Dollars and Sense:
TD's Leading Economic Index: It Was All Yellow

Beata Caranci, SVP & Chief Economist | 416-982-8067
James Orlando, CFA, Senior Economist | 416-413-3180

September 3, 2019

Highlights

- External risks have deteriorated economic sentiment globally, with trade tensions and manufacturing weakness in Europe and Asia being most notable.
- Our TD Leading Economic Index is now flashing yellow in six of eight categories, demonstrating greater breadth of a slowing U.S. economy. This points to low growth of 1% to 2%, rather than a contraction (recession).
- Recession probability models that rely on the yield curve will always flash higher recession odds than those that rely on forward economic indicators. A key distinction is in the timing.
- Over August, a toxic combination has formed between heightened 'recession talk' and yield curve inversion. We are at risk of what we have coined the "Beetlejuice Effect". This is where recession talk can become self-fulfilling by playing into the psyche of businesses and investors.
- With no sign of improvement in global economic and political outcomes, we expect the Federal Reserve and the Bank of Canada to cut policy rates two times in the coming months to keep a floor under the economy.

It was all yellow. We're not talking about Coldplay's hit song, but rather the observation that struck when we updated our Leading Economic Index (Chart 1). It shows six of eight indicators flashing yellow, marking more breadth than previous periods of market angst (Table 1). The last few months have brought forth a seismic shift in several areas of the outlook, supporting the view that the Federal Reserve has sufficient cause to follow through with two more cuts this year. If our economic index continues to deteriorate through year-end, more cuts may yet be on deck for 2020.

Although the Bank of Canada was completely silent for six straight weeks over the summer, we believe they will have to join the swelling ranks of global central banks trying to build up defenses against worsening external risks. As a result, we pencilled in two rate cuts from the Bank of Canada into our outlook.

Here's a run-through of just some of the latest developments that suggest now is the time to err on the side of caution:

1. Our global economic outlook has been downgraded to 2.9%. This thinning cushion to absorb political and economic shocks marks the slowest pace in a decade. The forecast disappointments have a high concentration within Europe, where the outlook remains tenuous for large economies, like Germany, Italy and the UK.

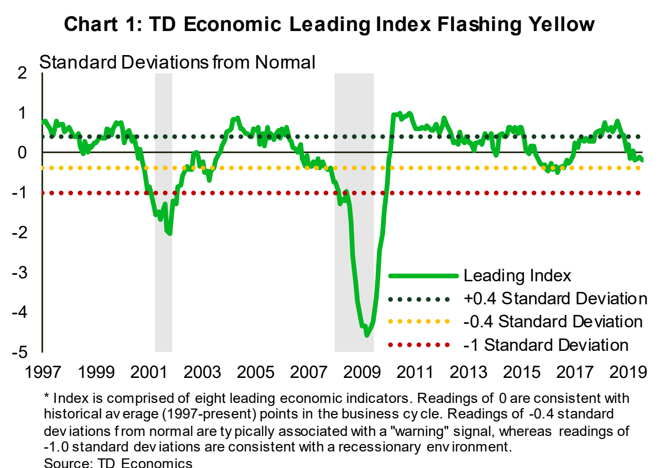


Chart 1: TD Economic Leading Index Flashing Yellow

* Index is comprised of eight leading economic indicators. Readings of 0 are consistent with historical average (1997-present) points in the business cycle. Readings of -0.4 standard deviations from normal are typically associated with a "warning" signal, whereas readings of -1.0 standard deviations are consistent with a recessionary environment.
Source: TD Economics

2. The small green shoots that materialized on global trade over the spring looked to have been stepped on during the summer. Momentum was not sustained and trade escalation during August between China and the U.S. will not help matters.
3. This worrisome combination has prompted almost a universal shift to dovish comments or outright lower interest rates by central banks. Many are reading from the same playbook: rate cuts are largely to guard against unfavorable global trends and rising uncertainty.
4. In parallel with falling expectations for economic growth has been a downward swift in longer term bond yields. This has reinforced yield-inversion dynamics in countries like the U.S. and Canada, while others have seen a large tranche of yields move into negative territory.

Against this backdrop, it's not surprising that recession talk has returned to the front pages of the media and is top of mind among our clients. A deep dive shows that there is no evidence in the hard data that the U.S. is headed for a recession, but some warning flags indicate higher odds over the next 12-24 months.

Dynamics at Play

The incidence of 'recession talk' has shot up and sits higher today than prior periods of heightened market angst (i.e. stock market correction in December 2018 and the Chinese revaluation episode in 2015). As Chart 2 shows, the degree of concern is mirroring the period of 2011/12 when, in fact, Europe did tilt into a recession. The U.S. did not follow suit, as the financial and economic linkages tend to be stronger going in the other direction. However, the global economy was a restraint on the U.S. economy, which saw only 1.5% growth in 2011.

A key reason recession talk has increased is directly related to the inversion of the U.S. yield curve. Naturally this didn't occur in 2011 because much of the dialogue was directed towards Europe. And, importantly, the mechanics were not easy to achieve, with U.S. short-term rates sitting near zero, versus 2.25% today.

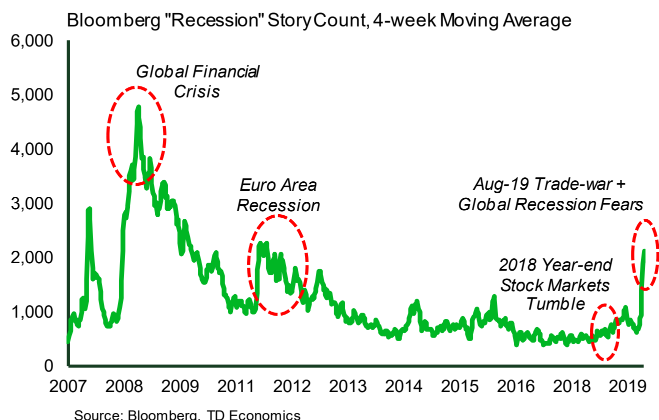
Any recession probability model that contains the yield curve as an explanatory variable will show high odds of a recession, typically within the 50-60% range. The NY Fed's financial model is lower at 31% (as of July 31st), but relative to its history, this marks the highest odds since early-2007. As we've discussed in a previous report, this occurs because yield inversion is unquestionably a good signal of a recession. But, its history is not a perfect, and these days the signal may be obscured by unconventional central bank policies. In any event, models where it is the primary focus will always predict high odds once inversion occurs.

The most important piece of the puzzle comes into play when you switch the focus of recession probability mod-

Table 1: Evolution of U.S. Leading Indicators

Date	TDE Economic Index	Consumer Variables				Business Variables			
2000s Recession (Recession Start: March 2001)									
Oct-00	-0.32	-0.12	0.00	-0.07	0.14	-0.12	0.02	-0.13	-0.05
Nov-00	-0.44	-0.11	-0.02	-0.19	0.12	-0.12	0.00	-0.08	-0.04
Dec-00	-1.03	-0.08	-0.08	-0.25	-0.06	-0.26	-0.04	-0.19	-0.08
Jan-01	-0.87	-0.06	-0.05	-0.19	0.12	-0.31	-0.07	-0.28	-0.03
Feb-01	-1.00	-0.06	-0.10	-0.28	0.01	-0.31	-0.11	-0.13	-0.03
Mar-01	-1.36	-0.07	-0.10	-0.42	-0.13	-0.28	-0.13	-0.20	-0.01
Financial Crisis (Recession Start: December 2007)									
Jul-07	-0.23	-0.19	0.00	0.01	0.09	-0.03	0.02	0.05	-0.18
Aug-07	-0.35	-0.21	0.00	-0.03	0.03	-0.02	0.02	0.03	-0.18
Sep-07	-0.44	-0.22	0.03	0.00	-0.03	0.03	0.04	-0.09	-0.19
Oct-07	-0.43	-0.22	-0.01	-0.05	-0.01	0.00	0.02	0.03	-0.19
Nov-07	-0.40	-0.22	0.00	-0.05	0.05	-0.04	0.05	-0.04	-0.16
Dec-07	-0.73	-0.22	-0.02	-0.09	-0.08	-0.08	0.01	-0.01	-0.23
Current									
Feb-19	-0.17	-0.03	0.00	-0.02	-0.13	0.04	0.03	-0.02	-0.04
Mar-19	0.04	-0.03	0.04	0.03	-0.03	0.07	0.01	0.02	-0.08
Apr-19	-0.17	-0.01	-0.01	0.01	-0.02	0.00	-0.05	-0.03	-0.06
May-19	-0.14	0.02	-0.02	0.00	-0.05	-0.02	-0.02	-0.03	-0.03
Jun-19	-0.10	0.07	-0.02	-0.01	0.01	-0.03	-0.04	-0.02	-0.06
Jul-19	-0.19	-0.02	-0.05	0.00	0.04	-0.04	-0.07	-0.04	-0.01

Source: TD Economics



els to those that monitor economic indicators. Doing so causes the recession odds to fall measurably within the 20-30% range.

What accounts for the difference? Timing. The signal from yield curve inversion has historically maintained a long lead time of 12-24 months, while those driven by economic indicators generally offer no more than a 3-6 month window. And herein lies a key piece of information. All models are telling us that a period of slower growth is on deck for 2020, particularly as the weight of tariff hikes this year come to fully bear on production and consumer costs. But, the signal has not yet arrived that negative financial market sentiment has bled deeply through the economic data. Nothing is written in stone yet: a recession may be in our future, but that risk is not imminent.

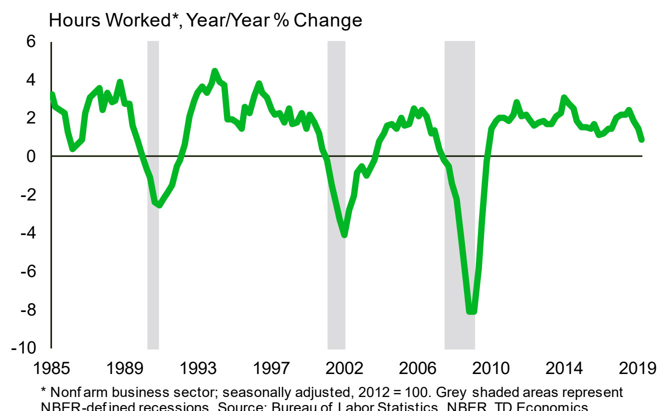
Two New Developments Of Concern

Last year, we published a paper coining the 'Beetlejuice Effect', in which recession concerns can become self-fulfilling by altering the hiring and investment behavior of firms. An area of concern in the past month is the potential for a toxic combination created by the high incidence of recession talk and the reinforcement of that sentiment within an inverted yield curve. Neither of these existed when we wrote that report in December.

Within the economic data, here too there's a new development afoot. Our Leading Economic Index shows six of eight indicators flashing a cautionary yellow. This is not a surprise for those indicators capturing business sentiment and output, as the deceleration in the ISM indicators and manufacturing cycle has been well telegraphed in the data for several months. What caught our eye over the summer was the deceleration in hours-worked (Chart 3). Is this a sign that businesses are responding to uncertainty by pursuing more cautionary hiring? Time will tell if the trend deepens into red territory. If so, it would be harder for the mighty U.S. consumer to stand strong in the face of a compromised job market.

In fact, the timing of the recent trade escalation couldn't have been worse. We have been perpetual optimists that the U.S. consumer has strong underpinnings and present a key source of upside risk to our forecast. This became reinforced in recent data, showing a second quarter spending profile near 5%. And the third quarter looks like it will have a solid 3%-handle. However, as the full force of the tariffs comes to bear on production and market sentiment, we will be downgrading our U.S. outlook to somewhere in the 1.5% to 1.6% range for 2020. And, the near-term data on consumer spending may not be the best guide for next year.

Consumers are likely to front-load purchases this fall to get ahead of tariff-related price hikes on some of the favorite items. This may make our Leading Economic Index prone to a false signal on the consumer side, requiring us to place more emphasis on what hours and job conditions are telling us, rather than consumer spending patterns. Don't forget, we have likely not seen the peak in trade tensions, as the U.S. administration will be releasing a ruling on auto imports come November under their Section 232 investigation. Recently Japan has indicated they may have struck a trade deal with the U.S. to avoid a negative outcome, but Europe remains in the crosshairs and marks a larger trading partner with the U.S. than China. A collision of U.S. trade conflicts across two continents could be more than business sentiment is able to bear.



This is why the economics community needs to be humble during this period of extreme political uncertainty. Economic models are not designed for political shocks, it requires a significant degree of judgement by forecasters. Lasting shocks to sentiment and income have larger impacts on the forecast than the direct effects on trade flows from movements in export prices. With the U.S. being the source of political uncertainty, it may lead to stronger feedback loops between the global economy and their domestic economy relative to that 2011 period when recession talk was heightened.

Putting all the pieces together, it would be completely reasonable for the Federal Reserve to continue along the rate-cut course. Doing so now has a foundation that goes beyond simply taking out 'insurance'. A case can be made that the fundamentals are showing some early evidence of fault lines.

Standing Alone Carries Risk

As for the Bank of Canada (BoC), the second quarter rebound to 3.7% GDP growth might be viewed as a mark of resiliency, but it followed six months of no growth. Sustainability will be a challenge. Since we are marking down the U.S. forecast, we will naturally be doing the same north of the border due to the strong trade links, as well as Canada being more susceptible to global developments as a small, open economy. To be clear, just like the U.S. economy, Canada also has some positive tensions occurring that help push against negative market sentiment and trade outcomes. These include a solid job market, strengthening wage growth and rebounding housing markets across the country. While these help push against a recession outcome, the dynamics alone would be hard-pressed to prevent slower growth as global risks mount.

The question for BoC Governor Poloz on September 4th is how he plans to weight the current data relative to the forward risks. We suspect one reason the BoC stayed silent over the summer was to evaluate how much of the market volatility was simply noise versus an appropriate reflection of deteriorating fundamentals. Global political developments over August have shown that "hoping for the best" should be an abandoned strategy. We think the Bank of Canada will acknowledge the growing headwinds, and be open to cutting rates in October. This offers them sufficient time to evaluate political developments and the bleed through to business sentiment, which will be captured in their favoured Business Outlook Survey. By that time, we'll also know whether the U.S. has followed through with the newest escalation occurring in October to hike the May tariff rate of 25% to 30% on Chinese products. This would be a clear signal of staying power on the trade war and balance of risks.

In thinking about the balance of risks, perhaps the most intuitive approach is to imagine a situation in which they cut rates, and the economy proves more resilient than expected. In other words, it wasn't needed. It would be a fairly 'easy' exercise to raise rates at a future date, which is precisely what we saw in 2015 (cuts) vs 2017 (hike). However, if the BoC stands still and finds itself behind the growth-curve, it could imply a more aggressive rate-cut cycle at a future date. This is a situation that no central banker would choose as a first preference.

Naturally, we're not sure the BoC views the balance of risks in the same way as us, so all we can do is strap ourselves in for a period where all economists will be coping with data that will be murkier than anything we've seen in recent history.

Bottom Line

With external risks hitting both business and investor sentiment, we are closely watching for contagion to the broader U.S. and Canadian economies. According to the TD Leading Economic Index, we are not seeing red flags supporting outright contraction, but rather a broad-based weakening. So far, this pattern remains unique relative to what we've seen ahead of prior economic downturns, where specific sectors move deep into red territory based on prior excesses (i.e. corporate sector in 2000 and housing sector in 2007).

Nevertheless, the economic backdrop has deteriorated sufficiently to prompt some backstop action by both the Federal Reserve and the Bank of Canada. We are calling for 50 bps in cuts by both central banks by the end of 2019. This action will play through the confidence channel and hopefully provide the necessary support for the economy. Should we get further deceleration in our Leading Economic Index, then even more monetary stimulus will be warranted.

Interest Rate Outlook

	Spot Rate	2018				2019				2020			
	Sep-03	Q1	Q2	Q3	Q4	Q1	Q2	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
CANADA													
Overnight Target Rate	1.75	1.25	1.25	1.50	1.75	1.75	1.75	1.75	1.25	1.25	1.25	1.25	1.25
3-mth T-Bill Rate	1.63	1.10	1.26	1.59	1.64	1.67	1.66	1.40	1.15	1.15	1.15	1.15	1.15
2-yr Govt. Bond Yield	1.33	1.77	1.91	2.21	1.86	1.55	1.47	1.30	1.25	1.25	1.25	1.30	1.40
5-yr Govt. Bond Yield	1.16	1.96	2.06	2.33	1.88	1.52	1.39	1.20	1.20	1.20	1.30	1.40	1.50
10-yr Govt. Bond Yield	1.14	2.09	2.17	2.42	1.96	1.62	1.46	1.20	1.20	1.25	1.35	1.50	1.60
30-yr Govt. Bond Yield	1.40	2.23	2.20	2.42	2.18	1.89	1.68	1.45	1.45	1.50	1.60	1.75	1.85
10-yr-2-yr Govt Spread	-0.20	0.32	0.26	0.21	0.10	0.07	-0.01	-0.10	-0.05	0.00	0.10	0.20	0.20
U.S.													
Fed Funds Target Rate	2.25	1.75	2.00	2.25	2.50	2.50	2.50	2.00	1.75	1.75	1.75	1.75	1.75
3-mth T-Bill Rate	1.94	1.70	1.89	2.15	2.40	2.35	2.08	1.73	1.60	1.60	1.60	1.60	1.60
2-yr Govt. Bond Yield	1.51	2.27	2.52	2.81	2.48	2.27	1.75	1.50	1.50	1.55	1.60	1.70	1.80
5-yr Govt. Bond Yield	1.39	2.56	2.73	2.94	2.51	2.23	1.76	1.40	1.40	1.50	1.60	1.75	1.85
10-yr Govt. Bond Yield	1.50	2.74	2.85	3.05	2.69	2.41	2.00	1.55	1.55	1.65	1.75	1.90	2.00
30-yr Govt. Bond Yield	1.97	2.97	2.98	3.19	3.02	2.81	2.52	2.00	2.15	2.25	2.35	2.45	2.55
10-yr-2-yr Govt Spread	-0.01	0.47	0.33	0.24	0.21	0.14	0.25	0.05	0.05	0.10	0.15	0.20	0.20
CANADA - U.S SPREADS													
Can - U.S. T-Bill Spread	-0.31	-0.60	-0.63	-0.56	-0.76	-0.68	-0.42	-0.33	-0.45	-0.45	-0.45	-0.45	-0.45
Can - U.S. 10-Year Bond Spread	-0.37	-0.65	-0.68	-0.63	-0.73	-0.79	-0.54	-0.35	-0.35	-0.40	-0.40	-0.40	-0.40

F: Forecast by TD Economics, September 2019; Forecasts are end-of-period.
Source: Bloomberg, Bank of Canada, Federal Reserve.

Foreign Exchange Outlook

Currency	Exchange rate	Spot Price	2018				2019				2020			
		Sep-03	Q1	Q2	Q3	Q4	Q1	Q2	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Exchange rate to U.S. dollar														
Chinese Yuan	CNY per USD	7.18	6.27	6.62	6.87	6.88	6.71	6.87	7.20	7.25	7.25	7.25	7.25	7.25
Japanese yen	JPY per USD	106	106	111	113	110	111	108	106	105	104	103	103	102
Euro	USD per EUR	1.09	1.23	1.17	1.16	1.15	1.12	1.14	1.09	1.09	1.10	1.12	1.13	1.14
U.K. pound	USD per GBP	1.20	1.40	1.32	1.31	1.28	1.30	1.27	1.20	1.19	1.20	1.21	1.22	1.23
Swiss franc	CHF per USD	0.99	0.95	0.99	0.98	0.98	1.00	0.98	0.99	0.99	0.99	0.99	0.99	0.99
Canadian dollar	CAD per USD	1.34	1.29	1.31	1.29	1.36	1.34	1.31	1.33	1.33	1.32	1.31	1.30	1.30
Australian dollar	USD per AUD	0.67	0.77	0.74	0.72	0.71	0.71	0.70	0.68	0.68	0.69	0.70	0.70	0.70
NZ dollar	USD per NZD	0.63	0.72	0.68	0.66	0.67	0.68	0.67	0.63	0.64	0.65	0.67	0.68	0.69
Exchange rate to Euro														
U.S. dollar	USD per EUR	1.09	1.23	1.17	1.16	1.15	1.12	1.14	1.09	1.09	1.10	1.12	1.13	1.14
Japanese yen	JPY per EUR	116	131	129	132	126	124	123	116	114	114	115	116	116
U.K. pound	GBP per EUR	0.91	0.88	0.89	0.89	0.90	0.86	0.90	0.91	0.92	0.92	0.93	0.93	0.93
Swiss franc	CHF per EUR	1.08	1.17	1.16	1.13	1.13	1.12	1.11	1.08	1.08	1.09	1.11	1.12	1.13
Canadian dollar	CAD per EUR	1.46	1.59	1.53	1.50	1.56	1.50	1.49	1.45	1.45	1.45	1.47	1.47	1.48
Australian dollar	AUD per EUR	1.63	1.60	1.58	1.61	1.63	1.58	1.62	1.60	1.60	1.59	1.60	1.61	1.63
NZ dollar	NZD per EUR	1.74	1.70	1.72	1.75	1.71	1.65	1.70	1.73	1.70	1.69	1.67	1.66	1.65
Exchange rate to Japanese yen														
U.S. dollar	JPY per USD	106	106	111	113	110	111	108	106	105	104	103	103	102
Euro	JPY per EUR	116	131	129	132	126	124	123	116	114	114	115	116	116
U.K. pound	JPY per GBP	128	149	146	148	140	144	137	127	125	125	125	125	125
Swiss franc	JPY per CHF	107.4	111.4	111.6	116.3	111.6	111.1	110.5	107.1	106.1	105.1	104.0	103.5	103.0
Canadian dollar	JPY per CAD	79.5	82.4	84.3	87.8	80.4	82.8	82.4	79.7	78.9	78.8	78.6	78.8	78.5
Australian dollar	JPY per AUD	71.5	81.7	81.9	82.1	77.3	78.6	75.6	72.1	71.4	71.8	72.1	71.8	71.4
NZ dollar	JPY per NZD	66.8	76.9	75.0	75.3	73.6	75.5	72.4	66.8	67.2	67.6	69.0	69.7	70.4
Exchange rate to Canadian dollar														
U.S. dollar	USD per CAD	0.75	0.78	0.76	0.77	0.73	0.75	0.76	0.75	0.75	0.76	0.76	0.77	0.77
Japanese yen	JPY per CAD	79.5	82.4	84.3	87.8	80.4	82.8	82.4	79.7	78.9	78.8	78.6	78.8	78.5
Euro	CAD per EUR	1.46	1.59	1.53	1.50	1.56	1.50	1.49	1.45	1.45	1.45	1.47	1.47	1.48
U.K. pound	CAD per GBP	1.61	1.81	1.73	1.69	1.74	1.74	1.66	1.60	1.58	1.58	1.59	1.59	1.60
Swiss franc	CHF per CAD	0.74	0.74	0.76	0.76	0.72	0.75	0.75	0.74	0.74	0.75	0.76	0.76	0.76
Australian dollar	AUD per CAD	1.11	1.01	1.03	1.07	1.04	1.05	1.09	1.11	1.11	1.10	1.09	1.10	1.10
NZ dollar	NZD per CAD	1.19	1.07	1.12	1.17	1.09	1.10	1.14	1.19	1.18	1.17	1.14	1.13	1.11

F: Forecast by TD Economics, September 2019; Forecasts are end-of-period.
Source: Federal Reserve, Bloomberg.

International Interest Rates Outlook

	Spot Rate	2018				2019				2020			
	Sep-03	Q1	Q2	Q3	Q4	Q1	Q2	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Germany													
ECB Deposit Rate	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60
3-mth T-Bill Rate	-0.72	-0.79	-0.65	-0.58	-0.84	-0.55	-0.60	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70
2-yr Govt. Bond Yield	-0.92	-0.62	-0.67	-0.53	-0.62	-0.61	-0.76	-0.79	-0.76	-0.73	-0.68	-0.54	-0.43
5-yr Govt. Bond Yield	-0.93	-0.11	-0.30	-0.09	-0.32	-0.46	-0.67	-0.79	-0.73	-0.66	-0.59	-0.47	-0.37
10-yr Govt. Bond Yield	-0.71	0.49	0.30	0.47	0.24	-0.07	-0.33	-0.60	-0.50	-0.40	-0.30	-0.20	-0.10
30-yr Govt. Bond Yield	-0.20	1.15	1.02	1.08	0.87	0.57	0.26	-0.05	0.05	0.15	0.35	0.50	0.65
10-yr-2-yr Govt Spread	0.21	1.11	0.97	1.00	0.86	0.54	0.43	0.19	0.26	0.33	0.38	0.34	0.33
United Kingdom													
Bank Rate	0.75	0.50	0.50	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00	1.00
3-mth T-Bill Rate	0.76	0.51	0.59	0.75	0.70	0.75	0.75	0.75	0.75	0.75	0.88	1.00	1.13
2-yr Govt. Bond Yield	0.33	0.81	0.71	0.82	0.73	0.64	0.68	0.58	0.68	0.79	1.01	1.24	1.46
5-yr Govt. Bond Yield	0.26	1.11	1.03	1.17	0.90	0.69	0.61	0.54	0.64	0.77	0.96	1.14	1.33
10-yr Govt. Bond Yield	0.39	1.35	1.28	1.44	1.14	0.99	0.83	0.50	0.60	0.75	0.90	1.05	1.20
30-yr Govt. Bond Yield	0.90	1.71	1.74	1.91	1.82	1.55	1.47	1.00	1.20	1.35	1.45	1.55	1.65
10-yr-2-yr Govt Spread	0.07	0.54	0.56	0.62	0.42	0.36	0.15	-0.08	-0.08	-0.04	-0.11	-0.19	-0.26

F: Forecast by TD Economics, September 2019; Forecasts are end-of-period.
Source: Bloomberg.

Global Stock Markets

	Price Sep-03	30-Day % Chg.	YTD % Chg.	52-Week High	52-Week Low
S&P 500	2,926	-0.2	16.7	3,026	2,351
S&P/TSX Composite	16,442	1.0	14.8	16,669	13,780
DAX	11,920	0.4	12.9	12,630	10,382
FTSE 100	7,259	-2.0	7.9	7,687	6,585
Nikkei	20,625	-2.2	3.0	24,271	19,156
MSCI AC World Index*	510	-0.8	12.0	532	436

*Weighted equity index including both developed and emerging markets.
Source: Bloomberg, TD Economics.

Commodity Price Outlook

	Price	52-Week	52-Week	2018				2019				2020			
	Sep-03	High	Low	Q1	Q2	Q3	Q4	Q1	Q2	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Crude Oil (WTI, $US/bbl)	55	76	42	63	68	70	59	55	60	55	56	57	58	59	59
Natural Gas ($US/MMBtu)	2.34	4.80	2.02	3.08	2.86	2.93	3.80	2.92	2.51	2.30	2.35	2.40	2.41	2.42	2.44
Gold ($US/troy oz.)	1535	1543	1183	1329	1306	1213	1229	1303	1307	1465	1470	1470	1450	1425	1425
Silver (US$/troy oz.)	18.70	18.70	14.00	16.74	16.56	15.02	14.58	15.58	14.91	16.60	17.25	17.50	17.50	17.50	17.50
Copper (cents/lb)	254	297	254	316	312	277	280	282	278	268	277	284	288	290	290
Nickel (US$/lb)	8.19	8.19	4.85	6.01	6.56	6.02	5.21	5.60	5.56	6.44	5.90	5.90	6.12	6.35	6.35
Aluminum (Cents/lb)	79	100	79	98	102	93	89	84	81	81	82	86	88	91	91
Wheat ($US/bu)	5.74	7.55	5.74	7.42	7.46	6.70	6.85	7.08	6.36	6.20	6.34	6.38	6.41	6.44	6.48

F: Forecast by TD Economics, September 2019; Forecast are period averages; E: Estimate.
Source: Bloomberg, USDA (Haver).

Disclaimer

This report is provided by TD Economics. It is for informational and educational purposes only as of the date of writing, and may not be appropriate for other purposes. The views and opinions expressed may change at any time based on market or other conditions and may not come to pass. This material is not intended to be relied upon as investment advice or recommendations, does not constitute a solicitation to buy or sell securities and should not be considered specific legal, investment or tax advice. The report does not provide material information about the business and affairs of TD Bank Group and the members of TD Economics are not spokespersons for TD Bank Group with respect to its business and affairs. The information contained in this report has been drawn from sources believed to be reliable, but is not guaranteed to be accurate or complete. This report contains economic analysis and views, including about future economic and financial markets performance. These are based on certain assumptions and other factors, and are subject to inherent risks and uncertainties. The actual outcome may be materially different. The Toronto-Dominion Bank and its affiliates and related entities that comprise the TD Bank Group are not liable for any errors or omissions in the information, analysis or views contained in this report, or for any loss or damage suffered.