The Quarterly

With this commentary, we plan to communicate with you every month about our thoughts on the markets, some snap-shots of metrics, a section on behavioural investing and finally an update on MacNicol & Associates Asset Management (MAAM). We hope you enjoy this information, and it allows you to better understand what we see going on in the market place.

"Great discoveries and improvements invariably involve the cooperation of many minds"

- Alexander Graham Bell

The Numbers:

Index:	**Year-to-Date:**	
S&P/TSX:	-4.51%	
NASDAQ:	7.51%	
Dow Jones:	3.56%	
S&P500:	4.19%	
Interest Rates:	**Canada**	**USA**
90-Day T-Bill:	1.50%	2.13%
5-Year Bond:	2.16%	2.74%
10-Year Bond:	2.23%	2.87%
30-Year Bond:	2.24%	3.05%

Economic Data:

- NAFTA renegotiation complete USMCA born
- US private payrolls grew by 230,000 in September significantly ahead of forecasts
- Bank of Canada kept interest rates at 1.5% at its September meeting but odds now favour a hike on USMCA deal
- Crude oil, natural gas and copper all sharply higher in September predominantly erasing declines in the summer
- Gold still materially below the $1,300 level though up roughly $25 in early October trading
- US 10-Year Bond yield now definitively through the 3% level and approaching the 3.3% mark on strong data from the US labour market
- Equities correct sharply in early October on rate concerns

Valuation Measures: S&P 500 Index

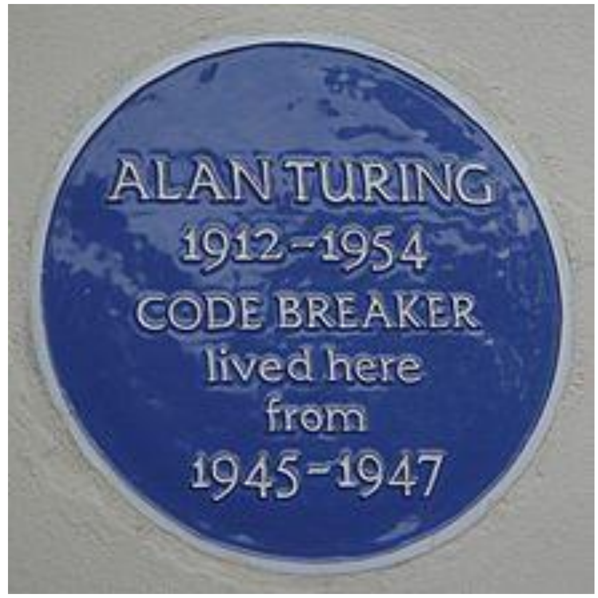
Valuation Measure	**Latest**	**1-year ago**
P/E: Price-to-Earnings	25.42	23.67
P/B: Price-to-Book	3.52	3.08
P/S: Price-to-Sales	2.33	2.09
Yield: Dividend Yield	1.74%	1.91%

Year-to-date Performance, by Sector: October 11th, 2018

U.S. Markets	Close	Net	1 Day %	YTD %
Dow Jones	25598.74	-831.83	-3.15%	3.56
Dow Jones Transports	10550.92	-445.16	-4.05%	-0.58
Dow Jones Utilities	739.54	-3.44	-0.46%	2.24
S&P 500	2785.68	-94.66	-3.29%	4.19
S&P 400 Midcap	1905.43	-126.74	-6.24%	0.26
S&P 600 Smallcap	987.79	-28.15	-2.77%	5.50
NASDAQ	7422.05	-315.96	-4.08%	7.51
Russell 2000 (Smallcaps)	1575.41	-46.45	-2.86%	2.60
BKX (Banking)	104.19	-2.47	-2.31%	-2.36
BTK (Biotech)	4885.81	-183.71	-3.62%	15.72
XOI (Oil Index)	1528.26	-60.40	-3.80%	14.43
SOXX (Semiconductor)	1242.10	-58.05	-4.46%	-0.87
XAU (Gold/Silver)	65.51	0.63	0.98%	-23.17

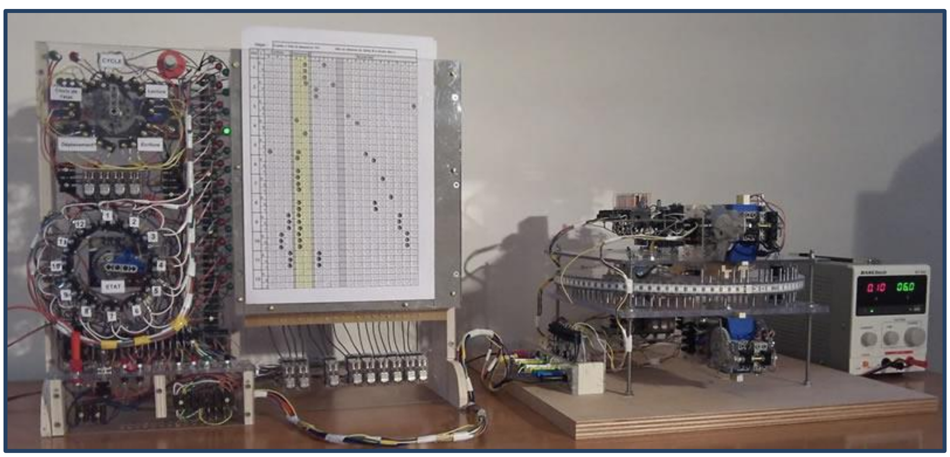
Source: Jeff Saut, Raymond James

Data Intelligence and investor delight



Alan Turing is widely regarded as the father of computer science and artificial intelligence. Unfortunately, Turing's fame is limited to a relatively small cohort of World War II history buffs and members of local math or computer science societies. He briefly led Hut 8, the unit of British Intelligence tasked with decoding German naval ciphers during World War II. In cryptography a "cipher" is an algorithm that can either encrypt or decrypt secret codes. Turing's work played a pivotal role in cracking the German "ENIGMA" code enabling the Allies to defeat the Nazis in many crucial engagements, which contributed materially to war efforts.

Turing was instrumental in helping the allies defeat the Nazis in World War II, alone warrants his spot in this edition of *The Quarterly*. We regard Turing not only as a World War II legend but as the inventor of the computer. We hope history regards Turing as such or at the very least the father of the progenitor of the computer. Turing's tape reading machine was created over 80 years ago and it bares little resemblance to modern computers.



The picture above is a display model of Turning's machine, used for educational purposes at a local museum. Back in 1936, the original machine used a predefined set of rules to determine a result from a set of input variables that came through the tape, today it comes through the cloud.

Do not let the Turing machine's crude appearance fool you. A Turing machine can simulate any computer algorithm no matter how complex. Computer algorithms form a critical part of data analytics: the process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful conclusions or to supporting decision-making. These days your data and how intelligently you use it can give your organization a competitive edge regardless of what your organization does.

Complex military and intelligence systems use data to hone battlefield tactics and to apprehend threats in the increasingly high stakes game of cyber warfare. Logistics companies use data to track, report and anticipate orders for a growing mix of clients. Hospitals use data to improve the level of care they provide to patients. Insurance companies use data to better detect fraud and design more suitable policies. The world of media and entertainment also uses data to increase revenues by understanding the real-time evolution of customer sentiment. Professional sports teams are also upping their game, with more teams studying data designed to help them win. Companies like *SportLogiQ* are helping teams succeed and broadcasters cash in.

Companies like *SportLogIQ* use data intelligently to send the right player in to the right situation so that sports teams can win championships and broadcasters can increase viewership.

SPORTLOGiQ

But Generals, Actuaries and Head Coaches aren't the only ones capitalizing on a trend in data. The keenest of retailers are using data to help them design predictive models that help their businesses anticipate evolving customer demands. US retailer Target for example, was able to use data to predict when a customer might have a baby.

Target stores missed their mark in Canada but the retailer's intelligent use of data to predict big life events in its client base was a direct hit.

Investment Implications

Investors searching for higher returns may wish to concentrate their investigations on companies that use data more effectively. Businesses that know where and when to channel corporate resources, are likely to be more profitable because they will save money by avoiding less fruitful ventures or corporate structures. Yet, such companies are proving to be more difficult to find in a stock market dominated by a handful of expensive tech names. Companies not traded on the stock market might, but available through the world of private equity investing may just be the optimal way to obtain exposure to this very clever asset class.

Data *un*intelligence?

Though not all the attention garnered from data intelligence is positive. Earlier in the year Facebook was in the news for its handling of personal data in the Cambridge Analytica [CA] affair. The situation turned into a full-blown scandal when it was revealed that CA had "harvested" (pirated) millions of Facebook profiles without consent. While the illicit data harvesting would appear to go back as far as 2015 it was not until the emergence of a whistleblower named Christopher Wylie, that the story caught widespread attention from the media, and lawmakers. Wylie, a Canadian, worked in CA's Research unit. Wylie provided *The Guardian* with documents that describe the secretive internal workings of CA.

Facebook was in the media for all the wrong reasons recently. The company's safe guarding of data was far from intelligent.

Just what was Cambridge Analytica harvesting anyway?

The documents described how CA obtained unauthorized data on 87 million personal Facebook users for the purposes of creating politically targeted campaigns for the 2016 US Presidential race. Most of the 87 million Facebook users did not explicitly give CA permission to access their data. Facebook founder and CEO Mark Zuckerberg was dragged before Congress for a roasting on his company's role in the hack. The business practices at CA, in addition to the full scope of the relationship between CA and Facebook, continue to be the subject of ongoing litigation and it may be some time before politicians and investors find out what happened. At the risk of stating the obvious, the MAAM investment team views this as one example of data not being used or obtained intelligently, and of course we do not own Facebook shares in client accounts. To us partnerships in private firms that fly under the radar of most investors represents data being intelligently used, and we hope this will delight our investors over time. Safe harbor investing is not always about being cautious it is about allocating resources to the right opportunities.

Later in October you will get the chance to meet leaders in the data field at the MacNicol Data Intelligence Conference. It just might be the most intelligent couple of hours you spend all year. More details on the conference can be found in the firm news section of *The Quarterly*.

Alan Turing was one great mind but as the quote at the beginning from Alexander Graham Bell reminds improvements take many.

Beautiful Bird, Crude Reality

We have written about the Loonie before, which of course makes perfect sense given our position as a Toronto-based investment firm with a predominantly Canadian client base. The questions we pose in relation to the Loonie in this edition of *The Quarterly* are as follows:

1. Did "USMCA" the new trade deal formerly known as NAFTA get its name after Christy Freedland, Robert Lighthizer and Iidefonso Villarreal discovered that YMCA was already taken?
2. Does "USMCA" in-and-of-itself change our views on the Canadian $ (CAD)?

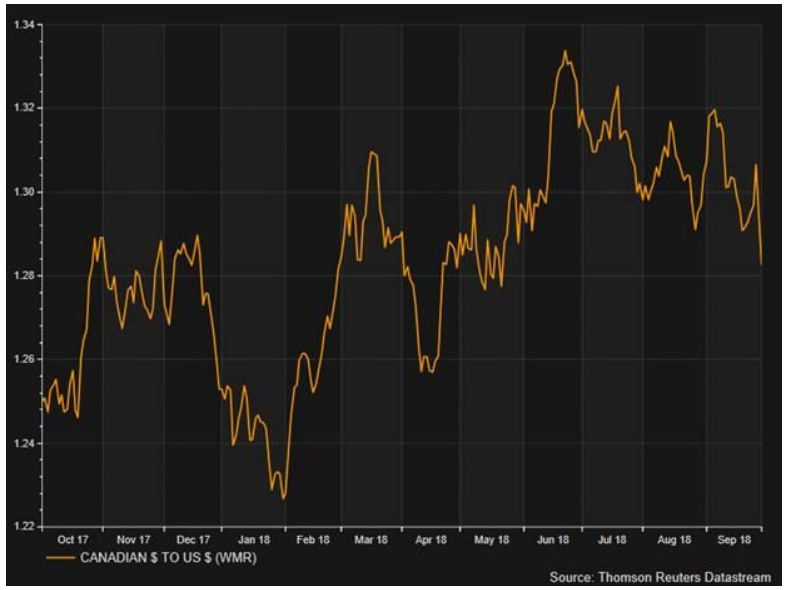
Hours spent negotiating, minutes spent coming up with a new name for NAFTA.

The first question is easily answered: USMCA is not the best new name for NAFTA but the unpleasant sting of its peculiarity should diminish over time. The second question requires a more detailed explanation since it amounts to asking us whether we believe that recent Canadian dollar strength will continue and whether USMCA had anything to do with it. Remember that here at MAAM a currency is considered the stock of a nation. Stocks are driven higher or lower by investor expectations for future earnings growth. A company's underlying profitability drives its stock price, is a statement understood by most investors. Currencies on the other hand are a bit of a different animal. Let us then look at the main factors that drive the price of the Canadian dollar while noting that USMCA isn't one of them.

Interest Rate Differentials and Crude Oil

Though the recent run up in the CAD may be connected to a new NAFTA deal we fall short of calling it a direct cause and effect relationship. The rise in the Loonie is not so much the deal itself. In fact, over longer time periods, investors are well advised to consider the differential between Canadian and US interest rates and crude oil prices as more reliable factors in the Loonie's flight.

American interest rates are higher than Canadian interest rates when viewed from the short end of the curve. The MAAM investment team also looked at 2-year interest rate differentials since they have done an excellent job of informing us about USDCAD movements in the recent past. USMCA only removes the uncertainty around monetary tightening on the part of the Bank of Canada and not the US Federal Reserve, which was on a well-established path to tightening for a little while now. The $1.30 level then represents more of a bottom for our currency we just don't see much of a catalyst to drive the Loonie higher.



This is the USDCAD chart which is interpreted as the cost of a US dollar to a Canadian. In recent times, 1 US dollar has cost us around $1.30 Canadian, but that has changed. As the Loonie strengthens the yellow line in the above graph comes down.

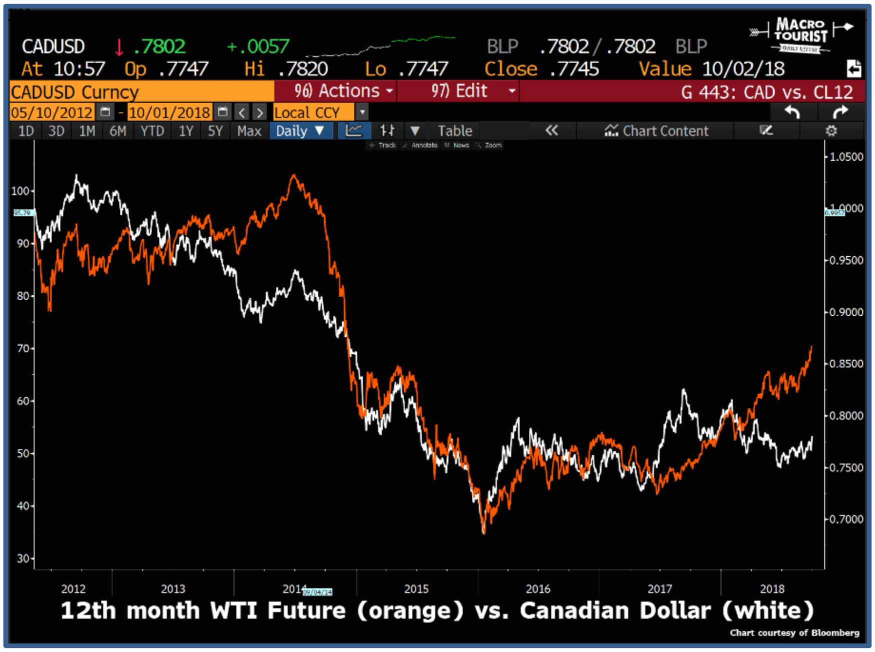
The Canadian dollar has performed ahead of what interest rate markets suggest it should visa vie the US Dollar.

The bond market suggests that the Canadian dollar should be weaker against the US Dollar [not stronger] and so perhaps the currency market is missing something.

Crude oil prices.

The Canadian economy is heavily dependent on tax revenues from energy sales, that's how the term "Petro Loonie" came to be. While the relationship between crude oil prices and the Loonie is unmistakable, crude oil has outperformed the Loonie for the majority of 2018.

Unfortunately, because Canadian crude is of an inferior quality to other global benchmarks it is more expensive to refine. Canadian crude is also having its fair share of troubles getting to international markets due to a lack of pipeline capacity. Crude can be shipped by rail, but that process is more dangerous and more expensive. It forces crude to compete with agricultural goods and represents only a short-term solution. US refinery outages (due to scheduled maintenance) also impact demand for our oil. US refineries in the gulf are the ones able to process thicker grades of Canadian crude. Canada is not running out of oil we simply cannot get it to where it needs to go and are thus assigned a deeply discounted price called Western Canada Select which is WTI.



Oil prices are rising but so is the spread between US and Canadian oil. This has caused the Loonie to lag crude. Perhaps USMCA means no major changes to Canadian energy export capacity.

Crude Oil		10/9/18 Close	Change	10/9/17 Close	17/18 Change	Average Price YTD
Synthetic Crude	(C$/bbl)	66.93	-77 ¢	67.99	-1.06	82.32
Edmonton Mixed Sweet	(C$/bbl)	61.75	-3.35	61.30	0.45	75.72
Western Canada Select	(C$/bbl)	36.19	-2.38	48.10	-11.91	54.86
Edmonton Condensate	(C$/bbl)	86.47	92 ¢	64.74	21.73	84.39
Differential (WTI/WCS)	(C$/bbl)	60.83	3.22	13.96	46.87	31.52
Differential (WTI/Synthetic)	(C$/bbl)	30.09	1.61	-5.95	36.04	4.06
WTI Cushing Spot	(US$/bbl)	74.96	62 ¢	49.58	25.38	67.12
Nymex WTI Nov18	(US$/bbl)	74.96	62 ¢	49.58	25.38	67.04
Nymex WTI 12 Month Strip	(US$/bbl)	74.16	52 ¢	50.42	23.74	64.89
Nymex WTI 2019 Strip	(US$/bbl)	73.77	52 ¢	50.55	23.22	62.35
ICE Brent Dec18	(US$/bbl)	85.00	84 ¢	55.79	29.21	73.10

The Petroleum Services Association of Canada closely monitors a variety of oil indicators. Of note to Canadians is the fifth line item "Differential (WTI/WCS)". The WCS/WTI spread is nearly double the YTD average.

Canada's full oil export pipelines, combined with a slow uptake in crude-oil-by rail shipments and, recently production outages at two important U.S. refineries. BP Plc's Whiting refinery in Indiana and Marathon Petroleum Corp.'s Detroit refinery, two of heavy Canadian oil's key customers, have been offline and undergoing maintenance. If anything, we believe the Loonie could reverse course. The run up in the aftermath of NAFTA will be short lived. Yes, Canada has gotten the pressure of a new NAFTA deal off its back, but 2018 continues to feel like a year in which Canadian investments are shunned, including the Loonie. Accordingly, we suspect that the new NAFTA does not have much to say about where the Loonie has gone thus far in 2018. If anything, we believe a reversal in our beloved petro dollar is more likely than a break out to new highs. So, enjoy the flight it will be a short one.

Shot across the bow?

The end of September represents not only a month end but a quarter end as well. The conclusion of the 3rd quarter of 2018 marks the end of brazen investor overconfidence and the beginning of investor angst. This is surprising since October, at least statistically speaking is not a particularly bad month for stocks. Debacles like those that occurred in 1987 and 2008 test one's belief in the statistics, but truthfully October is not a bad time to be invested. So what gives?

What about this October?

The major averages have declined, breadth (a measure of the extent to which a wide variety of stocks are participating in market movements) has deteriorated and opportunities to enter have been few. Comparisons to the "February Flop" earlier in the year are therefore to be expected. At times like these it is important to remember that the market was not as extended as it was back in January and as *The Quarterly* goes to the printer, what we are seeing is still by-and-large a garden variety corrective process, which makes intuitive sense. Very few if any of the headlines dominating financial markets recently have been a surprise.

"I told you I was raising okay…"

Most would agree the Fed raised short-term interested rates largely in line with expectations, and very mildly we would add. The lengthy trade talks most investors are sick and tired of hearing has, if anything, surprised to the upside. Unemployment, as reported on the very first page of *The Quarterly*, fell yet again.

Democrats and Republicans continued to trade shots over a variety of subjects, but their political discourse and dirty tricks are hardly news to anyone. Emerging markets have represented problematic pockets for investors, but one would think the performance of those indices, would drive money into perceived safe havens. Interest rates are rising, but they have been rising for 2-year now as inflationary pressures bumped against Fed targets. By and large then the past few weeks have been as one would have expected. Market psychology however can change quickly, and it can change especially quickly to those who ignore the deterioration without doing anything about it. Yields on the flagship US 10-year bond are now easily through the 3% level and this represents more of a floor and less of a ceiling to investors. Perhaps the reality of 3% interest rate is now beginning to sink in. Long-term investors should welcome dips like the kinds we are seeing as most market fundamentals remain intact. Recent market movements are by all accounts technical pull backs from overbought levels. The sorts of pullbacks which “recharge” markets and reward intrepid investors who have put capital to work. October certainly got off to a rocky start, so let us help you put market movements to your advantage. After climbing a wall of worry markets are finally giving investors something to worry about. Pullbacks are inevitable but worrying doesn’t have to be.

Firm News

The MacNicol Data Intelligence Conference is set for Monday October 29th, 2018 from 4-7pm at Rosedale Golf Club.

Calling all incorporated professionals and business owners! Do you pay yourself a salary? If so call us today to learn more about personal pension plans that can keep more of your money where it belongs.

MacNicol & Associates Asset Management Inc.
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