# **TD Economics**



# Dollars and Sense Go For Growth

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## **Highlights**

- Central bankers around the world over cut policy rates in response to downside economic and geopolitical risks. In a low growth environment, there is little buffer to absorb economic shocks, so preemptive action becomes necessary. In this report, we argue in favour of the bias to prioritize the business cycle (economic growth), with more tolerance to test the economy's potential to run a little hot.
- A typical monetary policy rule would not have predicted three cuts from the Federal Reserve in 2019. However, leaning into downside risks to protect economic growth and sentiment has proven a successful tactic with little trade-off to inflation risks.
- Canada has a perceived constraint from financial instability risks due to high household debt levels. However, a reacceleration of housing activity reflects a demand-side shock, accentuated by a lagged supply response and the decline in global bond yields. Although the Bank of Canada has leaned into this risk to date by holding policy steady, continuing to do so with persistent economic underperformance can serve to reinforce a negative feedback loop.

In 2019, the Federal Reserve and numerous other central banks saw the risk of weakening economic growth and acted quickly by cutting interest rates. Most monetary policy rules wouldn't have suggested that the Federal Reserve would cut interest rates by 75 basis points from July to October. But, they took out insurance against a slowing global economy and worsening risks. Doing so appears to have successfully placed a floor under the economic expansion.

We were supporters of the Fed's swift action. When momentum and sentiment is challenged within a lower growth economy, further tests to confidence, a judgement error, or any small unanticipated shock can ripple quickly into more persistent nega-

tive outcomes. This is an ever-present risk for Canada, which has the added challenge of highly leveraged households. The latter can result in a more muted response to monetary and fiscal stimulus measures if the economy stagnates, or tips into recession. In this world, the priority of a central bank should be to protect growth to avoid the trap of a negative feedback loop. The combination of risks places asymmetric downside risks to the inflation mandates.

### No Free Lunch

Economists recognize that we live in a world of tradeoffs. This is certainly true when prioritizing growth. One tradeoff is that a persistence of low interest rates can cause the economy to overheat. When capacity constraints are pushed, wages and operating costs rise. This eventually leads to higher inflation. This happened in the

Chart 1: Shocking GDP to the Upside and the Slow Response of Inflation

4.0

Canada Real GDP (Shock Minus Control) (RHS)

Canada Core Inflation (Y/Y) (LHS)

Canada Outut Gap (LHS)

60

2.5

2.0

1.5

1.0

2019 2020 2021 2022 2023 2024 2025

Source: Statistics Canada, TD Economics



1970s and 1980s, when double-digit inflation plagued the economy following the historically low interest rate period of the 1950s and 1960s. Even though central banks have been effective in using inflation targeting to bring down both expected and actual inflation, many people still worry that high inflation could be lurking around the corner.

With inflation in most of the developed world undershooting the 2% target over the last decade, it has become quite apparent that the world needs more inflation and not less. But how much would central banks tolerate? The Federal Reserve has a symmetric target around 2%, implying it is comfortable with a modest overshoot. The Bank of Canada and the Bank of England have a range of 1% to 3% around the 2% target. For arguments sake, let's say that Canada experiences a growth shock (fiscal expansion for example) and the Bank of Canada does not respond by increasing its policy rate. Because inflation expectations are so anchored, a growth shock of 2% would be required for core inflation to reach the 3% level (Chart 1). Simply put, it would take a monumental growth overshoot for inflation to even test the upper bound of the target range. We calculate that the growth overshoot would have to amount to CA\$65 billion in GDP over two years. The equivalent figure for the U.S. is approximately US\$600 billion.

Of interest, when we try to shock GDP using only the monetary policy lever, our simulations show that interest rate cuts by the Bank of Canada alone cannot achieve the destabilizing growth boom highlighted above. There is simply not enough monetary policy room. In this way, the Bank of Canada can confidently respond to downside risks to growth by cutting rates to offer a bit more cushion, with little fear of losing control of inflation.

# The Elephant in the Room

The other major trade-off with leaning into stronger growth relates to the risk of inflating asset prices. Lower interest rates have reduced the cost of capital for businesses and pushed valuations on stocks and corporate bonds higher. Not only that, lower yields have also reduced consumer borrowing costs and have driven a re-emergence in housing activity.

For the U.S., this is welcomed. Household leverage is low, and homeownership rates have failed to materially make headway despite the longest expansion on record. By extension, the consumer cycle has been restrained. There is a lot of runway left in this segment of the economy. When

the Federal Reserve cut rates in 2019, one of the first areas to respond (outside of market sentiment) was the housing sector. And momentum ended the year on a strong note.

For Canada, the story is different. High household leverage within pockets of the country (mainly two provinces, Ontario and British Columbia) have raised concerns over financial stability among policy makers. The Bank of Canada has made this a focus of its Financial System Review for years. And rightly so. After two emergency cuts to the policy rate in 2015 (in response to a large drop in the price of oil), house prices soared over the 2016–2017 period. This drove already elevated household debt-to-income ratios to new highs: Canada stands among the most indebted in the developed world. This history provides a clear example of how low interest rates can spur household imbalances.

The Bank of Canada doesn't want to further stoke this fire via rate cuts that could encourage home buying behavior. But the unfortunate truth is that it probably can't do much to manage this market. The recent reemergence of Canadian housing demand has happened while the Bank held firm with its policy rate. In fact, the Bank of Canada is maintaining a policy rate higher than that of the Federal Reserve even though Canadian economic growth continues to disappoint and is well below that of its southern neighbor (even taking their relative 'cruising speeds' into account).

The sticky policy rate has not been reflected in Canadian government debt yields due to the global integration of financial markets that pushed longer term yields lower on risk premiums and other central bank policy decisions. And because commercial banks fund themselves across the yield curve, a decline in bank funding costs enabled lower mortgage rates.

However, it isn't just the integration of financial markets that limits the Bank of Canada's influence. Rising house prices are largely due to long-term demand and supply dynamics. On the demand side, Canada has benefitted from a population and labor force boom. Due to proactive immigration policy to counter the headwinds of aging domestic demographics, Canada boasts population growth that is (at least) two to three times higher than peer economies. This is further accentuated by a majority of newcomers settling within a handful of cities. In fact, 60% of the entire population resides within 200 kilometers of just 5 Canadian cities. This compares to 26% in the US. With more people living and working in the country, demand for housing has



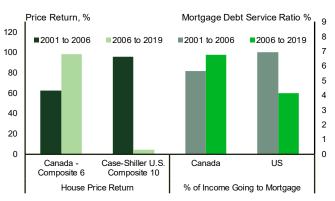
naturally increased. On the supply side, we are still playing catchup, and some government policies have likely imposed unintended consequences of reducing turnover. Though record supply is under construction, the continued demand surprise and mismatches in the type of housing relative to preferences, makes for an imbalance that is forcing prices higher. Interest rates are not likely the catalyst at work anymore, particularly with households having to undergo tighter stress testing requirements on mortgage qualification. These are matters that need to be addressed by government and regulatory policies. It's a tall order for a central bank to mitigate or manage a financial risk that's concentrated within a single segment of the economy, and further within a geographic region.

# Why Do We Love Investing in Homes?

Like all true love, once you have it, you can't seem to get enough of it. Canadian's have this love affair with homes. They spend lots of money buying them, renovating them, and filling them with stuff. This is part of the reason why the Bank of Canada is limited in it ability to address the systemic housing risk. When a friend is thinking about dipping into the market and asks for advice on whether they should take the plunge, its common to say things like: "You need to be in the market before you get priced out of it", "Get as much of a mortgage as you can", or "It is all about levered gains". These statements are only good advice when prices go up. Americans are familiar with the opposite side of this story from the 2008 experience (see the U.S. price growth in Chart 2).

Canada was spared those scars because of a combination of lower leverage, a strong banking system, a solid labour force growth rate, and high income growth. Over the last ten years, the average sale price of a Canadian home has averaged a compound annual return of 4.6%. This compares to 4.3% south of the border. For the Greater Toronto

Chart 2: Canada and U.S. Housing - Pre and Post-Crisis



Source: Teranet, Standard & Poor's, Federal Reserve Board, Statistics Canada, TD Economics

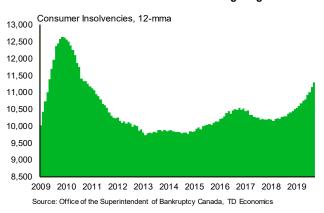
and Vancouver Areas the return has been 7.5% and 5.2%, respectively. Table 1 looks as these returns in comparison to other assets classes. The gross return on the 10-year Canadian government bond was 3.7% annually, while the S&P TSX Composite returned 6.9% (these numbers are not considering potential management expense fees nor the tax-sheltered nature of the investment). It's merely illustrative to drive home the point that the last ten years have offered good returns for financial assets. When you consider the (typically) levered gains from housing and the fact you get to live in the home, the incentive to be invested in housing has been rewarding.

Now we wouldn't be economists without warning that future returns may be different than the past. This is even more apparent given the past acceleration in prices and massive erosion in affordability. What is worrying is that the benefit of levered gains when prices go up become levered losses when prices go down. This is a real risk when the Canadian economy enters recession. If the unemployment rate rises, the lost income will make already high debt payments even harder to manage. Reduced consumer spending could

	Table 1													
		Total Return, %		Housing: Average Sale Price, %										
	Canada 10-Year	TSX Composite	S&P 500 Index	Canada	Greater Toronto	Greater								
	Bond (C\$)	Index (C\$)	(US\$)	Canada	Area	Vancouver Area								
10 Year Return	3.7	6.9	13.6	4.6	7.5	5.2								
5 Year Return	1.8	6.3	11.7	4.2	7.7	4.0								
3 Year Return	1.9	6.9	15.3	0.8	4.0	-1.0								
	e no management fee. da, Toronto Stock Exch													



Chart 3: Consumer Insolvencies Edge Higher

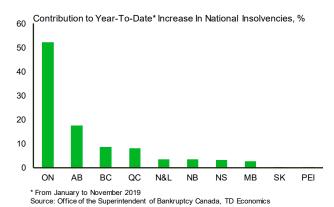


exacerbate even a mild slowdown or downturn. This is the argument for why the Bank of Canada should consider protecting growth. Financial vulnerability accentuates the pain on the economy once the economy contracts.

Also, the longer the economic expansion runs, the better the evolution of the stock of mortgages. This is because Canada has put in stringent macroprudential rules and other measures to reduce speculation and overleveraging. At the same time, older mortgages have been building up equity buffers via payments and price gains. Showing an asymmetric bias to lean into financial housing risks made sense when these were lacking or less mature, but this is no longer the case. As time goes on, more mortgages will have been originated under macroprudential rules such as the B-20 that impose higher qualifying rates for mortgages than any market-posted rate.

Furthermore, we couldn't help noticing that even with a low yield environment and a solid labor market backdrop, financial stress is already becoming evident. And, this time, it's not solely an Alberta or an oil-impacted province effect. In Chart 3 and Chart 4, we show the rise in consumer insolvencies by province. The increase is certainly on the radar of the Bank of Canada, as this is an area of the economy that it can have the most impact. This is because consumer loans are largely tied to the prime rate, which is a spread off the Bank of Canada rate. As the Bank raised rates starting in 2017, the prime rate rose in lockstep. No surprise, consumer delinquencies started to rise as well. An interest rate cut by the Bank of Canada would influence an easing in financial conditions in the consumer loan market.

#### Chart 4: Provincial Breakdown of Insolvencies



### **Bottom Line**

Many central banks have cut interest rates to protect economic growth. It was a good move and will continue to be so. There are many who believe the Bank of Canada should keep the powder dry for when the economy turns south. But, this ignores the possibility that the household impulse response to stimulus (be it fiscal or monetary) may be muted in that situation relative to the past. Elevated leverage and negative feedback loops can create exaggerated and swifter moving dynamics to the downside. Likewise, the argument to wait until the data all but confirm a stark and persistent underperformance in order to avoid the risk of stoking inflation also becomes challenged.

Lastly, for small open economies like Canada, leaning into asset bubbles is limited by a central bank that can only marginally influence international yield dynamics on the domestic curve. Macroprudential policy and the current dynamics that are creating a demand shock is also largely external to its toolkit. It's important that the Bank of Canada continue to raise awareness on financial risks to regulators, the government and the public, but the housing market structure has evolved, as have the economic risks within the broader economy. The interest rate lever should be pulled to protect broader economic growth and domestic sentiment at earliest signs of a wobbling.



		Inte	erest R	Rate O	utlool	k							
	Spot Rate	2019				2020				2021			
	Jan-28	Q1	Q2	Q3	Q4	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
CANADA													
Overnight Target Rate	1.75	1.75	1.75	1.75	1.75	1.75	1.50	1.50	1.50	1.50	1.50	1.50	1.50
3-mth T-Bill Rate	1.64	1.67	1.66	1.65	1.66	1.53	1.40	1.40	1.40	1.40	1.40	1.40	1.40
2-yr Govt. Bond Yield	1.49	1.55	1.47	1.58	1.69	1.50	1.40	1.43	1.45	1.50	1.55	1.60	1.65
5-yr Govt. Bond Yield	1.39	1.52	1.39	1.40	1.68	1.45	1.45	1.55	1.60	1.65	1.70	1.75	1.80
10-yr Govt. Bond Yield	1.37	1.62	1.46	1.37	1.70	1.45	1.45	1.55	1.65	1.75	1.80	1.85	1.90
30-yr Govt. Bond Yield	1.50	1.89	1.68	1.53	1.76	1.55	1.55	1.65	1.75	1.85	1.95	2.05	2.15
10-yr-2-yr Govt Spread	-0.12	0.07	-0.01	-0.21	0.01	-0.05	0.05	0.12	0.20	0.25	0.25	0.25	0.25
U.S.													
Fed Funds Target Rate	1.75	2.50	2.50	2.00	1.75	1.75	1.75	1.75	1.75	1.75	1.75	2.00	2.25
3-mth T-Bill Rate	1.52	2.35	2.08	1.84	1.52	1.55	1.55	1.55	1.55	1.55	1.68	1.93	2.17
2-yr Govt. Bond Yield	1.46	2.27	1.75	1.63	1.58	1.55	1.65	1.80	1.90	2.00	2.10	2.20	2.30
5-yr Govt. Bond Yield	1.48	2.23	1.76	1.55	1.69	1.60	1.75	1.85	2.00	2.10	2.20	2.30	2.40
10-yr Govt. Bond Yield	1.65	2.41	2.00	1.68	1.92	1.75	1.90	2.05	2.20	2.30	2.40	2.50	2.60
30-yr Govt. Bond Yield	2.11	2.81	2.52	2.12	2.39	2.20	2.35	2.50	2.60	2.70	2.75	2.80	2.85
10-yr-2-yr Govt Spread	0.19	0.14	0.25	0.05	0.34	0.20	0.25	0.25	0.30	0.30	0.30	0.30	0.30
CANADA - U.S SPREADS													
Can - U.S. T-Bill Spread	0.12	-0.68	-0.42	-0.19	0.14	-0.02	-0.15	-0.15	-0.15	-0.15	-0.28	-0.53	-0.77
Can - U.S. 10-Year Bond Spread	-0.28	-0.79	-0.54	-0.31	-0.22	-0.30	-0.45	-0.50	-0.55	-0.55	-0.60	-0.65	-0.70

F: Forecast by TD Economics, January 2020; Forecasts are end-of-period.

Source: Bloomberg, Bank of Canada, Federal Reserve.

	Foreign Exchange Outlook														
6	Exchange	Spot Price		20	19			20	20		2021				
Currency	rate	Jan-28	Q1	Q2	Q3	Q4	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F	
Exchange rate to U.S. d	ollar														
Chinese Yuan	CNY per USD	6.91	6.71	6.87	7.15	6.96	6.95	6.90	6.85	6.80	6.80	6.80	6.80	6.80	
Japanese yen	JPY per USD	109	111	108	108	109	108	107	106	106	105	105	104	104	
Euro	USD per EUR	1.10	1.12	1.14	1.09	1.12	1.09	1.09	1.10	1.11	1.12	1.13	1.14	1.15	
U.K. pound	USD per GBP	1.30	1.30	1.27	1.23	1.33	1.30	1.30	1.30	1.31	1.32	1.33	1.34	1.35	
Swiss franc	CHF per USD	0.97	1.00	0.98	1.00	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	
Canadian dollar	CAD per USD	1.32	1.34	1.31	1.32	1.30	1.33	1.34	1.33	1.32	1.31	1.30	1.30	1.30	
Australian dollar	USD per AUD	0.68	0.71	0.70	0.68	0.70	0.68	0.69	0.70	0.70	0.70	0.70	0.70	0.70	
NZ dollar	USD per NZD	0.65	0.68	0.67	0.63	0.68	0.65	0.67	0.68	0.69	0.69	0.69	0.69	0.69	
Exchange rate to Euro	•	•													
U.S. dollar	USD per EUR	1.10	1.12	1.14	1.09	1.12	1.09	1.09	1.10	1.11	1.12	1.13	1.14	1.15	
Japanese yen	JPY per EUR	120	124	123	118	122	117	116	117	117	118	118	119	120	
U.K. pound	GBP per EUR	0.85	0.86	0.90	0.89	0.85	0.84	0.84	0.85	0.85	0.85	0.85	0.85	0.85	
Swiss franc	CHF per EUR	1.07	1.12	1.11	1.09	1.09	1.06	1.06	1.06	1.07	1.08	1.09	1.10	1.11	
Canadian dollar	CAD per EUR	1.45	1.50	1.49	1.44	1.46	1.45	1.46	1.46	1.47	1.47	1.47	1.48	1.50	
Australian dollar	AUD per EUR	1.63	1.58	1.62	1.62	1.60	1.60	1.58	1.57	1.59	1.60	1.61	1.63	1.64	
NZ dollar	NZD per EUR	1.69	1.65	1.70	1.74	1.67	1.68	1.63	1.62	1.61	1.62	1.64	1.65	1.67	
Exchange rate to Japan	ese yen														
U.S. dollar	JPY per USD	109	111	108	108	109	108	107	106	106	105	105	104	104	
Euro	JPY per EUR	120	124	123	118	122	117	116	117	117	118	118	119	120	
U.K. pound	JPY per GBP	142	144	137	133	144	140	139	138	138	139	139	140	140	
Swiss franc	JPY per CHF	112.2	111.1	110.5	108.3	112.3	111.3	110.2	109.7	109.2	108.7	108.2	107.6	107.4	
Canadian dollar	JPY per CAD	82.9	82.8	82.4	81.6	83.8	81.0	79.6	79.8	80.1	80.3	80.5	80.1	79.9	
Australian dollar	JPY per AUD	73.8	78.6	75.6	72.9	76.4	73.2	73.6	74.3	74.0	73.6	73.3	72.9	72.7	
NZ dollar	JPY per NZD	71.4	75.5	72.4	67.7	73.3	70.0	71.5	72.2	72.9	72.6	72.2	71.9	71.7	
Exchange rate to Canad	lian dollar														
U.S. dollar	USD per CAD	0.76	0.75	0.76	0.76	0.77	0.75	0.75	0.75	0.76	0.76	0.77	0.77	0.77	
Japanese yen	JPY per CAD	82.9	82.8	82.4	81.6	83.8	81.0	79.6	79.8	80.1	80.3	80.5	80.1	79.9	
Euro	CAD per EUR	1.45	1.50	1.49	1.44	1.46	1.45	1.46	1.46	1.47	1.47	1.47	1.48	1.50	
U.K. pound	CAD per GBP	1.71	1.74	1.66	1.63	1.72	1.73	1.74	1.73	1.73	1.73	1.73	1.74	1.76	
Swiss franc	CHF per CAD	0.74	0.75	0.75	0.75	0.75	0.73	0.72	0.73	0.73	0.74	0.74	0.74	0.74	
Australian dollar	AUD per CAD	1.12	1.05	1.09	1.12	1.10	1.11	1.08	1.07	1.08	1.09	1.10	1.10	1.10	
NZ dollar	NZD per CAD	1.16	1.10	1.14	1.21	1.14	1.16	1.11	1.11	1.10	1.11	1.11	1.11	1.11	
F: Forecast by TD Economics, .	January 2020; Forecasts are er	d-of-period.					•								
Source: Federal Reserve, Bloor	mberg.														



	Inte	rnatior	al Inte	erest l	Rates	Outlo	ok							
	Spot Rate		2019				20	20		2021				
	Jan-28	Q1	Q2	Q3	Q4	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F	
Germany														
ECB Deposit Rate	-0.50	-0.40	-0.40	-0.50	-0.60	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	
3-mth T-Bill Rate	-0.51	-0.55	-0.60	-0.61	-0.65	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	
2-yr Govt. Bond Yield	-0.63	-0.61	-0.76	-0.78	-0.61	-0.50	-0.50	-0.50	-0.50	-0.49	-0.48	-0.46	-0.43	
5-yr Govt. Bond Yield	-0.60	-0.46	-0.67	-0.78	-0.57	-0.55	-0.50	-0.50	-0.50	-0.50	-0.48	-0.39	-0.30	
10-yr Govt. Bond Yield	-0.34	-0.07	-0.33	-0.58	-0.34	-0.30	-0.30	-0.30	-0.30	-0.30	-0.27	-0.22	-0.17	
30-yr Govt. Bond Yield	0.17	0.57	0.26	-0.10	0.02	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.18	
10-yr-2-yr Govt Spread	0.28	0.54	0.43	0.20	0.28	0.20	0.20	0.20	0.20	0.19	0.21	0.24	0.26	
United Kingdom														
Bank Rate	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	
3-mth T-Bill Rate	0.64	0.75	0.75	0.77	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	
2-yr Govt. Bond Yield	0.45	0.64	0.68	0.36	0.45	0.35	0.45	0.55	0.65	0.67	0.80	0.89	0.96	
5-yr Govt. Bond Yield	0.40	0.69	0.61	0.28	0.55	0.48	0.58	0.70	0.83	0.88	1.00	1.10	1.18	
10-yr Govt. Bond Yield	0.55	0.99	0.83	0.40	0.65	0.60	0.70	0.85	1.00	1.10	1.20	1.30	1.40	
30-yr Govt. Bond Yield	1.06	1.55	1.47	0.98	1.10	1.10	1.25	1.35	1.45	1.55	1.65	1.75	1.85	
10-yr-2-yr Govt Spread	0.11	0.36	0.15	0.05	0.20	0.25	0.25	0.30	0.35	0.43	0.40	0.41	0.44	

F: Forecast by TD Economics, January 2020; Forecasts are end-of-period.

Source: Bloomberg

Global Stock Markets													
	Price Jan-28	30-Day % Chg.	YTD % Chg.	52-Week High	52-Week Low								
S&P 500	3,276	1.1	1.4	3,330	2,640								
S&P/TSX Composite	17,501	1.9	2.6	17,622	15,463								
DAX	13,324	-0.1	0.6	13,577	10,907								
FTSE 100	7,481	-2.1	-0.8	7,687	6,834								
Nikkei	23,216	-2.6	-1.9	24,084	20,261								
MSCI AC World Index*	564	-0.5	-0.2	579	482								

\*Weighted equity index including both developed and emerging markets.

Source: Bloomberg, TD Economics.

Commodity Price Outlook														
Price	52-Week	52-Week	2-Week 2019				20	20		2021				
Jan-28	High	Low	Q1	Q2	Q3	Q4	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
53	66	51	55	60	56	57	55	56	58	60	60	61	61	61
1.98	4.25	1.90	2.92	2.56	2.38	2.39	2.20	2.30	2.30	2.40	2.45	2.46	2.47	2.49
1567	1582	1271	1303	1307	1473	1482	1560	1500	1500	1500	1450	1450	1450	1450
17.47	19.60	14.35	15.58	14.91	17.02	17.34	17.80	17.60	17.60	17.60	17.00	17.00	17.00	17.00
259	297	253	282	278	263	267	270	285	285	289	277	274	276	281
5.72	8.19	5.27	5.60	5.56	7.05	6.99	5.96	7.48	7.48	7.48	8.05	8.62	8.85	8.85
80	88	77	84	81	80	80	80	79	78	78	78	78	76	77
6.85	7.55	5.62	7.08	6.36	6.14	6.77	6.79	6.80	6.89	6.90	6.91	6.93	6.95	6.97
	Jan-28 53 1.98 1567 17.47 259 5.72 80	Price         52-Week           Jan-28         High           53         66           1.98         4.25           1567         1582           17.47         19.60           259         297           5.72         8.19           80         88           6.85         7.55	Price Jan-28         52-Week High         52-Week Low           53         66         51           1.98         4.25         1.90           1567         1582         1271           17.47         19.60         14.35           259         297         253           5.72         8.19         5.27           80         88         77	Price Jan-28         52-Week High         52-Week Low         Q1           53         66         51         55           1.98         4.25         1.90         2.92           1567         1582         1271         1303           17.47         19.60         14.35         15.58           259         297         253         282           5.72         8.19         5.27         5.60           80         88         77         84	Price Jan-28         52-Week High         52-Week Low         Q1         Q2           53         66         51         55         60           1.98         4.25         1.90         2.92         2.56           1567         1582         1271         1303         1307           17.47         19.60         14.35         15.58         14.91           259         297         253         282         278           5.72         8.19         5.27         5.60         5.56           80         88         77         84         81	Price Jan-28         52-Week High         52-Week Low         Q1         Q2         Q3           53         66         51         55         60         56           1.98         4.25         1.90         2.92         2.56         2.38           1567         1582         1271         1303         1307         1473           17.47         19.60         14.35         15.58         14.91         17.02           259         297         253         282         278         263           5.72         8.19         5.27         5.60         5.56         7.05           80         88         77         84         81         80	Price Jan-28         52-Week High         52-Week Low         Q1         Q2         Q3         Q4           53         66         51         55         60         56         57           1.98         4.25         1.90         2.92         2.56         2.38         2.39           1567         1582         1271         1303         1307         1473         1482           17.47         19.60         14.35         15.58         14.91         17.02         17.34           259         297         253         282         278         263         267           5.72         8.19         5.27         5.60         5.56         7.05         6.99           80         88         77         84         81         80         80	Price Jan-28         52-Week High         52-Week Low         2019         Q1         Q2         Q3         Q4         Q1F           53         66         51         55         60         56         57         55           1.98         4.25         1.90         2.92         2.56         2.38         2.39         2.20           1567         1582         1271         1303         1307         1473         1482         1560           17.47         19.60         14.35         15.58         14.91         17.02         17.34         17.80           259         297         253         282         278         263         267         270           5.72         8.19         5.27         5.60         5.56         7.05         6.99         5.96           80         88         77         84         81         80         80         80	Price Jan-28         52-Week High         52-Week Low         Q1         Q2         Q3         Q4         Q1F         Q2F           53         66         51         55         60         56         57         55         56           1.98         4.25         1.90         2.92         2.56         2.38         2.39         2.20         2.30           1567         1582         1271         1303         1307         1473         1482         1560         1500           17.47         19.60         14.35         15.58         14.91         17.02         17.34         17.80         17.60           259         297         253         282         278         263         267         270         285           5.72         8.19         5.27         5.60         5.56         7.05         6.99         5.96         7.48           80         88         77         84         81         80         80         80         79	Price Jan-28         52-Week High         52-Week Low         Q1         Q2         Q3         Q4         Q1F         Q2F         Q3F           53         66         51         55         60         56         57         55         56         58           1.98         4.25         1.90         2.92         2.56         2.38         2.39         2.20         2.30         2.30           1567         1582         1271         1303         1307         1473         1482         1560         1500         1500           17.47         19.60         14.35         15.58         14.91         17.02         17.34         17.80         17.60         17.60           259         297         253         282         278         263         267         270         285         285           5.72         8.19         5.27         5.60         5.56         7.05         6.99         5.96         7.48         7.48           80         88         77         84         81         80         80         80         79         78	Price Jan-28         52-Week High         52-Week Low         Q1         Q2         Q3         Q4         Q1F         Q2F         Q3F         Q4F           53         66         51         55         60         56         57         55         56         58         60           1.98         4.25         1.90         2.92         2.56         2.38         2.39         2.20         2.30         2.30         2.40           1567         1582         1271         1303         1307         1473         1482         1560         1500         1500         1500           17.47         19.60         14.35         15.58         14.91         17.02         17.34         17.80         17.60         17.60         17.60           259         297         253         282         278         263         267         270         285         285         289           5.72         8.19         5.27         5.60         5.56         7.05         6.99         5.96         7.48         7.48         7.48           80         88         77         84         81         80         80         80         79         78         78	Price Jan-28         52-Week High         55 - Week Low         2019         2020         20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -	Price Jan-28         52-Week High         Low         Q1         Q2         Q3         Q4         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F           53         66         51         55         60         56         57         55         56         58         60         60         61           1.98         4.25         1.90         2.92         2.56         2.38         2.39         2.20         2.30         2.30         2.40         2.45         2.46           1567         1582         1271         1303         1307         1473         1482         1560         1500         1500         1500         1450         1450           17.47         19.60         14.35         15.58         14.91         17.02         17.34         17.80         17.60         17.60         17.00         17.00           259         297         253         282         278         263         267         270         285         285         289         277         274           5.72         8.19         5.27         5.60         5.56         7.05         6.99         5.96         7.48         7.48         8.05 <td< td=""><td>Price Jan-28         52-Week High         52-Week Low         Q1         Q2         Q3         Q4         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F         Q3F         Q3F</td></td<>	Price Jan-28         52-Week High         52-Week Low         Q1         Q2         Q3         Q4         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F         Q3F         Q4F         Q1F         Q2F         Q3F         Q3F

F: Forecast by TD Economics, January 2020; Forecast are period averages; E: Estimate.

Source: Bloomberg, USDA (Haver).



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