



## Is a recession coming?

### Highlights

- > The word 'recession' was on everybody's lips last month, as the introduction of new tariffs from both China and the United States combined with a series of weak economic data – especially from Europe – resulted in a recession signal from the U.S. Treasury bond market.
- > Fear naturally took its toll on the equity market, but damage remains somewhat limited. So, is the worst yet to come or are the concerns expressed by markets exaggerated? In other words, is a recession coming?
- > Sticking to our evidence-based approach to investing, we decided to tackle this question with various economic and financial data using relatively simple econometric models. This allows us to extract probabilities of a recession from the yield curve, but also from key economic indicators, the corporate bond market, and the equity market.
- > Our results? It is hard to deny that the U.S. yield curve is now calling for a recession; an imperfect yet compelling call for extra caution. On the other hand, key economic indicators, corporate bonds and equities all resulted in low recession probabilities.
- > So, who to believe? For now, only the yield curve is flashing red, but it's also the only measure that has historically signaled economic downturns well in advance. As for equities and corporate bonds, they might be reassuring, but we would obviously prefer to reduce their allocation before they start pricing in a serious economic downturn. To compound the problem, it seems that the direction of the global economy is largely dependent on the mood of an American president whose unpredictability is increasingly controversial.
- > Yet, these are all reasons why we gradually reduced risk in our asset allocation this year, reaching neutrality between stocks and bonds back in May. For us to add another layer of defense, we would need to see further weakness from economic fundamentals. On the other hand, a signal of excess pessimism from our Market Sentiment Indicator or better clarity on the trade front would likely incline us to add to our stock allocation. But for now, we see no reason to deviate from our A3 model recommendation and, therefore, we are keeping our asset mix unchanged.
- > Another very popular question recently was whether long-term interest rates in the United States were destined to join their European and Japanese peers near zero. While this isn't far-fetched in a recession scenario, the pace at which treasuries rallied in recent months makes them highly vulnerable to a sharp reversal. A look at the previous times in history where 30-year U.S. treasuries generated such high returns in such a short period of time shows that losses—most of which were quite significant—have always occurred in the months that followed.
- > Early last month, the Renminbi (RMB) crossed the 7 ¥/USD mark for the first time since 2008, leading many (including the U.S. president) to ask whether China has been engineering a devaluation of its currency in a bid to favour exports and offset tariffs. We argue that this would be a very risky strategy for China, although as long as the cloud of uncertainty born from the Sino-American trade war hovers over the global economy, it will remain difficult for the Yuan to halt its current slide.

**Table 1 Global Asset Allocation**

Global Classes	Weights				
Cash					
Fixed Income					
Equities					
<b>Fixed Income</b>					
Federal					
Investment Grade					
High Yield (USD)					
Non-Traditional FI					
<b>World Equities</b>					
S&P/TSX					
S&P 500 (USD)					
MSCI EAFE (USD)					
MSCI EM (USD)					
<b>Factors and Alternative Investments</b>					
Value vs. Growth					
Small vs. Large					
Low Vol. vs. High Beta					
Canadian Dollar					
Commodities					
Energy					
Base Metals					
Gold					
Infrastructure					

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Current Allocation

Previous Allocation

## Market Review

### Fixed Income

- > The U.S. 30-year treasury benchmark yield fell below 2% in August for the first time.
- > Impressively, this type of longer duration product has performed on par with equities this year as investors continue to lower their long-term growth and inflation expectations in the U.S. and abroad.
- > In another worrying sign for risk assets, last month saw the first 10-year less 2-year U.S. yield curve inversion since this economic cycle began.
- > As such, most Fixed Income assets continued their strong absolute and risk-adjusted returns for the year.

### Canadian Equities

- > The S&P/TSX was the only major equity index to finish in growth territory last month.
- > Finishing the month flat, the Canadian Energy sector fared better than its southern neighbour, boosted in part by positive news regarding the Trans Mountain & Keystone XL pipeline projects.

### U.S. Equities

- > It was a rocky month for the S&P 500, as all but the three most defensive sectors (Utilities, Real Estate, and Consumer Staples) finished the period with negative returns.
- > The worst performing sector in August, Energy, fell prey to somewhat weaker oil prices and a worsening demand outlook.

### Commodities

- > Gold broke through the \$1,500 mark in August, reaching its highest level since April 2013, amid rising Sino-American trade tensions.
- > WTI prices fell last month, as the downside risks from a deepening trade confrontation between the U.S. and China outweighed positive news in the form of continued OPEC cuts and an unexpectedly large U.S. inventory drawdown.

### Foreign Exchange

- > Surprisingly strong economic data out of Canada failed to halt the loonie's slight depreciation last month.
- > The U.S. dollar further strengthened in August—the DXY reaching its highest level since May 2017—as investors around the world increasingly piled into the relative safety and higher yields of U.S. debt markets.

**Table 2 Market Total Returns**

Asset Classes	August	YTD	12 months
<b>Cash (3-month T-bills )</b>	<b>0.1%</b>	<b>1.1%</b>	<b>1.7%</b>
<b>Bonds (FTSE/TMX Ovr. Univ.)</b>	<b>1.9%</b>	<b>8.7%</b>	<b>9.6%</b>
FTSE/TMX Short term	0.7%	3.3%	4.5%
FTSE/TMX Mid term	1.9%	8.0%	9.6%
FTSE/TMX Long term	3.4%	16.4%	16.1%
FTSE/TMX Government	2.1%	8.8%	9.9%
Federal	1.8%	5.8%	7.6%
Provincial	2.5%	11.7%	12.1%
Municipal	2.2%	10.9%	11.3%
FTSE/TMX Corporate	1.2%	8.6%	8.6%
AA+	0.7%	4.9%	6.0%
A	1.7%	10.6%	10.3%
BBB	1.1%	9.3%	9.0%
BoAML High-Yield (USD)	0.4%	11.1%	6.6%
Preferred Shares	-4.0%	-3.6%	-13.5%
<b>Canadian Equities (S&amp;P/TSX)</b>	<b>0.4%</b>	<b>17.1%</b>	<b>4.3%</b>
Energy	-0.4%	7.6%	-13.9%
Industrials	-1.1%	22.0%	5.8%
Financials	-2.6%	12.6%	-0.2%
Materials	5.8%	23.9%	23.4%
Utilities	4.8%	30.6%	26.6%
Cons. Disc	0.3%	19.3%	0.5%
Cons. Staples	4.4%	19.2%	25.9%
Healthcare	-13.0%	2.1%	-25.8%
IT	7.7%	60.1%	43.7%
Comm. Svc.	1.9%	10.7%	12.2%
REITs	3.0%	21.9%	13.2%
S&P/TSX Small Cap	-1.5%	12.2%	-5.2%
<b>US Equities (S&amp;P500 USD)</b>	<b>-1.6%</b>	<b>18.3%</b>	<b>2.9%</b>
Energy	-8.1%	2.1%	-20.1%
Industrials	-2.6%	19.0%	0.6%
Financials	-4.8%	14.3%	-2.9%
Materials	-2.8%	13.5%	-2.5%
Utilities	5.2%	20.3%	21.2%
Cons. Disc	-1.3%	21.4%	2.5%
Cons. Staples	1.8%	21.2%	16.1%
Healthcare	-0.5%	5.8%	-0.6%
IT	-1.5%	29.4%	6.6%
Comm. Svc.	-1.5%	21.2%	9.7%
REITs	4.9%	28.5%	20.3%
Russell 2000 (USD)	-5.1%	10.8%	-14.1%
<b>World Eq. (MSCI ACWI)</b>	<b>-2.3%</b>	<b>14.3%</b>	<b>0.3%</b>
MSCI EAFE (USD)	-2.6%	10.1%	-2.7%
MSCI EM (USD)	-4.8%	4.2%	-4.0%
<b>Commodities (CRB index)</b>	<b>-4.0%</b>	<b>-5.4%</b>	<b>-5.9%</b>
WTI Oil (US\$/barrel)	-5.9%	21.9%	-21.1%
Gold (US\$/ounce)	7.1%	19.4%	27.1%
Copper (US\$/tonne)	-4.2%	-4.9%	-5.2%
<b>Forex (DXY - US Dollar index)</b>	<b>0.4%</b>	<b>2.9%</b>	<b>4.0%</b>
USD per EUR	-1.1%	-3.7%	-5.4%
CAD per USD	0.9%	-2.4%	2.1%

CIO Office (data via Refinitiv)

2019-08-30

## Is a recession coming?

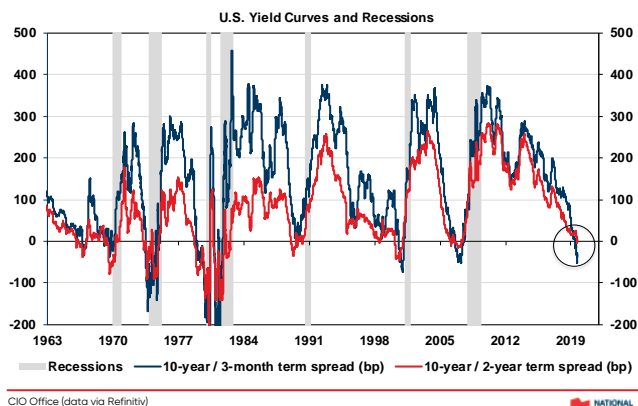
The word 'recession' was on everybody's lips in August, as evidenced by the sharp increase in the number of Google searches featuring the term throughout this last month. In parallel, another keyword has raised questions online in an unprecedented fashion – Yield Curve – and that's no coincidence (**Chart 1**).

### 1 Question of the Month: Is a recession coming...



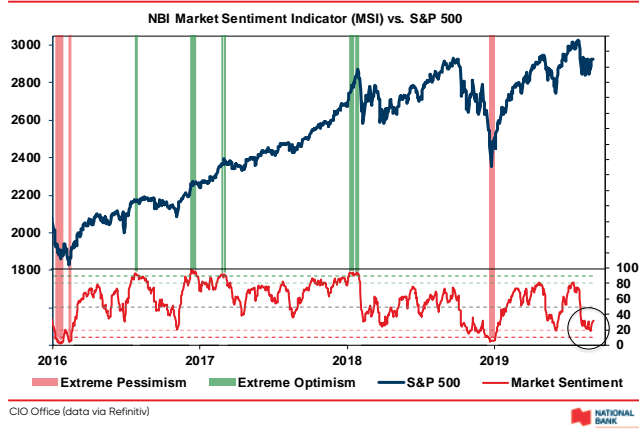
Indeed, the introduction of new tariffs from both China and the United States combined with a series of weak economic data – especially from Europe – have sparked enough fear in the markets to trigger a bond market signal that has historically preceded recessions by 7 to 19 months: a yield curve inversion between 10-year and 2-year U.S. Treasury yields. This follows the inversion between 10-year and 3-month maturities that occurred back in March (**Chart 2**, see our April monthly report for a better understanding of the meaning and implications of yield curve inversions).

### 2 ...as the U.S. yield curve suggests?



Fear naturally took its toll on the equity market, as reflected by our market sentiment indicator (**Chart 3**). Nevertheless, damage remains somewhat limited, with U.S. equities down 1.6% in August and Canadian stocks even managing to post a gain of 0.4% during the period.

### 3 More fear than harm for equities thus far...



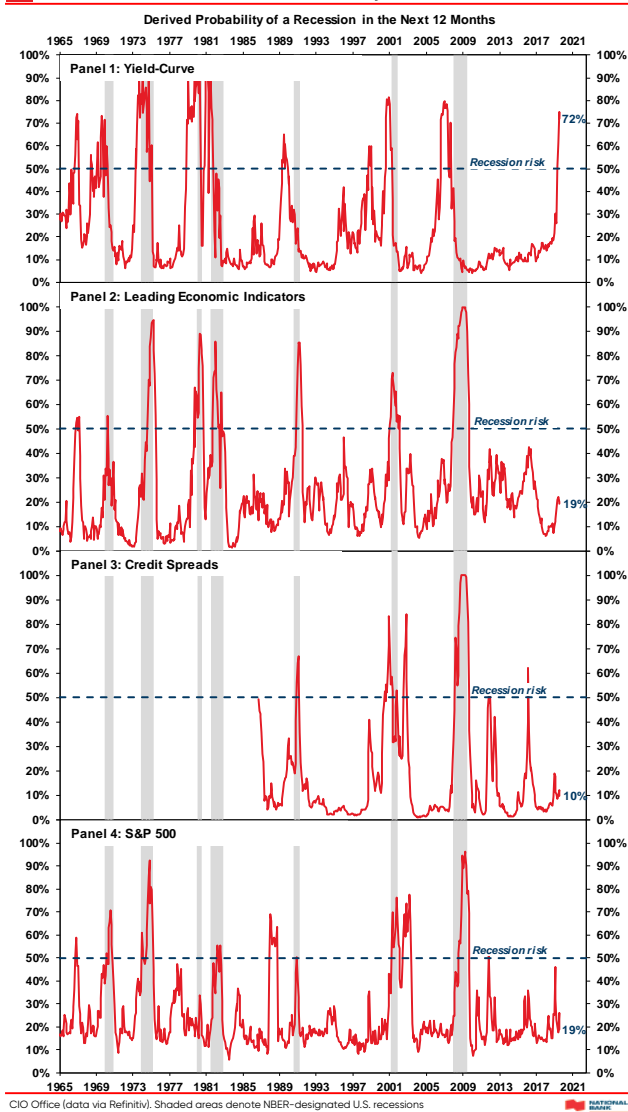
So, is the worst yet to come or are the concerns expressed by markets exaggerated? In other words, is a recession coming? At the risk of stating the obvious, we do not own a crystal ball. We also strongly advise you to maintain a degree of skepticism towards anyone speaking as if they did... especially in this era of Trump-led uncertainty. Sticking to our evidence-based approach to investing, we decided to tackle this question with various economic and financial data using relatively simple econometric models. This allows us to extract probabilities of a recession from the yield curve, but also from key economic indicators, the corporate bond market, and the equity market (**Chart 4**, next page).

To start with, it is hard to deny that the U.S. yield curve is now calling for a recession, with odds that it will occur over the next twelve months at 72%, significantly above the 50% mark that has accurately signalled the last seven U.S. recessions with only two false signals (1966, 1998) (**Chart 4, Panel 1**, next page). Of course, there are valid reasons to discount this red flag. For instance, we've never had a recession without first going through a period of restrictive monetary policy, which we arguably haven't undergone yet. Moreover, it is clear that the decline in long-term rates is mainly the effect of term premiums plunging into negative territory, another first (see the Fixed Income section for more detail). That said, we are mindful not to fall into the "this time is different" trap, hence why we take the yield curve signal for what it is: an imperfect yet compelling call for extra caution.

Speaking of imperfection, the main quality of the yield curve—the fact that it precedes recessions by a significant period—also happens to be its largest drawback, as those who have exited risk assets at the first sign of an inversion have historically paid an opportunity cost by being on the sidelines far too early. That is precisely why we put so much emphasis on fundamental leading economic indicators—such as manufacturing activity, labour market conditions, consumer sentiment, and housing—when assessing recession risk. At this point, these figures indicate a 19% recession probability over the next year, still significantly below worrisome levels (**Chart 4, Panel 2**, next page).

Similarly, deriving a recession probability from credit spreads resulted in a relatively low risk of 10%, meaning that the corporate bond market is still not buying the recession scenario

#### 4 ... but is the worst (a recession) yet to come?



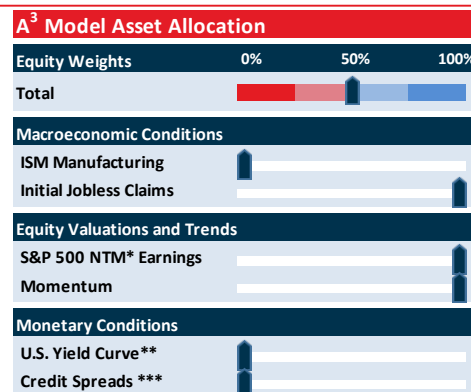
conveyed by Treasury Bonds and seems to be tracking economic fundamentals instead (Chart 4, Panel 3).

Finally, the equity market—historically a lot more volatile than its corporate bond market sibling—also remains far from pricing in a recession at this point according to our calculations, with recession probabilities inferred from the S&P 500 at just 19% (Chart 4, Panel 4).

So, who to believe? For now, only the yield curve is flashing red, but as you can see, it's also the only measure that has historically signalled economic downturns well in advance. As for equities and corporate bonds, they might be reassuring, but we would obviously prefer to reduce their allocation before they start pricing in a serious economic downturn. To compound the problem, it seems that the direction of the global economy is largely dependent on the mood of an American president whose unpredictability is increasingly controversial.

Yet, these are all reasons why we've gradually reduced risk in our asset allocation this year, reaching neutrality between stocks and bonds back in May. For us to add another layer of defense, we would need to see further weakness from economic fundamentals. On the other hand, a signal of excess pessimism from our Market Sentiment Indicator or better clarity on the trade front would likely incline us to add to our stock allocation. But for now, we see no reason to deviate from our A3 model recommendation and, therefore, we are keeping our asset mix unchanged (Chart 5).

#### 5 Caution remains the motto of the A<sup>3</sup>... and so, ours



CIO Office (data via Refinitiv). As of September 3, 2019. \*Next 12 months. \*\*U.S. 10-year notes minus 3-month T-bills. \*\*\*High yield minus Investment grade



In any event, we should remind ourselves of the true implications of recessions for investors. The heavy losses that make so many anxious about recessions are often equated to the absolute worst performance someone could realize by investing his/her entire portfolio in equities at market peak and selling everything at the exact bottom (maximum drawdowns). If the mere idea of such volatility for a fraction of your portfolio compromises your sleep and/or if your investment horizon is short, you might want to reduce your equity risk exposure. You may be surprised to learn, however, that the average return on a balanced portfolio over the last six recessions is actually zero. Not something to celebrate, but far from the financial catastrophe many seem to believe (Chart 6).

#### 6 What if a recession hits?

Recession	Max U.S. equities drawdown	Balanced portfolio* total return		
		12-months Before	During Recession	12-months After
Nov 1973 - Feb 1975	-48%	7%	-7%	12%
Jan 1980 - Jun 1980	-17%	11%	9%	7%
Jul 1981 - Oct 1982	-27%	9%	15%	26%
Jul 1990 - Feb 1991	-20%	4%	6%	9%
Mar 2001 - Oct 2001	-37%	-1%	-5%	-8%
Dec 2007 - May 2009	-57%	1%	-16%	9%
Average	-34%	5%	0%	9%

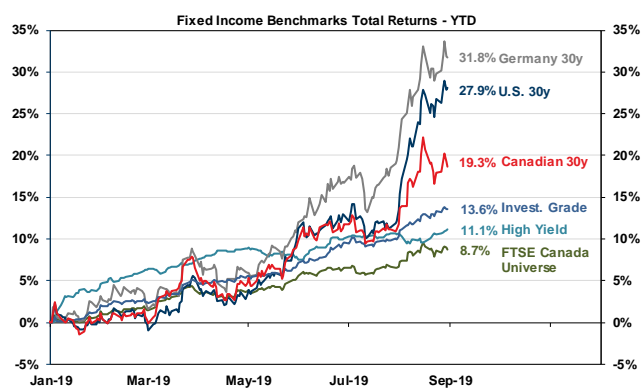
CIO Office (data via Refinitiv). \*60% equities (MSCI World in CAD) 40% Bonds (FTSE Canada Universe after 1980, FTSE 3-month T-Bills before 1980).



## Fixed Income: Race to the Bottom?

Fixed income assets continued to climb relentlessly in August, with 30-year government bonds now exhibiting total returns rivaling those of the best years... of equity markets (**Chart 7**).

### 7 Equity-like returns for fixed income assets YTD...

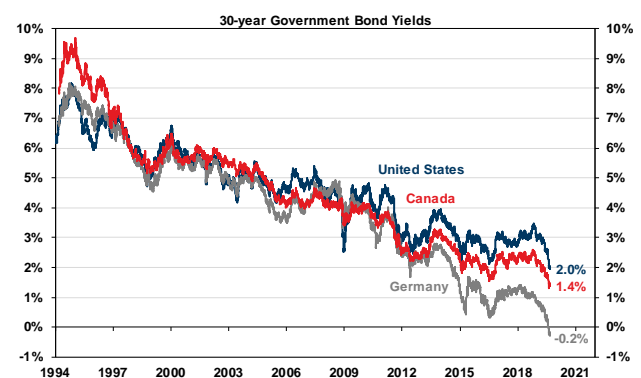


CIO Office (data via Refinitiv)



This reflects the sharp plunge in government bond yields worldwide, with 30-year interest rates reaching record lows notably in Germany and in the U.S., but also in Canada (**Chart 8**).

### 8 ... as government bond yields race to the bottom...



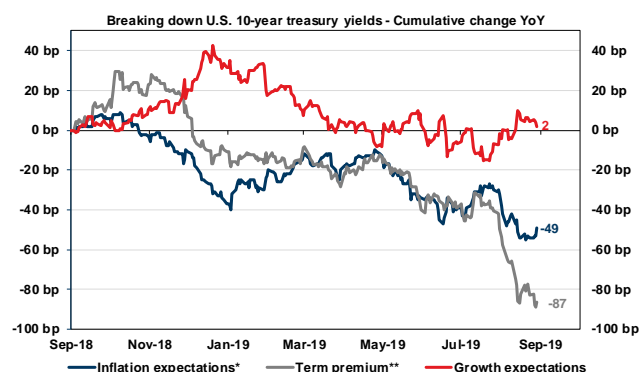
CIO Office (data via Refinitiv)



What is the main driver of such a race to the bottom? Looking at U.S. 10-year Treasury yields, which can be broken down into three key components (inflation expectations, growth expectations, term premium), it becomes apparent that it is largely the result of a marked decline in the term premium (**Chart 9**).

Why is this important? Essentially because, if the last two recessions are any guide<sup>1</sup>, it is specifically when the growth component begins to fall (as economic indicators begin to weaken), in conjunction with an increase in term premiums (as uncertainty rises), that the risk of recession is poised to become a reality (**Chart 10**).

### 9 ...and the U.S. term premium sinks even lower



CIO Office (data via Refinitiv). \*TIPS 10-year breakeven inflation rate. \*\* 10-year ACM term premium



### 10 The term premium typically rises close to a recession



CIO Office (data via Refinitiv). \*Growth component can also be interpreted as the expected average real policy rate over the term.

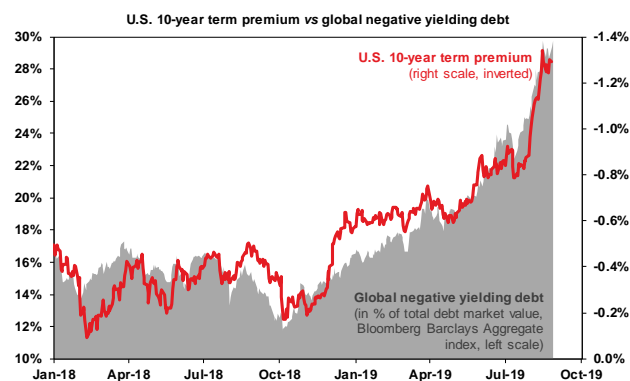


A more fundamental question is: why is the term premium this low, or worse still, negative? After all, this amounts to saying that treasury investors are effectively paying to hold duration risk, a statement that defies all economic logic. We see three main reasons contributing to this anomaly. First, the bond market is seemingly ruling out any risk of a substantial rise in inflation, thanks to nearly a decade of relative weakness and stability in this measure. Second, central banks have become a lot more predictable in the eyes of the market—even perhaps at their mercy—with the Fed's recent about-turn undoubtedly contributing to this belief. And third, the ongoing economic softness in regions where policy rates seem bound to remain at zero permanently, namely Europe and Japan. The resulting rise in negative yielding debt worldwide renders U.S. debt relatively more attractive and does indeed exhibit a strong correlation with the term premium (**Chart 11**, next page).

We would also mention the abundance of news headlines calling for U.S. 10-year yields heading to zero, which likely accelerated their decline in August. But here is the problem. While it isn't far-fetched to expect rates to approach zero in a recession scenario, the pace at which treasuries rallied in recent months leaves them highly vulnerable. Should (1) inflation

<sup>1</sup> Unfortunately, it is not possible to carry out this analysis before 1999 due to the lack of data on inflation expectations.

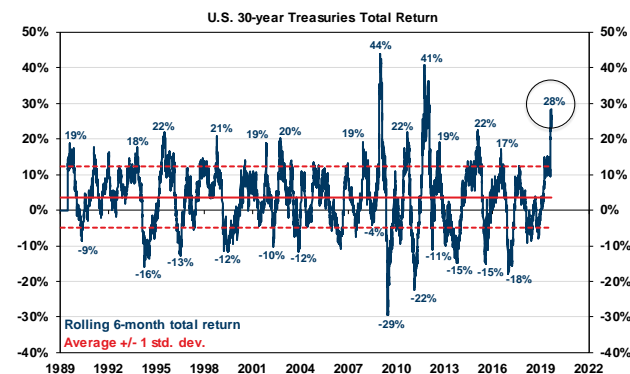


**11 Is negative yielding debt abroad dragging U.S. rates?**

CIO Office (data via Refinitiv, Bloomberg)



unexpectedly rise, (2) any major central bank “disappoint” markets, or (3) global economic data improve substantially, yields could quickly reverse course. Any positive announcement on the trade front could also be a trigger, as unlikely as that may be. However, whatever one may think, a look at the previous times in history where 30-year U.S. treasuries generated such high returns in such a short period of time as they have recently, shows that losses—most of which were quite significant—have always occurred in the months that followed (Chart 12). Will this time be different? Probably not.

**12 The stage is set for a reversal. Will this time be different?**

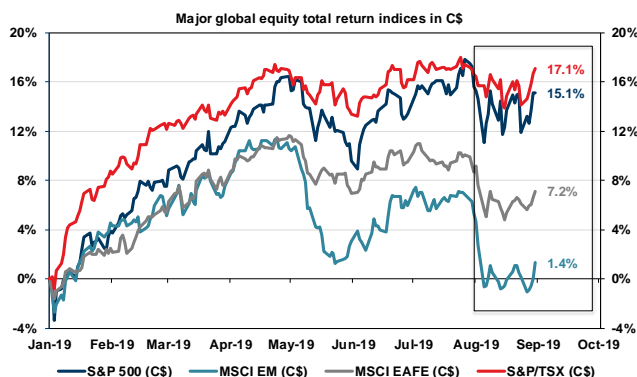
CIO Office (data via Refinitiv)

**Equities: Rocky Road**

Global equity indices seesawed throughout the month of August, unnerved by an escalation in trade tensions visibly more damaging to emerging markets, where 2019 returns have practically vanished (Chart 13).

In the U.S., equities continued to show resilience in this volatile environment, benefitting from yet another solid earnings season, with the S&P 500 constituents posting a 3.3% (vs. -0.6% expected in early July) bottom line growth in for Q2 (Chart 14).

Nevertheless, it bears noting that market leadership reflects an ever-growing dominance by defensive, growth-oriented and

**13 Global equities seesawed throughout August**

CIO Office (data via Refinitiv)

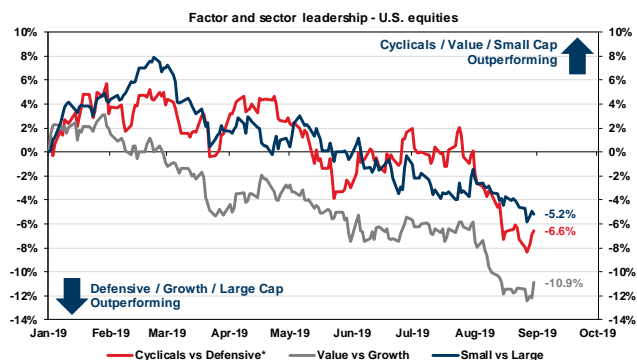
**14 Earnings continued to surpass expectations in the U.S...**

	Earnings Summary - S&P 500				Q2/2019 YoY*
	% Reported	% Beat	% Met	% Missed	
<b>S&amp;P 500</b>	99%	74%	8%	18%	3.3%
Health Care	100%	95%	2%	3%	10.4%
Technology	99%	79%	9%	12%	-2.2%
Comm. Sev.	100%	78%	4%	19%	17.8%
Materials	96%	74%	4%	22%	-12.7%
Financials	100%	74%	4%	22%	10.0%
Industrials	99%	72%	12%	16%	-9.0%
Staples	97%	72%	9%	19%	1.6%
Energy	100%	71%	4%	25%	-8.9%
Real Estate	100%	69%	16%	16%	3.1%
Discretionary	100%	66%	18%	16%	2.6%
Utilities	100%	43%	4%	54%	1.1%

CIO Office (data via Refinitiv). \*Blends actual EPS growth with expectations for those yet to report.



larger companies – an eloquent illustration of investors' preference for safer assets this year (Chart 15).

**15 ...but the market clearly favours safer stocks**

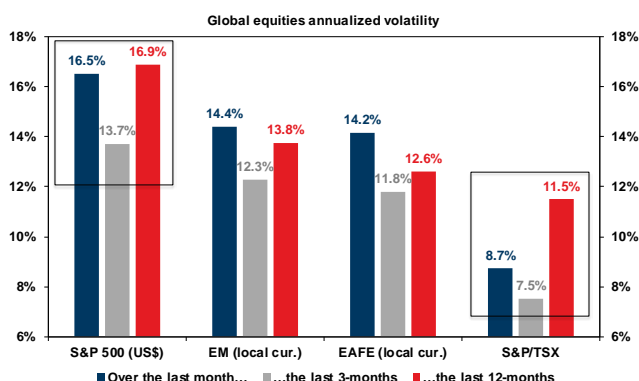
CIO Office (data via Refinitiv). \*Cyclical sectors = Average of Energy, Materials, Industrials, Financials, Cons. Discretionary. Defensive sectors = average of Staples, Telecommunication Services, Utilities.



This finding is to be expected given the developments in the government bond market, and more particularly the direction that the Trump administration is taking in the trade war. It is possible that their strategy is nearing the point where it could seriously backfire on their own economy and stock market. For

now, though, we continue to expect that the current backdrop will lead only to heightened volatility for U.S. equities, as was the case in recent months. Besides, let us recall that this was one of the reasons why we paired their overweight with an increased allocation to considerably less volatile Canadian equities back in May. An expectation which has proven accurate and profitable thus far (**Chart 16**).

#### 16 North America: Two countries... two volatilities...

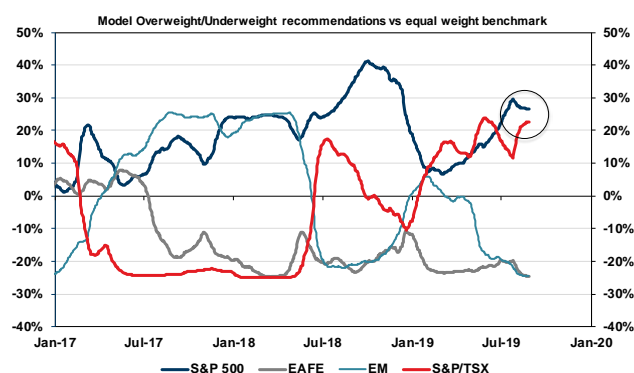


CIO Office (data via Refinitiv)



Under these circumstances, we maintain our geographical asset allocation in favour of North American equities unchanged. This is also what is advocated by our relative momentum model which, by the way, also takes into account the volatility of different regions in its recommendations (**Chart 17**).

#### 17 ... but one common momentum signal in their favour



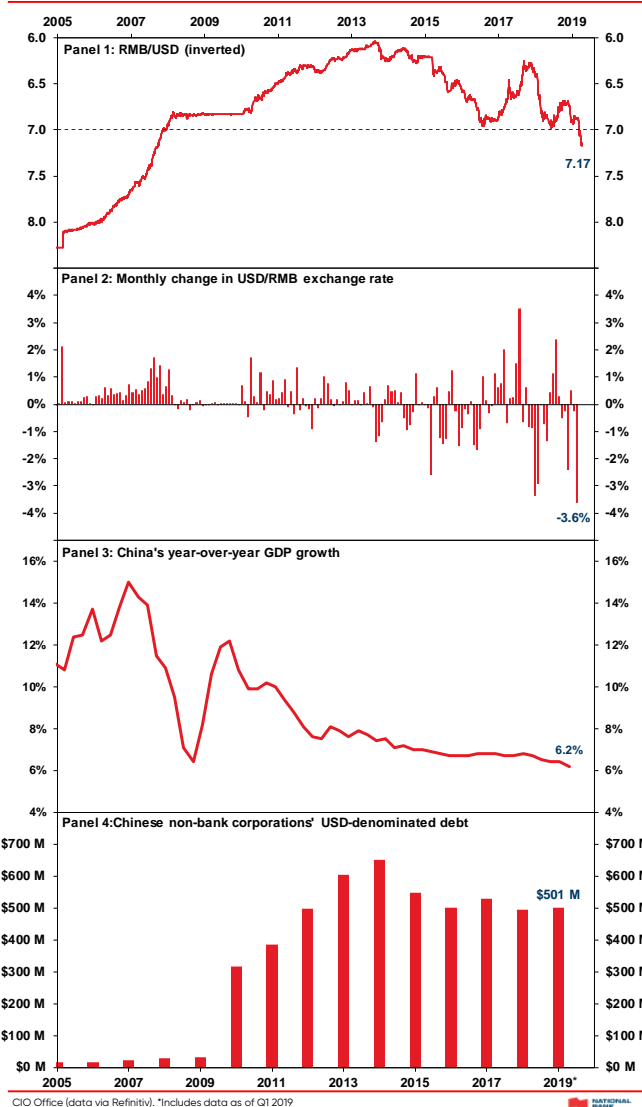
CIO Office (data via Refinitiv)



### Currencies: Reading the Renminbi

Early last month, the Renminbi (RMB) crossed the 7 ¥/USD<sup>2</sup> mark for the first time since 2008 (**Chart 18, Panel 1**), sparking market unrest as the S&P 500 simultaneously suffered its worst day of the year (-3.0%). Soon after, the Trump administration officially labeled China a currency manipulator. By month's end, the Yuan had lost 3.6% in value against the USD, its largest monthly drop in over 25 years (**Chart 18, Panel 2**). Amid such volatility

#### 18 The Renminbi: Two sides to every coin



CIO Office (data via Refinitiv). \*Includes data as of Q1 2019



and tension, many (including the U.S. president) have asked whether China has been engineering a devaluation of its currency in a bid to favour exports and offset tariffs.

To start with, it is important to understand that the RMB fundamentally differs from other major currencies due to its "managed float" system. Rather than being entirely subject to market forces like any G7 currencies, China's exchange rate is only allowed to move  $\pm 2\%$  around a value set daily by the People's Bank of China (PBOC). However, this does not necessarily imply that they have been manipulating their currency. In fact, a recent IMF report<sup>3</sup> concluded that a succession of reforms by the PBOC brought the RMB at a level "warranted by fundamentals" in 2018.

But what of the more recent bout of depreciation? Let us recall that over this period, Chinese growth has been decelerating (**Chart 18, Panel 3**) and the country finds itself in an interminable

<sup>2</sup> The Renminbi is the name of the Chinese currency, while the Yuan is its unit of account. Both words are often used interchangeably.

<sup>3</sup> International Monetary Fund. Asia and Pacific Dept. (2019). People's Republic of China. *IMF Staff Country Reports*, 19266. doi: 10.5089/9781513510460.002

trade war with its largest trading partner. Some measure of depreciation is to be expected in the face of such headwinds.

Finally, we would argue that the downside risks facing China of an active devaluation of its currency must also weigh heavily on the minds of policy makers at the PBOC. A loss in investor confidence in the RMB could not only lead to large and sudden capital flights from the country as occurred in 2015-2016, but also hinder China's aspirations for it to become a major reserve currency. What's more, a weaker Yuan would increase the debt burden of Chinese non-bank corporations, which, as of 2019 Q1, have accumulated over \$500B in USD-denominated debt (**Chart 18, Panel 4**).

Due in part to the above risks, we find it hard to believe that China would purposely engineer a prolonged devaluation of the RMB. However, as long as the cloud of uncertainty born from the Sino-American trade war hovers over the global economy, it will remain difficult for the Yuan to halt a market-driven slide.



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