Group Assignment

Will the rising interest rates affect the profitability of Canadian banks?

ECO349H5

Dr. Yingnan Zhao

University of Toronto Mississauga

Submission Date: August 15, 2022

Group 11

Youwei Zhang 1006126130 (Introduction, Conclusion)

Xuecheng Gao 1006226807 (Methodology, Analysis)

Qiong Wu 1006666653 (Methodology, Analysis)

Tingjia Lu 1005915306 (Methodology, Analysis)

3. Will the rising interest rates affect the profitability of Canadian banks?

Nowadays,the interest rate in Canada demonstrate an upward trend in 2022.The increasing interest rate decreases banks' profits due to maturity mismatch, for example, the maturity of liabilities is shorter than that of assets on average,which is called the interest-rate risk,but there are also many other circumstances.In 2020, faced with the COVID-19 pandemic, the Bank of Canada lowered its policy interest rate to 0.25% to boost the economy. The Bank is raising rates to attempt to rein in high inflation. In May 2022, inflation reached an almost 40-year peak, at 7.7%.When interest rates rise, consumer expectations for savings account rates also rise. A rate hike could mean a slight increase in future interest rates on savings accounts and Certificates of Guaranteed Investment (GIC). Banks are not obliged to raise interest on savings accounts in proportion to the interest rate they borrow, but competitive pressures can eventually lead to higher interest rates.The rising interest rate will affect the housing mortgage as well.During the COVID-19 pandemic, the Bank of Canada cut interest rates several times to stimulate economic development, reducing the benchmark interest rate to an all-time low. As soon as the interest rate rises, major banks will raise the interest rate on mortgages and other credits, and the financial burden on those who buy houses at low interest rates during the epidemic, or owners of companies whose sales have been affected by the epidemic and therefore maintain their loans, will significantly increase each month.The Canadian housing market, which has been hot for several years, may also cool down as rising interest rates lead to an increase in mortgages. If you want to enter the market, it's mixed news: the price may become more affordable, but you may pay a higher mortgage rate than before.Not only the housing mortgage,but also the car loan and the company loan are also increasing.Many mortgages, auto loans and corporate bonds are influenced more by investors' expectations of future short-term interest rates than by current rates. Although these rates only apply to new loans and bonds, not existing ones, they are rising faster.Higher interest rates make loans and mortgages more expensive. In cities with high-priced real estate such as Vancouver and Toronto, homeowners can pay hundreds of dollars in term mortgages. Higher interest rates can also affect lines of credit as well as auto and student loans.For example, interest rates for people with variable debt, such as credit cards, credit limits, and variable mortgages, are pegged to the bank of Canada's interest rates – and these rates are immediately affected.When the bank of Canada's interest rates go up, the interest you pay goes up.When interest rates go down, the amount of interest you pay goes down. If you have a variable interest rate debt associated with it, you can expect your payment to increase.The next few paragraphs will go through some analysis and methodology on how higher interest rates will affect the earnings of Canadian banks and the relationship between inflation and interest rates, and the impact of high interest rates on various loans.

We discuss the current rising interest rates affecting the profitability of Canadian banks and relate to the impact of interest rate changes on bank assets and liability in Our Lecture 6.

We did some research about Canada's interest rate data (Trading Economics, Canada interest rate summary) before, during the Covid-19 to the present. From the data, we clearly know that interest rates were at 1.75% in 2019 before the covid-19. After that, interest rates kept falling to the lowest point of 0.25% during covid-19, until the interest rate did get better in 2022. Covid-19 has done long-term damage to Canada's economy; the opening of each province and enterprise, people's consumption behavior, unemployment, and more problems will have a series of ripple effects on the demand-supply chain. The Bank of Canada's measures are not only cutting interest rates to the minimum, but they are also starting a program to buy bonds and government securities, in order to help the market operation, and lower the cost of borrowing for households and businesses. The lower interest rate and economic recession have a strong impact on Canada's inflation. We can find that Canada's historical inflation rate has been in the range of 1% to 2% in the materials that we searched(World Data, Development of inflation rate in Canada, from 2019 to 2021), but the inflation suddenly goes down to 0.72% in 2020. Therefore, Covid-19 also led to consumers having less spending power and reduced purchasing power. At the same time, as the inflation rate increases, the interest rate decreases, which has a certain impact on the real income of consumers, and people's living standards also have declined. We could see the high inflation due to Covid-19 in our daily life, I remember we just need to spend 25 Canadian dollars to buy a box of beef, but now we need 38 Canadian dollars before tax, then we use the consumer price index's formula (price now over price before, and then times 100 percent) to calculate a consumer price index right now, so we can get the current consumer price index is running about 152%. Then let us verify our data, we looked up the summary of Canada's consumer price index (Trading Economics, Canada Consumer Price Index), and the conclusion is that the data calculated by querying the prices before and after Covid-19 is very close to the real data. At the beginning of 2022, the Bank of Canada kept raising the interest rate in order to adjust the economy and curb inflation, this action increased the deposits to the commercial bank, which in turn raised bank profits. It corresponds exactly to the contractionary monetary policy that we learned in ECO349. This policy means the government and central bank raise interest rates and reduce investment and demand for money, further lowering the inflation rate by controlling the money supply. During Covid-19, the Bank of Canada accelerated the process of the contractionary monetary policy with three times interest rate increase. In our opinion, we think contractionary monetary policy will help to prevent inflation and boost bank profits, but it will also cause an economic recession in Canada. In the sheet we collected about the Bank of Canada(Trading Economics, Canada Central bank balance sheet), we can obviously know that banks' profits have been in a very stable upward trend before the Covid-19, until 2020 the Bank's profit had fallen, and we are able to found every time the central bank raises interest rate will cause a small boost to bank's profits. These data from real-life show how contractionary monetary policy, and whether it will be useful for economic development during Covid-19. The high-interest rates will cause bank deposits to rise, and investments to decrease to adjust supply and demand for preventing inflation when in an economic recession. People can earn interest when they save money in commercial banks, the interest rate goes up bringing a direct change that is the increase or decrease in bank deposits, which also stimulates the desire of depositors to save more money in the bank. The liquidity of money will shrink during an economic recession. After that, people will keep their money in banks, so the deposit in the bank will increase, and the profits of the bank will rise accordingly. Additionally, we can take a clear look at the bank's deposit rise due to the high-interest rate in three ways. Firstly, we can think of it in terms of total bank deposits, the rising interest rate means more returns than before, therefore, people will be more inclined to save money in banks, and the total bank deposits also go up. Secondly, we can talk about it in the form of savings. The change in the interest rate could affect the way people save money; people gain interest by saving deposits when the bank keeps raising interest rates, the other one is people save with money or with physical savings. Finally, we talk about the structure of savings, deposits, securities, and long-term and short-term financial assets have a huge impact on the distribution of savings structure. The proportion of short-term financial assets will ascend in the savings structure when the short-term interest rate increases. The rising interest rate has an important moderating effect on national savings, for example, adjusting total savings, savings structure, and form of savings.

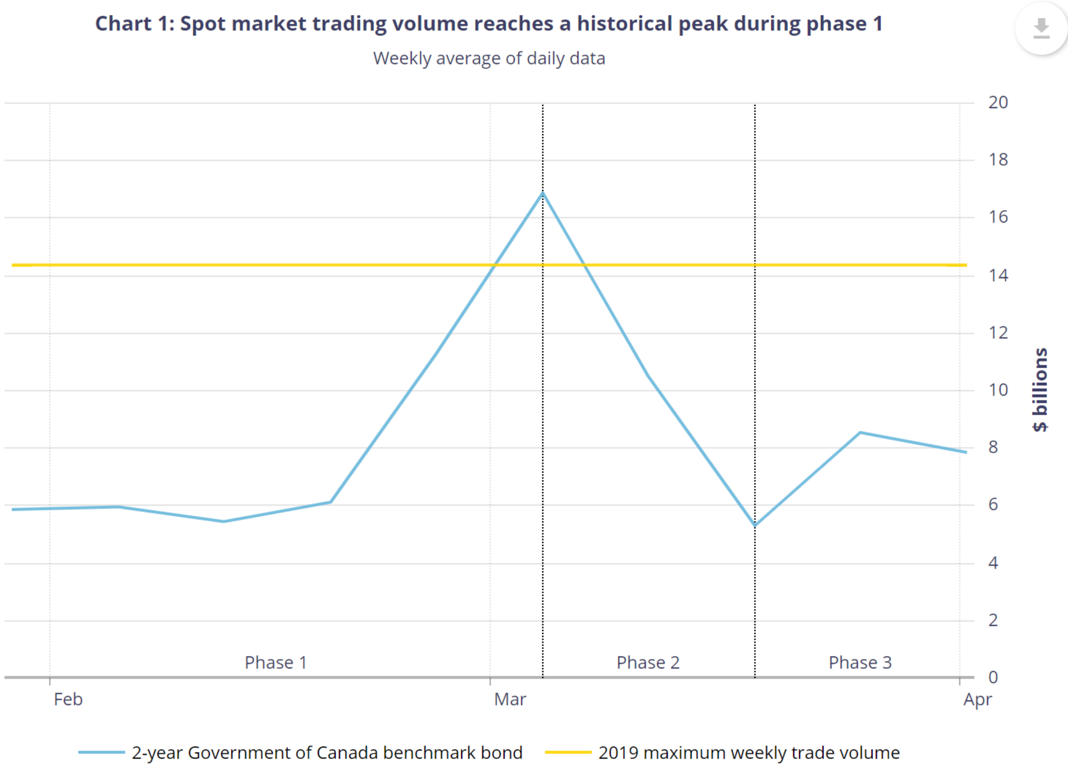
Contractionary monetary policy improves the interest rate, so more people will keep their money in a safer place such as a commercial bank, and so invest less in some financial products. Then we can do a hypothesis about market segmentation theory. Next, we should check Canada's household saving rate (Trading Economics, Canada Household Saving rate), and a conclusion is that thousands of people save money in the bank, the data has reached 28.2% during the Covid-19, so saving rates were double or more than before Covid-19. In fact, contractionary monetary policy is a positive way, it is difficult for people to get credit and loans from commercial banks under this policy, but it can drive banks' reserve requirement ratio up. This theory can improve the development of the bank, the lending capacity, and the profitability of commercial banks. In addition, it also can help commercial banks avoid the risks of economic recession, and reduce the number of loans. The goal is to decrease the allocation of market funds and improve the management level of bank loans. Therefore, commercial banks are able to win a mass of funds that can increase their profits and asset management. The contractionary monetary policy is actually used as a conditioning tool for short-term markets, so it does not have a great impact on the long-term, the main impact is the short-term interest rate. In the long-term, the interest rate will change with the market requirement, social policy even, or social structure; the monetary policy has avoided institutional issues in the greatest limitation, so the long-term effect will be smaller than the short-term interest rate. Money demand is a rising demand, the quantity of money increases. If the government will not continue contractionary policy indefinitely, its function will disappear soon. In the short term, the target of contractionary policy is to improve the short-term interest rate, so the government's use of short-term policy leads to the short-term interest rates changing fast, but long-term interest rates change slowly. The interest rate structure curve will have a lower slope, that is the reason I think there is a positive relationship between the short-term and long-term interest rates. We did some research about the effects of the contractionary monetary policy, and by its theory we know this policy is used when the economy is overheating. The Bank of Canada can solve the inflation problems during Covid-19 through high-interest rates. During the implementation of the policy, the government could lower the real money balance and raise interest rates in the short term when prices are sticky. National income and import point out would be lower leading to a trade surplus when the government adopted a contractionary monetary policy. Under normal circumstances, the long-term interest rate is higher than the short-term interest rate, we also can think of it as the term structure of interest rate (Financial EDGE, term structure of interest rate). This theory is the same as our hypothesis, both divide the market into short-term, mid-term, and long-term; each bond market with different maturities can be regarded as a single individual, and one of them is separate from the others. The interest rate of different maturities of bonds depends on how much demand for this bond is to people, and the supply of the market. Short-term and long-term interest rates both have limitations, they cannot be used instead of each other. Long-term interest rates are different from short-term interest rates due to they have long maturities and many uncertainties, so long-term is a higher risk than short-term interest rates. Market segmentation theory exists because investors and depositors both have a preference for maturity. From my side, I think I did not know enough about the causes, effects, and trends of changes in market interest rates, that is the reason why I think the short-term interest rate is definitely higher than the long-term interest rate, my opinion is the government made high-interest rates in the quickest way possible to ease inflation in order to boost bank profits.

There are two types of Canadian banks, the Bank of Canada and the Canadian Commercial Banks. The role of the central bank is to issue money and monetary policy. The main objective of monetary policy is to stabilize the value of money by keeping inflation low and controlling interest rates. Enables individuals and businesses to have more confidence in their investment decisions. Different from the central bank, a commercial bank is a financial institution that raises funds with various financial liabilities and operates various financial assets for the purpose of profit. Commercial banks mainly make profits from asset business, loan business, and foreign exchange trading. Therefore, when interest rates rise, investment decreases, lending risk increases, and foreign exchange decreases. These will affect the profitability of commercial banks.

First, one reason for rising interest rates is inflation. In order to deal with domestic inflation, Canada's central bank announced a 100 basis point increase in interest rates to 2.5% using tight monetary policy. It also brought the Bank of Canada's overnight rate to its highest level since 2008. Higher interest rates make Canada's currency appreciate, which is not good for export trade. Currency appreciation reduces the export competitiveness of exporting products. Through the IS-LM model, it can be seen that when the currency appreciates and the interest rate rises, the country's exports will decline seriously. Because more export commodities lose competitiveness, and the country's foreign exchange will also be affected to a certain extent. Energy and other commodity prices rose in the first quarter of 2022 due to the impact of the Russian-Ukrainian war. The war has further disrupted global supplies in the wake of the pandemic, and Canada's role as an energy exporter has also been affected. The foreign exchange reserves of Canadian banks fell as a result. In addition, many companies will be unable to repay due to the impact of export trade, which will affect bank profits.

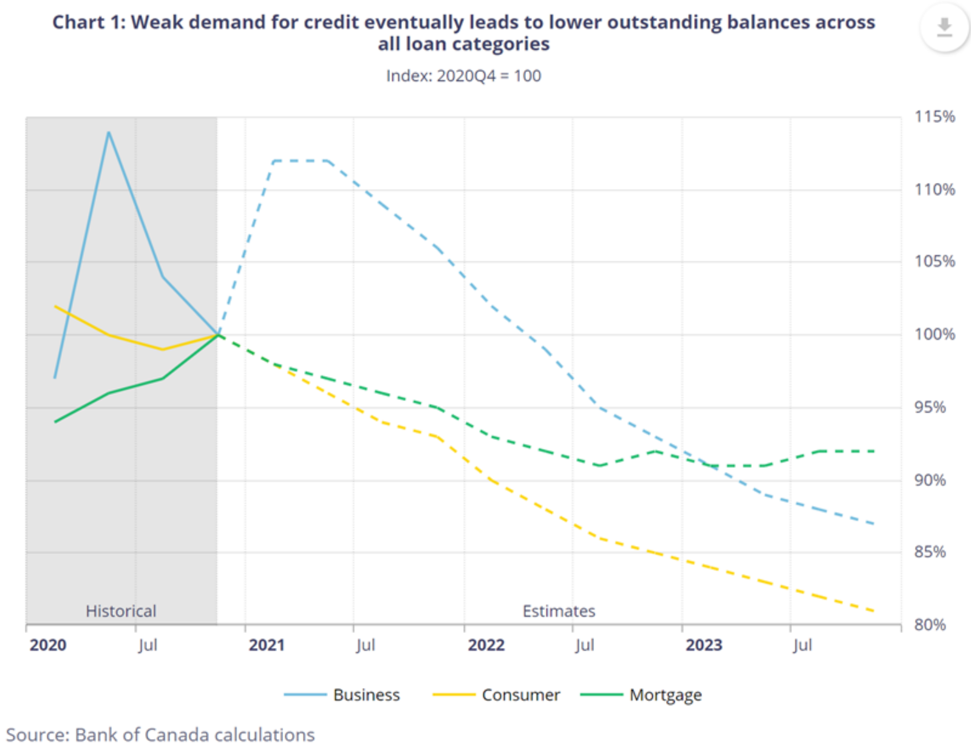
Second, the increase in interest rates will have an impact on Canadian residents' investment, savings, consumption and the domestic financial market. In the process of raising interest rates, investment in the people will be affected. Because after the interest rate hike, the domestic investment opportunity cost will increase. In the face of the economic downturn, the combined effects of the epidemic and war, the return on investment is very low, and with the further liberalization of interest rate hikes, household savings will also increase. For the Canadian financial market, raising interest rates means that the liquidity in the market will decrease, and the funds that can enter the stock market will also decrease. In the short term, raising interest rates in Canada is more beneficial than detrimental, which has eased inflation in Canada. However, the debts of commercial banks are mostly short-term, while the assets of banks are mostly long-term. After the Bank of Canada's monetary policy of raising interest rates, the prime rate of Canada's five major commercial banks was raised to 3.20% from 2.70%. The increase in interest rates will increase the cost of personal borrowing, because people will have to spend more money to pay off debts. And there will be many non-performing loans on short-term loans, because the repayment cost will rise and many personal loans will default, which will affect the bank's profits. A maturity mismatch occurs when commercial banks use short-term loan proceeds to pay for long-term loans. Banks use short-term loan profits with relatively low interest to lend to long-term enterprises. At this time, there will be a mismatch between the maturity of the asset side and the maturity of the liability side, and the bank's profit will decline accordingly. Commercial loans, as the main source of profit for banks, are the most affected. As banks adjust interest rates, the cost of long-term loans has risen, and small and medium-sized enterprises need to borrow from banks to maintain their operations, but the risk of non-performing loans for these groups increases. Large corporations, on the other hand, will reduce loan amounts and increase other investments. Since the subprime mortgage crisis in 2007, Canada's business investment gap has accumulated to about $100 billion. The company is very careful about investing. Central bank monetary policy works by affecting interest rates. If the company doesn't adjust the interest rate, this shows that the change in the interest rate has very little effect on the business investment. Nonetheless, monetary policy affects how individual companies invest. In any case, this will affect the bank's profit decline.

Third, the financial products of commercial banks, such as funds, bonds, and stocks. Due to the interest rate hike, commercial banks have bought bonds in large quantities in the financial market. Since bonds are fixed future cash flows, higher interest rates reduce the value of financial products held by banks. From the data in the table, bond trading volume peaked in March 2020 due to the increased demand for bonds due to the epidemic. Then the central bank intervenes and the demand for liquidity falls. During the pandemic, many asset managers needed to convert assets into cash for margin calls. Asset managers sold a lot of fixed-income securities, and the market became chaotic. In order to restore market order, the central bank began to purchase a large number of fixed-rate bonds and assets. The central bank will set a price, and dealers will then sell at that price. And the central bank's repurchase does not affect the seller's leverage.

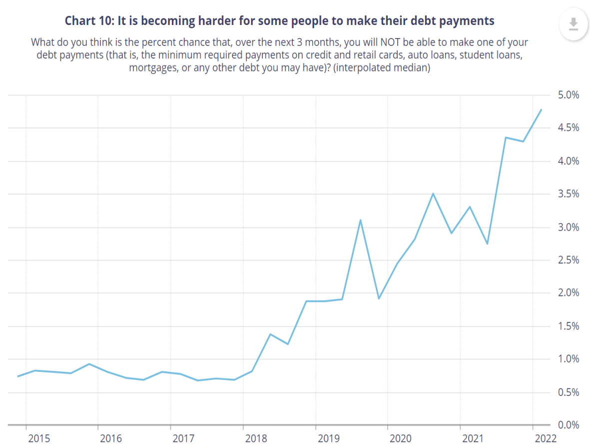


The COVID-19 pandemic has wreaked havoc on the Canadian economy, with high inflation, multiple interest rate hikes by the central bank, reduced liquidity in financial markets, and a surge in domestic unemployment. The pandemic has impacted bank profits in three main parts. Bank credit demand has weakened, loan defaults have increased, and credit declines have led to increased risk.

First, demand for commercial credit from banks rose in the early days of the pandemic, as companies borrowed heavily from banks to guard against uncertainties and make up for falling profits. Businesses repay these loans during this phase, however over time demand for loans declines due to a prolonged economic downturn. The outstanding loan balance exceeded the new loan volume. Banks are facing a huge credit crunch as uncertainty during the pandemic creates a crisis for SMEs. In 2021, SMEs will lay off a large number of people to keep the company running. And after the rate hike, SMEs are more cautious about lending and investing.



Second, the number of loan defaults has increased. Some borrowers are unable to repay their loans on time because of rising inflation and declining economic activity. Banks need to set aside funds to deal with these non-performing loans, and they also need to dispose of non-performing assets. Banks are also facing a credit crunch as the mortgage market sees a flood of defaults. Banks will face a total of $123 billion in credit losses over the three years of the pandemic. In the future, many companies and lenders will not be able to obtain large long-term loans from banks because of their lower credit index. Inflation is growing, and even outpacing worker wages. And because the central bank has raised interest rates, more and more people can't repay their loans. The non-performing loan ratio increased by 2.7% from 2019 to 2022.



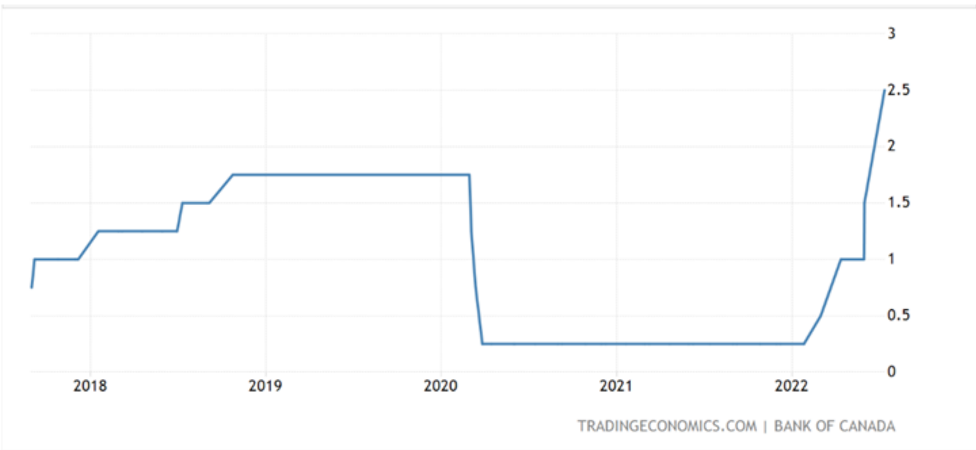
Rising interest rates will affect bank profitability in many ways. Because it is closely related to people's lives, such as mortgages and auto loans.

Before COVID, the inflation rate in Canada was around 2%. During the COVID, the inflation rate dropped to 0.9% in Mar 2020. To stimulate the economy through the pandemic, the Canadian government decreased the policy rate from 1.75% to 1.25% on Mar 4th, 2020. Then it dropped further to 0.75% on Mar 16th, 2020. Finally stabilized at 0.25% on Mar 27th, 2020. By drastically reducing the cost of debt, the central bank stimulates demand and increases competition for commodities. The goal is to make demand exceed supply, causing commodity shortages and driving up inflation.

However, because of various reasons, such as supply-chain issues, the government's increased money supply, the Russia- Ukraine war, etc., the inflation rate increased from 2021. Until Jun 2022, the inflation rate rises to 8.1% which is the highest point since 1983. The Canadian government has taken an aggressive stance to curb inflation. The main tool of the central bank to control inflation is the interest rate. Their current tactic is to raise interest rates to help ultimately slow down inflation. In recent months, the Bank of Canada has moved aggressively to hike rates, until Jul 13th, 2022, the target rate increased to 2.25% which is the highest rate since the financial crisis in 2008.

Recent inflation rates for Canada

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2022	5.1%	5.7%	6.7%	6.8%	7.7%	8.1%							
2021	1.0%	1.1%	2.2%	3.4%	3.6%	3.1%	3.7%	4.1%	4.4%	4.7%	4.7%	4.8%	3.4%
2020	2.4%	2.2%	0.9%	-0.2%	-0.4%	0.7%	0.1%	0.1%	0.5%	0.7%	1.0%	0.7%	0.7%
2019	1.4%	1.5%	1.9%	2.0%	2.4%	2.0%	2.0%	1.9%	1.9%	1.9%	2.2%	2.2%	1.9%
2018	1.7%	2.2%	2.3%	2.2%	2.2%	2.5%	3.0%	2.8%	2.2%	2.4%	1.7%	2.0%	2.3%



With rising inflation, many Canadians are facing a higher cost of living. A comparison from 2021 to 2022 has demonstrated that Canadians are getting poorer. With inflation sitting at 8.1%, where wage growth averages at 3%, many Canadians see their purchase power decrease in 2022. With raising interest rates, Canadian banks will adjust their lending rates and eventually will impact their profit for 2022. In our opinion, we believe that with the rising interest rates, Canadian Banks stand to benefit from the rate hikes and thus making them more profits in 2022. Because the main income of commercial banks is to earn interest differentials which is the profit gap between loans and deposits. The bank takes deposits from depositors and gives out loans to borrowers, the interest rate margin is the profit of the bank.

During the years of the pandemic, households and businesses enjoyed a lower interest rate, where borrowing became much cheaper. This allowed companies to expand at a lower cost and families to upgrade/spend more at a fraction of the usual cost. With an influx of money (Supply) the costs of goods (Demand) have risen, hence fuels for inflation, as the population receives more money to spend, the cost of goods soared, and we are left with alarming inflation. The bank of Canada increased the policy rate which is an attempt to rein in runaway price and inflation rate increases. The borrowers that borrowed during low-interest periods stand to pay a higher premium now to service that debt. With higher interest rates, the lenders (Canadian Banks) will see their profits go up.

In Canada, the largest household debts are mortgages and followed by Auto Loans. With the lower interest rate set out during the pandemic, many people and corporations leveraged the lower borrowing cost to expand their business as well. However, with a rising interest rate in 2022, the loans are becoming more expensive to service, hence the banks are starting to see the borrowing cost go up, and ultimately, borrowers are paying more in 2022 than in 2020 for the loans. The increased rates help banks to collect more on their loans, and in the long run, these loans add up to a significant sum, which in turn boosts the bank's profitability.

During the pandemic, mortgages dropped to an all-time low. Average 5yr fixed can be obtained at 2.49%, and variables were much lower. This is like the interest-rate risk, the longer the maturity, the more affected by the change in interest, and the larger the change will be. Therefore, the interest rate of 5yr fixed is much higher than the variable rate. The loan is the biggest asset of commercial banks. According to liquidity preference theory, the longer the term of an asset can increase the higher the interest rate. Canadian banks approved loans to homeowners to secure real estate at lower interest rates. Once the interest rates begin to rally, the borrowers must pay higher returns if they did not obtain a fixed mortgage. Even with fixed mortgages, once the terms expire, borrowers are looking at a higher mortgage with the increased rates. All the extra money being paid back to the banks at higher interest rates will make banks more profitable. For example, average mortgages total BE 208K in 2020, and 220k in 2021, with 2022 being more. Current fixed 5 year mortgages are around 5%. (Almost a 100% increase vs 2020 interest rate). If a 208k mortgage was locked in for 2.49% under 30yrs, their monthly payment would total $820.77/ month. However, with some mortgages at a different rate (5% current), this loan would cost the borrower $1,116.59/ month to service. The extra $295.82 would count towards the bank's extra income, hence boosting their profitability.

The overnight rate is particularly important in Canada because it affects the cost of most short-term loans. The central bank can stimulate borrowing and increase inflation by cutting interest rates, and it can also increase interest rates to reduce demand and decrease inflation. When demand reduces and the supply pressure reduces as well, prices stop rising. It's also better for the economy once inflation goes back to the standard level. So, when interest rates increase, although the previous borrowers will pay more interest to the banks, new borrowers will become less at the same time, as interest rates rise, so do borrowing costs. Therefore, after the interest rate hike, in the short term, the rising interest rates can increase the profitability of Canadian banks, but in the long run, whether the interest on mortgage repayments will rise more than the new loans reduced or the opposite, which is unknown.

Bond yield vs average fixed rates

Year	5-yr benchmark bond yields	Avg. 5-yr fixed rates
2009	2.41	4.05
2010	2.44	3.83
2011	2.07	3.63
2012	1.37	3.19
2013	1.62	3.15
2014	1.55	3.04
2015	0.82	2.61
2016	0.75	2.42
2017	1.39	2.63
2018	2.14	3.21
2019	1.5	2.75
2020	0.93	2.49

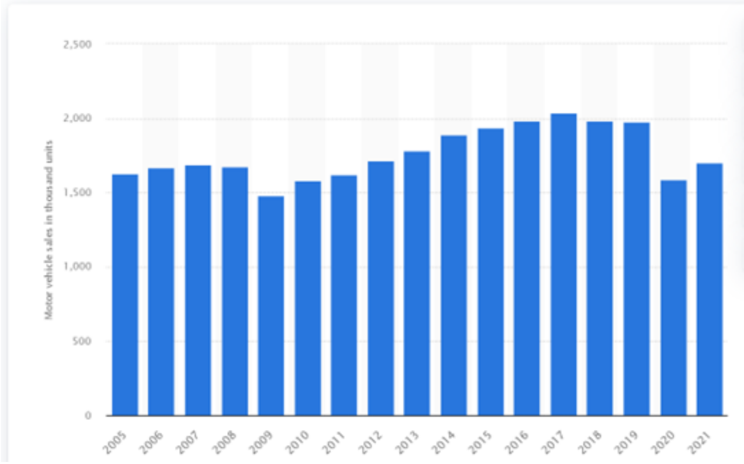
Average Consumer Debt Balance Since 2020 by Debt Type

	2020	2021	Change
Auto loan and lease	$19,703	$20,987	+$1,284 (+6.5%)
Mortgage	$208,185	$220,380	+$12,195 (+5.9%)
Personal loan	$16,458	$17,064	+$606 (+3.7%)
Student loan	$38,792	$39,487	+$695 (+1.8%)
Credit card	$5,315	$5,221	-$94 (-1.8%)
HELOC	$41,954	$39,556	-$2,398 (-5.7%)

The second largest consumer debt in Canada is the auto loan. The price of a new vehicle just topped 40,000 Canadian dollars. In 2020, most auto loans can be completed with rates of 1-2%. However, now according to the status of the first five months of 2022, the average auto loan rate increases to 5.35%, and depending on the brand the consumer purchases, some must pay upwards of 7%. For example, a Toyota Camry will cost ($45,000 Cad after taxes with cash) if this vehicle was purchased in 2020, with rates at 2.99%, the monthly repayment would be $680 for 72 months. However, with current rates (5.49%) the consumer will have to pay $731 for 72 months to be able to own this vehicle. With the changing rates, we see an additional $3,672 went to the bank. On average, Canada has sales of 1.7million cars/yr. If we take the average, the rising interest rate would generate an additional $6.3 Billion over 6 years. With the increased rates, banks will see their profit go up in this sector as well.

January 2022	February 2022	March 2022	April 2022	May 2022
5.09%	5.11%	5.23%	5.52%	5.80%

Total vehicle sales in Canada from 2005 to 2021
(in 1,000 units)



However, it is uncertain to promise that this year the average sales of cars in Canada are still around 1.7million. In 2021, March was the strongest month for auto sales in Canada. But because of various reasons, especially the pandemic-related issues and supply-side constraints, the sales trend has gone downhill since then. DesRosiers Automotive Consultants (DAC) estimates that new vehicle sales in March of 2022 were 140,460 units, down 19.8% from the peak in the same period last year. In 2022, the cumulative first-quarter sales were 330,593 units, down 12.7% from last year's data. Supply-side constraints remain the main issue. According to expert analysis, in 2022, car sales will still be affected by the supply chain. Otherwise, it will return to or above pre-pandemic levels. (Malloy, 2022)

What's more, shortages are caused by a variety of factors. Even though the semiconductor shortage has made some progress, the Russia - Ukraine war has led to further parts shortages, especially for European manufacturers. German automakers alone will cut production by around 700,000 vehicles in 2022, according to the Association of the German Automobile Manufacturers (VDA). It is around a 13% decrease compared with last year. In Asia, coronavirus-related factory closures impact a portion of semiconductor supply. Furthermore, The extraordinary complexity of microchip production is also part of the supply shortage reasons. It seems unlikely that semiconductor supply will improve significantly until the second half of 2023. This is bound to have a certain impact on car sales in Canada as well. (Wintzenburg, 2021)

Although the semiconductor shortage is not caused by the rising interest rate, it still has an uncertain point because the sales are indefinite. Therefore, in the short run, the rising rate of car loans can increase the profitability of Canadian banks, but in the long run, it is hard to verify whether or not car loans will affect the profitability of Canadian banks after rising interest rates.

On another note, banks normally generate income based on lending their customer's money to consumers at higher interest. Such as a line of credit. Banks hold customer money in an investment account that pays out set interest rates below short-term rates. They profit off the margin generated by this practice. With raising interest rates, this gap becomes bigger and hence becomes more lucrative for the banks. For example, a bank gives customers a 1% return and charges 2% interest on consumers. Hence pocketing the difference as profit. For example, if an investment account has 1 Billion dollars, they need to pay 1% back to customers ($ 10 million) however they were charging 2% on consumers ($ 20 million) hence generating profit. If the government increases the interest rate by 1%, in the short term, they can continue to pay out 1%, however, the new rates could be 3%, thus they'd be able to generate $ 30 million and keep the extras as profit). As the interest rate raises, the loans sent out by the banks become more profitable. Because there will be a greater spread between the rates banks give to their customers and charges to their consumers, the banking industry will greatly profit from this.

In conclusion,the interest rate is still rising in Canada these days.There are three main reasons why the Bank of Canada is still raising the policy interest rate..First of all,Inflation is too high, and more and more people are increasingly worried that high inflation will continue. We cannot allow this to happen. Restoring price stability to low, stable and predictable inflation is crucial.Next,the Canadian economy is overheated, and people's demand has increased after the epidemic. There is a shortage of workers, a shortage of many goods and services. Demand needs to slow down so that supply can catch up and ease price pressures.Last but not least，Bank of Canada aims to bring inflation back to its 2% target through a soft landing in the economy. To that end, the Bank of Canada is rapidly raising policy rates to prevent high inflation from becoming entrenched. If that were the case, then the economy and Canadians would be even more painfully allowing inflation to fall.Inflation is widening due to excess demand in the Canadian economy. As people enjoy a fully reopened economy, there aren't enough goods and services to meet the demand we see. Employers can't find enough workers, and they're raising wages to attract and retain employees. With household spending strong, businesses pass on higher input and labor costs by raising prices.Higher interest rates will help slow demand and give supply time to catch up. Consumer spending will slow as demand, which has been suppressed by pandemic restrictions, eases and borrowing costs increase. Real estate market activity has cooled rapidly from unsustainable high levels during the pandemic. Slowing global growth will reduce the demand for Canadian exports.Rate hikes can cool demand and inflation without dampening growth or causing unemployment to soar. Some industries will be more vulnerable to rate hikes than others, but a very tight labor market means there is room to reduce the number of job openings without having a significant impact on overall employment. With the prices of many of the commodities we export expected to remain high, the impact of a slowdown in global economic growth on Canada will not be as great as in many other countries.

In general, rising interest rates are good for banks because their balance sheets are asset-sensitive and assets are repriced faster than liabilities. Net interest margins should widen, thereby increasing profitability. An upward sloping yield curve and rising interest rates usually indicate that the economy is expanding and performing well.Therefore, the net interest margin should widen, thereby improving profitability. An upward-sloping yield curve and rising interest rates are usually indicative of an economy that is expanding and performing well. However, as interest rates rise, floating rate borrowers will need to pay more interest on the same loan, which can put pressure on borrowers.

When interest rates are higher, banks make more money by using the difference between the interest the bank pays to customers and the interest the bank earns by investing.Banks may pay customers a full percentage point less than the income they earn by investing in short-term interest rate. In addition, higher interest rates tend to reflect a period of faster economic growth, with the raising interest rates to slow the expansion.A stronger economy means more consumers are seeking loans, which helps banks benefit from the difference between the interest on loans charged to investors and the amount they earn through investment.

Reference:

Trading Economics: ‘Canada’s interest rate: summary’, from 2012 to 2022.
https://tradingeconomics.com/canada/interest-rate
World Date: ‘inflation development of the past 61 years in Canada.
https://www.worlddata.info/america/canada/inflation-rates.php
Trading Economics: ‘Canada Consumer Price Index’, from 2012 to 2022.
https://tradingeconomics.com/canada/consumer-price-index-cpi
Trading Economics: ‘Canada central bank balance sheet’, from 2012 to 2022.
https://tradingeconomics.com/canada/central-bank-balance-sheet
Financial EDGE: ‘Term structure of interest rate’,definition.
https://www.fe.training/free-resources/financial-markets/term-structure-of-interest-rates/
Trading Economics (Jul 2022) Canada Interest Rate2022 Data - 1990-2021 Historical - 2023 Forecast – Calendar
https://tradingeconomics.com/canada/interest-rate
Rate Inflation (Jul 20, 2022) Canada Inflation Rate
https://www.rateinflation.com/inflation-rate/canada-inflation-rate/
RATESDOTCA (2022) Best 5 Year Fixed Mortgage Rates in Canada
https://rates.ca/mortgage-rates/5-year-fixed
Horymski C. (Jun 24, 2022) Total Mortgage Debt Increases to $10.3 Trillion in 2021
https://www.experian.com/blogs/ask-experian/how-much-americans-owe-on-their-mortgages-in-every-state/
Kapralos C. and Wood C. (Aug 2, 2022) What is The Average Car Loan Interest Rate in Canada?
https://loanscanada.ca/auto/what-is-the-average-car-loan-interest-rate-in-canada/
Statista (May 6, 2022) Canada - vehicle sales
https://www.statista.com/statistics/423012/motor-vehicle-sales-in-canada/
Malloy G. (Apr 7th, 2022) March, Q1 auto sales remain depressed
https://canadianautodealer.ca/2022/04/march-q1-auto-sales-remain-depressed/
Wintzenburg J.B. (Dec 8, 2021) A new and open chip culture
https://newsroom.porsche.com/en/2022/company/porsche-consulting-new-and-open-chip-culture-29341.html
Danaee, A. (A., Grewal, H., Howell, B., Ouellet Leblanc, G., Liu, X., Patel, M., & Shen, X. (2022, May 24). How well can large banks in Canada withstand a severe economic downturn? Bank of Canada. Retrieved August 15, 2022, from
https://www.bankofcanada.ca/2022/05/staff-analytical-note-2022-6/
Bank of Canada increases policy interest rate by 100 basis points, continues quantitative tightening. Bank of Canada. (n.d.). Retrieved August 15, 2022, from
https://www.bankofcanada.ca/2022/07/fad-press-release-2022-07-13/
Fontaine, J.-S., & Walton, A. (2020, July 3). Covid-19 and bond market liquidity: Alert, isolation and recovery. Bank of Canada. Retrieved August 15, 2022, from
https://www.bankofcanada.ca/2020/07/staff-analytical-note-2020-14/
Kim, M. J., & Witmer, J. (2020, November 2). Corporate Investment and monetary policy transmission in Canada. Bank of Canada. Retrieved August 15, 2022, from
https://www.bankofcanada.ca/2020/11/staff-analytical-note-2020-26/
Cimon, D., & Walton, A. (2022, June 30). Fixed-income dealing and central bank interventions. Bank of Canada. Retrieved August 15, 2022, from
https://www.bankofcanada.ca/2022/06/staff-analytical-note-2022-9/
D'Souza, C., Grieder, T., Hyun, D., & Witmer, J. (2020, September 11). The Canadian Corporate Investment Gap. Bank of Canada. Retrieved August 15, 2022, from
https://www.bankofcanada.ca/2020/09/staff-analytical-note-2020-19/