TD Economics



Dollars and Sense: Adopting A Risk Management Approach On Policy

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Highlights

- A swifter path for the economic recovery is expected to lead the Federal Reserve and the Bank of Canada to begin to raise the policy rate before the end of 2022. This marks a significant divergence in view from the Federal Reserve's median dot plot.
- Monetary policy is a blunt tool that works in the aggregate and central bankers will have difficulty fine-tuning it to achieve a goldilocks outcome in the labor market. That responsibility will rest with government policies. As 2022 unfolds, we expect central bank communication to tilt towards a risk management lens of leaving rates too low for too long.
- The Bank of Canada has been more proactive than the Federal Reserve in fine-tuning its communication and asset purchases, setting the stage for a potential rate hike in 2022.

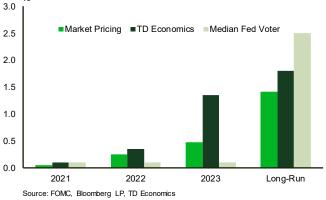
Recent U.S. economic data are serially exceeding expectations. From the ISM manufacturing and service data that reveal not just resilience but power, to households that reflect a strong appetite to spend their government stimulus checks, to employment gains that signal more of the same is to come in the months ahead. The determination of the U.S. economic rebound cannot be denied – a sentiment echoed by Federal Reserve Chair, Jay Powell, when he stated that the economy is "at an inflection point." With fiscal stimulus in place and vaccine supply to soon outstrip demand, the U.S. economy is rapidly absorbing any remaining slack. In the months ahead, evidence will mount to support the reflation narrative, prompting Fed

members to adjust their forward guidance to signal an earlier rate hike cycle and an end to Quantitative Easing (QE).

Rate hikes: the horizon is coming into focus

In the Federal Reserve's recent Summary of Economic Projections, members dramatically upgraded their employment and inflation outlook. The median voter now sees the unemployment rate dropping below the estimate of full employment in 2022. Core PCE inflation is also expected to accelerate above 2% this year and remain at or above that level for the next few years. Effectively, the Fed will have met its broad policy mandate at least a year earlier than it previously predicted. This should align to a pull-forward in FOMC expectations for rate hikes.

Chart 1: Expect Earlier Rate Hikes than what the Fed is Signalling



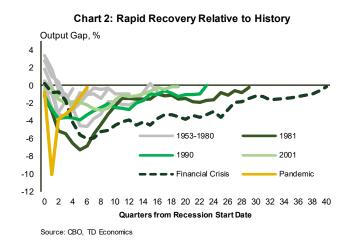




Although the median voter still shows no hikes through 2023 (Chart 1), the individual voting card reveals a growing number expecting earlier rate hikes. Seven FOMC members expect rate hikes in 2023 and four are now expecting the first hike to occur in 2022. Previously only one member stood in the 2022 camp. With respect to how high rates can get, Fed members have been steadfast in believing that the policy rate will eventually end up between 2% and 3%.

Market participants aren't quite buying what the Federal Reserve is selling and are preparing for an earlier exit from the zero-policy stance. As of writing, the first step forward is priced to start in early-2023, with the policy rate eventually peaking at 1.4% ten years from now. In other words, market pricing is more optimistic than the Fed on the start of rate hikes, but less optimistic with respect to the endpoint.

We share the view of the market rather than the Federal Reserve, with the exception that the policy rate endpoint should be roughly 1.85%, or 45 basis points higher than current market pricing. Our near-term view is grounded in a forecast that fully absorbs economic slack by the end of this year, with a recovery shaping up to be one of the quickest in modern history (Chart 2). This is occurring thanks to rising house prices, booming financial market assets, and a strong government safety net. By extension, we expect maximum employment to be reached by the middle of next year and core PCE inflation to move above 2% this quarter and stay there for the next few years. Given its mandate of full employment and average inflation of 2%, the Fed would have a hard time standing still on a zerobound policy rate by the end of 2022, assuming a one year overshoot of inflation offers sufficient convincing evidence.



Pressure Testing the Forecast

Between the inflation and employment mandates of the Federal Reserve, we have greater confidence in our inflation outlook. That's because the Fed has indicated repeatedly that it is attempting to pursue a policy approach that is in greater alignment to inclusive employment outcomes. This presents three risks to the forecast. The first is that there can be broad interpretation of where this threshold of inclusion rests or meets a sufficient condition to trigger a rate hike cycle. The second is that the absorption of workers can occur more slowly than anticipated because businesses prove cautious in rehiring or have learned to adapt with fewer workers. The third, and a highly probable outcome, is that re-hiring occurs in sectors that differ relative to where workers were displaced by the pandemic. This could leave the post-pandemic labor market with a greater number of discouraged or structurally unemployed workers.

Even in this world, it's hard to see the Fed holding the policy rate at the zero bound. We have long been told by central bankers that the policy rate is a blunt tool. It works in the aggregate, but not with surgical precision. Once there's significant progress and critical mass on healing the labor market, the keys should be turned over to government levels to address specific shortcomings through financial aid, training and employment services. For instance, sustaining a zero-policy rate would do little to influence the outcome for a 55-year-old worker who was displaced from the tourism industry. The risk management lens would need to become focused in the other direction. Leaving rates too low for too long fuels excess behavior in other segments of the market (like asset prices) that can put the entire financial and labor market stability at risk. We are already seeing some of this risky behavior becoming rooted in the stock market, and the housing market is the next most highly exposed. So, resetting Wall Street and Main Street expectations created by easy money will eventually take on greater importance, as economic slack dwindles from both the economy and the job market, even if the latter is imperfect.

The Bank of Canada's Forward Guidance Leads the Fed

The Bank of Canada is in the same boat as its U.S. counterpart, but unlike the Fed, they are already prepping the market for an earlier exit from ultra-easy monetary policy settings. Last week, the central bank dramatically upgraded its economic forecast within the Monetary Policy Report. According to the Bank's view, the economy is expected to fully recover from the pandemic, with inflation sustainably at 2%, in the second half of 2022. That is a pull forward from its March statement, when those objectives were not expected to be met until 2023.

Within our March <u>economic forecast</u>, we were already aligned with this upgraded view. Even though Canada's vaccine rollout has not been as aggressive or assured as that of the U.S., the economy has been equal in its display of resilience. The recent headwinds caused by the third wave of COVID-19 infections and government-imposed social restrictions are viewed as a temporary restraint on the economy. Vaccine supply will continue to ramp up in the weeks ahead and the country is expected to have approximately 50% of the population having received at least one vaccine dose before the close of the spring. This certainly won't allow for full normalization of business activity, but we are only looking for forward progress as the minimum criteria.

Given the Canadian economy's display of resilience, it's possible to achieve the elimination of all excess capacity by the start of summer 2022. By that time, measures of core inflation should have stabilized above 2%. This is the point in which the Bank will have to weigh the risk of trying to achieve the goldilocks of full normalization of labor markets relative to fueling excess risk-taking behaviors. We believe the balance of risks will shift the mind-set to the central bank hiking before the end of 2022.

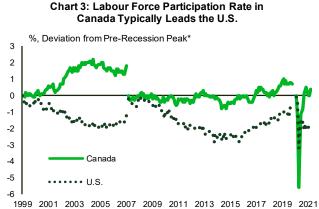
And, if we get the timing wrong, it may be because the Bank will move even more quickly, potentially ahead of the Federal Reserve. Too often our clients believe that the Bank of Canada must 'follow the Fed'. Often this is rooted in the notion that Canada already imports the U.S. yield environment, and that an earlier rate-hike cycle would add fuel to the loonie, choking some growth from the export sector. All true. However, there is precedence for the Bank to move ahead of the Fed or independently. That's because the economies have diverged in recent years in two key areas – housing market risks and the labor market recovery.

The Bank of Canada is in a tough position due to the redhot housing market. Housing demand and prices are soaring, with Canadian's incentivized to take on debt due to low mortgage rates. Although some modest tightening in <u>mortgage qualification</u> is coming down the pipe, it won't be sufficient to meaningfully cool home prices and the pace of mortgage debt accumulation. The most efficient way to slow the build-up in financial imbalances is through the <u>interest rate channel</u>.

However, pursuing a rate hike cycle in the absence of a solid labour market would be risky business. Fortunately, Canada's performance has diverged widely from its U.S. counterpart. Labor market participation rates among the core working age group -25 to 54 – are already 0.4 percentage points above pre-pandemic levels. If not for the latest business closures due to the third virus wave, Canada would likely have returned employment to pre-pandemic levels before the close of the spring months! This is at least seven months ahead of the experience south of the border. We have written previously that Canada's labor market resilience is not an anomaly and has been a key characteristic of the past three recession-recovery cycles (Chart 3). Against this backdrop, one can imagine a situation that gives the Bank of Canada less runway than the Federal Reserve to keep the policy rate at the lower bound, particularly given that the former is already taking proactive action to reduce QE asset purchases.

Addressing the Balance Sheet

A modern case study on adjusting QE policy has come from the Bank of Canada. The Bank has been very nimble with its QE policy, having already ended the purchase of mortgage bonds once the housing market started roaring back last summer. It has also paired back its weekly bond



Source: StatCan, BLS, TD Economics. *24-54 year-olds

purchases twice now. The Bank has been incredibly clear on its policy. It will do QE when it is necessary and be flexible with the rate of buying depending on the evolution of the recovery. Having said that, we think the BoC will signal another reduction of purchases this summer, with an end to purchases (on a net basis) altogether by the end of this year. That would set the backdrop for a shift to focusing on the policy rate as the next step.

If our economic forecast is correct, the Federal Reserve will have to follow the BoC's lead and reconsider the balance sheet in short order. Recall that at the onset of the pandemic, the Fed dusted off and expanded upon its policy playbook from the Global Financial Crisis (GFC). It restarted liquidity programs to ease short-term borrowing constraints and re-launched its QE program to put downward pressure on yields. It also broadened the types of assets it purchased to include risky corporate debt. Furthermore, it cemented itself as the lender of last resort through its Main Street Lending and Paycheck Protection Program. Put another way, it opened up and deployed the war chest.

Despite a robust recovery forming, the Fed is still actively purchasing government bonds and mortgage-backed securities (MBS) at a clip of \$80 billion and \$40 billion a month, respectively. At its March meeting, the Fed was steadfast in noting that it will continue QE until there is "substantial further progress has been made toward the Committee's maximum employment and price stability goals". Given our view that the U.S. economy should return to its potential level of GDP, and that core inflation will be above 2% by the end of this year, we'd call that substantial progress. As such, would it really be necessary for the Fed to keep the policy rate at the zero-bound at that point? The recovery will already be close to completion, offering an opportunity to pivot communication and signal an easing of asset purchases before the end of 2021.

This provides some upside for our yield forecast. The last time the Fed signaled an adjustment to its QE policy in 2013, the UST 10-year yield shot up 132 basis points in just 4 months (also known as the taper tantrum). At the time, the Fed was just hinting of an end to new purchases, it wasn't even debating an unwind of its balance sheet. The point here is that an adjustment to QE policy acts as a strong forward guidance signal and investors will quickly price higher yields as a result. This time around, the 10-year yield has already jumped 122 basis point from the August 2020 low. That is a big move without any signal from the Fed that it will tighten policy. Now we don't expect an additional 100 basis points tacked on once the communication adjustment to QE policy occurs, but some volatility is likely to occur and the UST 10year could reach 2% quicker than previously thought.

What Does This Mean for our Yield Outlook?

Our readers know that the driving force behind the rise in government bond yields over the last eight months has been the rise in inflation expectations and the anticipation of an earlier start to the central bank rate hiking cycle. For the Fed, given our expectation that it will hike at the end of 2022 and eventually get the effective policy rate to 1.85%, the fair value of the UST 10-year yield is around 1.7% to 1.8% today. We see the 10-year rising to our long-term target of 2.5% over the next couple of years, although as we note above, the speed of adjustment is a wild card.

With the UST 10-year yield currently trading around 1.6%, that is just a little lower than our estimate of fair value. When we break down this yield into the path for rates and the term premium, we calculate that just over 40% of the 10-year's yield is due to Fed policy rate path expectations. The rest is investors demanding compensation for the risk that inflation will overshoot and that the Fed may surprise the market with more rate hikes. In other words, investors aren't banking that the Fed will raise rates as high as we think it will, but long-term bond investors want more compensation for this risk.

The story is much the same for Canadian yields. The government of Canada 10-year has closely tracked the UST 10-year over the last few months. At 1.5%, markets are pricing a rate hike cycle starting within the next two years, which is aligned with our view. Given our rate hike path and the BoC eventually expected to return the policy rate to a high of 1.75%, the current fair value of the Canadian 10-year is 1.6% to 1.7%. This value should rise as we move closer to that first rate hike. By the end of this year, we have the Canada 10-year at 2.0% and reaching 2.25% by the end of 2022.

Bottom Line

The economic recovery continues to show incredible resilience. GDP and employment are quickly closing in on their potential. Inflation will follow suit. The Fed is recognizing this upturn in the economy, but has been hesitant to change its tune on its policy stance. Should the recovery continue to unfold as we predict, the balance of risks will shift from a zero-policy rate designed to stoke the recovery, to one that if left unchecked for too long, will fail to mitigate financial and economic risks. And, it's important to note that there are still many unknowns related to the outlook that are not uniquely positioned to the downside anymore. The Biden administration has put forward the American Jobs Plan at just over \$2 trillion, and later today there will be more details released on other measures to redistribute income and social programs towards the middle and lower income groups of America. None of these have been baked into the economic and financial outlook. Yet, both could lead to higher longer term yields and an earlier exit from ultra-low rates by the Federal Reserve.

In the case of Canada, here too the economic recovery is unfolding better than expected. The Bank of Canada has recognized this quicker recovery path and has acknowledged that it will likely tighten policy in 2022. This is a more realistic assumption than what we are seeing from the Federal Reserve. The Bank of Canada has also shown more flexibility on its QE policy and has reduced asset purchases according to the path of the economic recovery. Investors should expect further adjustments to QE and more forward guidance on the policy path from the Bank over the coming months.





Interest Rate Outlook														
Interest Rates	Spot Rate 2020						20	21		2022				
Interest Rates	Apr-27	Q1	Q2	Q3	Q4	Q1	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F	
CANADA														
Overnight Target Rate	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	
3-mth T-Bill Rate	0.09	0.21	0.20	0.12	0.06	0.09	0.10	0.13	0.15	0.18	0.20	0.35	0.63	
2-yr Govt. Bond Yield	0.33	0.42	0.28	0.25	0.20	0.22	0.45	0.55	0.70	0.90	1.10	1.30	1.45	
5-yr Govt. Bond Yield	0.96	0.60	0.36	0.36	0.39	0.99	1.10	1.25	1.40	1.55	1.70	1.80	1.90	
10-yr Govt. Bond Yield	1.56	0.71	0.52	0.57	0.67	1.55	1.70	1.85	2.00	2.15	2.25	2.25	2.25	
30-yr Govt. Bond Yield	2.10	1.30	0.99	1.11	1.21	1.98	2.15	2.30	2.45	2.55	2.55	2.55	2.55	
10-yr-2-yr Govt Spread	1.23	0.29	0.24	0.32	0.47	1.33	1.25	1.30	1.30	1.25	1.15	0.95	0.80	
U.S.														
Fed Funds Target Rate	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	
3-mth T-Bill Rate	0.01	0.11	0.16	0.10	0.09	0.03	0.05	0.10	0.10	0.10	0.10	0.25	0.50	
2-yr Govt. Bond Yield	0.18	0.23	0.16	0.13	0.13	0.16	0.30	0.45	0.60	0.80	1.00	1.20	1.40	
5-yr Govt. Bond Yield	0.88	0.37	0.29	0.28	0.36	0.92	1.00	1.20	1.40	1.60	1.75	1.85	2.00	
10-yr Govt. Bond Yield	1.63	0.70	0.66	0.69	0.93	1.74	1.70	1.90	2.00	2.10	2.20	2.30	2.40	
30-yr Govt. Bond Yield	2.30	1.35	1.41	1.46	1.65	2.41	2.35	2.45	2.55	2.60	2.65	2.70	2.75	
10-yr-2-yr Govt Spread	1.45	0.47	0.50	0.56	0.80	1.58	1.40	1.45	1.40	1.30	1.20	1.10	1.00	
CANADA - U.S SPREADS														
Can - U.S. T-Bill Spread	0.08	0.10	0.04	0.02	-0.03	0.06	0.05	0.03	0.05	0.08	0.10	0.10	0.13	
Can - U.S. 10-Year Bond Spread	-0.07	0.01	-0.14	-0.12	-0.26	-0.19	0.00	-0.05	0.00	0.05	0.05	-0.05	-0.15	

F: Forecast by TD Economics, April 2021; Forecasts are end-of-period. Source: Bloomberg, Bank of Canada, Federal Reserve.

Currency	Exchange	1	Foreign Exchange Outlook														
3		Spot Price	Spot Price 2020						21		2022						
Exchange rate to U.S.	rate	Apr-27	Q1	Q2	Q3	Q4	Q1	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F			
	Exchange rate to U.S. dollar																
Chinese Yuan	CNY per USD	6.48	7.08	7.07	6.79	6.53	6.55	6.60	6.65	6.70	6.75	6.80	6.80	6.80			
Japanese yen	JPY per USD	109	108	108	106	103	111	106	104	103	102	102	101	101			
Euro	USD per EUR	1.21	1.10	1.12	1.17	1.22	1.17	1.19	1.20	1.21	1.25	1.26	1.26	1.26			
U.K. pound	USD per GBP	1.39	1.25	1.24	1.29	1.37	1.38	1.39	1.40	1.40	1.40	1.40	1.40	1.40			
Swiss franc	CHF per USD	0.91	0.96	0.95	0.92	0.88	0.94	0.93	0.94	0.95	0.96	0.97	0.98	0.99			
Canadian dollar	CAD per USD	1.24	1.41	1.36	1.33	1.28	1.26	1.24	1.24	1.23	1.24	1.25	1.25	1.26			
Australian dollar	USD per AUD	0.78	0.61	0.69	0.72	0.77	0.76	0.77	0.76	0.75	0.74	0.73	0.73	0.73			
NZ dollar	USD per NZD	0.72	0.60	0.65	0.66	0.72	0.70	0.72	0.71	0.69	0.68	0.67	0.67	0.67			
Exchange rate to Euro																	
U.S. dollar	USD per EUR	1.21	1.10	1.12	1.17	1.22	1.17	1.19	1.20	1.21	1.25	1.26	1.26	1.26			
Japanese yen	JPY per EUR	131	118	121	124	126	130	126	125	125	128	128	128	127			
U.K. pound	GBP per EUR	0.87	0.89	0.91	0.91	0.90	0.85	0.86	0.86	0.86	0.89	0.90	0.90	0.90			
Swiss franc	CHF per EUR	1.10	1.06	1.06	1.08	1.08	1.11	1.11	1.13	1.15	1.20	1.22	1.23	1.25			
Canadian dollar	CAD per EUR	1.50	1.56	1.53	1.56	1.56	1.48	1.48	1.49	1.49	1.55	1.56	1.58	1.59			
Australian dollar	AUD per EUR	1.56	1.79	1.63	1.64	1.59	1.54	1.55	1.58	1.61	1.69	1.72	1.72	1.73			
NZ dollar	NZD per EUR	1.68	1.85	1.74	1.77	1.70	1.68	1.65	1.69	1.75	1.84	1.87	1.88	1.88			
Exchange rate to Japar	nese yen																
U.S. dollar	JPY per USD	109	108	108	106	103	111	106	104	103	102	102	101	101			
Euro	JPY per EUR	131	118	121	124	126	130	126	125	125	128	128	128	127			
U.K. pound	JPY per GBP	151	134	133	136	141	153	147	146	144	143	143	142	141			
Swiss franc	JPY per CHF	119.0	111.7	113.8	114.9	116.7	117.4	114.0	110.6	108.4	106.8	105.2	103.7	102.1			
Canadian dollar	JPY per CAD	87.7	76.1	79.2	79.2	80.9	88.0	85.4	83.9	83.4	82.6	81.8	80.9	80.1			
Australian dollar	JPY per AUD	84.5	66.0	74.3	75.6	79.5	84.2	81.6	79.0	77.2	75.8	74.4	74.0	73.6			
NZ dollar	JPY per NZD	78.4	64.1	69.5	69.8	74.2	77.3	76.3	73.8	71.0	69.6	68.3	67.9	67.6			
Exchange rate to Canad																	
U.S. dollar	USD per CAD	0.81	0.71	0.74	0.75	0.78	0.80	0.81	0.81	0.81	0.81	0.80	0.80	0.79			
Japanese yen	JPY per CAD	87.7	76.1	79.2	79.2	80.9	88.0	85.4	83.9	83.4	82.6	81.8	80.9	80.1			
Euro	CAD per EUR	1.50	1.56	1.53	1.56	1.56	1.48	1.48	1.49	1.49	1.55	1.56	1.58	1.59			
U.K. pound	CAD per GBP	1.72	1.76	1.68	1.72	1.74	1.73	1.72	1.74	1.73	1.74	1.75	1.75	1.76			
Swiss franc	CHF per CAD	0.74	0.68	0.70	0.69	0.69	0.75	0.75	0.76	0.77	0.77	0.78	0.78	0.78			
Australian dollar	AUD per CAD	1.04	1.15	1.07	1.05	1.02	1.04	1.05	1.06	1.08	1.09	1.10	1.09	1.09			
NZ dollar	NZD per CAD	1.12	1.19	1.14	1.14	1.09	1.14	1.12	1.14	1.18	1.19	1.20	1.19	1.19			



International Interest Rates Outlook													
Interest Rates	Spot Rate		2020			2021					20	22	
	Apr-27	Q1	Q2	Q3	Q4	Q1	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Germany													
ECB Deposit Rate	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
3-mth T-Bill Rate	-0.63	-0.71	-0.56	-0.62	-0.77	-0.66	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60
2-yr Govt. Bond Yield	-0.69	-0.70	-0.70	-0.70	-0.72	-0.69	-0.60	-0.55	-0.49	-0.46	-0.42	-0.36	-0.28
5-yr Govt. Bond Yield	-0.60	-0.66	-0.70	-0.71	-0.74	-0.63	-0.55	-0.50	-0.44	-0.41	-0.37	-0.31	-0.23
10-yr Govt. Bond Yield	-0.25	-0.47	-0.46	-0.52	-0.58	-0.29	-0.25	-0.20	-0.14	0.01	0.16	0.32	0.47
30-yr Govt. Bond Yield	0.29	0.02	0.00	-0.10	-0.16	0.26	0.26	0.31	0.46	0.61	0.77	0.92	1.07
10-yr-2-yr Govt Spread	0.44	0.23	0.24	0.18	0.14	0.40	0.35	0.36	0.35	0.47	0.58	0.67	0.75
United Kingdom													
Bank Rate	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
3-mth T-Bill Rate	0.08	0.18	0.01	0.00	-0.06	0.01	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2-yr Govt. Bond Yield	0.07	0.12	-0.08	-0.03	-0.06	0.10	0.10	0.15	0.15	0.15	0.20	0.20	0.25
5-yr Govt. Bond Yield	0.34	0.21	-0.05	-0.06	-0.09	0.28	0.40	0.52	0.64	0.77	0.85	0.93	1.01
10-yr Govt. Bond Yield	0.77	0.35	0.17	0.23	0.20	0.84	0.77	0.85	0.92	1.00	1.08	1.16	1.25
30-yr Govt. Bond Yield	1.30	0.82	0.64	0.78	0.75	1.39	1.32	1.40	1.47	1.55	1.63	1.71	1.80
10-yr-2-yr Govt Spread	0.71	0.23	0.25	0.26	0.26	0.75	0.67	0.70	0.77	0.85	0.88	0.96	1.00
F: Forecast by TD Economics, April 2021; Fore Source: Bloomberg.	casts are end-of-period.												

Global Stock Markets												
Major Market Indexes	Price	30-Day	YTD	52-Week	52-Week							
Major Market Indexes	Apr-27	% Chg.	% Chg.	High	52-Week Low 2,820 14,420 10,336 5,577 19,262 473							
S&P 500	4,187	5.3	11.5	4,188	2,820							
S&P/TSX Composite	19,175	2.3	10.0	19,351	14,420							
DAX	15,249	3.4	11.2	15,460	10,336							
FTSE 100	6,945	3.0	7.5	7,020	5,577							
Nikkei	28,992	-0.6	5.6	30,468	19,262							
MSCI AC World Index*	706	4.9	9.3	706	473							

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Source: Bloomberg, TD Economics.

Commodity Price Outlook															
Commodity	Price	52-Week 52-Week		2020					20	21		2022			
	Apr-27	High	Low	Q1	Q2	Q3	Q4	Q1	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Crude Oil (WTI, \$US/bbl)	63	66	12	46	28	41	42	58	63	65	60	59	58	57	56
Natural Gas (\$US/MMBtu)	2.86	16.13	1.33	1.91	1.71	1.99	2.53	3.56	2.70	2.60	3.00	3.10	2.90	2.80	3.15
Gold (\$US/troy oz.)	1776	2064	1684	1582	1708	1909	1874	1796	1775	1725	1675	1650	1625	1600	1575
Silver (US\$/troy oz.)	26.26	29.13	14.78	16.90	16.38	24.34	24.45	26.24	26.25	26.00	25.75	25.00	24.50	24.00	23.50
Copper (cents/lb)	443	443	230	255	243	296	326	385	405	389	374	369	347	356	356
Nickel (US\$/lb)	7.56	8.94	5.36	5.76	5.53	6.45	7.24	7.96	7.71	7.60	7.37	7.26	7.37	7.14	7.03
Aluminum (Cents/lb)	109	109	66	77	68	77	87	95	95	87	85	83	81	82	84
Wheat (\$US/bu)	7.63	7.71	5.75	6.60	6.46	6.36	6.84	7.41	7.90	7.50	7.20	7.10	7.05	6.95	6.90
F: Forecast by TD Economics, April 2021; I Source: Bloomberg, USDA (Haver).	Forecast are period a	verages; E: Estir	nate.												



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