



September 2018

# Finding Alpha

# Table of Contents

BOC's Interest Rate Decision: A Helicopter View	1
"NAFTA is one of the worst deal in history"	3
10 Years Later: A Great Financial Crisis Lookback	5
Lululemon Running to the Top	7

# BOC'S INTEREST RATE DECISION: A HELICOPTER VIEW

BILL SHU

SEPTEMBER 28, 2018

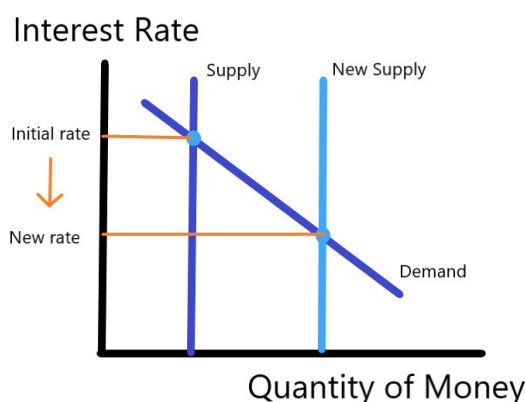
THE interest rate decisions of Bank of Canada (and all central banks in the world) have always been one of the key market signals that are closely followed by investors. On September 5th, the Bank of Canada announced that it is keeping its benchmark interest rate steady at 1.5 per cent. This educational article is dedicated to unravel the mystery behind the function of the central bank, the concept of economy-wide interest rates, and the implications of this decision.

## Bank of Canada: the Central Bank of the nation

Firstly, what is the Bank of Canada? The Bank of Canada is the central bank of the nation, which is responsible for four specific functions, the most important of is to conduct monetary policy in order to promote economic growth, stable prices, and full employment. In other words, the Bank of Canada must control and maintain the money supply in a fashion that optimizes economic prosperity.

In addition to conducting monetary policies, the BoC also promotes “safe, sound and efficient” financial systems, designs and issues bank notes (whereas the Royal Mint produces coins), and also act as the “fiscal agent” (which one may understand as a financial consultant/planner) for the central government.

As opposed to the common misconception that the central bank is a government agency, in fact, the central bank is structurally independent from the government, which provides itself with a perspective on the economy that is theoretically free from political interference and lobbying efforts. Of course, it is important to coordinate the fiscal policy conducted by the government and monetary policy by the central bank (as the two types of policies are complementary in nature), which is why the head of the BoC consults with the Minister of Finance on a regular basis



**Figure 1:** This is a supply and demand graph of the market for money. As the money supply increases, interest rates decrease, which stimulates the economy.

## Bank of Canada's policy tools

So how can the Bank of Canada fulfill its mandate and “fine tune” the economy? The key economic indicator that it can adjust is the general level of interest rates. Interest rates are essentially the cost of borrowing money to borrowers, and the reward of saving / lending to lenders. When the economy is in a recession, the BoC lowers the interest rates, which provides firms and individuals with less incentive to save, as well as more incentive to borrow and spend money in the economy. Therefore, the economy will grow faster with the added consumption and business investment. On the other hand, when the economy is overheating with risks of high inflation, the BoC raises the interest rates, which raises the cost of borrowing and the benefit of saving, thus slowing down the economy's consumption and investments.

Obviously, the central bank cannot control and adjust every single interest rate of every single debt instrument in the market. Instead, it only targets an optimal of one benchmark rate, known as the “overnight rate,” which is the rate that big banks borrow overnight loans from each other. Once that rate is adjusted, all the other interest rates in the economy will adjust accordingly as well, as almost all interest rates are positively.

The most common and powerful tool that the BoC utilizes is “open market operations.” When the BoC wants to lower interest rates, it buys bonds in the open market, which injects funds into the economy (it has bonds in exchange for cash injected in the markets). This is known as expansionary monetary policy (used to stimulate the economy). In that case, money supply increases, which in turn, decreases the interest rate (which is the price in the money market). Similarly, when the BoC wants to increase interest rates, it sells bonds in the open market which extracts funds out of the economy. Money supply decreases, and thus interest rate increases.

### The current increasing interest rate environment

The economic catastrophe in 2007–2008 engendered central banks across the globe to conduct aggressively expansionary monetary stimulus policies (as some may characterize as “Quantitative Easing”), thus lowering interest rates to near zero levels (as illustrated on this graph). Since 2016–2017, the economy has completed the recovery from the Great Recession of 2008 and started to step into the expansionary phase of the business cycle. Therefore, the Bank of Canada (as well as the Federal Reserve in the U.S.) has been gradually increasing interest rates since then. On one hand, this avoids rapid inflation during a period of rapid growth. On the other hand, increasing the rate has indicated the central banks’ confidence in the economy (as it believe the growth can be sustained despite increasing interest rates). Therefore, in the past few years, we have been in an increasing interest rate environment.

### KEY OVERNIGHT INTEREST RATE

A look at the Bank of Canada's trend-setting overnight rate:



**Figure 2:** This graph illustrates the drastic interest rate decrease due to the 2008 recession and the gradual rate hikes since 2017.

### The implications behind Bank of Canada's decision

So why did the Bank of Canada decide to keep the interest rate at 1.5% on September 5th, instead of pushing another rate hike? The main reason, of course, is the ongoing trade war, more specifically the unclear prospect of NAFTA talks between the U.S. and Canada. As of the day that this article is written, the U.S. and Canada still have not reached a mutually acceptable trade agreement, which brings lots of uncertainty as the end results of the negotiation may lead to different economic projections and outlook for the next few years. Therefore, instead of dogmatically raising the rates now simply because the economy is performing well, the Bank of Canada decides to wait and see before a new trade agreement is settled. Additionally, drawing from BoC's statement and the current economic conditions, economists and investors all agree that the Bank will very likely raise rates in October, which not only illustrates its confidence in the current economic growth but also in the potential success of the trade talk.

1. <https://www.cbc.ca/news/business/bank-of-canada-interest-rate-1.4811031>

2. <http://www.bankpedia.org/index.php/en/87-english/b/23910-bank-of-canada-boc-features-of-the-canadas-central-bank-encyclopedia>

3. <https://globalnews.ca/news/4428097/bank-of-canada-interest-rate-hike-oct-24/>

# "NAFTA IS ONE OF THE WORST DEALS IN HISTORY"

NATHAN SMITH, GARBO LIU

SEPTEMBER 30TH, 2018

ON September 30th, U.S.A. and Mexico published the text of what is to be the U.S.-Mexico Trade Agreement, leaving Canada on the sideline, and possibly NAFTA in the past. Trump has been very vocal on his opinion of NAFTA, calling it "One of the worst deals anybody in history has ever entered into". We will see how tariff feuds and trade deal uncertainty have an unfavorable impact on automakers such as Ford, and clashing effects on the farmers and big players in the dairy industry.

## The Agreements

Canada, the U.S., and Mexico are all running out of time to come to an updated agreement. By U.S. regulations, the text outlining the new agreement must be published 60 days before the deal can be signed. Mexico's Prime Minister is eager to have the "U.S.-Mexico Trade Agreement" implemented before his term comes to a finish as there is uncertainty whether the upcoming Mexican Prime Minister would accept the deal on the table. With U.S.A. and Mexico satisfied by the newly drafted deal, there is urgency to get it signed. The U.S.-Mexico text being published by September 30th is key for the deal to be signed on November 30th, just before Mexico's new Prime Minister enters office.

Much of the dissatisfaction of the 24 year old NAFTA have come from Trump on the topics of Canadian tariffs on key industries such as our dairy industry, auto manufacturing processes, and U.S. based employment which has lead to pursuit of a new agreement. The main new features, which will be drafted on Sept. 30th, of the U.S.-Mexico trade deal will now:

- Require 75% of the auto parts must be manufactured within the trade bloc member countries, up from 62.5% in NAFTA
- Require 40-45% of the auto manufacturing process must have been done by workers being paid at least US\$16.00 per hour
- Include a 16 year sunset clause, with an review allowed every 6 years



figure 1: Ford (NYSE: F) has seen a net decrease in stock price of 20.09% from May 30, 2018 close - Sept 27, 2018 close.

The major components of this new deal were clearly focused on addressing auto-related frustrations. But what is the actual impact of this deal? By requiring a larger percent of manufacturing to be done in-country, the big auto companies like Ford, GM, Fiat Chrysler will pay more for auto part inputs locally, decreasing their bottom line. At the same time, the agreement will benefit small business auto parts manufacturers, specifically U.S. parts companies, who will see increased demand from the deal and thus a boost to their top line. As well, the wage requirement will boost the average wage input throughout the manufacturing process. This will increase net wage costs for the big automakers and small parts companies, but can boost overall employee welfare in Mexico, and, to Trump's satisfaction, raise the number of U.S. companies operating domestically.

NAFTA had traditionally prevented member countries from imposing tariffs on each other, with some exceptions such as Canada's tariff on dairy products, but with NAFTA out of the way, we can see the direct impact of trade barriers on investment opportunities. Back in May of 2018, the U.S. announced tariffs of 25% on steel and 10% on aluminum. This is expected to cost the Canadian economy US\$3.2 billion per year, which decreases the Canada's dollar value. Ironically, this U.S. tariff resulted in Ford, a U.S. based company, paying more for its inputs. Ford's CEO reported that, "The metal tariff imposed took about US\$1 billion in profit from us". From Figure 1, we can conclude new trade rules and tariffs are two important factors driving down Ford's stock (NYSE: F) price.

Even in light of being excluded from the U.S.-Mexico deal, Trudeau stated he will not sign any bad deal for Canadians. While Trump has made it clear that he does not want to continue Canada's 300% tariff on U.S. dairy products in the modernized NAFTA deal, Trudeau is not giving concession on the Canadian dairy industry, which contributes \$8.7B dollars to Canada's GDP and adds 115,000 jobs to the market. Historically, Canada has kept strict import quotas on dairy products and applies steep tariffs (200-300%) on imports that exceed the quota. This tariff results in supply management, such that domestic Canadian farmers make up the bulk of the dairy supply in Canada. Despite Canada's tariffs, the U.S. sends far more dairy products to Canada than the other way around — in 2016, the U.S. exported \$557M of dairy products to Canada and received about \$113M. Although Prime Minister Justin Trudeau has vowed to defend supply management, he has not ruled out the possibility of offering Americans access to up to 10% of the Canadian market — double of the access they have now.

Easing up on dairy supply management would be devastating for Canadian farmers, but Canadian dairy processors that have international operations, such as Saputo Inc., take another view on this issue. In an interview with Bloomberg Markets, Saputo's CEO stated that the company will not be affected by tariffs because its dairy inputs are purchased domestically. Saputo sides with the U.S. to end dairy pricing rules, explaining that "[Canada] can't hold onto milk supply-managed system and have a glass of milk competing with world markets at the same time". The Class 7 pricing agreement, struck in 2016 between Canadian dairy processors and dairy farmers, allowed processors to pay lower prices for domestic milk ingredients used to make cheese and yogurt, and to export the rest. It was struck to create a domestic market for Canadian milk ingredients, after cheaper U.S. imports that were not subject to high tariffs flooded in previously. U.S. imports drastically dried up after Class 7 took effect, hurting farmers and processors in Wisconsin and New York state. Saputo's CEO said he was speaking out now because scrapping Class 7 would be more logical and less damaging than keeping it and surrendering additional tariff-free volumes to the United States.

We can summarize that, while Canadian dairy farmers may be severely impacted by a reduction of dairy supply management, bigger international dairy processors will not be hit as hard. We will eagerly wait to see if Canada makes moves to keep old NAFTA agreements on dairy alive, or whether a new approach will be sought out for the industry.

3. <https://www.cnn.com/2018/09/05/politics/nafta-canada-dairy-tariffs/index.html>

4. <https://globalnews.ca/news/4431314/nafta-donald-trump-canadian-dairy-market-access/>

5. <https://ca.reuters.com/article/businessNews/idCAKBN1JE2FI-OCABS>

6. <https://www.ctvnews.ca/business/canada-can-end-dairy-trade-dispute-with-u-s-by-ending-pricing-irritant-saputo-1.3978847>



# 10 YEARS LATER: A GREAT FINANCIAL CRISIS LOOKBACK

KHALISA VALANI

SEPTEMBER 24, 2018

**I**N October 2007, investors were rejoicing as the Dow and S&P 500 reached all-time highs, and the bull market, which began in 2002, officially celebrated its fifth birthday. However, by the same time just one year later, the markets had plunged, financial giants had been slain, and panic and chaos ensued all over the globe. So what caused this drastic turn of events?



**Figure 1:** S&P 500 quoted in USD from January 2007 – December 2009.

**Source:** Yahoo Finance

The so-called “the Great Recession” or the “Financial Crisis of 2008” is largely attributed to the “Subprime Meltdown” which commenced in 2007, when the housing market was a source of great interest to investors, banks and consumers. Subprime mortgages are loans targeted towards borrowers with poor credit scores and high default risks, who would not typically qualify for regular mortgages. Due to the nature of the debtors, creditors often charge higher interest rates on these loans in order to justify taking on a higher amount of risk.

It is quite logical that subprime mortgages were viewed as favorable in early 2007 as the economic prosperity increased the risk tolerances of financial institutions. Unfortunately, this led to reckless business activity, including institutions taking on more debt than they could afford by underwriting massive amounts of loans to increase profit margins. This is largely due to the fact that when these institutions underwrite loans, they can then package the loans into “mortgage-backed securities” (MBSs), which is funded by other investors. Therefore these lending institutions bear no default risk on the loans they underwrite, which incentivized reckless subprime lending.

When the economy started its downturn in the later half of the year, many people lost their jobs, leading to a large-scale failure of borrowers being able to repay their mortgage debt. Thus began the “Subprime Meltdown” – high loan default rates by consumers were coupled with the inability of creditors to absorb the debt, which ultimately broke the foundation upon which the entire financial industry laid.

September 2018 marks the 10-year anniversary of some of the most significant events in all of financial history. The month of September in 2008 saw the first of many financial shocks when the United States government announced its takeover of Fannie Mae and Freddie Mac on September 7th, 2008. The two firms were responsible for creating the secondary mortgage market where financial institutions were able to sell the mortgage debt they had originated in order to gain the capital needed to finance additional mortgages, through the previously discussed MBSs. While the economy was prosperous, Fannie Mae and Freddie Mac made homeownership more accessible for many people, but these organizations catalyzed the subprime meltdown when economic growth started to slow. The government rescue was a major red flag, signalling that the credit crisis was out of control, but the turmoil had only just begun.

During the following week, on September 14th, 2008, prominent financial firm Lehman Brothers filed for bankruptcy and Bank of America bought Merrill Lynch, the nation's largest brokerage. The American International Group (AIG) was also reeling from heavy exposure to subprime mortgage debt and was saved by a \$40 billion injection by the Federal Reserve. Over the next few weeks, many other firms that were reeling from their own losses experienced partial or total asset liquidation or transfers. This caused a mentality shift towards being risk averse – banks even refused to lend to consumers at all until governments forced their hand in an attempt to restore order to the global financial system in exchange for emergency monetary relief.

This restoration process has yielded some of the most impactful regulatory reform in modern history. In July 2010, the United States enacted the Dodd-Frank Wall Street Reform Act, which strove to prevent reckless risk-taking behaviours by financial institutions in order to protect consumers from economic catastrophe. The economy has now been in its longest bull market, which hopefully signals that investors have learned their lesson from the Great Financial Crisis that took place some ten years ago.

3. <https://www.investopedia.com/articles/economics/08/fannie-mae-freddie-mac-credit-crisis.asp>

4. <https://www.nytimes.com/2008/09/15/business/15lehman.html>

5. <https://corpgov.law.harvard.edu/2010/11/20/the-financial-panic-of-2008-and-financial-regulatory-reform/>



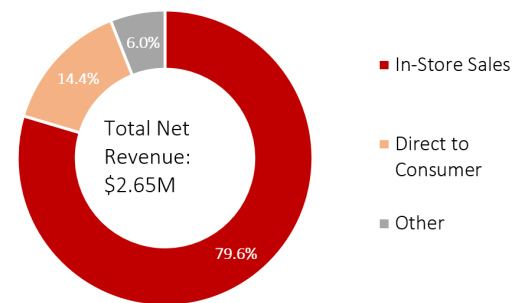
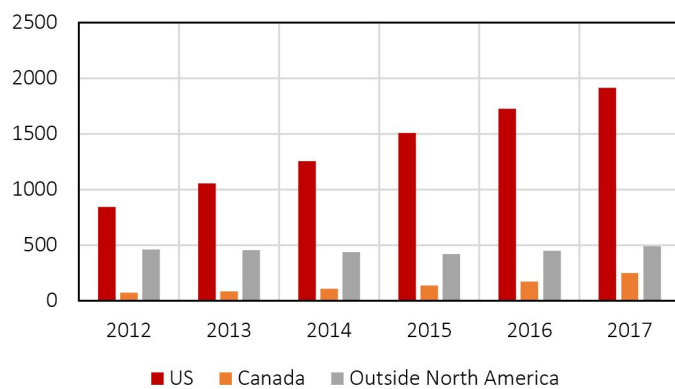
# LULULEMON RUNNING TO THE TOP

EDWARD SUN

SEPTEMBER 29TH, 2018

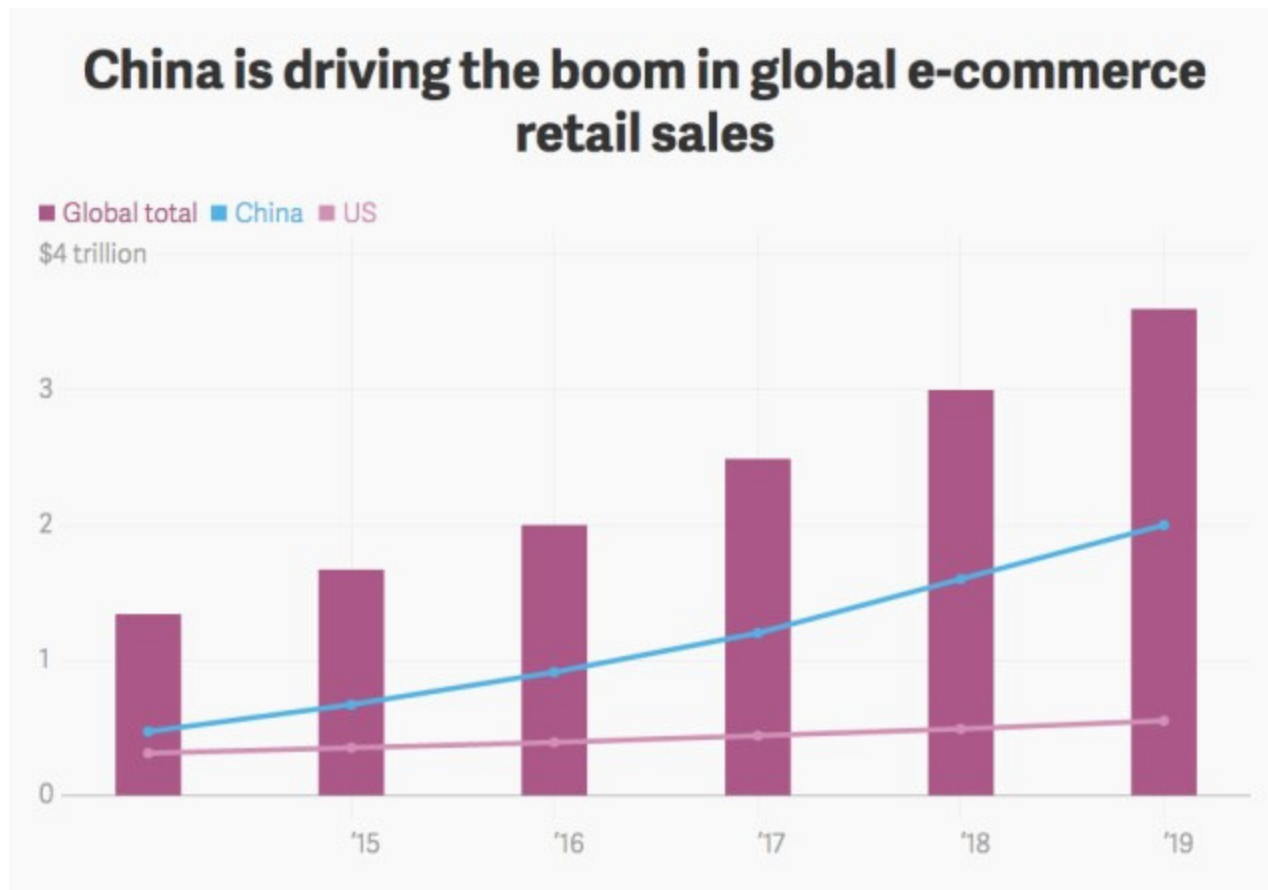
LULULEMON is a yoga-inspired athletic apparel company. Over the last twelve months, Lululemon's stock price has risen over 140%. This has been due to their strong financial performance with record breaking sales as well as management's road map for growth in the future. Their core business comprises of the engineering, design, and distribution of athletic apparel to both men and women. The Lululemon brand focuses on the fitness-focused & health conscious luxury lifestyle. By keeping in-store inventory low, this creates a feeling of "scarcity" and luxury of the brand. Lululemon rarely offers sales and depends on their community based approach to build brand awareness and customer loyalty. Over the last quarter, Lululemon had some very impressive results, revenues up 25% year-over-year (YoY), in-store sales up 10%, e-commerce sales up 48%, and EPS up to \$0.71/share from \$0.36/share YoY. Looking at the industry, the global sports apparel market is expected to reach \$180 billion by 2020, partly due to the rise in the "athleisure" trend (wearing sportswear clothing as casual clothing). This represents a huge opportunity for Lululemon to capitalize on, demand for sports leisure apparel has surged 17%, while demand for performance apparel has dropped 10%.

Net Revenue by Geographic Segment (in millions)



There are 2 main drivers behind Lululemon's impressive run. The company's financial position and sales growth strategy have shown investors that the firm is in the perfect position to dominate the athletic apparel space. Firstly, Lululemon has consistently improved their margins through supply chain segmentation and through the expansion of their distribution network. Their gross margin has gone up 3% and their EBIT margin has gone up 5% over the last quarter. This investment to improving net profits is vital to the long-term success of Lululemon. Similarly they have increased capital spending by 66% in order to develop their IT, data & analytics, and e-commerce platform to sustain their increased growth in demand. In addition to this, they are also investing in building new stores and improving existing stores through renovations, this is critical to reach their target \$4 billion revenue goal by 2020.

Secondly, Lululemon has invested significantly into their sales growth strategy. Through initiatives like their International Yoga Day campaign, where they donated \$1 million to encourage healthy living and fitness, their brand image has strengthened significantly. Their guest acquisition has increased by 30% across all distribution channels. Excellent customer support and brand loyalty has helped to increase brick and mortar sales by 10% compared to the industry average of 6%. E-commerce sales have grown significantly the past year and online website traffic has also increased. Users are now spending more money on average every purchase online.



Lululemon has a strong brand presence among women compared to men. However, males represent 52% of the athletic apparel market and this represents an opportunity to expand into a new market segment. In the last quarter, 30% of new customers were male, which indicates that Lululemon is acquiring male customers at a faster rate than women. Many new products have been launched in order to favor male customers, shorts, sweat hoodies and pants geared toward busy office commutes. Another catalyst for growth is the untapped market in China. Lululemon sales in Asia grew 55% as a large demand of lightweight yoga clothing is becoming more popular in the hot and humid conditions of the region. Lulu plans on expanding over 200% of its current Chinese operation and also plans to open up e-commerce platforms in Japan and South Korea.

With their impressive run in China and their expanding eCommerce platform, Lululemon is one of the fastest growing retailers with impressively high margins. Lululemon recently delivered an incredible second quarter with results astounding analysts across the street. However, due to their high share price and recent runup, it would be wise to see if Lululemon can continue delivering on their promises and satisfy growth seeking investors.