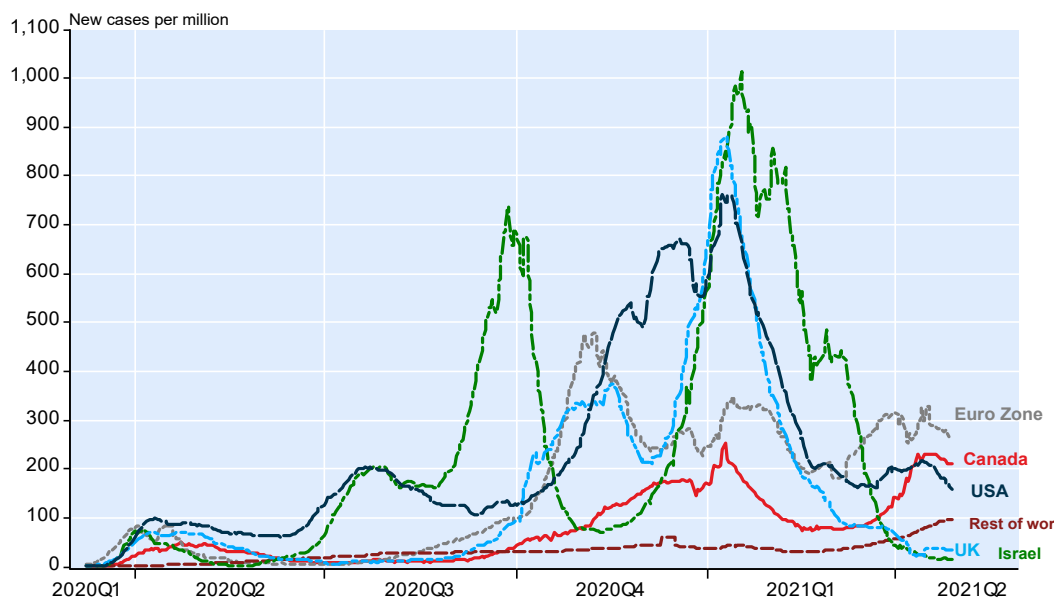


April 29, 2021

This monitor provides daily updates on the evolution of COVID-19 in selected countries using data available as of 8:00am EDT (graphs 1-9). We also track the progression of vaccines around the world (graphs 10-13), monitor the stringency of policy related to containment restrictions and public information campaigns (graph 14), monitor the reopening of economies (graph 15-16), and offer an update of our financial conditions index for Canada (graph 17).

1. World: Evolution of the pandemic

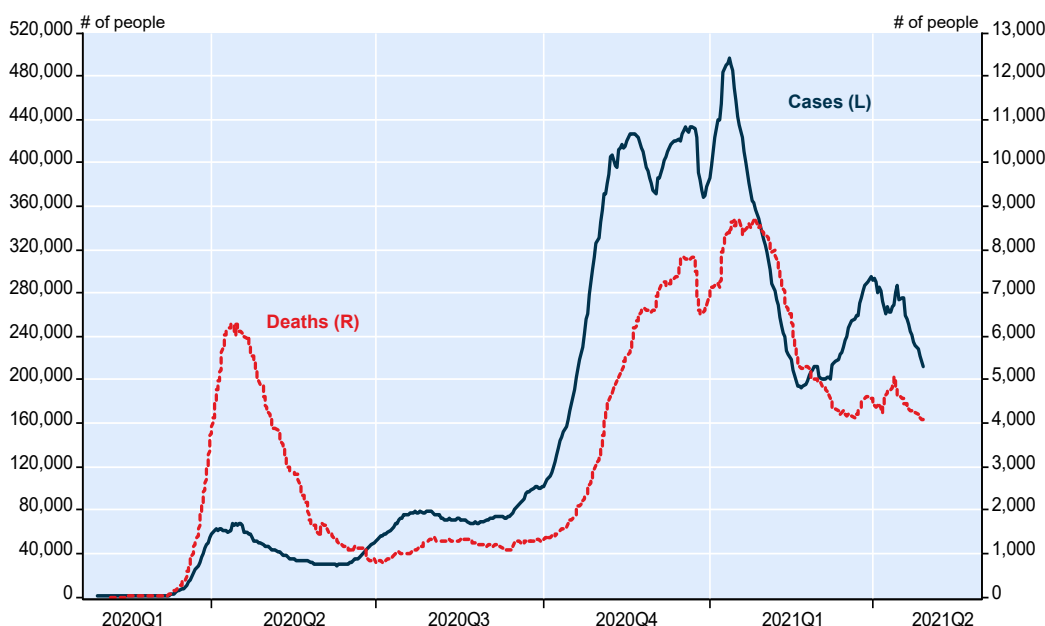
Daily new cases per million population by region, 7-day mov. average



NBF Economics and Strategy (data via Johns Hopkins CSSE)

2. Developed countries: Perspective on COVID-19 cases and deaths

New cases and new deaths in Europe and North America, 7-day mov. average



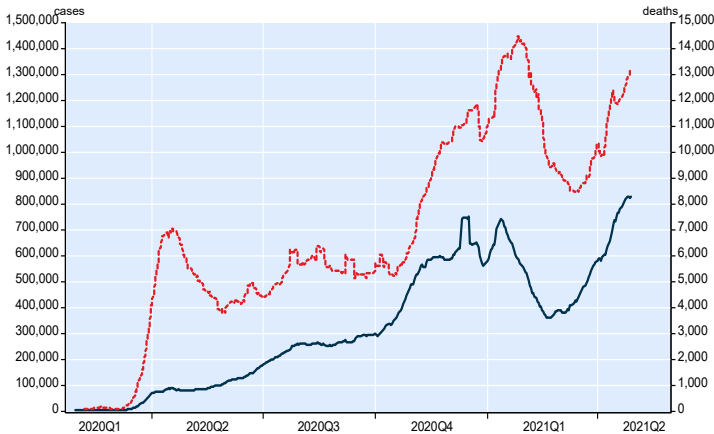
NBF Economics and Strategy (data via Johns Hopkins CSSE)

3. Evolution of the COVID-19 pandemic, selected countries

Daily change in cases and in deaths, 7 day moving average (data via Johns Hopkins CSSE)

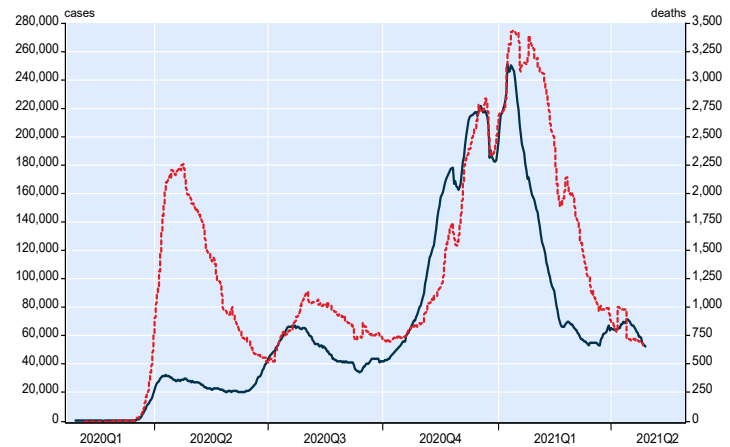
■ New cases (left axis) ■ New deaths (right axis)

World



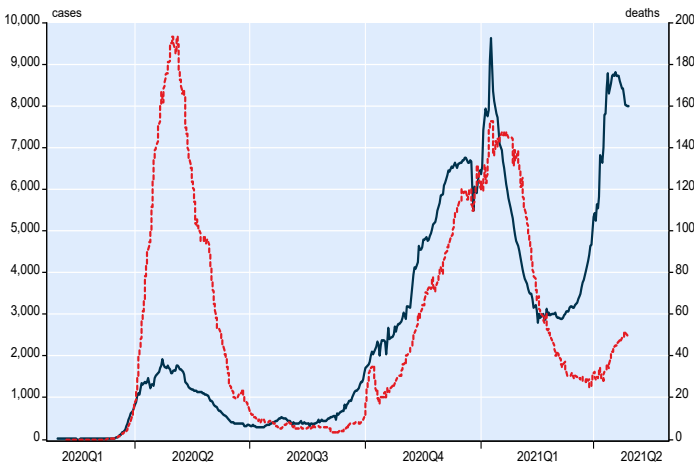
NBF Economics and Strategy (data via Johns Hopkins CSSE, Public Health Canada, INSPQ)

United States



NBF Economics and Strategy

Canada



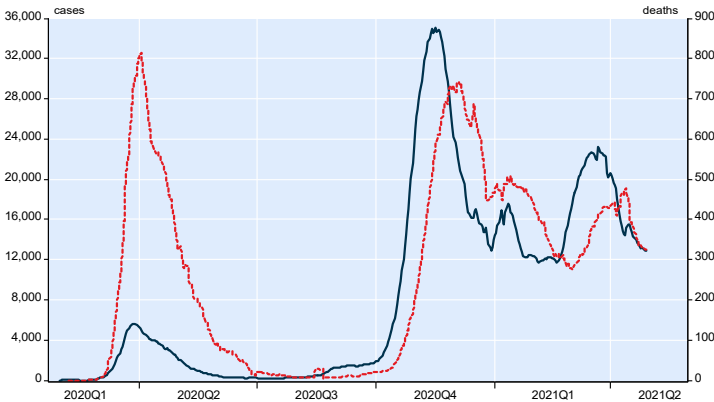
NBF Economics and Strategy

Germany



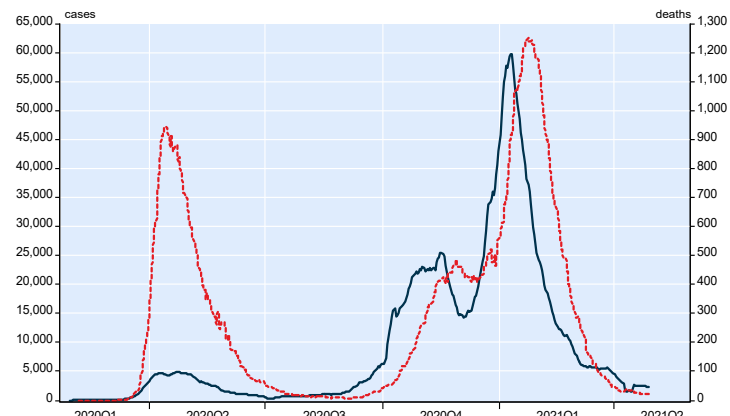
NBF Economics and Strategy

Italy



NBF Economics and Strategy

United Kingdom

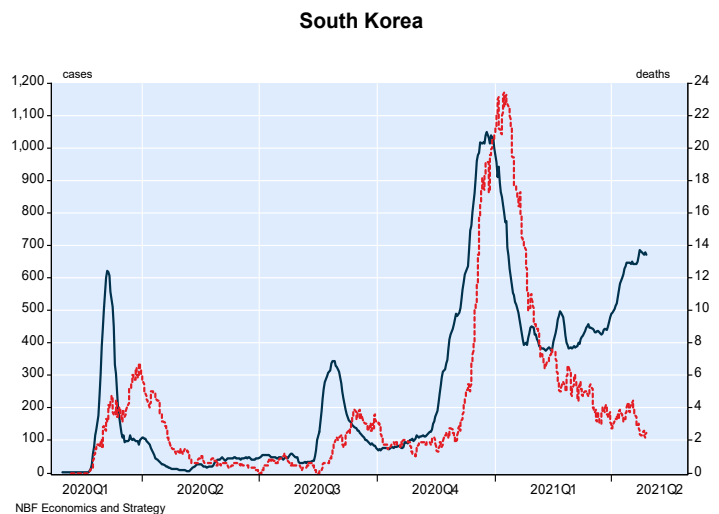
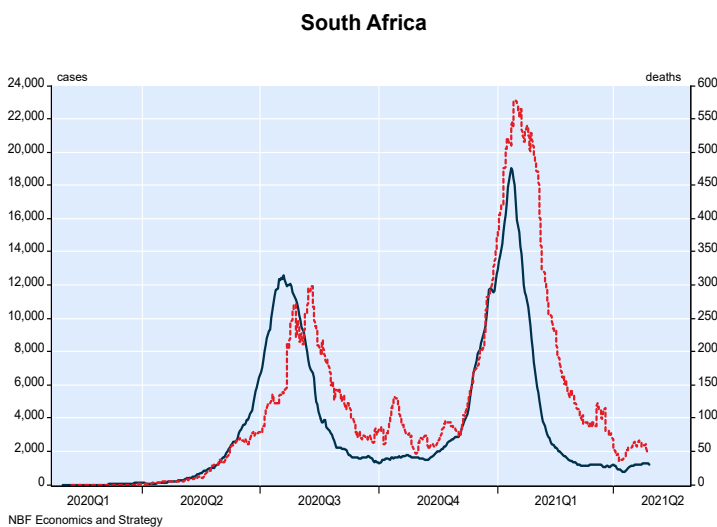
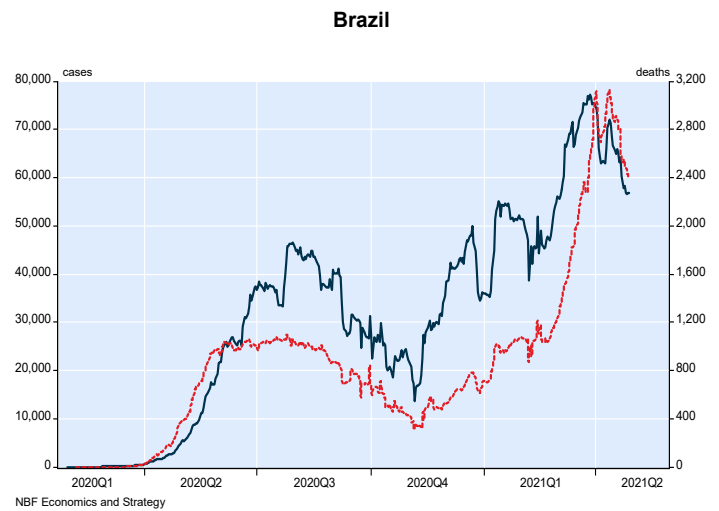
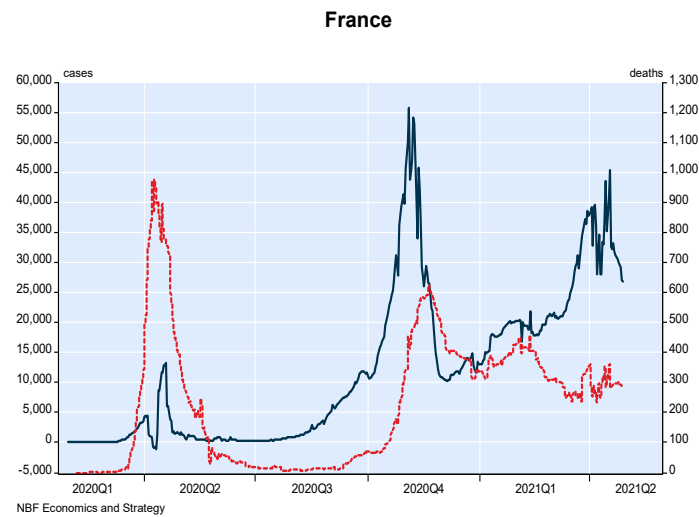
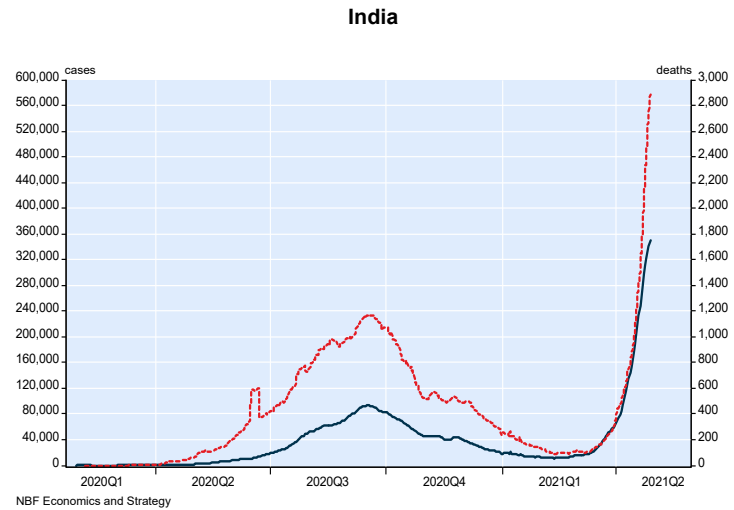
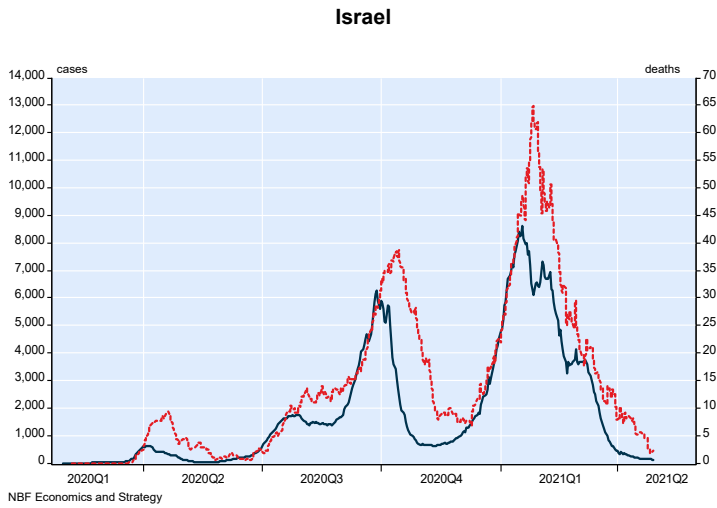


NBF Economics and Strategy

3. Evolution of the COVID-19 pandemic, selected countries (continued)

Daily change in cases and in deaths (data via Johns Hopkins CSSE)

■ New cases (left axis) ■ New deaths (right axis)



4. World, cases per million population

	Total cases per million population since start of the pandemic	Average new daily cases per million population						7 days vs 28 days trend
		Q2 2020	Q3 2020	Q4 2020	Q1 2021	Last 28 days	Last 7 days	
Turkey	56 946	24.3	15.3	246.2	144.0	613.8	521.3	↓
Sweden	95 108	68.6	26.8	370.8	399.5	550.4	511.8	↓
Netherlands	86 642	24.2	44.8	429.9	307.6	436.0	460.2	↑
France	84 772	23.9	63.7	340.1	334.1	498.9	410.4	↓
Columbia	56 112	21.2	158.0	175.6	168.5	296.7	350.0	↑
Bolivia	83 228	100.5	305.8	74.5	343.8	290.0	345.8	↑
Chile	62 488	160.4	105.3	83.7	226.6	355.7	323.1	↓
Belgium	85 186	46.1	53.5	497.4	224.3	311.1	282.1	↓
Brazil	68 805	72.2	174.3	147.6	265.2	300.0	269.7	↓
India	13 449	4.7	45.1	31.5	15.5	160.9	255.7	↑
Germany	40 313	16.2	12.6	191.0	142.4	223.7	246.2	↑
Ukraine	47 782	11.1	41.8	215.6	161.1	306.1	242.2	↓
Switzerland	76 368	19.2	27.1	504.8	191.5	228.4	231.9	↑
Austria	68 622	9.3	32.6	383.6	228.0	272.3	230.1	↓
Italy	65 977	24.5	13.4	321.7	269.8	241.8	212.3	↓
Canada	31 862	28.3	15.8	121.1	117.0	208.7	210.0	↑
Spain	74 990	36.0	120.9	269.6	324.0	168.5	179.5	↑
United States	97 827	81.9	152.6	420.5	351.1	191.7	159.9	↓
Ecuador	21 737	34.3	50.4	47.2	74.3	100.5	121.8	↑
Denmark	43 275	18.8	28.6	255.1	129.3	118.7	121.7	↑
Norway	20 851	8.6	10.3	71.8	95.3	106.7	80.2	↓
Portugal	81 710	37.4	35.6	359.4	447.7	48.3	46.2	↓
Finland	15 619	11.5	5.4	51.3	82.7	57.8	41.5	↓
Japan	4 577	1.4	5.6	13.0	20.9	29.8	37.0	↑
United Kingdom	64 988	39.7	27.1	325.9	306.7	34.7	33.9	↓
Mexico	18 318	19.3	44.0	58.2	71.1	27.5	23.7	↓
South Africa	26 955	27.8	95.9	71.1	93.9	18.5	20.8	↑
Indonesia	6 123	2.2	9.3	18.3	31.6	19.2	19.2	↑
Israel	98 406	25.2	276.6	224.4	539.9	21.9	13.9	↓
South Korea	2 369	0.7	2.3	8.0	9.1	12.3	13.1	↑
Australia	1 181	1.5	8.2	0.6	0.4	0.6	1.0	↑
China	71	0.0	0.0	0.0	0.0	0.0	0.0	↓

Data via Johns Hopkins CSSE

5. World, deaths per million population

	Total deaths per million population since start of the pandemic	Average new daily deaths per million population						7 days vs 28 days trend
		Q2 2020	Q3 2020	Q4 2020	Q1 2021	Last 28 days	Last 7 days	
Brazil	1872	3.1	4.3	2.6	6.5	13.0	11.3	↓
Columbia	1435	0.7	4.9	3.7	4.5	6.6	8.9	↑
Ukraine	1017	0.3	0.8	3.7	3.8	8.7	8.6	↓
Ecuador	1058	2.8	4.3	1.7	1.8	3.3	5.5	↑
Chile	1373	3.3	4.0	2.2	3.8	5.5	5.4	↓
Italy	1980	4.1	0.2	6.9	6.4	6.4	5.3	↓
Bolivia	2336	2.2	13.5	2.4	6.2	4.3	4.9	↑
France	1580	4.4	0.3	5.4	5.3	4.5	4.4	↓
Turkey	468	0.6	0.4	1.7	1.4	3.4	4.1	↑
Belgium	2089	8.6	0.3	9.0	3.3	3.5	3.4	↓
Germany	986	1.1	0.1	3.2	5.7	2.6	2.8	↑
Mexico	1690	2.4	4.2	4.1	6.8	3.6	2.6	↓
Austria	1131	0.7	0.1	6.6	3.9	3.2	2.5	↓
India	147	0.1	0.6	0.4	0.1	1.1	2.1	↑
United States	1740	4.1	2.6	4.6	6.8	2.4	2.1	↓
Sweden	1383	5.6	0.4	3.1	5.2	1.9	1.9	↑
Spain	1666	4.7	0.8	4.4	5.9	1.9	1.8	↓
Canada	633	2.5	0.2	1.8	2.1	1.1	1.3	↑
Switzerland	1233	1.9	0.1	7.0	3.5	1.2	1.2	↑
Netherlands	1000	3.3	0.2	3.2	3.3	1.2	1.0	↓
South Africa	926	0.5	2.6	2.2	4.7	0.9	0.8	↓
Indonesia	166	0.1	0.3	0.5	0.8	0.6	0.6	↑
Norway	137	0.4	0.0	0.3	0.5	0.5	0.5	↓
Denmark	429	1.0	0.1	1.2	2.2	0.4	0.4	↑
Japan	79	0.1	0.1	0.1	0.5	0.3	0.4	↑
United Kingdom	1877	6.1	0.3	5.0	8.8	0.4	0.3	↓
Finland	164	0.6	0.0	0.4	0.5	0.4	0.3	↓
Portugal	1659	1.5	0.4	5.2	10.9	0.4	0.3	↓
Israel	746	0.4	1.6	2.2	3.8	0.6	0.3	↓
South Korea	36	0.0	0.0	0.1	0.2	0.1	0.0	↓
Australia	36	0.0	0.3	0.0	0.0	0.0	0.0	↓
China	3	0.0	0.0	0.0	0.0	0.0	0.0	↓

Data via Johns Hopkins CSSE

6. Canada, cases per million population

	Total cases per million population since start of the pandemic	Average new daily cases per million population						7 days vs 28 days trend
		Q2 2020	Q3 2020	Q4 2020	Q1 2021	Last 28 days	Last 7 days	
Alberta	41 801	18.5	24.5	202.5	119.5	309.7	369.9	↑
Ontario	31 206	26.1	12.6	97.6	125.6	259.8	262.5	↑
Saskatchewan	34 276	5.6	10.4	123.9	172.1	212.8	209.8	↓
British Columbia	24 680	4.1	13.2	90.5	102.7	193.2	170.3	↓
Manitoba	27 569	1.8	13.2	178.9	76.2	105.9	163.5	↑
Quebec	40 421	66.0	24.0	162.7	140.8	152.4	121.5	↓
Nova Scotia	2 262	10.3	0.3	4.4	2.6	20.9	63.3	↑
New Brunswick	2 408	1.3	0.5	5.5	14.4	12.7	15.7	↑
Newfoundland	2 034	2.3	0.3	2.4	13.5	3.2	4.7	↑
Prince Edward Island	1 109	0.4	2.2	2.4	4.6	4.0	2.7	↓

Data via Johns Hopkins CSSE

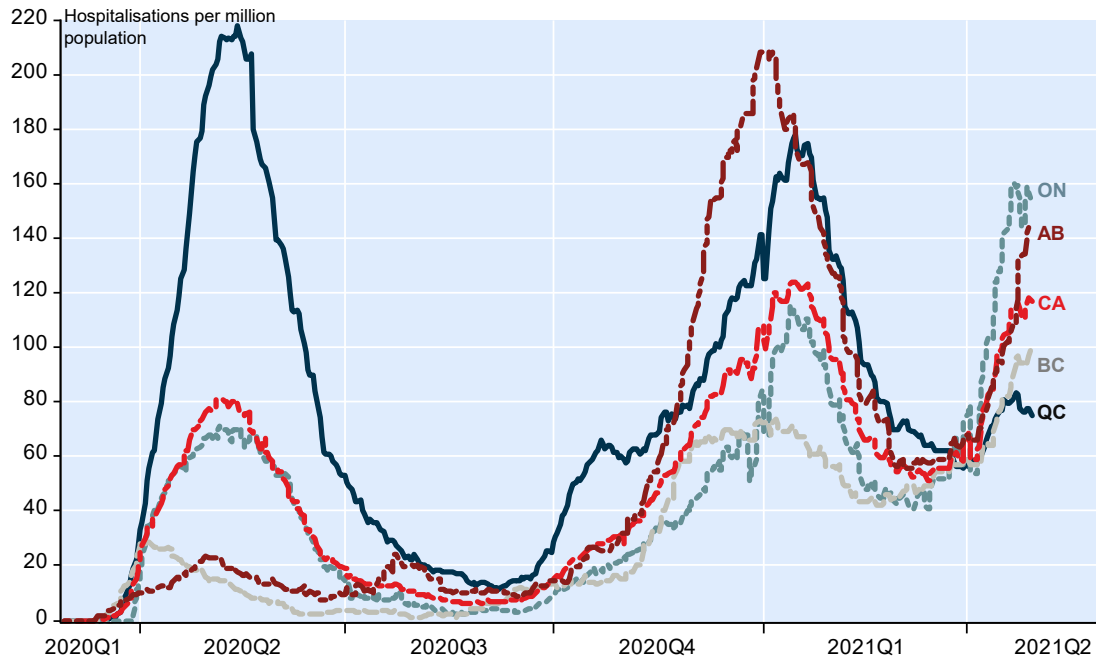
7. United States, cases per million population

	Total cases per million population since start of the pandemic	Average new daily cases per million population						7 days vs 28 days trend
		Q2 2020	Q3 2020	Q4 2020	Q1 2021	Last 28 days	Last 7 days	
Michigan	0	69.1	73.2	425.1	237.0	664.4	469.3	↓
Pennsylvania	0	74.0	61.9	408.6	331.4	330.2	265.9	↓
Florida	0	74.5	280.4	312.2	381.4	276.4	258.3	↓
New York	0	179.4	36.4	289.0	512.1	318.2	218.9	↓
Illinois	0	119.0	130.8	572.7	247.0	238.5	214.8	↓
Massachusetts	0	150.7	43.6	383.3	420.4	268.3	200.4	↓
North Carolina	0	68.8	148.6	340.9	399.2	177.8	192.5	↑
Washington	0	39.5	78.1	224.5	171.9	166.3	189.2	↑
Virginia	0	82.8	125.1	344.8	427.0	206.8	166.5	↓
Maryland	0	119.8	102.8	273.2	247.8	206.6	166.2	↓
Tennessee	0	66.2	242.9	621.8	368.1	175.8	153.0	↓
Indiana	0	70.9	120.2	632.0	290.3	165.5	144.4	↓
Georgia	0	80.1	242.4	356.7	414.1	126.9	127.9	↑
Ohio	0	46.6	95.0	508.1	303.0	158.4	125.0	↓
Wisconsin	0	51.4	174.8	743.3	221.7	138.0	112.0	↓
Arizona	0	117.7	208.0	450.5	495.3	93.4	101.2	↑
Missouri	0	36.3	185.8	490.0	256.7	44.6	101.0	↑
Texas	0	60.4	228.7	370.6	394.0	114.8	97.4	↓
California	0	62.1	161.7	404.9	381.2	64.1	48.0	↓
New Jersey	0	189.3	41.1	333.0	475.8	346.7	34.6	↓

Data via Johns Hopkins CSSE

8. Canada: Current hospitalisations related to COVID-19

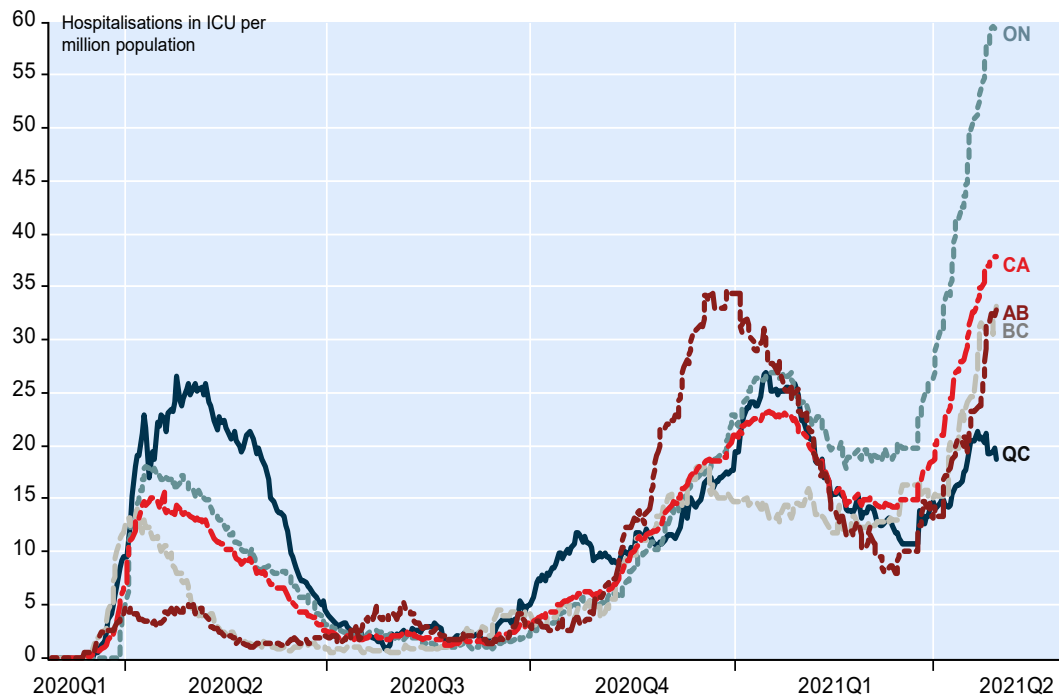
Hospitalisations per million population



NBF Economics and Strategy (data via INSPQ, Radio Canada <https://ici.radio-canada.ca/info/2020/coronavirus-covid-19-pandemie-cas-carte-maladie-symptomes-propagation/>)

9. Canada: Current hospitalisations in ICU related to COVID-19

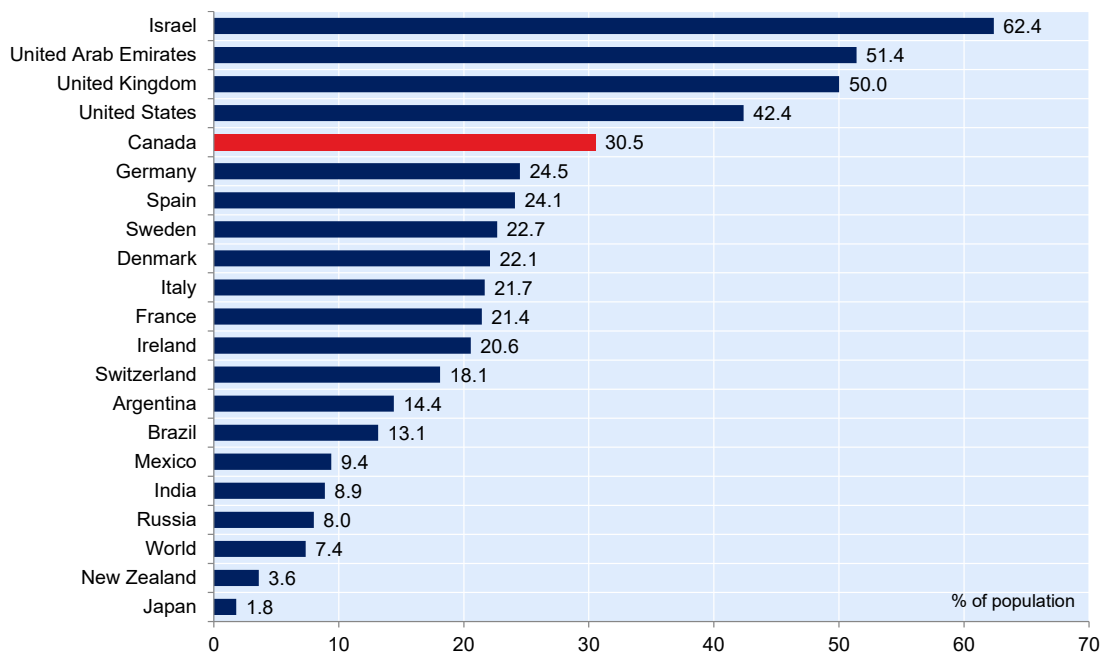
Hospitalisations in ICU per million population



NBF Economics and Strategy (data via INSPQ, Radio Canada <https://ici.radio-canada.ca/info/2020/coronavirus-covid-19-pandemie-cas-carte-maladie-symptomes-propagation/>)

10. World: Perspective on vaccine rollout (1)

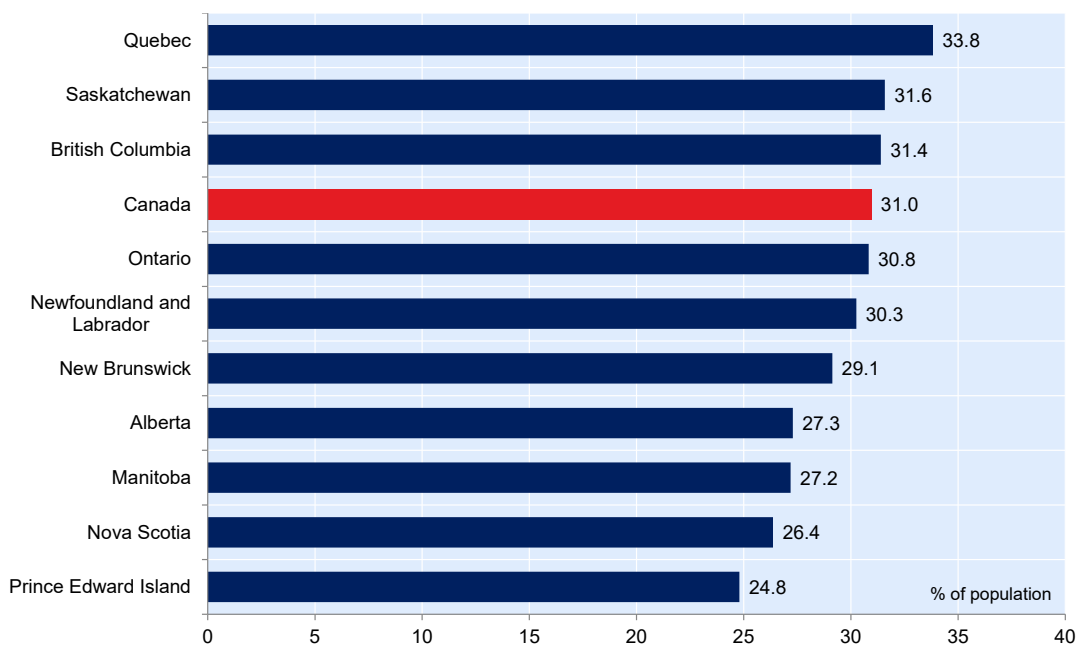
Share of population having received at least one dose of COVID-19 vaccine



NBF Economics and Strategy (data via <https://ourworldindata.org/covid-vaccinations>)

11. Canada: Perspective on vaccine rollout

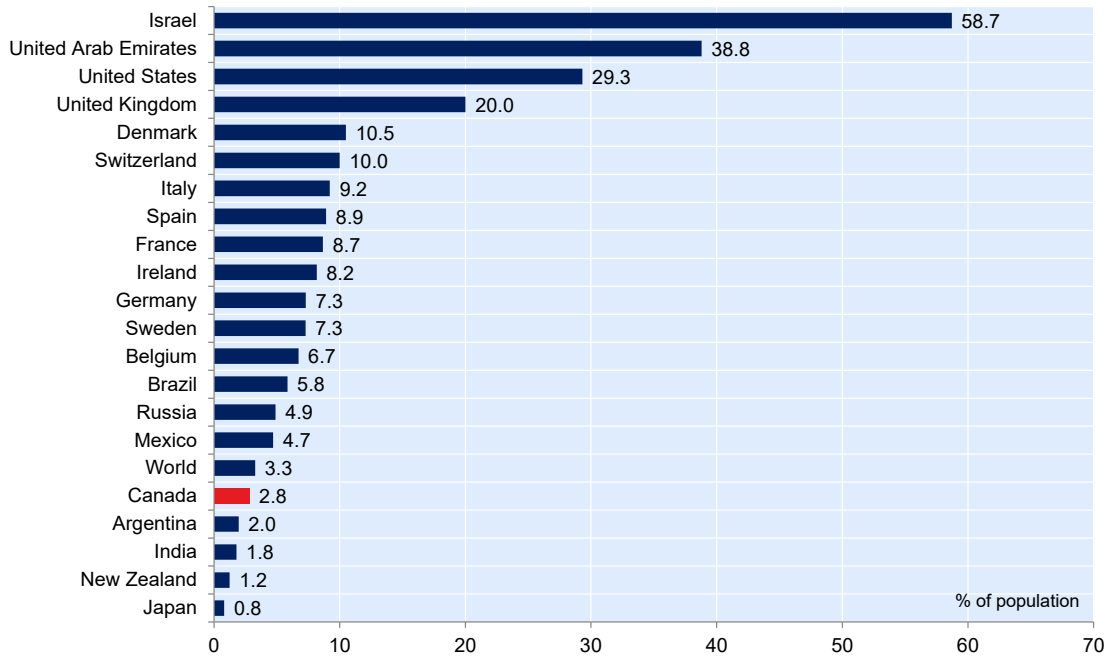
Share of population having received at least one dose of COVID-19 vaccine



NBF Economics and Strategy (data via <https://covid19tracker.ca/vaccinationtracker.html>)

12. World: Perspective on vaccine rollout (2)

Share of population fully vaccinated against COVID-19



NBF Economics and Strategy (data via <https://ourworldindata.org/covid-vaccinations>)

13. Average age of people seriously ill with Covid in Israel's hospitals

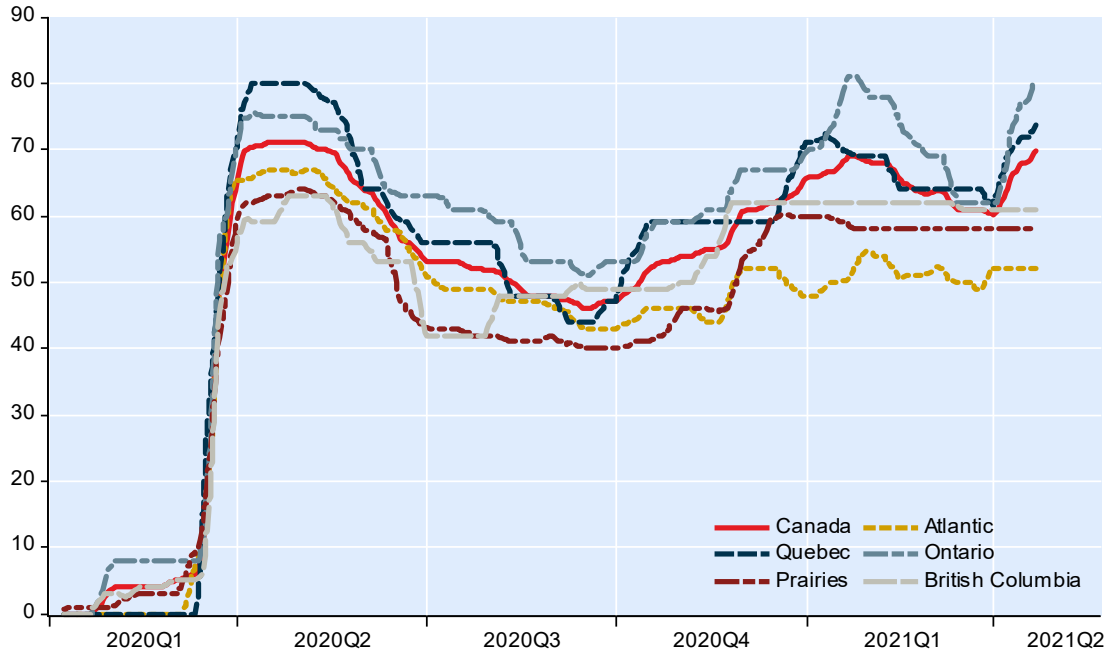
Average age of people hospitalised with severe cases of Covid-19, 7-day moving average



NBF Economics and Strategy (data via <https://data.gov.il/dataset/covid-19>)

14. Canada: Covid-19 stringency index

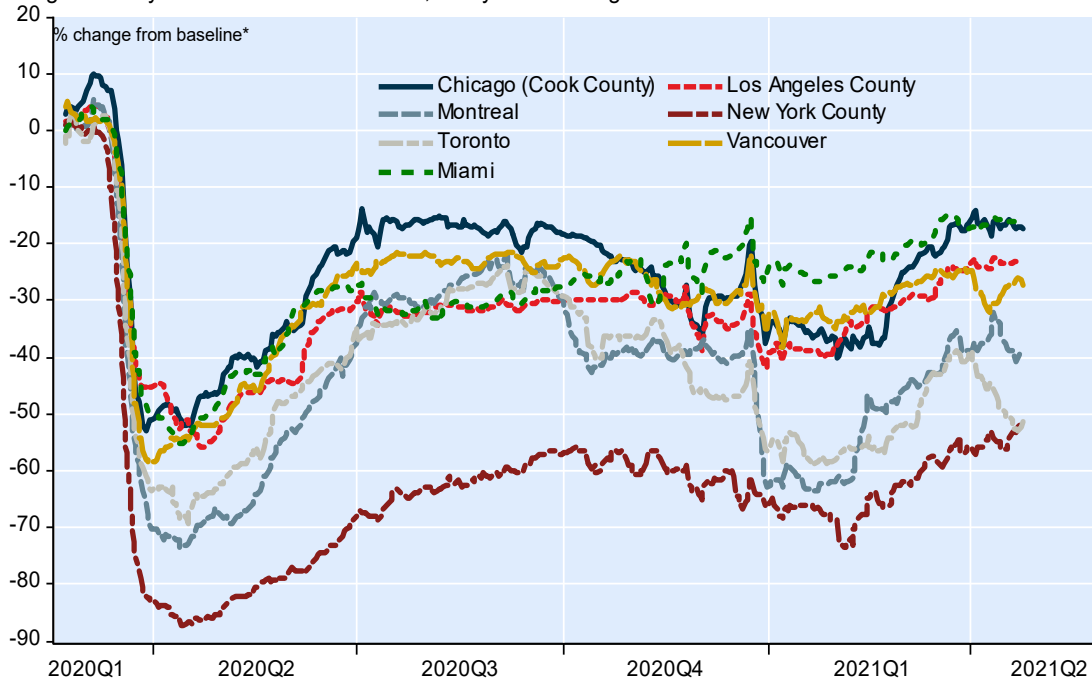
Stringency of policy related to containment restrictions and public information campaigns, 7-day mov. average



NBF Economics and Strategy (data via Bank of Canada)

15. Canada and United States*: Back to normal index

Google mobility data for retail & recreation, 7-day mov. average



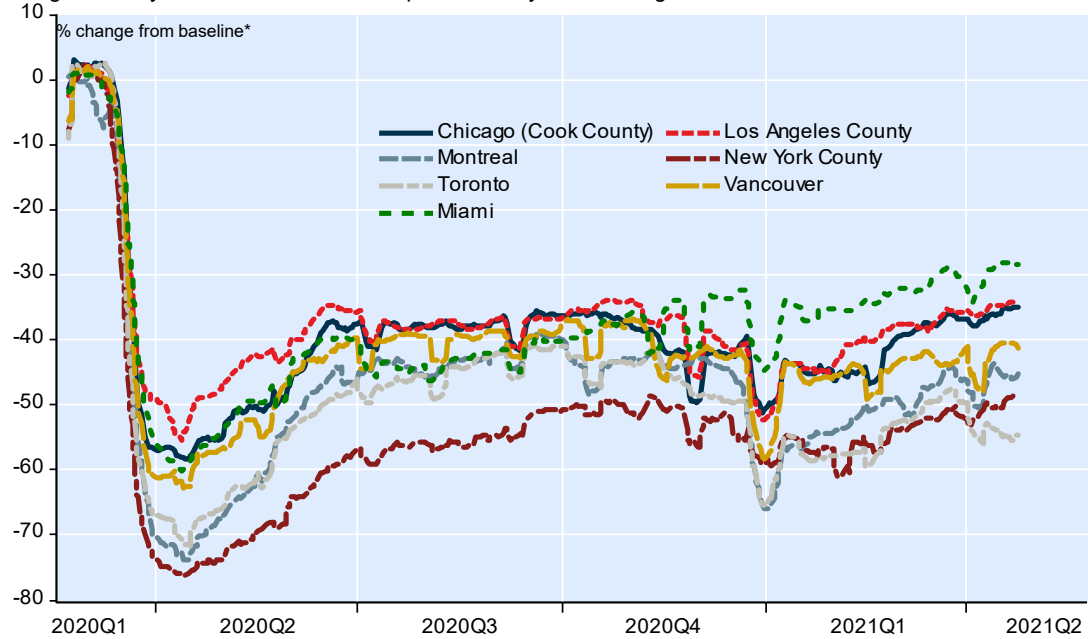
* 3 biggest cities of Canada and United States and Miami

**The baseline is the median value of the corresponding day of the week during the 5 week period from January 3 to February 6 2020

NBF Economics and Strategy (data via Google)

16. Canada and United States*: Back to normal index (2)

Google mobility data for transit and workplaces, 7-day mov. average



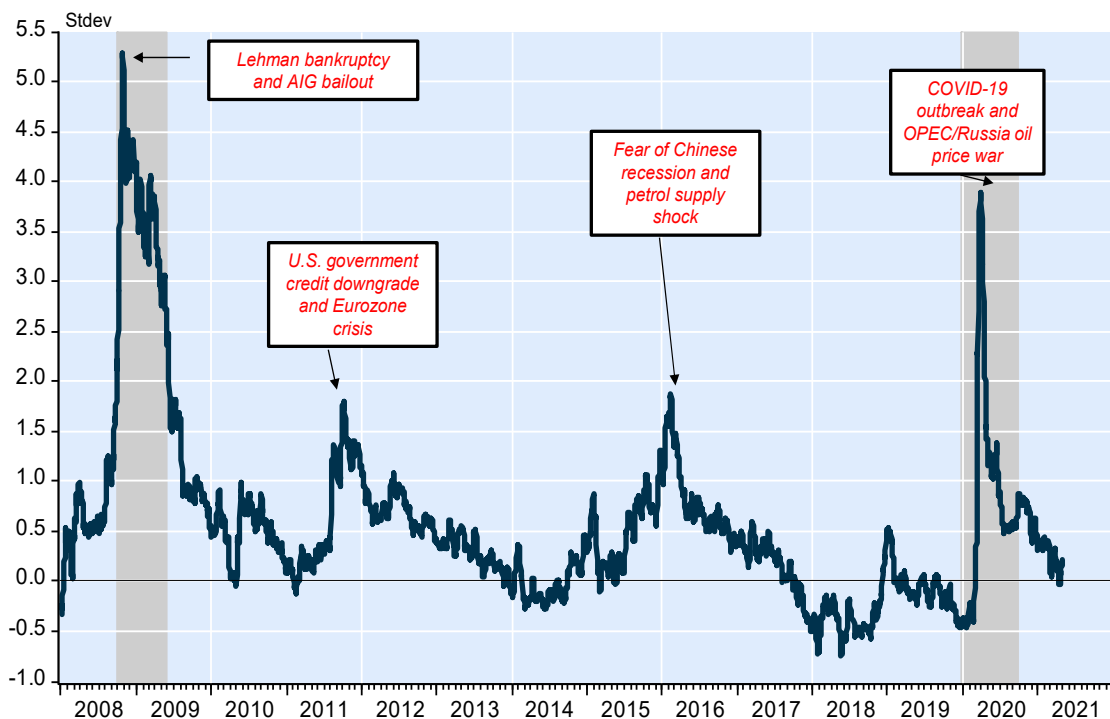
* 3 biggest cities of Canada and United States and Miami

**The baseline is the median value of the corresponding day of the week during the 5 week period from January 3 to February 6 2020

NBF Economics and Strategy (data via Google)

17. Canada: Perspective on financial stress

NBF financial stress index



NBF Economics and Strategy (data via Bloomberg and Refinitiv)

Our Canadian financial stress index (FSI) covers several asset classes. It emphasizes the financial sector, given its role in allocating capital to households and businesses. Our composite index is constructed based on a factor analysis model detecting common variations of normalized indicators. See below the variables included in the FSI.

NBF Financial Stress Index for Canada

Variables	Estimation
Beta S&P/TSX financials	$\beta = \text{cov}(r,m)/\text{var}(m)$ calculated daily over a rolling 1- year time horizon, where r = daily percentage change in the S&P/TSX Financials Total Returns Index. m = daily percentage change in the S&P/TSX Total Returns Index.
Financials bond yield spread	Approximated by the AA-rated long-term corporate bond yield, of which most constituents are financial issuers, minus the 10-year Canadian government bond yield.
S&P/TSX equity risk premium proxy	The S&P/TSX 12-month forward earnings divided by the price of the index minus the 10-year Canadian government bond yield.
S&P/TSX historical 1-month volatility	1-month historical volatility of the S&P/TSX.
USD/CAD historical 1-month volatility	1-month historical volatility of the USD/CAD exchange rate.
BBB rated corporate bond yield spread	BBB rated long-term corporate bond yield minus the 10-year Canadian government bond yield.
Provincial spread	Long-term provincial government bond yield minus the 10-year Canadian government bond yield.

Source: NBF Economics and Strategy (data via Bloomberg and Refinitiv)

Economics and Strategy

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General

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