Current Macro-Economic Environment

Inflation has been soaring high in the past several months, well beyond the Bank of Canada's target of 2% and their control range of 1% to 3%. There are several contributing factors responsible for rising prices but arguably the most influential is the exceptional use of stimulating monetary policy used during the Covid-19 pandemic to stave off the potential negative economic consequences.

Starting in March 2022, the Bank of Canada, along with other major central banks around the world, transitioned to a contractionary monetary policy by increasing interest rates in an attempt to ease inflationary forces. Since then, the Bank of Canada has risen its overnight interest rate seven consecutive times from 0.25% to 4.25% over eight months. In response, inflation has decelerated from its peak of 8.1% in July to 6.9% in October.

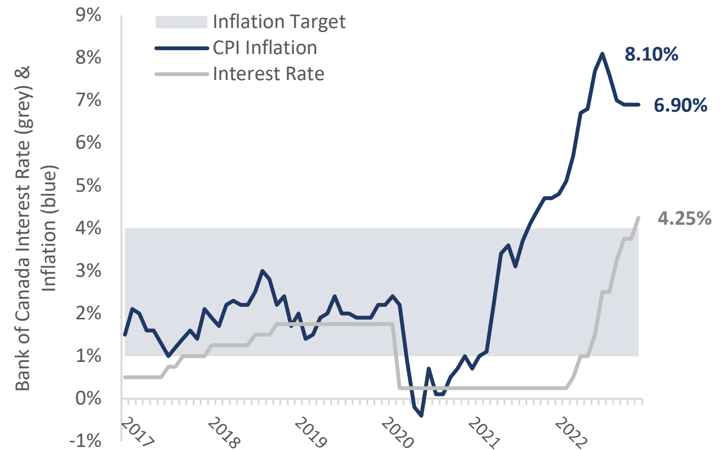

Figure 1 – Canadian year-over-year inflation and Bank of Canada interest rates since 2017. Source: Trading Economics

Despite both inflation and interest rates being at levels unseen for several decades, their current magnitudes are not unfamiliar to the Canadian economy. The chart below illustrates Canadian inflation and interest rates from 1970 to December 2022. Between 1970 and 1990, interest rates and inflation were frequently higher than the alarming measures of today's current economic environment.

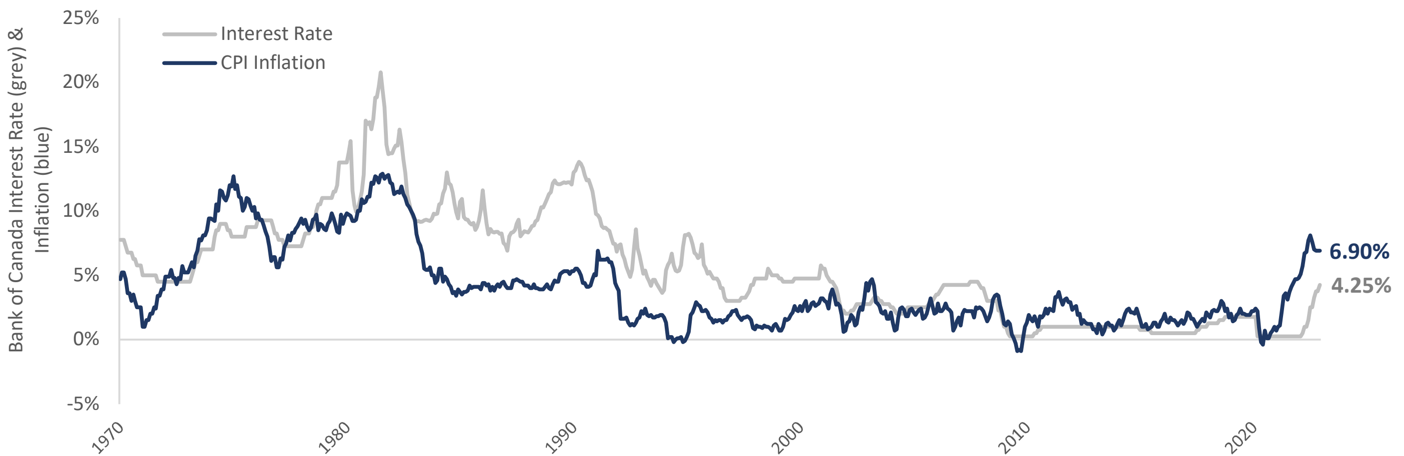

Figure 2 – Canadian year-over-year inflation and Bank of Canada interest rates since 1970. Source: Trading Economics

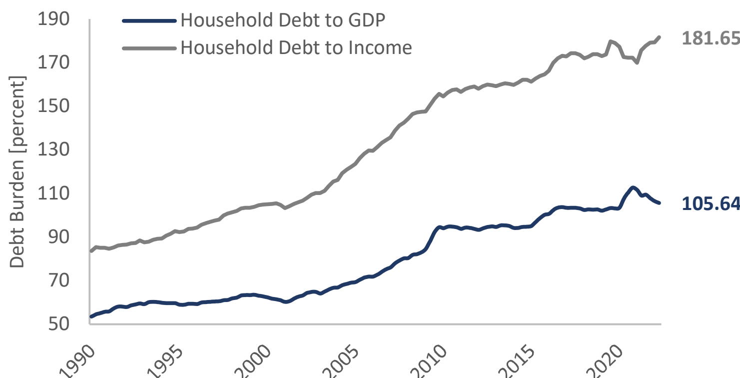

Figure 3 – Canadian household debt to GDP & Income from 1990 to Q2 2022 Source: Trading Economics

Although Canada has experienced environments with similar readings of inflation and interest rates in the past, the debt levels were significantly lower than where they are today. Figure 3 illustrates the household debt to income and household debt to GDP from 1990 to Q2 2022. This figure illustrates that the debt burden for both measures has doubled in the past three decades which would suggest that Canadians are significantly more sensitive to rising interest rates today than they were in previous rate-hiking cycles.

Furthermore, the pace of the current cycle exceeds the historical range of previous cycles. Figure 4 illustrates the distribution of historical interest rate hikes from the Bank of Canada since 1980. The figure shows that although the current rate hike of 400 basis points is not new, the pace of the hike deviates considerably from the historic trend. For example, the last time rates increased by a similar amount was in the early 1990s when they rose from 3.63% to 8.22%. However, that 459 basis point hike was executed over 26 months rather than the 8 months of the current cycle.

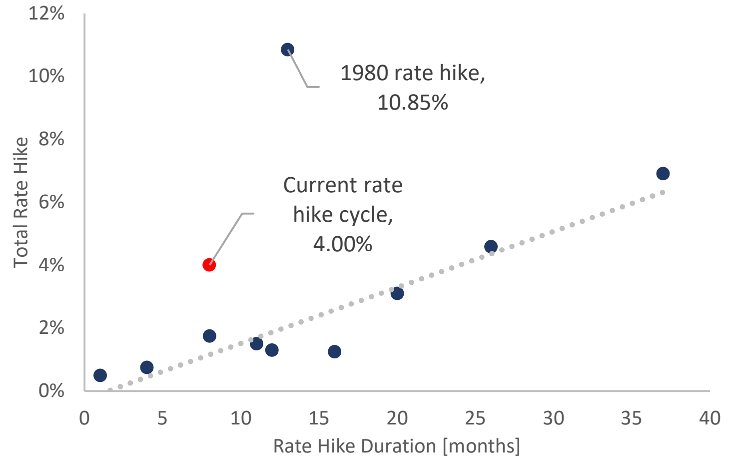

Figure 4 – Historic Canadian Interest Rate Hikes vs. Rate Hike Duration. Source: Trading Economics

Commencement		Termination		Duration	Increase	
Date	Rate	Date	Rate	[Months]	Absolute	Relative
Mar-22	0.25%	Nov-22	4.25%	8	4.00%	1600%
Jun-17	0.50%	Oct-18	1.75%	16	1.25%	250%
May-10	0.25%	Sep-10	1.00%	4	0.75%	300%
Sep-05	2.50%	May-06	4.25%	8	1.75%	70%
Sep-04	2.00%	Oct-04	2.50%	1	0.50%	25%
May-02	2.00%	Apr-03	3.50%	11	1.50%	75%
May-99	4.45%	May-00	5.75%	12	1.30%	29%
Jan-97	2.75%	Sep-98	5.85%	20	3.10%	113%
Dec-92	3.63%	Feb-95	8.22%	26	4.59%	126%
Mar-87	6.89%	Apr-90	13.80%	37	6.91%	100%
Jun-80	9.93%	Jul-81	20.78%	13	10.85%	109%

Table 1 - Previous Bank of Canada Interest Rate Hikes Source: Trading Economics

Table 1 summarizes previous interest rate hike cycles by the Bank of Canada. The only other time that also deviates considerably from the trend is the 1980 rate hike where interest rates increased from 9.93% in June 1980 to 20.78% in July 1981. Although this is a considerable rate hike, the relative increase is 109% comparable to the 400 basis point rise today which represents a relative increase of 1,600%.

Rising interest rates have had profound effects on the debt servicing costs for new mortgages. To visualize the financial pressure exerted by higher rates, Figure 5 illustrates the increase in mortgage payments for the same level of debt from a base interest rate of 2% (that was readily available in much of 2021) to today's prevailing interest rates of 6%. This cost pressure also causes a significant loss in purchasing power for buyers as illustrated in the red bars.

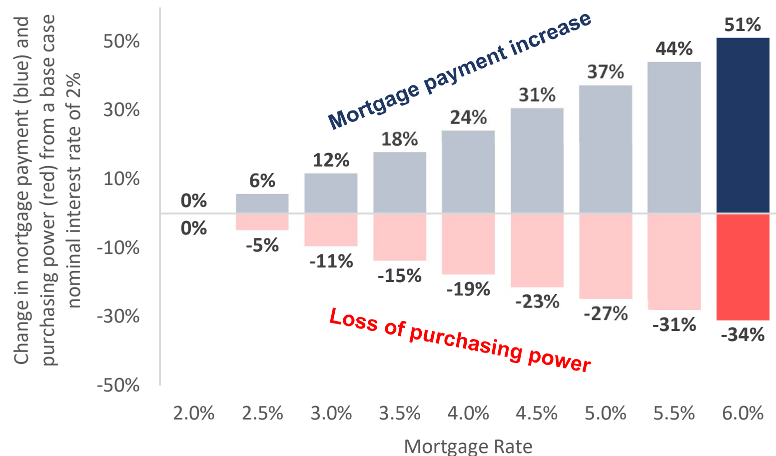

Figure 5 – Change in mortgage payment (blue) and loss of purchasing power (red) from a base case nominal interest rate of 2%

In summary, interest rates have risen to levels unseen for many years and although we have experienced high levels of inflation and contractionary monetary policy in the past, Canadians are far more sensitive to rising interest rates with today's soaring household debt levels. Furthermore, the pace and relative increase of the current rate hike stands out starkly from previous hikes, causing considerable pressure on debt servicing costs for new mortgages.