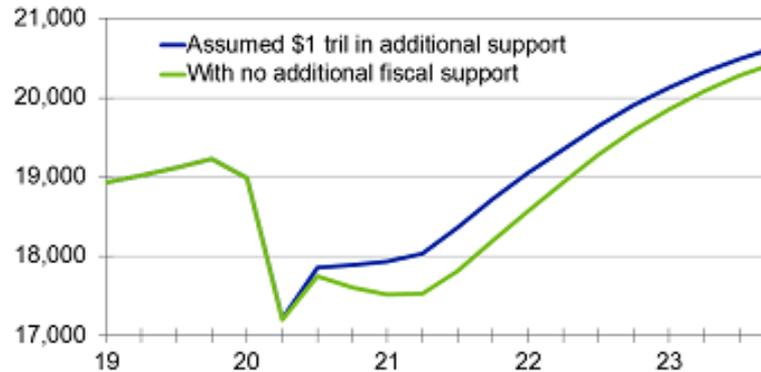
Source: US BEA, NY Times, Moody's Analytics

Businesses Feel Much Better
% of business survey respondents saying current conditions are improving



Source: Moody's Analytics

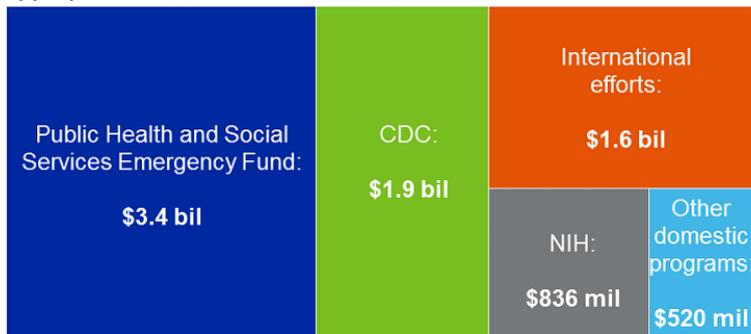
But – Double Dip Recession Risk Without More Fiscal Stimulus
U.S. Real GDP, 2012\$ bil



Source: US BEA, Moody's Analytics

Fiscal Stimulus US\$2.3+ Trillion 11% of GDP – Is it Enough?

'Phase One' Stimulus: \$8.3 Billion Cost of Coronavirus Preparedness & Response Supplemental Appropriations Act, 2020



Sources: KFF, Moody's Analytics

'Phase Two' Stimulus: \$171 Billion Cost of Families First Coronavirus Response Act



Sources: AAF, JCT, KFF, Moody's Analytics

Unemployment insurance: \$1 bil

'Phase Three' Stimulus: \$2.3 Trillion Cost of Coronavirus Aid, Relief, & Eco. Security (CARES) Act

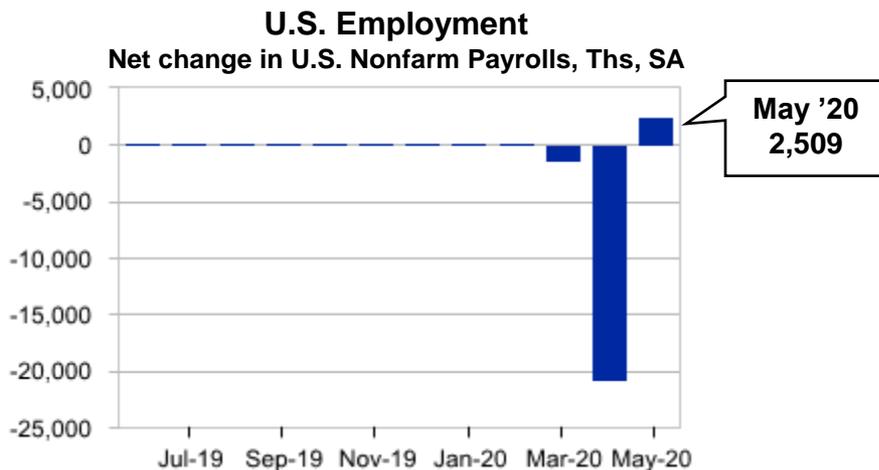


Sources: CRFB, Moody's Analytics

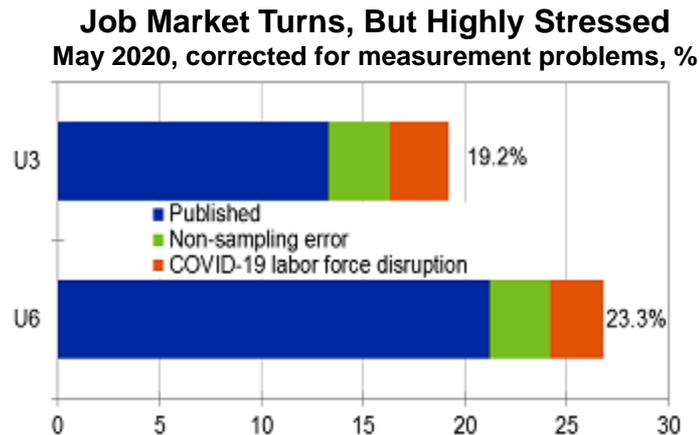
'Phase Four'
Now Needed
US\$1 Trillion
?

Workplace Pain

Unemployment to Remain High Through 2021 / Many Jobs Will Have Been Lost



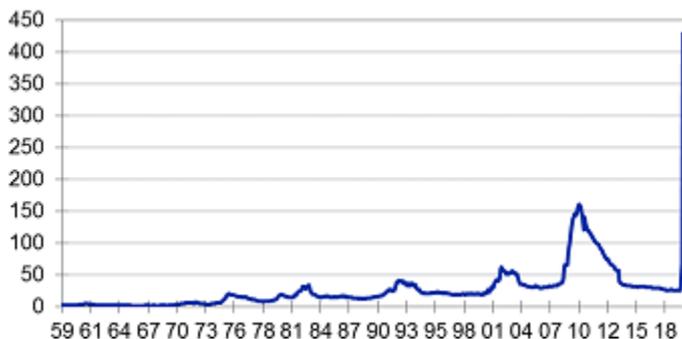
Source: US BLS, Moody's Analytics



Source: US BLS, Moody's Analytics

UI Payments Shatter Records...

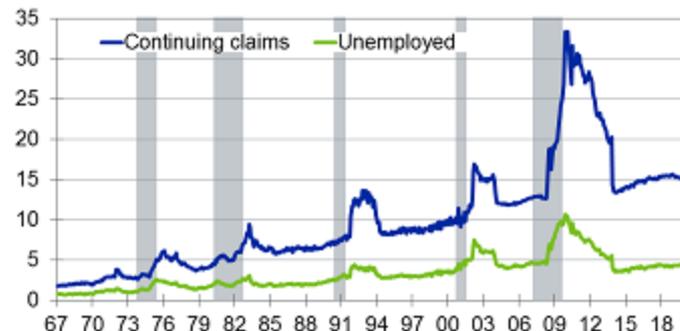
Personal current transfer receipts for UI benefits, \$bil



Source: BEA, Moody's Analytics

...Supporting Millions of Unemployed

Transfer receipts for UI benefits as a share of\$ mil per ths



Source: BEA, BLS, Moody's Analytics

Economic Activity

**Recession Deep and Short – 3 Months – April Apex
Recovery So Far Slow and Modest**

U.S. ISM Index of Non-Manufacturing Services (88% of GDP)



U.S. ISM Index of Manufacturing

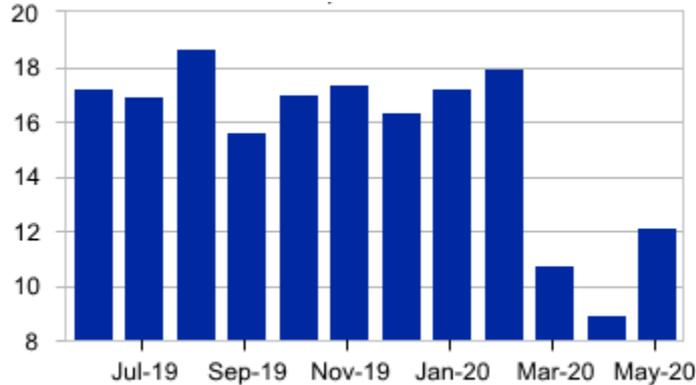


Americans' Buying Moderating For Cars and Goods!

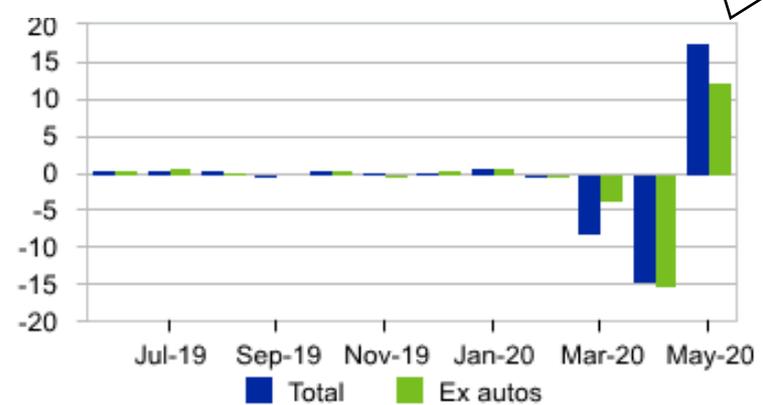
Pandemic Favours E-Commerce / Bricks and Mortar Retail Hit Hard

Hospitality / Travel Slow to Recover

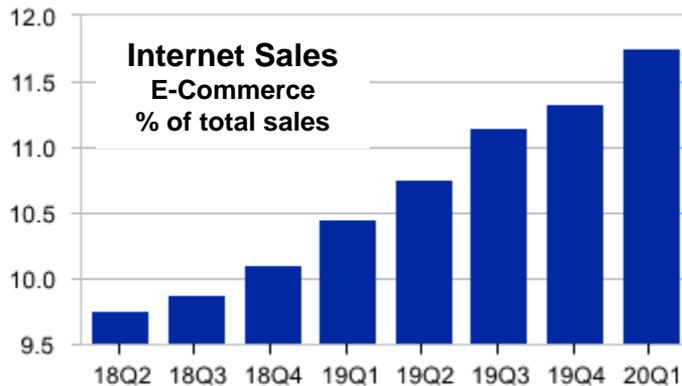
U.S. Vehicle Sales
Mil Units, SAAR



U.S. Retail Sales
% change



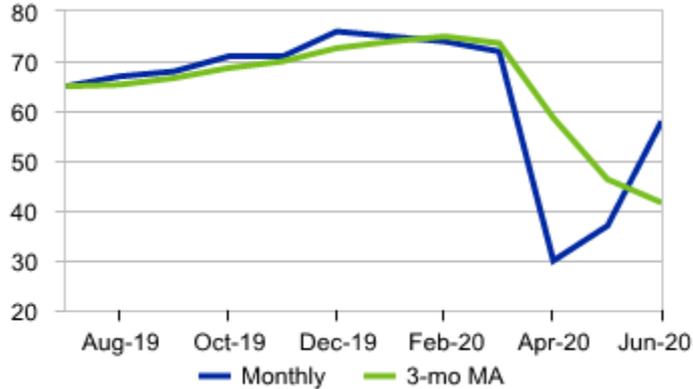
Shopping Patterns Changing



INTERNET SALES	20Q1	19Q4	19Q3	19Q2	19Q1	18Q4	18Q3
E-Commerce sales, \$ bil	160.3	156.6	153.3	146.3	139.7	134.3	130.6
% change	2.4	2.2	4.7	4.7	4.0	2.8	1.6
% change yr ago	14.8	16.6	17.3	13.8	11.8	11.0	13.2
E-Commerce as a % of retail sales	11.8	11.3	11.1	10.8	10.5	10.1	9.9

Housing Market

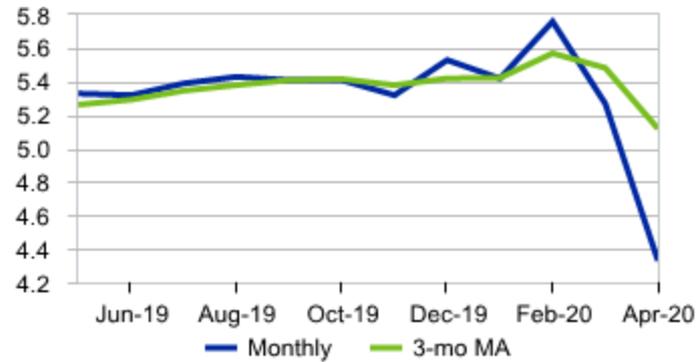
U.S. NAHB Housing Market Index



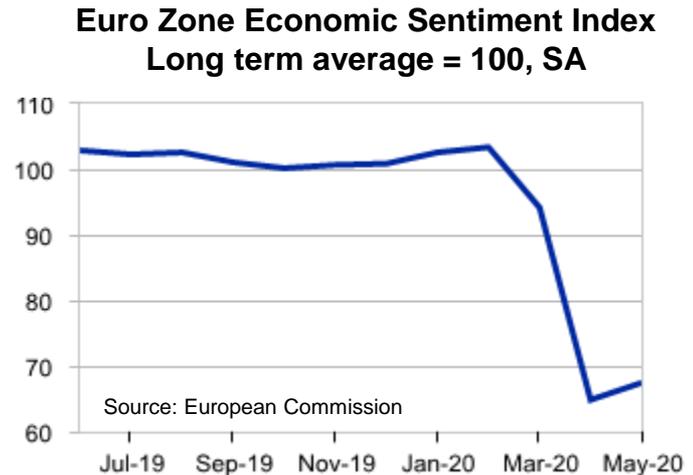
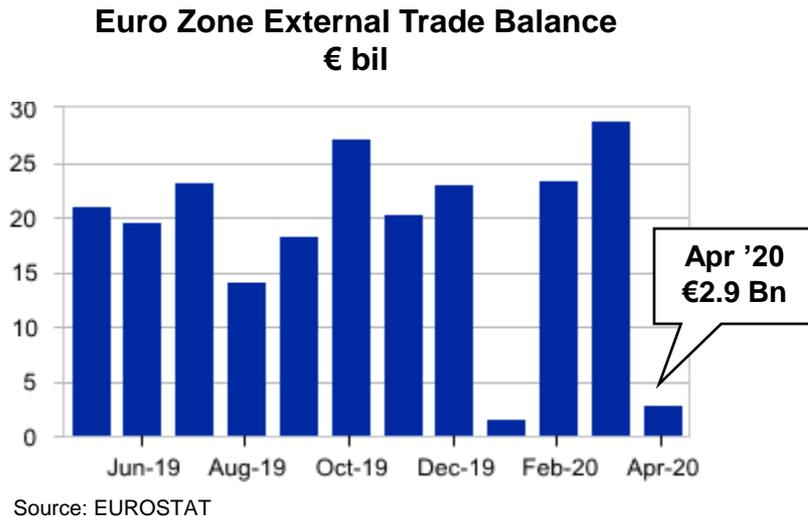
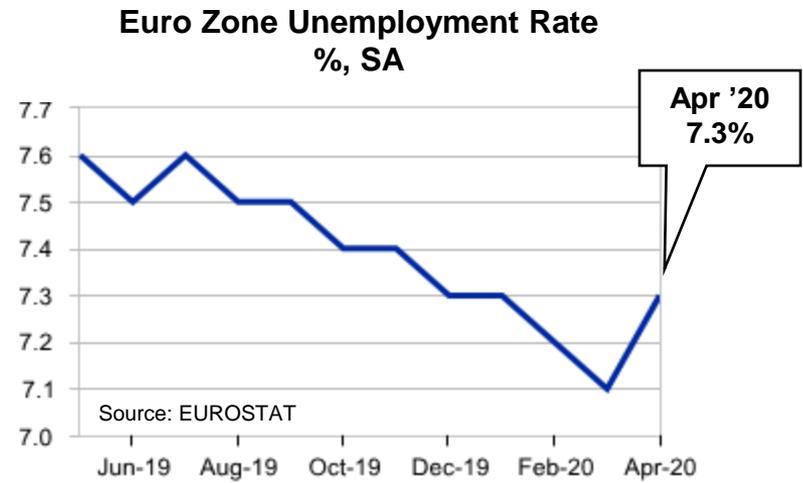
U.S. Housing Starts
Total privately owned, mil, SAAR



U.S. Existing Home Sales
Mil, SAAR



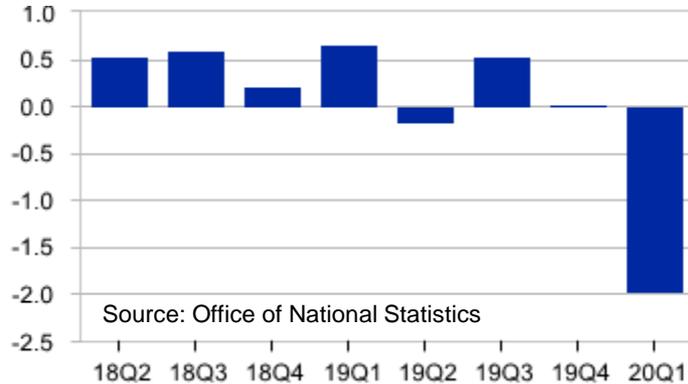
Euro Zone Hit Hard by COVID-19



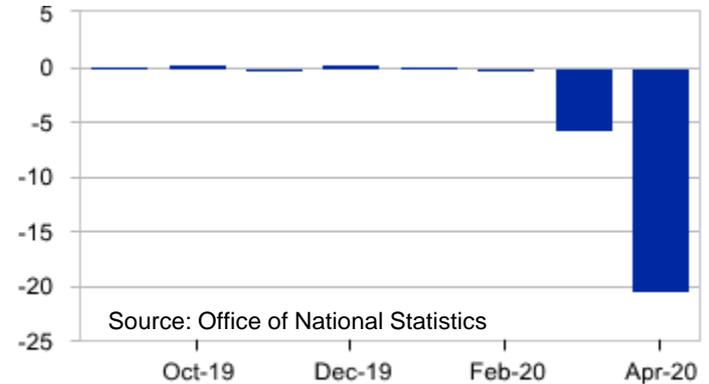
United Kingdom What Now?

**Brexit Stage 2 Negotiations Underway / U.K. Union Under Pressure
U.K. Joined The Lockdown Late – Result: Hit Hard**

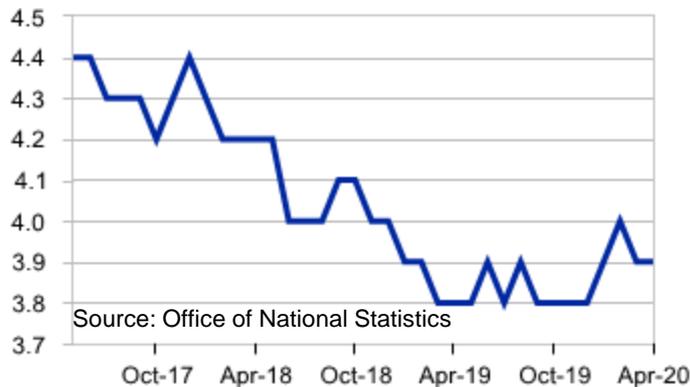
**U.K. Real GDP
% change**



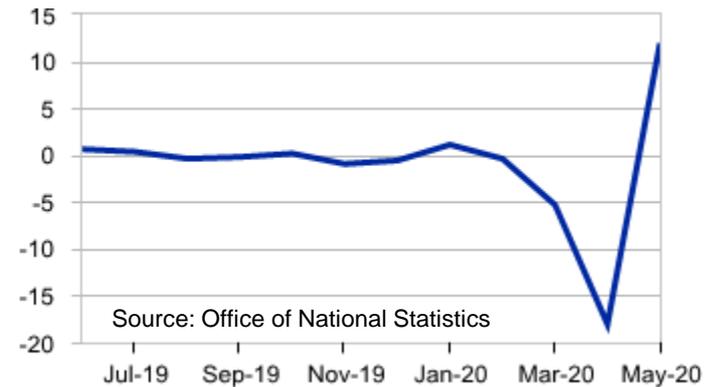
**U.K. Real GDP (Monthly)
% change**



**U.K. Unemployment Rate
%, 3-mo MA**



**U.K. Retail Sales Index
% change, SA**



Canada Starts to Open Up!

Key Issues:

Taming COVID-19

**Managing the Fallout – Trying to Keep Economy
Ready for Business**

China Trade / Political Issues

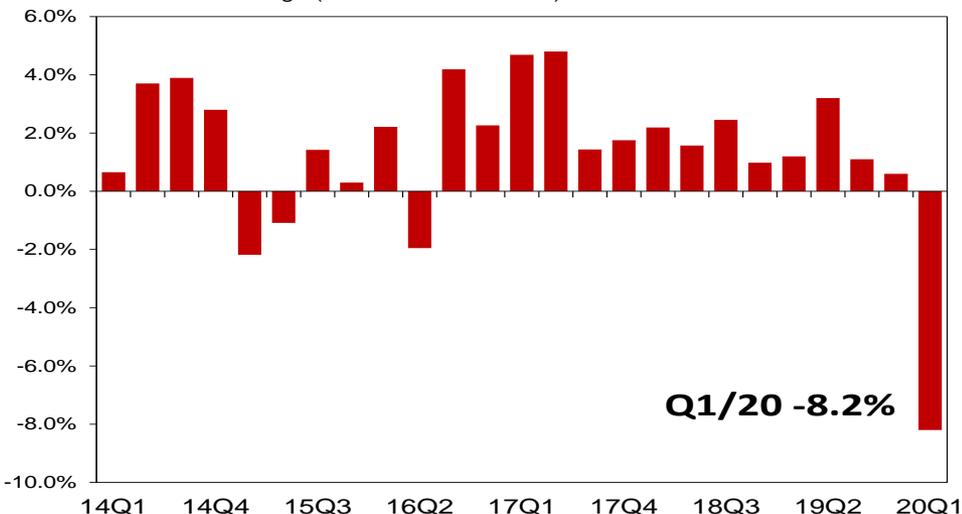
Market Access for Resources

High Household Debt Levels

Canadian Economy Hit by COVID-19 & Oil Price War

May, Beginning of Opening up Economy / Will be Slow and Choppy Recovery

Annualized QoQ % Change (Chained 2012 Dollars)



	GDP
2010	3.1%
2011	3.1%
2012	1.8%
2013	2.3%
2014	2.9%
2015	0.7%
2016	1.0%
2017	3.2%
2018	2.0%
2019	1.7%
2020	-6.0%
2021	5.5%

- Federal government commits \$250 Billion+ to support economy, businesses and people (10%+ of GDP).
- Federal and Provincial governments working constructively.
- Low oil prices hurt Alberta and Saskatchewan.
- High level of household debt and now loss of income halts non-essential spending in 2020/2021.
- Housing market remains solid, but will be interrupted over Q2 & Q3.
- CMHC introduces new regulations.
- Business sentiment deteriorates. Capex collapses.
- Monetary policy comes to the rescue. Rate cuts / QE announced.
- Provincial deficits and Federal deficit to rise substantially.
- Getting resources to tidal water still a major problem.
- Infrastructure program slow to unfold.
- Challenging U.S. relations.
- China trade and politics remain difficult.

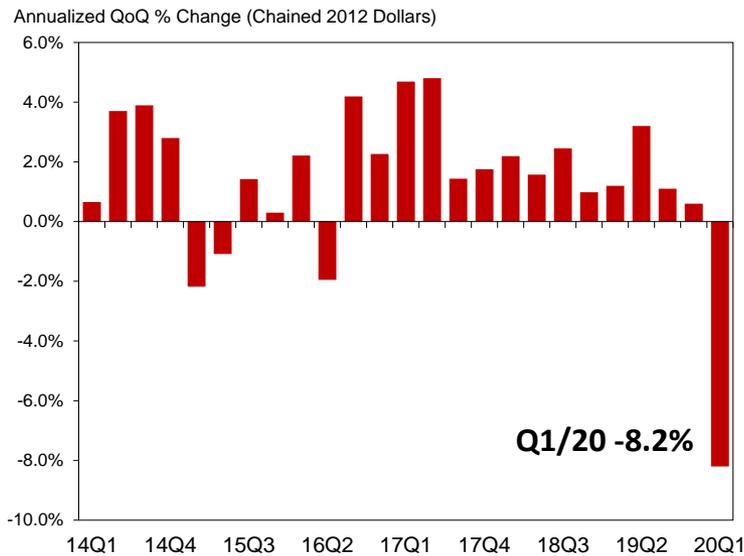
QUARTERLY GROWTH PROFILE				
	(QoQ% AR)			
	Q1	Q2	Q3	Q4
2014	0.7	3.7	3.9	2.8
2015	-2.2	-1.1	1.4	0.3
2016	2.2	-2.0	4.2	2.3
2017	4.7	4.8	1.4	1.8
2018	2.2	1.6	2.5	1.0
2019	1.2	3.2	1.1	0.6
2020	-8.2	-40.0	41.0	10.0
2021	6.5	4.0	2.5	2.5

Growth Was Slowing in Q4, 2019

Collapses in Q1/20 Through Q2

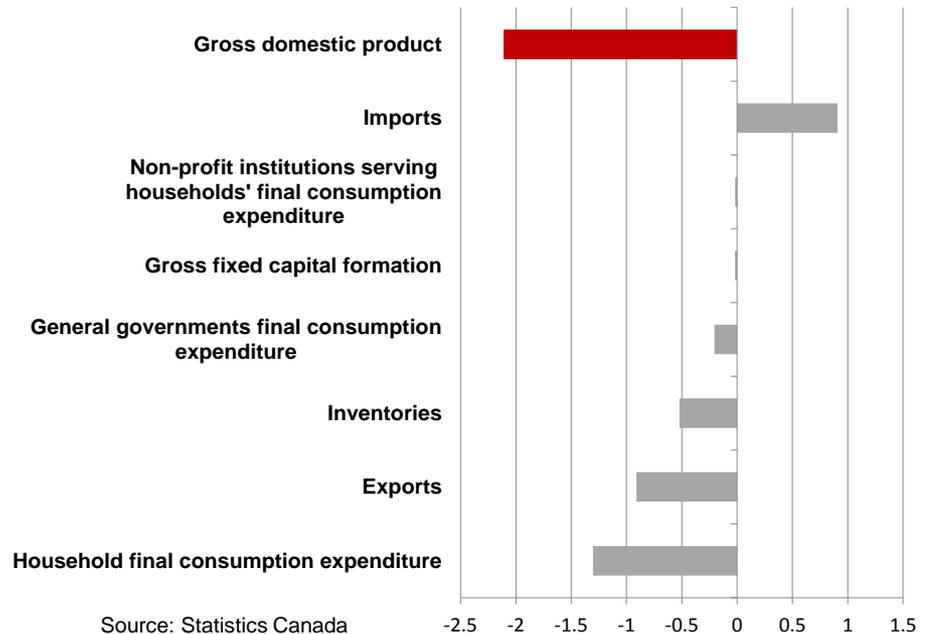
April Likely Apex of Decline

Canada Real GDP



Source: Statistics Canada

Contributions to percentage change in Real GDP Q1/20

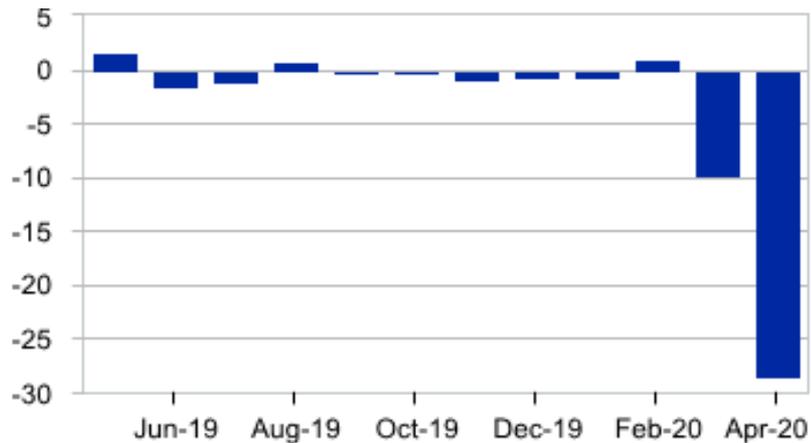


Canada Manufacturing Challenged!

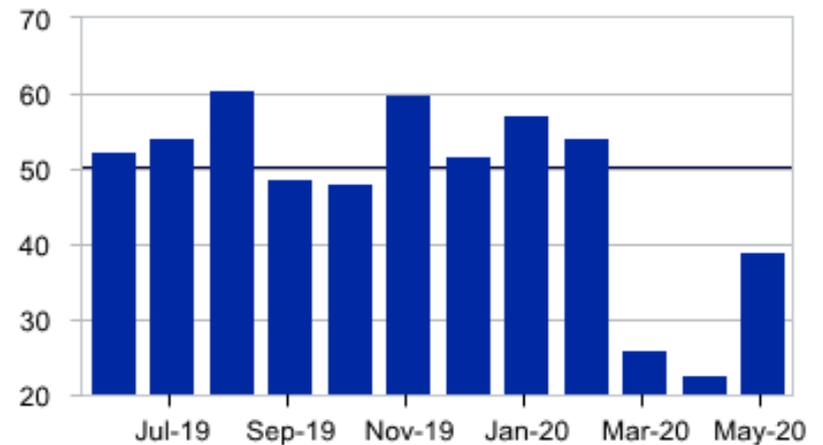
Supply Chain Disruptions and Plants Closed

Opening Up Started But Will Take Time as New Protocols Kick In

Canada Manufacturing Shipments % change



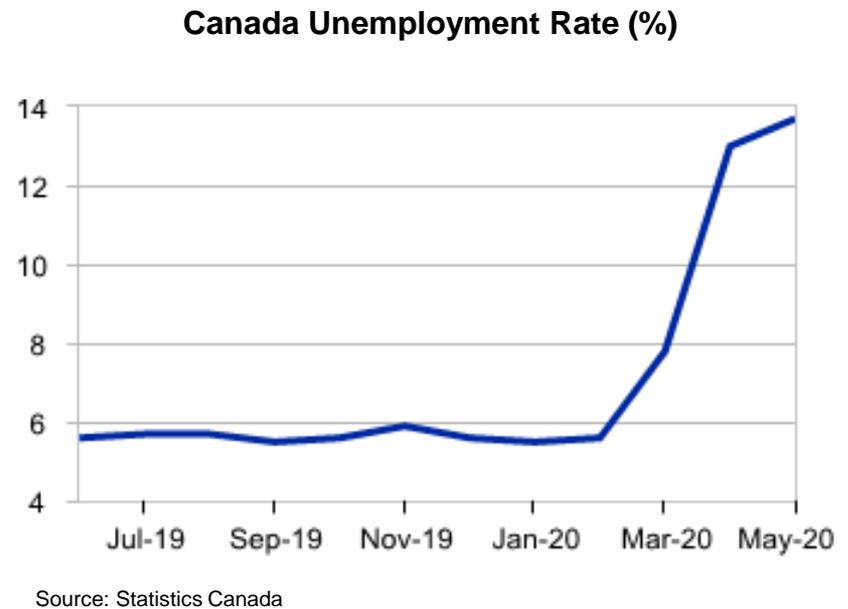
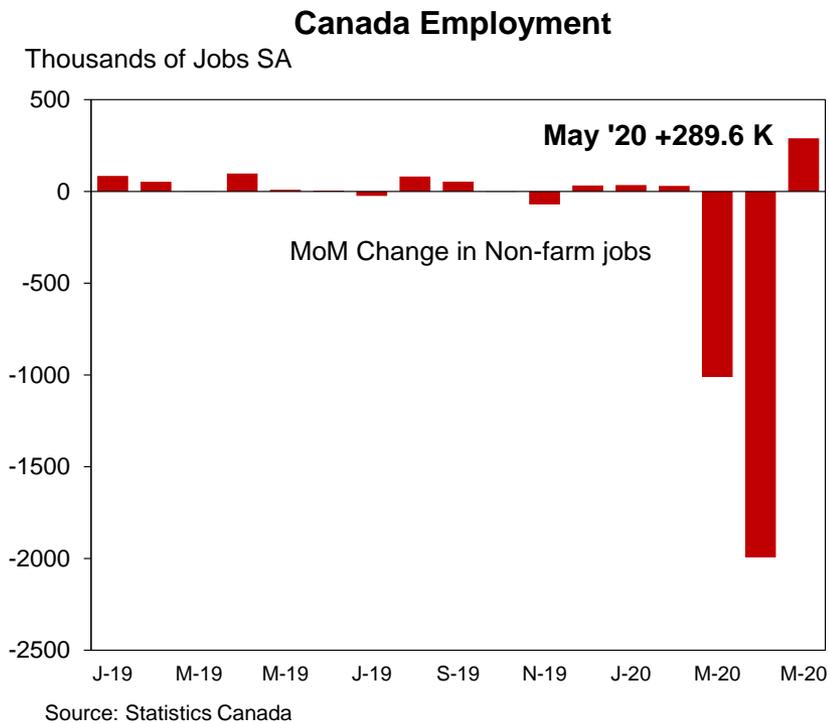
IVEY Purchasing Managers Index



March/April Job Losses Mount as Lockdowns Took Effect

Will Take 2-plus Years for Unemployment Rate to Return to Pre-COVID Level

Some Permanent Job Loss Will Have Occurred

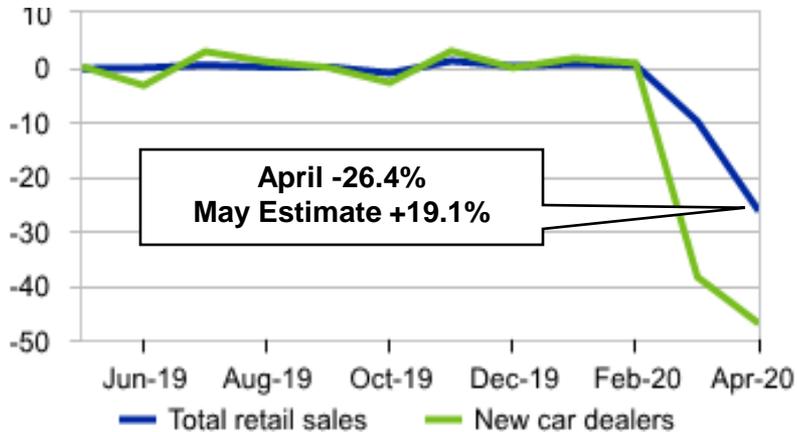


Consumer Confidence Will Be Key to Recovery

Household Debt to Income Ratio at Record High

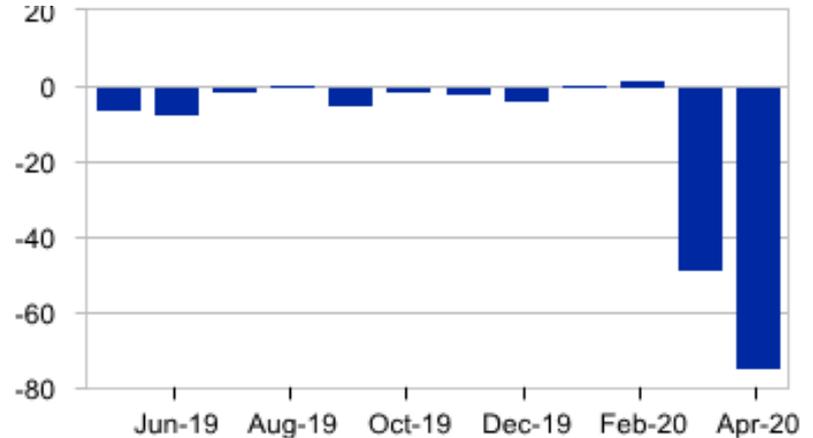
Q1 176.9%

**Canada Retail Sales
% change**



Source: Statistics Canada

**Canada New Motor Vehicle Sales
% change yr ago**

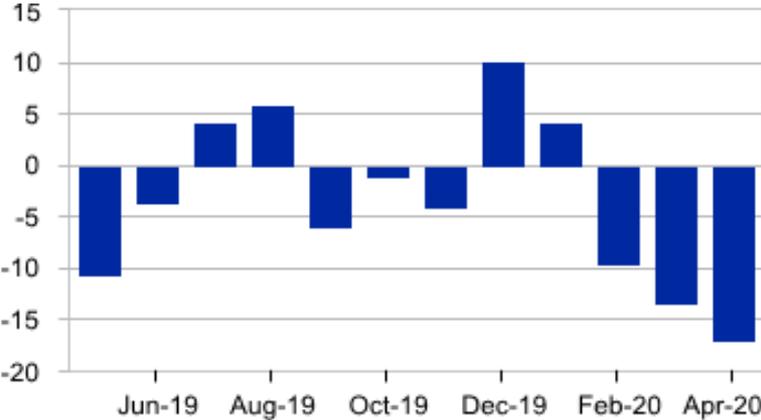


Source: Statistics Canada

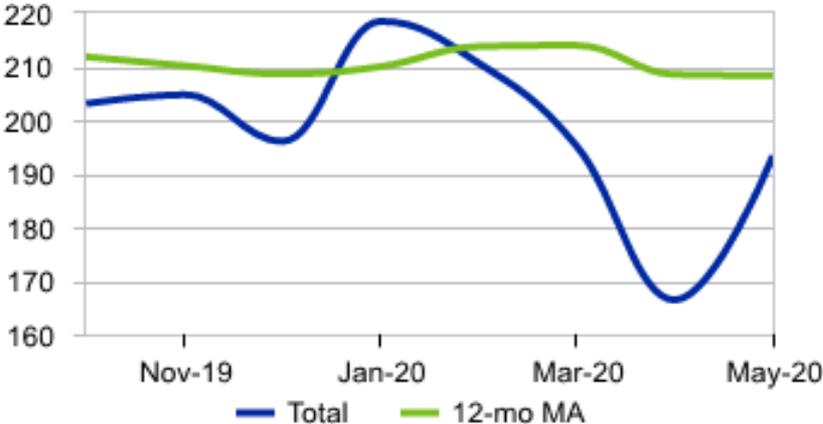
Housing Was Solid

but Non-Residential Investment Lacked Conviction
Uncertainties Damage Business Confidence
All Capital Investment Now on Hold
Construction Now Back in Business / Housing Starts Pick up

Canada Building Permits Value
% change



Canada Housing Starts
Ths, SAAR



Pandemic Hits Quebec, Ontario, B.C. & Alberta Hard Resource Regions Under Pressure Need Route to Tidal Water

Real GDP

	2015	2016	2017	2018	2019	2020	2021
CANADA	0.7	1.0	3.2	2.0	1.7	-6.0	5.5
B.C.	3.3	3.5	3.8	2.6	2.8	-5.0	6.0
ALBERTA	-3.6	-3.7	4.4	1.6	-0.6	-7.0	6.0
SASKATCHEWAN	-1.3	-0.5	2.2	1.3	-0.8	-6.0	5.3
MANITOBA	2.2	2.2	3.2	1.3	1.0	-4.7	5.5
ONTARIO	2.5	2.6	2.8	2.2	1.9	-6.0	5.7
QUEBEC	1.2	1.4	2.8	2.5	2.8	-6.3	5.8
NEW BRUNSWICK	2.3	1.2	1.8	0.8	1.0	-3.2	4.5
NOVA SCOTIA	1.0	0.8	1.5	1.5	2.1	-3.8	4.7
PEI	1.3	2.3	3.5	2.6	4.5	-3.0	4.5
NEWFOUNDLAND	-2.0	1.9	0.9	-3.5	4.0	-7.5	5.5