PREPARING FOR THE UNEXPECTED:

Assessing Two Key Macroeconomic Trends and Their Risks in the 2020s

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Authors: James K. Stewart, *Executive in Residence, Global Risk Institute*

Hugh O'Reilly, *Executive in Residence, Global Risk Institute*

EXECUTIVE SUMMARY

The early 2020s have shown that understanding and analyzing structural and emerging risks in the macroeconomic environment have become vastly more complicated. The COVID-19 pandemic, the decisive end to the global peace dividend with wars in Ukraine and the Middle East, and the fundamental shift away from ultra-easy monetary policy are just a few of the structural changes transforming the risk landscape.

Unprecedented events and structural aftershocks have forced financial institutions (FIs), non-financial firms, governments and regulators to adjust to more uncertain and complex developments still working their way through the economy, financial markets, and political systems. Yet, assessing these new structural trends and fundamental drivers requires understanding an array of challenges. How do organizations avoid being too narrow by focusing on a single pressing issue or too broad by seeing every problem as important or a crisis? What framework should be used to process and curate the sheer mass of data available to ensure that the important patterns and signals are recognized? And how do they avoid the frequent overreaction and volatility in financial markets from short-lived narratives?

This paper aims to provide a road map to understand two of the leading structural trends, their fundamental drivers and some of their numerous risks that are decisively reshaping this decade. We explore each of these core trends as distinct factors while recognizing that they are also interrelated systemically in their drivers and resulting risks. Their interactions with, and other fundamental changes in, the economy, the environment, and financial markets, as well as geopolitical factors and shifts, are decisively shaping the mid 2020s and likely beyond. Their interdependence makes it valuable to assess these trends and drivers individually and to explore selected illustrative examples of their interrelationships with other systems.

More uncertain outcomes and greater unintended consequences comprise the first core trend. Two of their key drivers are accelerating and broadening complexity and adaptivity that led to fundamentally different results in the early 2020s than central banks, governments, and financial markets expected. Future economic and financial risks from increasing complexity and adaptivity given the linkages to and interactions with climate change, digital networks, social media and technological advances merit emphasis. The resulting challenges of more uncertain outcomes and greater unintended consequences are wide ranging. They include the problems of incorporating and gauging greater complexity and adaptivity in the models and forecasts of central banks, governments, FIs and non-financial businesses.

Among the most important risks for governments are the broad-based structural issues in adjusting to increasing complexity and adaptivity, and

in assessing unexpected policy and regulatory impacts on a systems basis. The interactions with climate change, geopolitics and other systems present more numerous, interdependent and diverse challenges for public policy and regulation. Looking ahead, fundamental changes in governments' approaches to policy and regulatory assessment and implementation are essential. Far greater variability in results and unforeseen impacts increase the risks from continuing with traditional public sector approaches and standard political oversight in the more complex and adaptive environment this decade.

The second core trend is higher for longer policy interest rates and debt yields. These began with the surge in absolute policy rates and debt yields in 2022-2023. Even with projected policy rate cuts in 2024 and likely 2025, its next phase is expected to have rates and yields in 2024-2026 at substantially higher levels than 2010-2021. The drivers of this new rate environment are fundamental economic and policy changes from the late 1980s-2010s from the (i) reversals of three structural forces driving disinflation, and (ii) end of the macroeconomic approach of easy monetary policy and constrained fiscal policy during most of those three-plus decades.

The turnaround in three decisive global forces reducing inflation in the thirty-plus years preceding the pandemic merits emphasis in driving higher rates this decade. Together with central banks' growing recognition that ultra-easy monetary policy during 2010-2021 had short-lived benefits and major side effects, these structural reversals and dramatic shift in macroeconomic policy make the mid 2020s very likely to be structurally different. Higher for longer interest rates had enormous impacts on economic activity and asset prices in 2022-2023. Their legacy and ongoing higher rates versus the pre-pandemic decade and 2020-2021 create increased and/or new risks.

Higher relative policy rate and debt yields projected this decade will mean that financial stability and debt risks remain elevated through at least the mid 2020s. Bank and non-bank FI risks are magnified by the structural factors supporting higher inflation and real rates in the mid 2020s, especially in combination with monetary policy normalization. These financial risks include banking sector confidence and funding impacts from FI exposures to commercial real estate, especially in the U.S. In Canada, the strains on households and businesses from much higher debt costs versus the era from the Great Financial Crisis through 2021 remain significant. Over half of Canadian mortgages will be renewed during 2024-2026. For the public sector, much higher debt levels and rising government interest expenses as well as greater volatility in U.S. Treasury market yields remain crucial risks this decade given higher ongoing interest rates relative to the ultra-low yields of 2010-2021.

INTRODUCTION

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Unprecedented events and structural aftershocks have forced financial institutions (FIs), non-financial firms, governments and regulators to adjust to more uncertain and complex developments still working their way through the economy, financial markets, and political systems. Yet, assessing these new structural trends and fundamental drivers requires understanding an array of challenges. How do organizations avoid being too narrow by focusing on a single pressing issue or too broad by seeing every problem as important or a crisis? What framework should be used to process and curate the sheer mass of data available to ensure that the important patterns and signals are recognized? And how do they avoid the frequent overreaction and volatility in financial markets from short-lived narratives?

This paper aims to provide a road map to understand two of the leading structural trends, their fundamental drivers and some of their numerous risks that are decisively reshaping this decade. We explore each of these core trends as distinct factors while recognizing that they are also interrelated systemically in their drivers and resulting risks. Their interactions with, and other fundamental changes in, the economy, the environment, and financial markets, as well as geopolitical factors and shifts, are decisively shaping the mid-2020s and likely beyond. Their interdependence makes it valuable to assess these trends and drivers individually and to explore selected illustrative examples of their interrelationships with other systems.

More **uncertain outcomes and greater unintended consequences** comprise the first core trend. Two of their key drivers are accelerating and broadening **complexity** and **adaptivity** that led to fundamentally different results and effects in the early 2020s than central banks, governments, and financial markets expected. Future economic and financial risks from the interactions of complexity and adaptivity with climate change, digital networks, social media and technological advances also merit emphasis.

Much less predictable end results and more unforeseen side effects create structural issues for the public and private sectors. Our focus is upon the former. We examine several fundamental challenges for governments to adjust to greater complexity and adaptivity, and to assess more uncertain outcomes and unexpected consequences on a systemic basis. While the private sector role will be crucial to helping solve the array of crises and other crucial Canadian issues, the public sector will be setting the policies, regulations and rules to address these problems.

The second core trend is ongoing higher for longer policy interest rates and debt yields versus the 2010-2021 era. It has two phases, beginning with much higher absolute policy rates in 2022 that central banks raised further in 2023 and then kept at peak levels through at least early 2024 to contain inflation. Rates and debt yields rose higher and continued for much longer over the past two years than markets, most economists and central banks expected. Despite substantial policy rate cuts projected in mid/late 2024 and potentially 2025, the next phase is expected to be ongoing **higher policy rates and yields** in 2024-2026 relative to 2010-2021. The drivers of this new rate environment are fundamental changes from the late 1980s-2010s with the (1) reversals of several key **structural economic forces driving disinflation**, and (2) the decisive **shift from the macroeconomic policy approach** during those three-and-a-half decades.

The turnaround in major global forces reducing inflation in the three-plus decades preceding the pandemic, combined with recognition that ultra-easy monetary policy during 2010-2021 had short-lived benefits and major side effects, warrants highlighting. The reversal of these forces and major shift in macroeconomic policy make the mid-2020s structurally different. Higher for longer policy rates had enormous impacts on economic activity and asset prices in 2022-2023. This legacy from the past two years, combined with the higher relative policy rates expected in the mid-2020s versus 2010-2021, create increased and/or new risks.

1. MORE UNCERTAIN OUTCOMES AND GREATER UNINTENDED CONSEQUENCES

1.1 Increasing Complexity and Adaptivity

Economies and financial markets have been far more unpredictable in the 2020s than governments and central banks traditionally assumed, and than FIs were used to during the pre-COVID-19 era. These structural characteristics have created greater uncertainties and made modelling and forecasting much more difficult and error prone this decade. They have also increased the importance of considering and preparing for the significant unintended consequences of policies and regulations.

Assessing economies and financial markets as complex, adaptive systems enables them to be better understood. Economic and financial market systems are complex networks with non-linear cause-and-effect relationships, tipping points and other core characteristics including being nested with other systems.[1] **Using a systems framework requires recognizing that:**

- Policies to achieve positive effects in the near term can have negative effects longer term;
- Policies and regulations intended to stabilize one system can also have destabilizing impacts in other related systems; and
- Complexity and adaptivity pose serious difficulties for analysis, models and forecasts.

Complexity's challenges and impacts are evident in the unforeseen economic and financial market results and unintended policy consequences relative to consensus in recent years. Leading examples of complexity's unexpected effects include the buckling of global supply during 2020-21. Pandemic lockdowns sharply curtailed production, exposing the crucial and too little realized dependence of firms on numerous third-party suppliers and unexpected vulnerability of global/international supply chains. Few companies and policymakers foresaw this fragility of supply prior to COVID-19. Ignoring this complexity led to corporate and government complacency, a lack of resilience in production pre-COVID-19, and inadequate understanding of the risks from a complex chain of input suppliers. For the economy overall, global supply chain problems were major contributors to the jump in inflation in 2021-1H2022.

Complexity's unforeseen effects were evident with the innovations of digitizing bank deposits, and the influence of social media commentators on financial participants' behaviour. Their combined impacts were crucial to large-scale withdrawals of deposits within 24-hour spans in March 2023 at several U.S. regional banks and then again in May 2023 at another significant U.S. regional bank. Various factors caused these bank runs, but the unprecedented speed and size of total withdrawals were sea changes from the traditional 1-2 weeks of a bank run to reach these magnitudes.[2] For example, in March 2023, Silicon Valley Bank suffered withdrawals of $42 billion in 10 hours, with a further $100 billion set to be withdrawn when U.S. regulators intervened. In contrast, it took nine days for Washington Mutual to lose $17 billion in 2008 and regulators had to step in. Among the crucial factors exacerbating and accelerating U.S. regional bank runs in 1H2023 were social media commentaries and connections, and the almost instantaneous ability to transfer funds with a digital click via a mobile app or laptop.[3] The rapid pace and huge magnitudes of these withdrawals caught regional banks and financial regulators off guard. They caused notable financial market wobbles in 2023 in March and again in May, leading to rushed U.S. expansions of depositor protection to prevent further bank runs.

Adaptivity refers to the capacity of individuals, organizations and entire systems to adjust to innovations, opportunities and problems in multiple ways, at differing paces and in varying magnitudes. Its impacts are often very challenging to gauge in advance. Examples include the rapid adoption and much greater use of technology advances (e.g., remote work, online commerce) that helped prevent a much longer and far greater economic contraction from COVID-19 in 1H2020. This adaptive behaviour supported the subsequent rapid and robust demand rebound, helping spur larger increases in economic growth and greater rises in asset and goods prices versus the consensus of policymakers, economists and markets in 2020-2021.

Adaptivity was also well demonstrated by the multiple lending initiatives of Canadian FIs to forestall and/or limit the declines of disposable income from sharply higher mortgage rates from late 2022 onward. FI provision of variable-rate mortgages with fixed payments, longer amortizations and/or increased principal amounts, blunted and/or delayed some of the impact of higher borrowing costs, helping support consumption and overall demand from late 2022 through at least early 2024. The lagged impact of sharply higher mortgage rates on Canadian households surprised the Bank of Canada (BoC), many investors and most economists as modest economic growth continued in 2023-early 2024 despite the most rapid monetary tightening in several decades.

Adaptivity with negative impacts was evident in the significant price hikes of numerous firms during the Canadian economy's robust demand of 2021-1H2022.[4] A wide range of corporations used their inability to meet the sharp rise in demand to pass along labour and other input cost increases to consumers and other businesses. This was a seismic shift versus the pre-pandemic decade when weaker demand overall led many firms to absorb at least part of higher input costs and other increased expenses through lower profit margins and/or greater efficiency.

1.2 Increasingly Uncertain Economic and Financial Impacts for Modelling and Forecasts

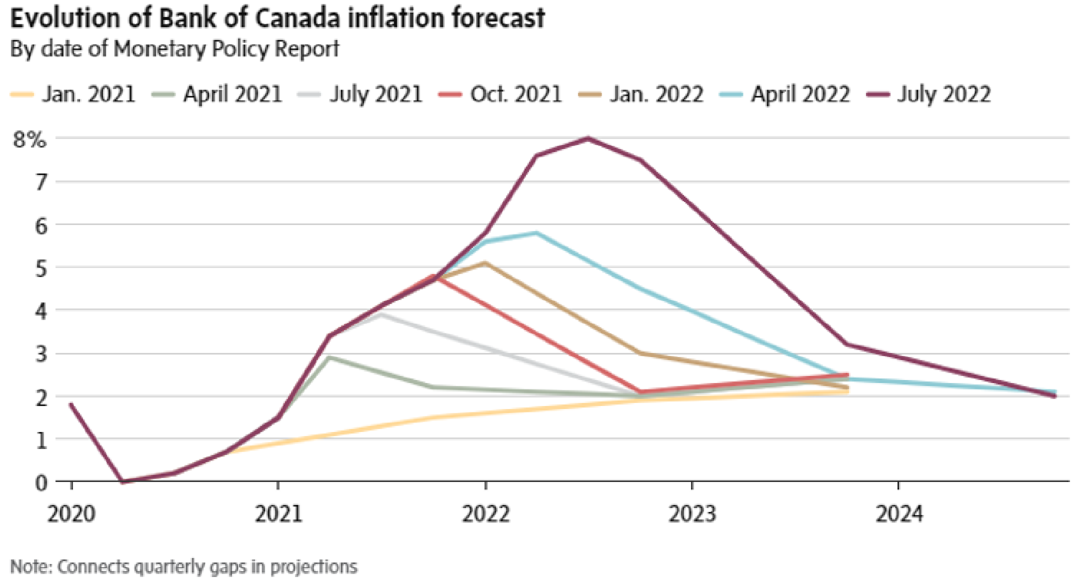
Adaptivity and complexity's economic and financial impacts caused fundamental problems for central banks and private sector models and forecasts in advanced economies. Excessive reliance on ultra-easy monetary policy in the 2010s included misreading the temporary nature of its growth stimulus as well as its complex impacts, and generating unexpected adaptive behaviour. As leading former central banker William White and other top policy practitioners and analysts have written, too low interest rates and too much quantitative easing (QE) created significant growth headwinds and other side effects in the decade following the Great Financial Crisis (GFC).[5] They were key to central banks overestimating Gross Domestic Product (GDP) growth and inflation every year during 2010-2019.[6] Increasing adaptivity and complexity during 2020-2022 also meant that critical demand and supply side changes and new structural trends in the pandemic's acute and transition phases were too little recognized.[7]

Combined with reversals in several longstanding drivers of the global economic environment in the 2020s (see Part 2), complexity and adaptivity have been leading causes of central bank, financial market and government forecasts substantially underestimating annual GDP growth and inflation in 2021-2023.

Looking specifically at the BoC, modelling problems arising from the complexity of COVID-19's and pandemic's impacts, global supply shocks, and adaptivity of consumers and businesses led to large forecasting errors in 2H2020 through mid-2022 (Chart 1). Further modelling challenges arose in 2023 from the delayed impact of sharply higher interest rates. These issues prompted a sweeping revamp of the BoC's two main macroeconomic models, with a new core model and approach including satellite models for analysis and forecasting pending by mid-2025.[8] Despite these notable pending improvements and fundamental overhaul of BoC models, uncertainty remains about their capacity to provide comprehensive accurate forecasts given increasing and broadening complexity and adaptivity in Canada and globally. Open questions of critics of central bank models generally, and the BoC's specifically, going forward, include the models' assumptions of economies and markets returning to equilibrium and of linearity, and their limitations in effectively modelling the broader economic effects of financial markets.[9]

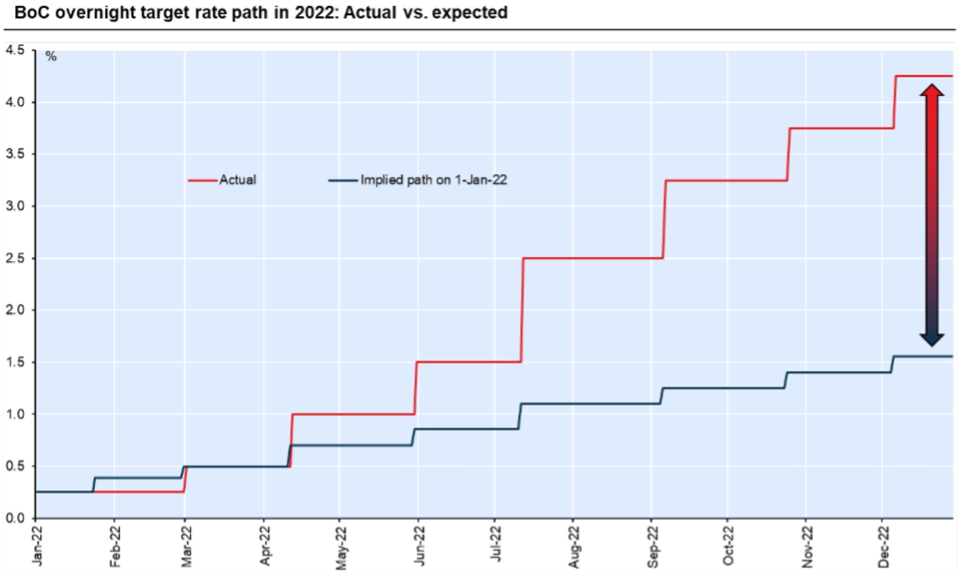
It is important to underscore that the issues facing central banks in allowing for complexity and adaptivity in models and forecasts apply at least as much to FIs, private sector economists and institutional investors in the 2020s. They also struggled mightily with the complex changes and adaptive behaviour of households, firms and global factors over the past two years. Large errors in debt markets' pricing and expectations of BoC policy rates in 2022 and in 2023 (Charts 2 and 3) are illustrative in this regard.

Chart 1: BoC Inflation Forecast Revisions During 2021-Through-Mid-2022



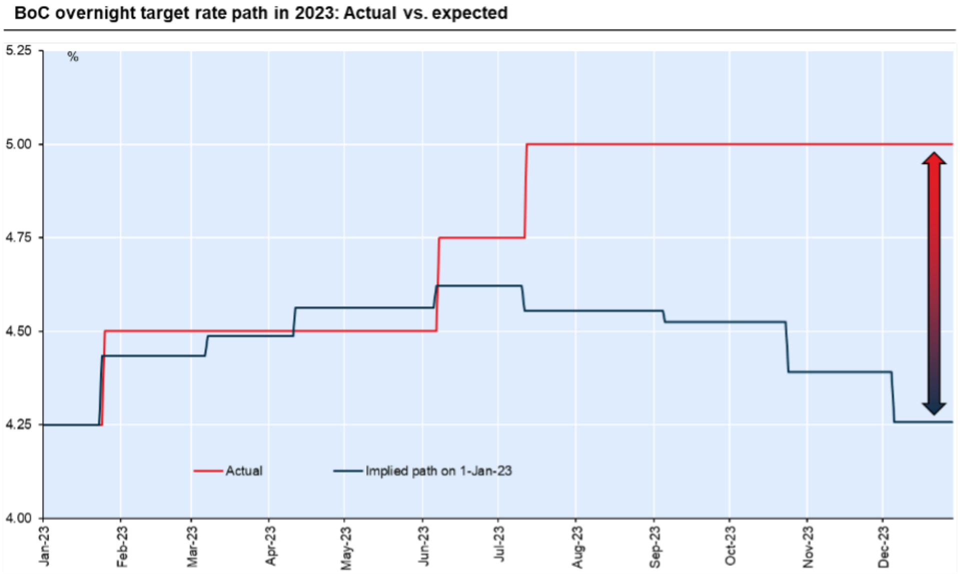
Sources: BoC Monetary Policy Reports; The Globe and Mail

Chart 2: Large Errors in Debt Market Outlook for BoC Policy Rates in 2022



Sources: National Bank Financial (NBF) Economics and Strategy; Bloomberg

Chart 3: Large Errors Continue in Debt Market Outlook for BoC Policy Rates in 2023



Sources: NBF Economics and Strategy; Bloomberg

Increasing complexity and adaptivity also altered the forecasting accuracy and merits of previously reliable gauges of the economic environment in the U.S. and other advanced economies. For example, three longstanding indicators of pending U.S. recessions or major downturns—an inverted yield curve, the leading economic index, and the so-called "Sahm rule" for unemployment increases—faltered in 2023.[10] An unexpectedly resilient consumer sector, robust labour markets, and ongoing large fiscal support sustained U.S. GDP growth and solid job gains throughout 2023, and set the stage for at least initial economic momentum in early 2024.

1.3 Geopolitical Risks and Complex Adaptive Linkages to the Economy and Financial Markets

The merits and applications of complexity and adaptivity also bear emphasis for macro geopolitical risk and its economic and financial repercussions. Examples include the Ukraine war's side effects with its pressures on and risks to global inflation and inflation-adjusted (real) yields. Prior to Russia's invasion of Ukraine in February 2022, the foreign policy consensus and media views took too little account of the complexity of multiple domestic factors in Ukraine, and of western nations' reaction and their capacity to adapt. Among the flaws in assessing Russia's strategy[11] and the mainstream Western view was the assumption of Russian military superiority leading to rapid military victory in days or weeks after its invasion. The consensus missed Ukraine's ingenuity, resilience and greater savvy in technology. Both Russia and the Western consensus seriously misjudged the potential for large-scale U.S. and European funding, logistics and weapons supplies, and intelligence support for Ukraine in 2022 and 2023.

Similarly, the consensus Western pre-invasion view that economic and financial sanctions would seriously harm Russia's economy in 2022 and 2023 was incorrect. It failed to appreciate the West's complex challenges in applying sanctions, and missed Russia's adaptability in evading these sanctions, and in pivoting to expand trade with developing nations particularly in energy, and to source new weapons supplies.[12]

The far longer-than-expected Ukraine war (still ongoing as of early 2024) and its adverse economic consequences include extensive attacks by Russia on Ukraine's grain handling, port and shipping networks in 2023. Major side effects also encompass a dramatic jump in military spending in Europe, the U.S. and elsewhere to support Ukraine, and help counter growing risks of further Russian expansion. The resulting pressures on global food prices in 2023, and on real yields in 2023 and early 2024 from higher public borrowing, illustrated how complex economic and financial linkages are with geopolitics.

1.4 Looking Ahead: More Numerous, Diverse and Interdependent Challenges for Government

Difficulties in delivering policies and programs effectively, and in responding to challenges on a timely and productive basis, have a very long history with governments of all political stripes. Yet, the range and depth of issues confronting the public sector–and the array of high-profile errors and problems--have accelerated and expanded in the early 2020s.

The resulting challenges for understanding the economy, financial markets and their linkages to other systems, and for designing policy and regulation are truly major on their own. They have been exacerbated by increasing and broadening complexity and adaptivity. This is especially true this decade from the far wider range of structural problems that are now in acute phases facing governments and regulators, and thus decisively affecting FIs and non-financial firms.

Global historians such as Adam Tooze and leading Canadian research entities such as the Cascade Institute have labeled this wide array of severe shocks the "polycrisis".[13] The polycrisis refers to risks that have been causally activated into actual harms of the well-being of a large number of people thereby becoming crises, and to the knock-on effects that cascade or spill-over into other systems, creating additional crises.[14] Proponents view the occurrence of multiple crises simultaneously as a defining element of this decade. These analysts term this a polycrisis because of the severity and synchronous nature of these ongoing shocks as well as their extensive interdependence. While the polycrisis components differ globally, nationally, regionally or locally, our focus is on several of the shocks comprising the Canadian polycrisis.

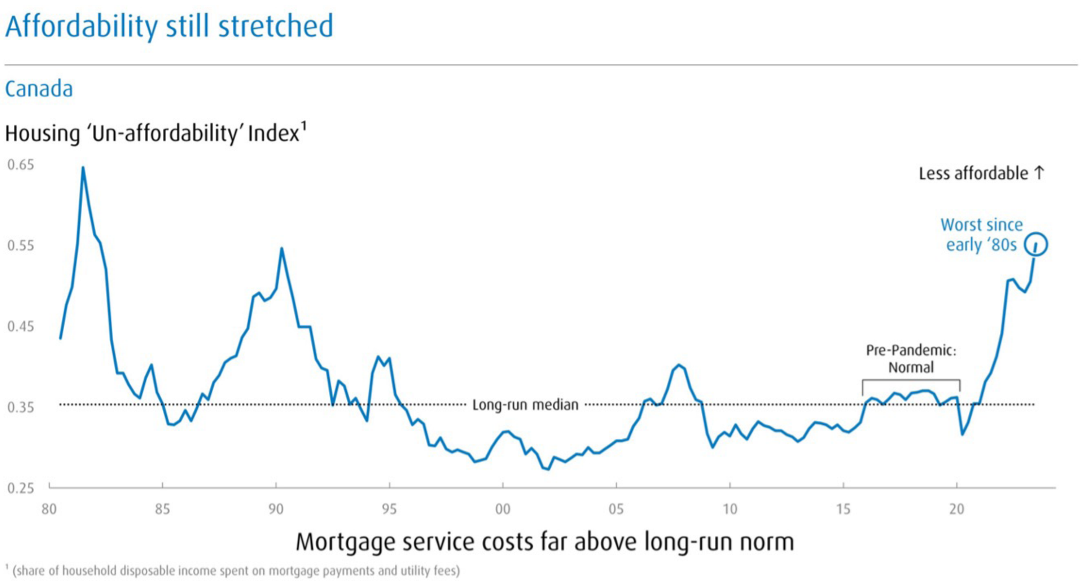
Care should be exercised in using the polycrisis approach. It is a very helpful concept to help explore the risks of complexity and adaptivity to accurate government assessment and the resulting policy and regulatory gaps and deficiencies. It also involves recognizing that simultaneous crises have occurred before–e.g., the 1970s energy and economic crises. The severity of these and other crises (e.g., the 1995 Quebec referendum) was very significant and deeply challenging for governments. Yet, the structural shocks in the 2020s are far more numerous and diverse.[15] Their systemic impacts reflect crucial new shocks relative to previous decades such as the existential threat of climate change. They are also far more complicated from the omnipresence of the digital world and social media, and the range and speed of online interactions.

1.5 Looking Ahead: Longstanding, Slow-Moving Problems Become Acute Crises

Newly acute crises for Canada's polycrisis this decade begin with housing, healthcare and climate change. The increasing severity of persistent problems in housing affordability and healthcare capacity, and the frequency of catastrophic weather events reached new heights in the early 2020s.

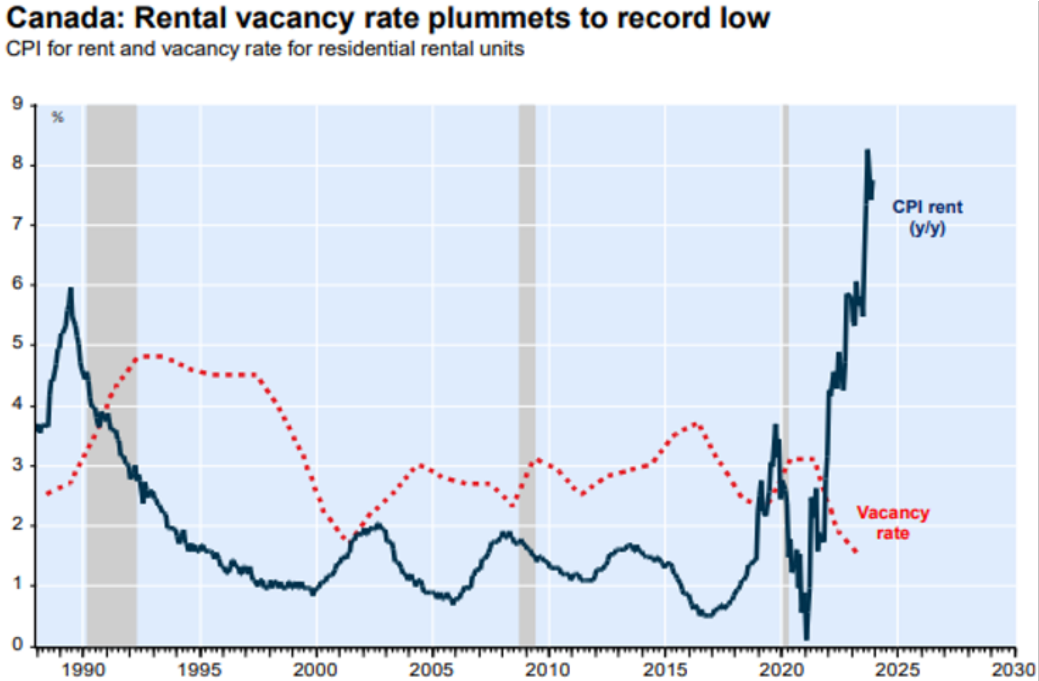
Housing affordability continued its multi-year deterioration in 2023, reaching its worst levels in four decades (Chart 4).[16] Much higher home prices versus pre-COVID-19 levels, rapidly rising rental costs outright and relative to inflation (Chart 5), and multi-decade highs in mortgage rates severely strained low and medium-income households. They posed escalating barriers for many prospective homebuyers and renters.

Chart 4: Affordability Reaches Worst Levels in Four Decades



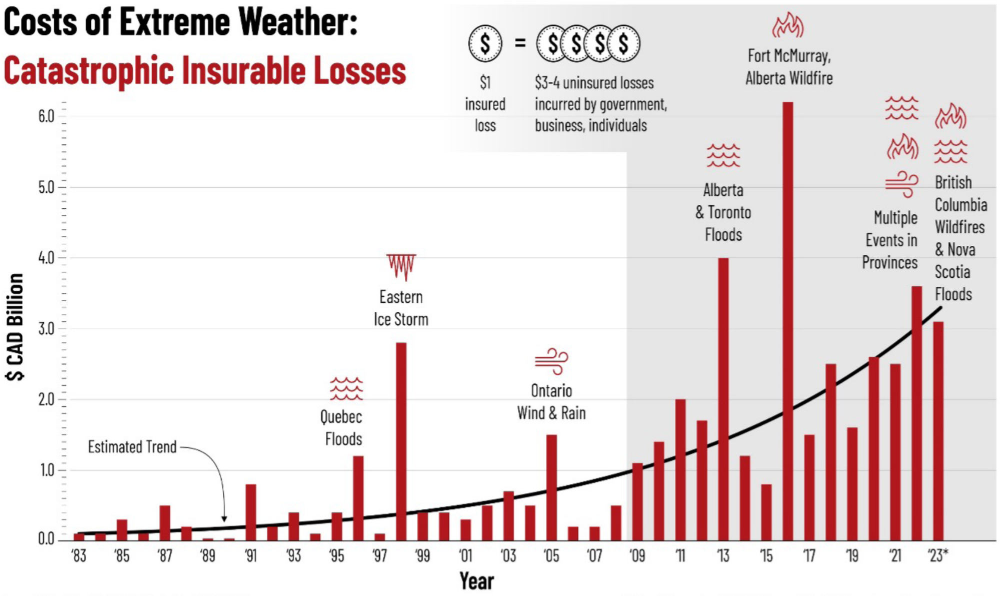
Sources: BMO Economics; Haver Analytics; BoC

Chart 5: Rental Costs Soar with Falling Vacancy Rates



Sources: NBF Economics and Strategy (data via Statistics Canada and CMHC)

Chart 6: Escalating Insurance Costs from Increasing Extreme Weather Events



Sources: Insurance Bureau of Canada Factbook; PCS; CatIQ; Swiss Re; Munich Re; Deloitte

In healthcare, overcrowding and long wait times in hospital emergency rooms, substantial backlogs for surgeries, major shortages of key personnel and worsening staff burnout soared to new peaks in the early 2020s.[17] The number of Canadians without regular access to a family doctor or nurse practitioner jumped from 4.5 million in 2019 to 6.5 million by 2022 (22% of all adults).[18] These acute structural problems were in addition to the increasing burdens for many families accommodating and/or caring for aging parents and other elderly relatives.

Environmental shocks intensified and were more frequent with the extraordinary surge in wildfires, heat domes, flooding, and droughts in Canada during 2022 and, especially, 2023. The direct effects caused thousands to relocate at least temporarily from their homes due to wildfires and flooding, and created new highs in property damage claims (Chart 6). Over the medium and long term, widespread health repercussions for Canadians from the sharp deterioration in air quality in the spring and summer of 2023 should be stressed. Significant indirect side effects include up to 1.5 million homes in Canada no longer being insurable for flood-related losses because of flood risk in basements.[19]

With each of these massive structural problems adversely affecting millions of Canadians, they have become priorities for voters. They have also helped fuel increasing disillusionment of Canadians with institutions, especially governments,[20] and their ability to address these shocks.

The resulting increasing difficulty faced by governments to generate and sustain popular support for multi-faceted, long-term solutions to these structural problems merits highlighting. It is particularly problematic when greater complexity, adaptivity and systemic linkages make solutions much harder to assess, design and implement. Fundamental changes in the public sector's approach are essential given the serious future risks of more uncertain outcomes and greater unintended consequences. These risks include the problems in continuing with traditional government. approaches and standard political oversight. Structural issues include deficiencies in long-established public sector approaches to analysis of complicated and complex problems. Another is the focus of too many politicians on short-term, simple narratives and proximate causes, something that the private sector often shares as well. The requisite knowledge and ability to apply know-how to policy design, implementation and oversight is uneven, especially in crucial areas such as hiring external expertise and in digitization services delivery. Taken together, these factors create clear risks that the requisite structural improvements in public policy and regulation will not occur.

1.6 Looking Ahead: Government Approach Flaws and Political Focus Concerns

The central tendency of the civil service to look for straightforward solutions and engage outside experts—too often by simply contracting out roles with too little oversight, cost control and coordination--is a core weakness as we explore in section 1.7. More generally, the traditional approach of the Canadian public sector misses the inevitable complex evolution of many problems. Too often it misreads their frequently intertwined nature with other issues, and the adaptive behaviour of people and organizations in response. Complex issues at the federal, provincial and municipal levels require considering and testing multiple approaches, and adjusting to changing circumstances as they unfold.

Institutional redesign in advanced economy governments generally[21] and in Canada specifically is crucial. The longstanding and foremost expert on Canadian public administration, Donald Savoie, points to the impact of the 5-6 times rise in the number of partisan advisors in the Prime Ministers' and Cabinet ministers' offices over the past four decades. This surge in partisan advice has reduced the reliance upon long-serving civil servants for guidance in traditional policy areas. It has made government operations much more bureaucratic from officials' need to respond to proliferating requests and other work generated by these advisors.[22]

These policy, regulation and implementation issues are exacerbated when politicians search for, and choose, simple short-term fixes to complicated and complex challenges, focusing on proximate events rather than root causes. For example, despite the warmest summer on record and devastatingly severe weather events in 2023, Canadian progress in climate mitigation and adaptation remains too slow and too little. Yet, various prominent politicians in Canada seized on proximate causes for the raging wildfires, ascribing the massive escalation in acres burned to lightning strikes, campfires and other trigger events rather than as the inevitable result of climate change[23] and longstanding forest management weaknesses. And it does not help that people continue to build or rebuild houses in a growing number of areas at serious risk of catastrophic weather events, despite insurance being either unavailable or only at high cost.

A further public sector challenge is the excessive focus on single issues despite the need for a systems approach. Effective systems solutions look at all factors creating crises, and consider their interrelationships and interdependence. Analyzing the systemic risks of specific initiatives and of short-term fixes helps avoid creating more and/or new medium and long-term problems in the sector under stress and in related sectors.

Successful government and regulator adaptation requires using systems approaches to address complexity, uncertain outcomes and unintended consequences. They involve multiple aspects,[24] starting with assessing whether a new paradigm to assess problems and crises on a systems basis is needed. This includes recognizing that there is no single solution to a number of these challenges. Improved outcomes in a broad range of areas will require multiple policy and/or regulatory elements that are dynamic. Approaches and institutional design will need to be analyzed and adjusted as issues evolve. Among the important changes required are political leaders, senior civil servants and regulators taking ownership of the process of finding, implementing and changing initiatives to address structural and other significant problems.

As an illustration, will a single-minded focus on private sector housing and rental supply support mean that other policies will be missed that could boost new housing supply and address incentives that adversely increase demand? Will other barriers and inadequate incentives affecting existing housing supply's re-purposing for rental and/or resale be addressed? Will partial near-term fixes create future problems such as building in areas with higher flood and wildfire risks or in areas that are vital habitat and/or support important biodiversity?[25]

Or will improved policies such as removing the federal and provincial sales tax on new rental construction, increasing the lending support for multi-residential housing through a much larger Canada Mortgage Bond program, and more low-cost loans for post-secondary institutions and builders for student housing signal a more effective approach—i.e., will they be the start of a coordinated, well-thought out array of measures to address Canada's housing problems on both the supply and demand sides? In this regard, will recent measures to cap the surge in population from soaring numbers of foreign students help address some key concerns of leading Canadian bank economists regarding non-permanent residents boosting shelter demand so far in excess of Canada's capacity to provide additional housing supply etc.?[26]

Successful systems approaches and examples of recognizing adaptivity and complexity in strategy and tactics include the policy adjustments made and lessons learned from the problems and lockdown experiences that occurred during COVID-19's acute stage in 2020. While far from perfect and with many lessons still to be learned, the increased vaccine take-up as 2021 progressed, especially among highly at-risk populations, was notable. This improved take-up of vaccines was achieved by public health officials increasingly relying upon front-line medical experts, the use of more targeted distribution to at-risk groups that were lagging in getting vaccinated, and better communications using trusted messengers and other representatives of these communities.

1.7 Looking Ahead: Consultant Usage Challenges and Digital Deficiencies are Clear Risks

Beyond better political approaches and greater understanding of complexity and systems approaches, addressing the polycrisis and other major problems confronting governments in Canada includes effectively engaging with the private and non-profit sectors. The likelihood of public policy success will increase significantly from different and better use of experts both to help lead policy and regulation to informed action, and to improve communication with the public and other stakeholders.[27] Of necessity, this means more interactions with and, as appropriate, hiring experts specifically to supplement public sector expertise and capabilities, particularly in technology policy and in digitization services.

Yet, governments' track record in selecting, overseeing and managing external consultants has revealed deep-rooted problems that are crucial to fix. The 2023-2024 hearings of the Standing Parliamentary Committee on Government Operations regarding consultant procurement and management--and the 2024 reports of the Auditor General and Procurement Ombud on the ArriveCan app specifically--provide telling indicators of the too often flawed process for the hiring, management and use of external consultants.[28]

The changes required include the Federal Government addressing systemic deficiencies in how its consulting system actually works versus its goals, and even to investigate alleged large-scale misconduct in contracting. The need to hire an external consulting firm to advise on how to reduce its consulting costs is indicative of genuine structural problems in this area,[29] particularly given that federal spending on consultants moved higher by one third in the past five years.[30]

These issues are even more problematic given that effective government digitization and other online capabilities are required in a range of policies and program designs and implementation.

Digitization is crucial in healthcare given the capacity limits, staff stress and key personnel shortages in so many areas of Canada's medical system. For example, new apps and other better digital approaches offer numerous significant ways to deliver better and more effective healthcare services. They include more efficiently allocating incoming patients among available hospitals to reduce emergency room bottlenecks, improving the timeliness and efficiency of communications between patients and primary care providers, enhancing and expanding virtual care, and better home testing results to assist physicians, practitioners and patients.

Digital capacity and quality is also critical to the everyday, routine interactions of people, businesses and other entities with government. For example, "in 2021 there were 265 million applications for 1,375 services across 72 [federal] departments and agencies—the equivalent of nearly seven applications for every Canadian."[31] Good and bad results from these interactions contribute to voter perceptions of the public sector performance in these areas and overall.

Longstanding significant weaknesses in routine digital service capabilities add to the complex and adaptive issues facing governments. Despite substantial investments in digital service delivery, many people experience significant delays and gaps including hard-to-navigate websites and disappointing paper-based applications when online solutions are available.[32] The reality too often is user-unfriendly government digital offerings, and long line-ups for key services (e.g., passports), and delayed processes. Not surprisingly, public opinion surveys show substantially higher levels of frustration with government services.[33]

Key findings in the 2023 report on the Federal Government's digital transformation problems include Canada lagging significantly behind peer governments and the private sector, using outdated and siloed legacy systems, a [too] heavy reliance on external vendors, antiquated project management, and a digital skills deficit.[34] In late 2023, former Chief Information Officer Catherine Luelo highlighted key constraints upon Canada's "progress from the analog to the digital age."[35] These included not operating as an enterprise, a substantial number of systems in poor health, and a too decentralized system of prioritizing, funding and leading modernization. Vital improvements recommended by several experts include a better management structure, enhanced digital procurement practices, and attracting, retaining and training workers with digital skills.[36]

Large-scale cost overruns, and failing to follow good management practices in digital contracting, development and implementation such as occurred with the ArriveCan app, are serious problems in their own right.[37] But the intersection of inadequate program design and execution leading to unintended outcomes is also problematic for much larger outlays such as the Canada Digital Adoption Program (CDAP) for small businesses. Intended as a major catalyst to help small firms enhance their digital capabilities during and after the pandemic, the uptake of CDAP loans and grants was far below the goal of 160,000 businesses being helped and the $4 billion originally allocated when its largest components were closed in early 2024.[38] Lessons to be learned include the Canadian Federation of Independent Business' comment that there were so many rules and requirements that most firms just gave up on seeking CDAP support.

2. STRUCTURAL SHOCKS AND MACROECONOMIC POLICY SHIFTS DRIVE HIGHER FOR LONGER POLICY RATES AND DEBT YIELDS VS. 2010-2021

2.1 Negative Shocks, Monetary Policy Normalization and Active Fiscal Policy

Full or partial reversals of several decisive, longstanding drivers shaping the late 1980s-2010s have transformed the global economic environment this decade. These foundational changes include the turnaround of the global labour supply from a large excess in the pre-pandemic decades to labour market tightness in the early 2020s, the partial deglobalization of key goods sectors, and the end to excess global savings.[39]

The seismic shift in macroeconomic policy from the easy money and constrained fiscal policy approaches of most of the pre-pandemic era has also been decisive. Monetary policy normalization since mid-2022 is a critical reversal in most advanced economies. Although the U.S. Federal Reserve (Fed) and the BoC moved belatedly to contain the jump in inflation in 2021-1H2022, they did so robustly when they recognized the error of continuing ultra-loose policy for too long. Both moved rapidly to aggressive monetary restraint from mid-2022 onward (see below). Active fiscal policy returned with enormous support to offset the impacts of COVID-19 and pandemic restrictions in 2020 in the U.S. and Canada. Large-scale fiscal stimulus continued, albeit at a slowing pace and lesser magnitude of increase, through 2023.

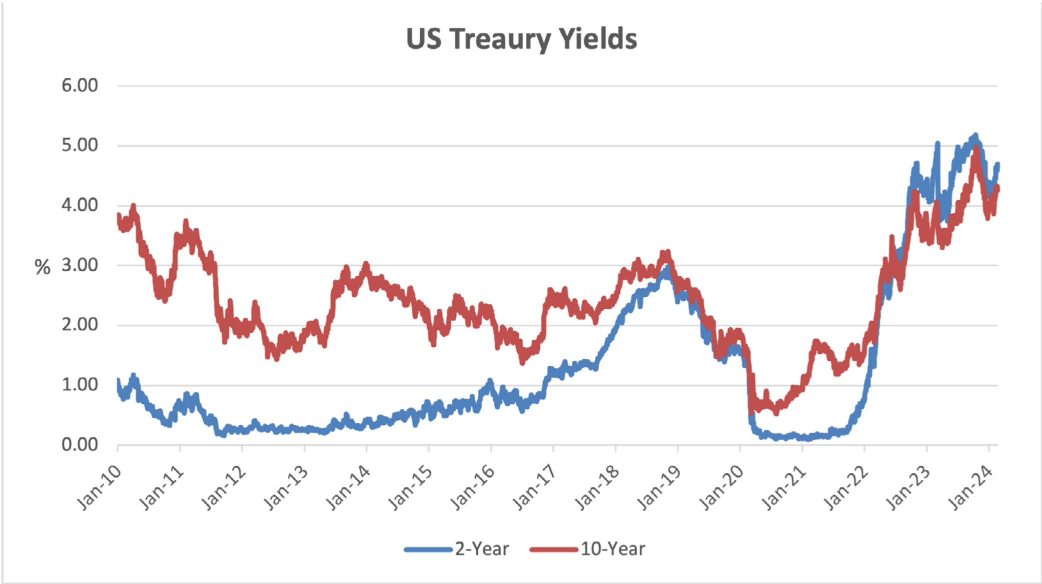
The importance of the full/partial reversal of these longstanding drivers, and the fundamental shift in macroeconomic policy, merit emphasis. The worldwide excess of labour and savings, combined with the globalization of many goods and services, were decisive in causing the disinflation of the late 1980s-2010s.[40] Ultra-easy monetary policy and constrained fiscal policy kept nominal yields on a falling path for over three decades, and suppressed real interest rates.

2.2 Higher for Longer Policy Rates and Debt Market Yields in 2022-2023

The fundamental shift in monetary policy and resulting increase in policy rates and debt yields outlook have two time periods. The first began in mid-2022 and continued through 2023. As inflation reached multi-decade peaks in the U.S. and Canada by mid-2022, the Fed and the BoC recognized that policy normalization had been delayed for much too long and was occurring at too modest a pace. They raised policy rates far more quickly and in much larger amounts in 2H2022, added several smaller further rises in 2023, and then maintained peak policy levels for longer. Both moved from QE to quantitative tightening (QT), with QT reaching meaningful levels in 2023. Rapid monetary policy restraint in a compressed timeframe was essential to prevent the surge in inflation during 2021 and 1H2022--caused by extreme supply shocks (COVID-19, then the Ukraine war), and cyclical and policy-driven demand and supply causes--from becoming a general wage-price spiral by 2023.

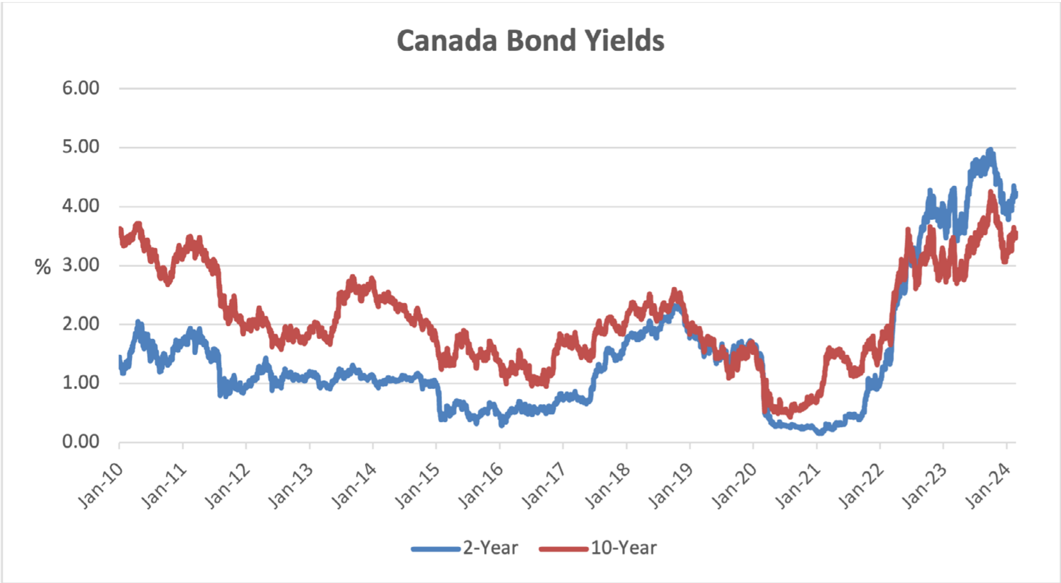
The resulting higher for longer policy rates and debt market yields were jarring for most firms, governments, households and investors as they neither expected nor were positioned for these developments in 2022-2023. Adverse impacts in 2022 included wrenching equity market declines, especially for technology stocks, the worst bond markets in decades, and housing markets' retrenchment with the jump in mortgage costs.

Chart 7: U.S. Treasury 2-Year and 10-Year Yields from 2010 to February 2024



Source: Data from Federal Reserve as of February 29, 2024

Chart 8: Canada Bond 2-Year and 10-Year Yields from 2010 to February 2024



Source: Data from BoC as of February 29, 2024

The consensus of financial markets and policymakers was surprised again from January through October 2023. Most investors and economists maintained their 2H2022 view of a pending recession, weak equity markets and better bond markets as the ongoing inverse yield curve in U.S. and Canadian debt markets showed. Yet, expectations about generative artificial intelligence's (generative AI's) future revenues coupled with resilient U.S. economic growth led to a strong U.S. equity market rebound, particularly for generative AI-linked technology stocks. Along with higher U.S. Treasury debt issuance, government bond yields and mortgage rates rose sharply during August-October 2023.

Markets retraced much of the August-October jump in yields and rates in November-December 2023 as U.S. inflation slowed substantially further, U.S. Treasury issuance lessened, and Fed policy guidance changed. Greater Treasury market volatility with the much-increased vulnerability to sharp moves in both directions in 2023 and again in early 2024, however, warrants spotlighting.

2.3 Looking Ahead: Lower Absolute Policy Rates in 2024-2026 but Higher Than 2010-2021

The BoC's and Fed's policy normalization, once they began in earnest from mid-2022 onward, was a huge paradigm change and very significant policy shift. The magnitude and pace of policy rate hikes of both central banks led to substantially positive real rates in 2H2023 and early 2024. Their shifts were strategic in recognizing their monetary policy errors in 2021, and also showed notable adaptability in tactical approaches. For example, the BoC's pattern of rate hikes and pauses in 2023, including maintaining its July 2023 5.0% policy rate through early 2024, showed flexibility and willingness to recalibrate its policy as economic, housing and inflation conditions evolved. Various BoC speeches and interviews in 2023 noted structural factors putting upward pressures on inflation and potentially higher real rates this decade versus its previous views.[41]

Looking ahead, it is important to distinguish between the near-term outlook for policy rates and medium-term trends. The path and magnitude of expected significant BoC and Fed policy rate cuts in 2024-2025 understandably dominates the attention of financial asset and housing markets. In contrast, our focus is on medium-term trends and drivers for the mid-2020s and potentially beyond.

We expect higher average policy rates and debt market yields during 2024-2026 versus 2010-2021 based upon our projected sustained increase in structural inflation and real yield pressures.[42] Policy rates and bond yields during the mid-2020s, and potentially beyond, are forecast to be materially higher than the pre-pandemic decade and 2020-2021 apart from during major economic downturns/recessions. As set out in Higher for Longer in March 2023, and barring major new global economic, financial and/or geopolitical shocks, we expect a central tendency for policy rates during 2024-2026 of 3%-4% within a wider band of 2%-5%. The wider band reflects the range for policy rates from low levels when large potential output gaps result from weak demand/recessions while the upper area would apply during periods of excess demand such as 2022-1H2023.

In projecting higher nominal and real yields versus the 2010-2021 era, care should be exercised to avoid assuming this is merely a reversion to the mean or to yields more typical of the pre-GFC era. The 2020s are fundamentally different from this era in multiple ways.

Upward wage and price pressures from the reversal of the excess global supply of labour, and partial deglobalization in a range of sectors are expected to keep **trend inflation** higher this decade than the sub-2.0% of the 2010s.[43] Although headline inflation fell substantially by early 2024 from four-decade peaks in June 2022, core inflation rates, service prices and wages still rose at paces above the levels to achieve the BoC's target rates of 2% inflation apart from during weak demand/recessions. Canada's overall Consumer Price Index (CPI) did decline in early 2024 to just under the upper boundary of the BoC's 1-3% range around its 2% inflation target. But this only occurred after 475 basis points (bps) of rapid policy rate hikes and the 5.0% peak being maintained from July 2023 through at least early 2024. Real policy rates had risen to at least 140 bps for eight months by March 2024, and Canada's economy had clearly moved to an excess supply situation by late 2023 and early 2024 as well.

Looking through the sharp cyclical slowing in the economy in 2H2023 and early 2024 from monetary restraint, core medium trends of cost and price pressures include ongoing negative supply shocks globally from higher wages and key labour shortages projected this decade from aging populations in advanced economies and China. The refocusing of international production in various goods sectors to regional trading networks and onshoring, combined with the dual importance of resiliency and efficiency, are forecast to also raise inflation's base in the mid-2020s.

Adverse price shocks arising from climate change this decade bear emphasis. Their greater magnitude, frequency and resulting existential threat differentiate the 2020s from previous eras. The direct effects of severe climate events in 2022 and their greater prevalence and intensity in 2023 substantially reduced agricultural yields in various major agrarian countries, and raised food prices. Large indirect effects (e.g., higher transportation and insurance costs) led to increased input prices for a broad range of goods. Given the consensus scientific outlook of more catastrophic climate events in Canada and globally this decade,[44] climate-related sources of inflation are forecast to become substantially larger.

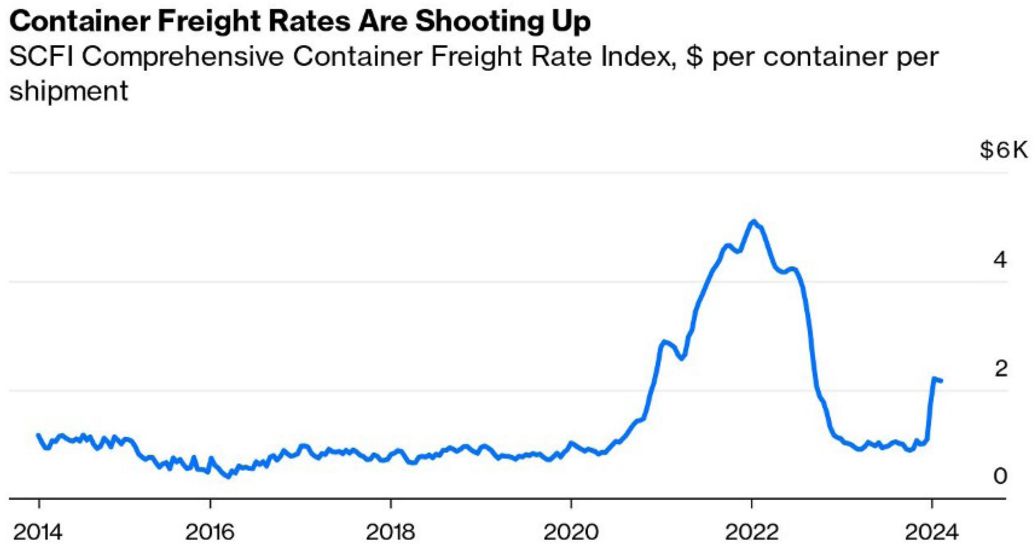
Inflation-boosting interactions between severe climate events and geopolitical factors have a higher likelihood this decade. They are also less predictable in their timing, scale and duration. Russia's attacks on Ukraine's ports, grain facilities and civilian ships in 2023 reduced Ukraine's grain export capacity that year by 40%.[45] Damage to the sales of this leading supplier of wheat and corn globally added significantly to the price pressures elsewhere from lower crop yields due to droughts and heat domes. Global shipping times and costs rose in late 2023 and early 2024 from the combination of the Panama Canal's very low water levels from drought and Houthi rebel attacks on the even more important Red Sea shipping passage. Around 17% of global trade was affected by restricted transits for ships and rising prices in these two major continental shipping routes.[46] The rise in supply chain pressures and instability from shipping limits (Chart 9) illustrated the potential for climate change and geopolitical interactions.

A balanced analysis of inflation's prospects in the mid-2020s includes stressing disinflationary pressures as well. A recession or financial shock may cause temporary inflation declines below the 2-3% range in the mid-2020s. Structural factors will help constrain base inflation, led by technological advance and adoption. We see their impacts as significant in keeping inflation from rising sustainably above the 2-3%-plus area that we forecast during 2024-2026. Generative AI will have notable disinflation benefits as will the expanding use of quantum computing and 3D printing. China's structural real estate sector issues, deflationary pressures and much slower overall growth are also important. China's lower growth path significantly reduced this leading country's demand for commodity imports and lessened resource price pressures globally in 2023 and likely in 2024. Yet, in our view, technology's and China's impacts will only partially offset the negative shocks identified above in boosting costs and prices.[47]

Beyond the expected higher base inflation in the mid-2020s versus the 2010s, upward pressures on nominal yields are forecast from various factors supporting higher **real rates**. They begin with the turnarounds in the global savings supply and demand for funds. On the supply side, the trend in total savings will decrease in advanced economies and in China due to declining working-age populations and the dissavings of rising numbers of seniors to pay for increased home or institutional care and medical support as they age.

On the demand side, enormous spending and investment will be required to achieve sufficient mitigation and adaptation to avoid the worst impacts of climate change. RBC's Climate Action Institute estimates that Canada will need to raise its capital flows from public and private sources from $22 billion annually in 2022 to $60 billion yearly to achieve Net Zero by 2050.[48]

Chart 9: Global Container Rates Surge on Red Sea Attack Risk and Drought Affecting Panama Canal



Sources: Bloomberg Opinion; UNCTAD calculations; Clarksons Research

Globally, average annual climate finance flows rose to nearly U.S. $1.3 trillion annually during 2021-2022, or about 1% of global GDP, almost doubling from 2019-2020 levels according to the Climate Policy Initiative.[49] Yet, this Initiative's average scenario forecast shows that yearly flows of climate finance to prevent the most severe impacts of climate change would need to surge to U.S. $8 trillion annually in 2024 and U.S. $9 trillion by 2030. Just to achieve the low end Initiative forecast to contain climate change would require U.S. $5 trillion in 2024 (almost quadruple the 2021-2022 annual outlays or roughly 4% of global GDP), rising to almost U.S. $6 trillion by 2030.

These climate finance requirements are over and above the large new defense expenditures and capital outlays underway through at least the mid-2020s for Asia, Europe, the UK and U.S. Additional major capital investment will be needed to address the systemic deficiencies in healthcare and infrastructure in many advanced countries. Taken together, they are expected to generate far greater demand for funds this decade.

This turnaround in the demand for funds in the 2020s contrasts starkly with much lower levels of business and government capital spending during the 2010s.[50] It is a tectonic change from the pre-pandemic era for all advanced economies. A growing number of leading economists and former and current policymakers forecast higher real rates versus the 2010s given secular changes (demographics, the surge in investment demand) and borrowing needs (fiscal policy).[51]

Other pressures for higher real rates in the 2020s arise from monetary policy's normalization since mid-2022. Long-term empirical studies by the Bank for International Settlements' (BIS') Claudio Borio and co-authors show that monetary approaches materially influence real rates, and the financial cycle.[52] If the BoC's and Fed's policy normalization is sustained, real rates will stay higher relative to 2010-2021. Speeches by and interviews with BoC Governing Council members in 2023 explicitly referred to the potential for higher real rates, noting some of the drivers set out above, and Fed estimates of future real rates have also risen.[53]

2.4 Looking Ahead: Greater Structural Financial Sector and Debt Risks

Despite the Fed's, BoC's and other major central banks' impressive progress in reducing inflation through early 2024, financial stability and debt risks remain elevated with the higher policy rate and debt yields expected this decade versus 2010-2021. Structural factors supporting higher inflation and real rates in the mid-2020s are also magnifying bank and non-bank FI risks, especially in combination with monetary policy normalization.

As of early 2024, the Fed and BoC have negotiated the tough path of implementing restrictive monetary policy without tipping their respective economies into a major recession or causing serious financial instability. However, challenges remain. Both want to avoid the recession and financial system risks of continuing for too long with strong monetary restraint to achieve the goal of bringing inflation back sustainably to the 2% target. Yet, too large and too rapid declines in policy rates in 2024 and 2025 risk the "last mile" of durably reducing inflation to 2-3%. Thus, the timing, pace and size of policy rate reductions is critical.

U.S. regional bank runs and resulting financial market wobbles in March and May 2023 underscored the financial stability risk for the Fed. The BoC's consumer surveys and the increasing loss provisions of lending FIs in 2023 show the significant economic strains for many mortgagors in Canada. Legacy financial risks in both countries continue from the ultra-easy era of too low interest rates and from excessive QE (the U.S. used large-scale QE during 2008-2021, Canada did during 2020-2021). The serious side effects in the U.S. and Canada included excess private sector leverage, misallocated investment and undue risk-taking.[54]

Risks are growing for bank and non-bank FIs. Commercial real estate (CRE) and private equity markets were hit hard by higher nominal and real yields in 2022 and 2023. The higher for longer rates expected in the mid-2020s relative to 2010-2021 mean that large price gains and excess returns in these sectors during the fixed income bull market from the late 1980s through 2021 are less likely. The vulnerability to corrections and recessions is greater given higher debt costs.

The CRE sector faces the additional risks of large debt maturities during 2024-2026, and of employers and employees having very different goals and views of hybrid/remote work.[55] While the leverage for less or more time in the office will depend upon excess labour demand or supply, the mid-2020s are unlikely to see a return to the full in-person office workweek as seen prior to COVID-19. The resulting financial vulnerability varies by building quality and age.[56] As lease terms come up for renewal and CRE debt matures in the mid-2020s, the risks are asymmetrical as newer high-quality commercial space has much better rental revenue and superior leasing prospects versus older buildings, medium-quality and, especially, lesser-quality space.

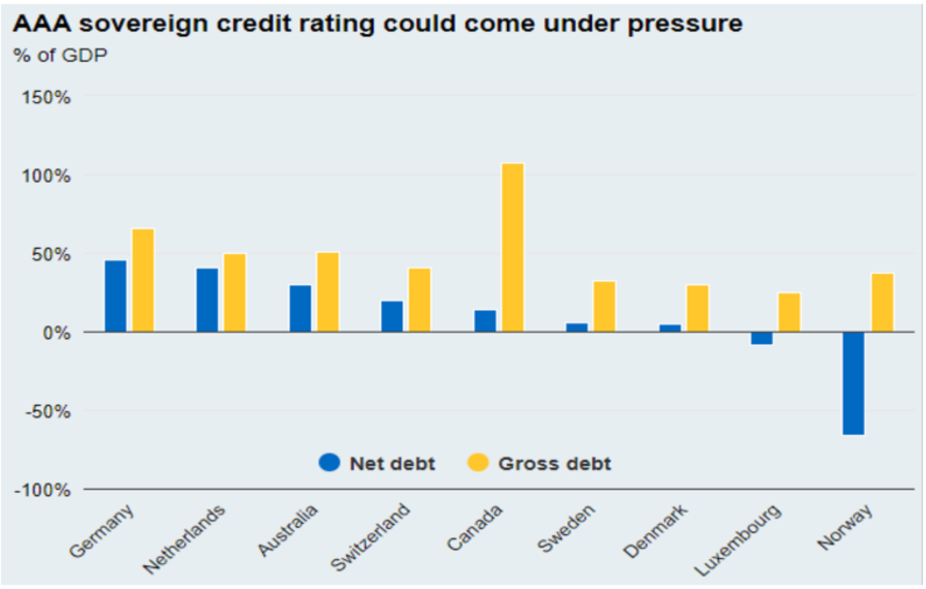
The CRE exposures and vulnerability of regional and foreign banks in the U.S. were underscored in early 2024.[57] New York Community Bancorp's (NYCB's) dividend cuts and increased reserves in response to CRE write-downs led to a plunge in its stock price of 38% on January 31 when they were announced. NYCB lost over 60% of its pre-announcement stock market value by early March before receiving a capital injection of more than U.S. $1 billion in equity and a new Chief Executive Officer was installed. Nor is U.S. CRE exposure limited to U.S. banks. Japan's Aozora Bank fell 20% after warning of U.S. CRE losses, and Deutsche Bank announced the quadrupling of its U.S. CRE loan provisions. The ongoing susceptibility of U.S. regional banks to CRE losses is evident in JP Morgan's 2023 research that showed these U.S. banks' exposure to CRE loans averages over 25% of assets versus just 6.5% at large banks.[58]

The remarks of Canada's Superintendent of Financial Institutions Peter Routledge in mid January 2024 are instructive in framing the different scale and nature of the risks for banking institutions from CRE lending in Canada relative to the U.S.[59] He stated, "It's likely that banks across the world are going to suffer some" CRE losses "and they're likely to be meaningful". While these CRE losses will probably be "earnings events" for Canadian banks, they are not a major capital risk. Using the analogy of a traffic light, he characterized office loans as a "dark orange" issue in Canada and "dark red" problem in the U.S.

Regulators are also concerned about the financial risks from the rapidly expanding debt share of non-bank FI's, especially hedge funds, and the accelerated move of unregulated lenders into the private credit market.[60] The more opaque nature of these activities from lesser regulation and differences in transparency of exposures of non-bank FIs complicates assessing these risks.

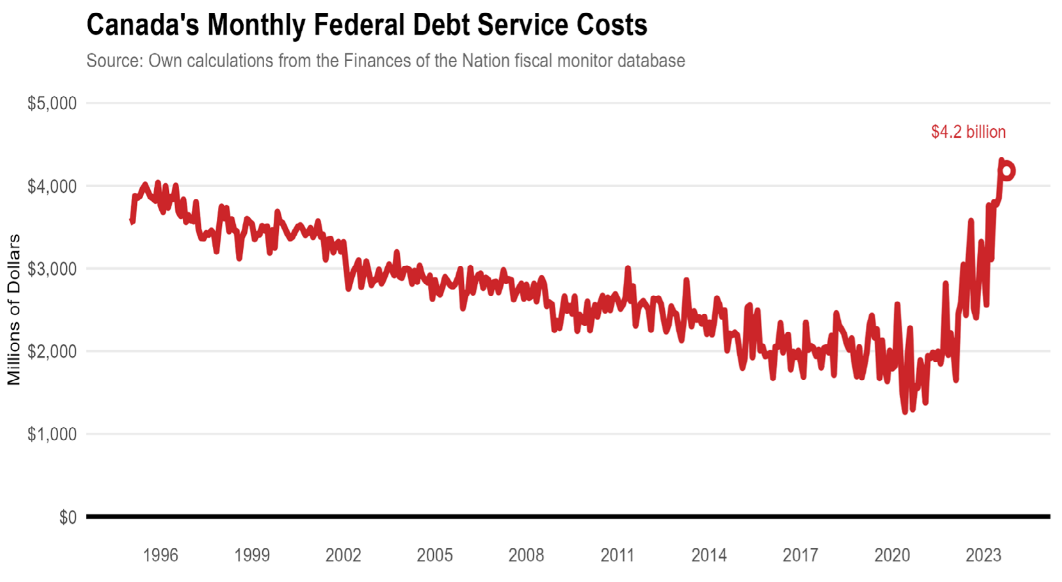
On the public sector side, the surge in government debt in the early 2020s is a further financial risk for markets and policymakers. The jump in borrowing boosted already excessive public sector debt levels in most advanced economies from before COVID-19.[61] It fueled a steep increase in public debt costs from higher debt yields from mid-2022 onwards. Admittedly, the challenge for Canada is gross government debt (Charts 10 and 11) while the U.S. faces the long-term constraints and risks of federal deficits exceeding 5% of GDP (Chart 12). Higher interest expenses and debt levels raise questions about Canada's and the U.S.' capacity for sufficient fiscal support if a severe economic or financial shock occurs, particularly with the larger budget deficits that would already be occurring in a sustained growth downturn or major recession.

Chart 10: Canada's Gross General Debt Levels Are Well in Excess of Other AAA-Rated Sovereign Borrowers



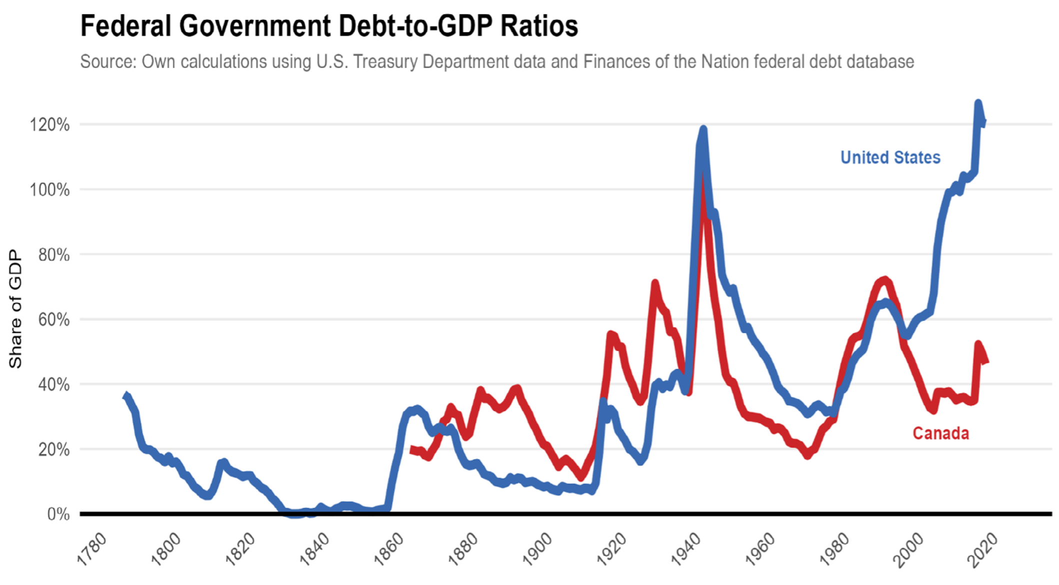
Sources: Statistics Canada; RBC Economics

Chart 11: Canada's Rising Cost of Public Debt



Source: Trevor Tombe, with data calculations from Finances of the Nation database

Chart 12: U.S. Deficits Are a Major Risk if Current Path Continues



Source: Trevor Tombe, with data from U.S. Treasury and Finances of the Nation database

Through mid-March 2024, U.S. Treasury yields have sustained a large part of their strong rally in November-December 2023. Yet, U.S. and other major sovereign government bond markets pose additional risks from their increased fragility and volatility. The late 2023 Treasury rally followed the unexpected spike in U.S. 10-year and long bond yields and sharp swings in fixed income prices daily in August-October 2023. While that earlier jump in yields had multiple causes, the substantial contributions of current and projected U.S. deficits, and the surge in U.S. Treasury issuance were deemed to be among the leading factors.[62] The uncertain impact of the Fed's QT as it continues to be implemented in the mid-2020s remains an open risk as well.

2.5 Looking Ahead: Will Politicization Constrain the BoC's Policy Independence?

The pace and scale of rapid, large-scale increases in Canadian mortgage rates and other lending costs in 2022-2023 were fundamental shocks to households and corporations. Fifteen-plus years of minimal inflation until 2021, the BoC's July 2020 forward guidance that its policy rate would stay near zero for a lengthy period "until economic slack is absorbed", and the resulting ultra-low rates until mid-2022, instilled a sense of complacency despite clearly rising inflation in 2021-1H2022.

Not surprisingly, the expectations of many people and firms were jolted by higher inflation and interest rates. Difficult adjustments included less discretionary income for many households, spending constraints and greater financial anxiety that boosted the political economy risks to the BoC's policy path. Much higher mortgage costs, food inflation and other cost of living pressures made affordability an increasing political issue by late 2022, and especially, during 2023-early 2024. This trend may become stronger as the percentage of homeowners renewing their mortgages at significantly higher interest rates versus pre-2H2022 levels builds through 2024 and, potentially, if policy rates remain at high real yields,in 2025 and 2026 (Chart 13).

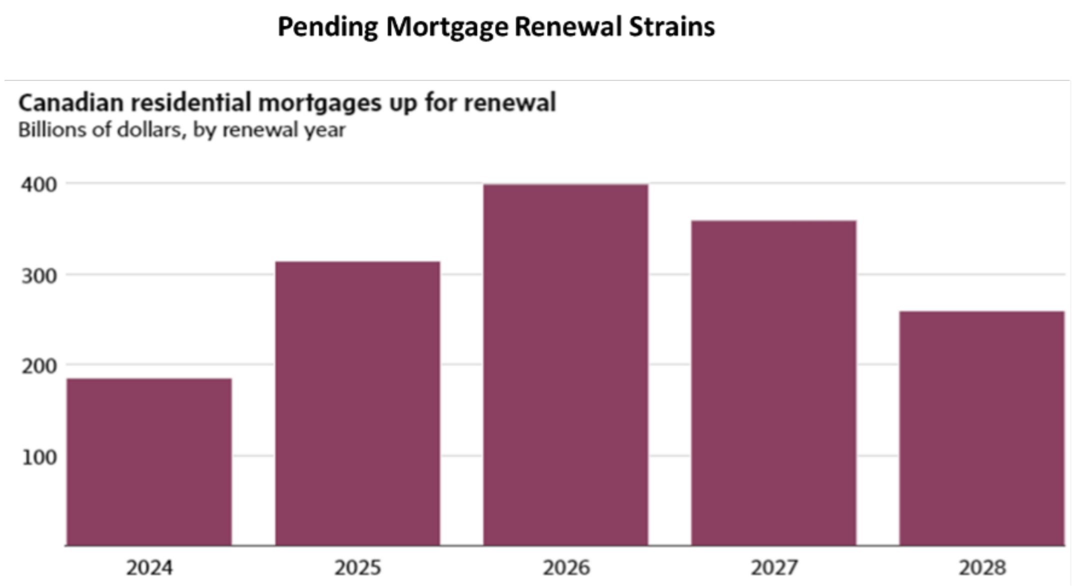
The open question is whether borrowing cost pressures in 2024 for homeowners and for small and medium businesses from the impacts of BoC monetary restraint will fuel more and stronger public criticisms and statements by senior federal and provincial politicians. This political risk is reflected in the comments of senior federal party representatives from across the political spectrum in 2023, requests from three provincial premiers in 2023 for rate hikes to end, and views of two provincial premiers in early 2024 supporting lower BoC policy rates.

A brief recap offers perspective on their criticisms, requests and unusual comments. In 2022, the Federal Opposition Leader openly criticized the BoC's large-scale purchases of Canada bonds as supporting federal spending, and stated that he would replace the BoC Governor if his party formed the government. In the week before the BoC's September 2023 meeting, three provincial premiers wrote to the BoC asking for an end to its policy rate increases. The Federal New Democratic Party, whose support is critical to the minority Liberal Government's parliamentary majority, called for a halt to rate hikes. The Finance Minister's decision to issue a statement after the BoC's September 2023 meeting broke with tradition, particularly given the structural relationship between the BoC and Finance. The Minister's comments included that the pause was "welcome relief for Canadians". Her number one priority was using "all the tools at my disposal" and working "to ensure that interest rates can come down as soon as possible".[63]

In February 2024, comments by the Prime Minister explicitly favoured lower BoC policy rates sooner rather later, while making it clear that the decision was the BoC's to make. One western provincial premier's strong criticism of the BoC that month implicitly supported policy rate declines while in March another large province's premier called directly for lower policy rates.

These unusual political comments, objections, and requests in 2023-early 2024 occurred with the Canadian economy still expanding, albeit modestly from mid-2023 onward, and employment growth continuing through at least February 2024. The risk of stronger political criticism and pressures on BoC policy bears emphasis in 2024 if unemployment rises significantly, especially if a recession happens, and/or core inflation remains well above the BoC's target.

Chart 13: High Mortgage Rates Affect Increasing Number of Homeowners



Source: RBC Capital Markets

Success in the BoC's policy pursuit of lower and more stable inflation in the mid-2020s depends crucially upon its credibility and scope to conduct monetary policy on the basis of economic and financial conditions. The BoC's progress in reducing the rise in the CPI from its 8.1% peak in June 2022 to 2.8% in both the CPI overall and the CPI excluding food and energy by February 2024 has been meaningful and clear. Policy normalization was crucial in preventing a wage-price spiral in 2023. It was essential to helping cause the rise in consumer and business price expectations in 2021 and 2022 BoC surveys to ebb significantly in 2023. Monetary restraint was vital in restraining demand to keep inflation from further eroding the living standards of workers who did not receive large wage hikes in 2021-2023, and for people on fixed incomes.

Moreover, as explored above, even with inflation's sharp decline by early 2024, the BoC is facing tough challenges in the mid-2020s and potentially beyond. They include the "stickiness" of services inflation, especially shelter costs,[64] structural drivers putting upward pressure on inflation and real rates this decade, and the cost and price repercussions of ongoing climate change. Politicization of the conduct of monetary policy generally and rate-setting specifically could make these challenges far more difficult if it affects the BoC's credibility and legitimacy.[65]

CONCLUSION

This paper has explored two core macroeconomic trends decisively shaping the 2020s. The first encompasses more uncertain outcomes and greater unintended impacts from accelerating and broadening complexity and adaptivity. The second is higher for longer rates and yields in 2024-2026 versus 2010-2021. The drivers of this new rate environment are the reversals of the structural economic forces driving disinflation, and the fundamental shift from the macroeconomic policy approach of the late 1980s-2010s.

The impacts of more uncertain outcomes and greater unintended consequences are wide ranging. They include the challenges of accelerating and broadening complexity and adaptivity for the models and forecasts of central banks, governments, FIs and non-financial businesses. The interactions with climate change, geopolitics and other components of the polycrisis present more numerous, interdependent and diverse problems for the public sector. Looking ahead, fundamental changes in government policy and regulatory assessment and implementation are essential as more variability in results and unforeseen impacts increase the risks from continuing with traditional public sector approaches and standard political oversight.

Higher policy rate and debt yields projected in the mid-2020s vs. 2010-2021 will mean that financial stability and debt risks remain elevated. Bank and non-bank FI risks are magnified by the structural factors supporting higher inflation and real rates, especially in combination with monetary policy normalization from its ultra-easy stance from the GFC through the first two years of the pandemic. These financial risks include banking sector confidence and funding impacts from FI exposures to CRE, especially in the U.S., and the strains on households and businesses in Canada from much higher debt costs versus the 2010-2021 era. Increased public sector debt levels and rising government interest expenses as well as greater volatility in U.S. Treasury market yields remain crucial risks this decade.

Endnotes

1 On complexity and adaptivity for economic and financial systems, see for example, W. Brian Arthur, **Complexity and the Economy** (New York: Oxford University Press, 2014); William White, "Recognizing the economy as a complex adaptive system: Implications for central banking", chapter 21 in **The Changing Fortunes of Central Banking** (2018); and William White, "Mitigating Global Warming is Not Our Only Problem: Are We 'Sleepwalking' Towards a Global Polycrisis?", Global Risk Institute in Financial Services (GRI), September 2023, pp. 1-2.

2 Brooke Masters, "US bank regulation needs to enter the digital age", *Financial Times*, January 24, 2024.

3 *Ibid*.; and Gillian Tett, "Wake up to the dangers of digital bank runs", *Financial Times*, April 20, 2023.

4 See Bank of Canada quarterly Business Outlook Surveys during 2021-1H2022 for the jump in intentions for large price increases by businesses, and 2H2022-2023 for the ebbing tide of firms planning major price hikes. On firms' ability to pass through higher input costs, see Tiff Macklem, "The Bank of Canada's response to post-COVID inflation and some lessons learned" in **Monetary Policy Responses to the Post-Pandemic Inflation**, edited by Bill English, Kristin Forbes & Angel Ubide (Paris: Centre for Economic Policy Research, 2024), pp. 52-53, 57.

5 On growth headwinds and side effects, see William White, "Why The Monetary Policy Framework in Advanced Countries Needs Fundamental Reform", Working Paper No. 210 (New York: Institute for New Economic Thinking, August 3 2023); William White, "Recognizing the Economy as a Complex, Adaptive System: Implications for Central Banks"; and William White, "It's Worse than 'Reverse': The Full Case Against Ultra-Low and Negative Interest Rates", Working Paper No. 151 (New York: Institute for New Economic Thinking, 2021). On excess leverage and undue risk-taking, Van R. Hoisington & Lacy Hunt, "Quarterly Review and Outlook: Second Quarter 2020", Hoisington Investment Management Company, pp. 2-3, 5. On the Fed put in asymmetrically supporting markets, John Authers, "The Fed's Stocks Policy is Exuberantly Asymmetric", *Bloomberg Opinion*, August 4th, 2020; and on the political and behavioural constraints upon reversing ultra-easy policy, Group of Thirty, "Fundamentals of Central Banking: Lessons from the Crisis" (October, 2015), pp. 43-44.

6 White, "Why The Monetary Policy Framework in Advanced Countries Needs Fundamental Reform".

7 See James K. Stewart, Hugh O'Reilly & Erik Brown, "Long-Term Thinking in Extraordinary Times: Macroeconomic Lessons from the Pandemic", GRI, (April 2021); Stewart, O'Reilly & Brown, "Transitioning from the Pandemic: Towards a More Balanced Fiscal Policy", GRI, (August 2021); and James K. Stewart, Hugh O'Reilly & Victoria Guo, "Unwinding Pandemic Stimulus: The Bank of Canada's Narrow Path to Successful Policy", GRI, (May 2022).

8 Mark Rendell, "The Bank of Canada retools its economic forecasting for a future that does not look like the past", *The Globe and Mail*, January 19, 2024.

9 Panel Remarks by William White, "The Future of Policy Modelling", *25th Central Bank Macroeconomic Modelling Workshop*, November 9, 2022, pp. 1-5, https://williamwhite.ca/2022/11/09/the-future-of-policy-modelling/.

10 Jason Kirby & Matt Lundy, "Why these reliable recession indicators are faltering", *The Globe and Mail*, December 29, 2023.

11 Dara Massicot, "What Russia Got Wrong", *Foreign Affairs*, March/April 2023, pp. 80, 87-92.

12 David Miliband, "The World Beyond Ukraine", *Foreign Affairs*, May/June 2023, p. 43; and Alaric Nightingale, Julian Lee & Alex Longley, "How Russia Punched an $11 Billion Hole in the West's Oil Sanctions", *Bloomberg*, December 5, 2023.

13 Jean-Claude Juncker used this term from complexity theorist Edgar Morin to describe the multiple crises confronting Europe during 2010-2016. The wider range of far-reaching crises in 2020-2023 made the term applicable more broadly—see Adam Tooze, **Shutdown: How Covid Shook the World's Economy** (New York City: Viking, 2021) pp. 6-8, and Michael Lawrence, Scott Janzwood & Thomas Homer-Dixon, "What Is a Global Polycrisis?", Version 2.0., Discussion Paper 2022-4. Cascade Institute, 2022.

14 Lawrence, Janzwood & Homer-Dixon, "What Is a Global Polycrisis?".

15 Thomas Homer-Dixon, Michael Lawrence & Scott Janzwood, "Dismissing the term 'polycrisis' has one inevitable consequence – reality always bites", *The Globe and Mail*, February 18, 2023.

16 Robert Kavcic, "Canadian Housing Market: Outlook and Implications", GRI Webinar, January 16, 2014; and Kyle Dahms & Alexandra Ducharme, "No respite for Canadian housing affordability in Q4 2023", *Housing Affordability Monitor*, National Bank of Canada Financial Markets, February 22, 2024.

17 Conference Report, "Better Health Outcomes: What is Holding Canada Back?", C.D. Howe Institute and HealthCare CAN, November 2, 2023, pp. 1-28.

18 See *Ourcare* national survey results from the fall 2022, https://www.ourcare.ca/nationalsurvey.

19 Blair Feltmate & James K. Stewart, "Government leadership in flood protection is long overdue", *Policy Options*, December 13, 2023.

20 Nick Nanos, "Data Dive with Nik Nanos: The national mood is dour – good news for the Conservatives", *The Globe and Mail*, February 9, 2024.

21 Fareed, Zakaria, **10 Lessons for a Post Pandemic World** (New York: Norton, 2021), chapter 2.

22 Donald Savoie, "Ottawa, we have a problem, the federal public service", *The Globe and Mail*, December 27, 2023.

23 Michael Lawrence and Thomas Homer-Dixon, "When it comes to wildfires or COVID-19, focusing on simple explanations might make things worse", *The Globe and Mail*, August 19, 2023.

24 Chris Clearfield, "Out of service: How do we solve a problem like Canada's creaking bureaucratic systems", *The Globe and Mail*, September 22 and 24, 2023.

25 Peter van Dijk & James K. Stewart, "The value of natural assets must be measured for truly sustainable development", *Policy Options*, October 10, 2023.

26 Stefane Marion & Alexandre Ducharme, "Canada is caught in a population trap", National Bank of Canada Financial Markets, January 15, 2024; and the comments of various banks' chief economists in Danielle Bochove, "Trudeau Botched Immigration Surge, Canada's Top Bank Economists Say", *Bloomberg*, January 11, 2024.

27 Simon Kuper, "Democracies need to work quicker and smarter. Here's what that might look like", *Financial Times*, September 28, 2023.

28 On the Parliamentary Committee on Government Operations investigation of the problems in the federal approach in hiring, managing and using consultants, see Bill Curry, "Ottawa paid nearly $670,000 for KPMG's advice on cutting consultant costs", *The Globe and Mail*, November 7, 2023; Bill Curry, "Procurement department launches review of IT firms accused of contracting misconduct", *The Globe and Mail*, November 9, 2023; and Campbell Clark, "The government's IT contracting pays middlemen to get around the system", *The Globe and Mail*, November 26, 2023. On the ArriveCan app, see Auditor General, "COVID-19 PANDEMIC: Report 1 ArriveCan", Reports of the Auditor General of Canada 2024; and Office of the Procurement Ombud, "Procurement Practice Review of ArriveCan", January 2024.

29 Curry, "Ottawa paid nearly $670,000 for KPMG's advice on cutting consultant costs".

30 Savoie, "Ottawa, we have a problem, the federal public service".

31 Andre Cote & Viet Vu, "The federal government needs a digital transformation", *Policy Options*, November 29, 2023.

32 *Ibid.*

33 Savoie, "Ottawa, we have a problem, the federal public service". Public dissatisfaction surveys about government services reflects broader opinion trends of deteriorating sentiment regarding Canada's direction overall as a country and views of Canadian healthcare. See National Survey, "Satisfaction with Canada as a country continues to decline – Universities and Colleges top positive contributor to Canada being a better country", *Nanos Research*, February 2024.

34 Creig Lamb, Daniel Munro & Viet Vu, "Byte-Sized Progress: Assessing Digital Transformation in the Government of Canada", *The Dais*, Toronto Metropolitan University, September 2023.

35 Kathryn May, "Catherine Luelo named clerk's advisor on digital transformation", *Policy Options*, January 12, 2024.

36 Lamb, Munro & Vu, "Byte-Sized Progress: Assessing Digital Transformation in the Government of Canada".

37 Auditor General, "COVID-19 PANDEMIC: Report 1 ArriveCan", Reports of the Auditor General of Canada 2024.

38 At the time of CDAP's closure of its largest components, the Federal government said that more than 20,000 micro-grants, over 21,000 business-plan grants and nearly 5,000 business loans had been handed out versus the stated program aim of helping 160,000 businesses. In terms of funding, $274 million in grant support had been provided versus $1.4 billion originally budgeted for grants and advisory services, and $280 million of loans had been made versus $2.6 billion projected for total loans at CDAP's inception. Chris Hannay, "Ottawa ends digital-upgrade program for businesses early, with billions unspent", *The Globe and Mail*, February 20, 2024.

39 Identified and explored extensively in Charles Goodhart & Manoj Pradhan, **The Great Demographic Reversal: Ageing Societies, Waning Inequality, and an Inflation Revival** (London: Palgrave Macmillan, 2020). For an incisive analysis of the tight labour markets during 2021 through late 2023, see Bernardus Doornik, Deniz Igan & Enisse Kharroubi, "Labour Markets: what explains the resilience", *BIS Quarterly Review*, December 4 2023.

40 Goodhart & Pradhan, **The Great Demographic Reversal**, p. 32; and William White's "Foreword" in Graeme Wheeler & Bryce Wilkinson, "How Central Bank Mistakes After 2019 Led To Inflation", The New Zealand Initiative, (July 2022).

41 Deputy Governor Paul Beaudry speech (June 2023), Governor Tiff Macklem interview (July 2023), Senior Deputy Governor Carolyn Rogers' speech (November 2023) and Governor Tiff Macklem interview (December 2023).

42 James K. Stewart, "Higher for Longer: Structural Inflation and Real Rate Trends in the 2020s", GRI, March 2023.

43 Goodhart & Pradhan, **The Great Demographic Reversal**; and William White, "The New Age of Scarcity: How We Can Adapt", *The Sylvia Ostry Lecture*, C. D. Howe Institute, November 22, 2023.

44 The forecast of the UK's national weather service, the Met Office, sees 2024 as potentially the first year where the average global surface temperature is more than 1.5°C warmer than the pre-industrial era. See Michael Le Page, "World predicted to break 1.5°C warming limit for first time in 2024", *New Scientist*, December 8, 2023. For Canada, Environment and Climate Change Canada forecasts place high probabilities on above average temperatures again in 2024, https://climate-scenarios.canada.ca/?page=cansips-prob.

45 "Russia destroyed 300,000 tons of grain since July in port, ship attacks, Kyiv says", *Reuters*, October 13, 2023.

46 The Editorial Board, "Global trade shudders over blockages in the Suez and Panama", *Financial Times*, December 20, 2023.

47 See also George Athanassakos, "Will AI save the day when it comes to inflation and interest rates? Don't count on it", *The Globe and Mail*, November 28, 2023.

48 RBC Climate Action Institute, "Climate Action 2024: Double or Trouble", https://www.rbc.com/climate-action-institute/climate-action-24/_assets-custom/pdf/climate-report-2024-double-or-trouble.pdf.

49 Climate Policy Initiative, Global Landscape of Climate Finance, November 2023, https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/

50 On pre-COVID-19 weakness in investment, see Rachel Lukasz & Lawrence H. Summers, "On secular stagnation in the industrialized world", *Brookings Papers on Economic Activity*, Vol. 50, No. 1, Spring 2019, pp. 1-54.

51 These include former U.S. Treasury Secretary Lawrence Summers, former FOMC member William Dudley, and JP Morgan's Chief Economist Bruce Kasman. See also the comments of Treasury Secretary and former Fed Chair Janet Yellen in January 2024; Blackrock Investment Institute, "2024 Global Outlook", December 5, 2023, https://www.blackrock.com/corporate/literature/whitepaper/bii-global-outlook-2024.pdf; and Joseph H. Davis, Ryan Zalla, Joana Rocha & Josh Hirt, "R-Star is Higher. Here's Why" (June 14, 2023), pp. 1-16, https://ssrn.com/abstract=4478413 or http://dx.doi.org/10.2139/ssrn.4478413.

52 C. Borio, P. Disyatat, M. Juselius & P. Rungcharoenkitkul, "Why so low for so long? A long-term view of real interest rates", *BIS Working Papers*, No. 685, 2017; and C. Borio, P. Disyatat, & P. Rungchaoenkitkul, "What anchors for the natural rate of interest?", *BIS Working Papers*, No. 777, 2019.

53 BoC interviews and speeches noted in endnote 17. For the Fed, note the upward trend in the average of Fed officials' estimates such as those set out in various FOMC meetings' Summary of Economic Projections in 2023.

54 White, "Why The Monetary Policy Framework in Advanced Countries Needs Fundamental Reform".

55 Rachana Shanbhogue, "The fight over remote working will heat up in 2024", *The Economist*, November 13, 2023; and Gus Carlson, "Companies indeed got workers back in the office – are you happy now?", *The Globe and Mail*, December 30, 2023.

56 Rachelle Younglai, " 'The older you get, the higher the vacancy': Toronto's top skyscrapers lose their lustre with age, research shows", *The Globe and Mail*, January 5, 2024; and Stephen Gandel, "US office owners face $117bn wall of debt repayments", *Financial Times*, January 1, 2024.

57 Patrick Clark, Natalie Wong & Diana Li, "A $560 Billion Property Warning Hits Banks from NY to Tokyo", *Bloomberg*, January 31, 2024; and Matthew Monks & Bre Bradham, "NYCB Raises More Than $1 Billion in Equity Led by Steven Mnuchin's Firm", *Bloomberg*, March 6, 2024.

58 Joe Seydl, Jay Serpe & Ryan Asato, "Are banks vulnerable to a crisis in commercial real estate", *Economy and Markets,* JP Morgan Private Bank, April 12, 2023. https://privatebank.jpmorgan.com/nam/en/insights/markets-and-investing/are-banks-vulnerable-to-a-crisis-in-commercial-real-estate

59 Cited in Christine Dobby, "Meaningful Losses Loom on Office Loans, Canadian Regulator Says", *Bloomberg*, January 19, 2024.

60 Laura Noonan, "Top financial regulator seeks global clampdown on hedge fund borrowing", *Financial Times*, September 29, 2023; Robin Wigglesworth, "FSOC vs shadow banks", *Financial Times*, November 6, 2023; Huw van Steenis, "Private credit boom will generate a new squeeze", *Financial Times*, November 28, 2023; & Jameson Berkow, "Companies increasingly turn to private lenders for financing", *The Globe and Mail*, November 28, 2023.

61 Serkan Arslanalp & Barry Eichengreen, "Living with High Public Debt", August 2023, https://www.kansascityfed.org/Jackson%20Hole/documents/9749/Living_With_High_Public_SA_Sep_2_2023.pdf

62 Ye Xie, "Worst US Bond Selloff Since 1787 Marks End of Free-Money Era", *Bloomberg*, October 8, 2023; and Ethan Wu, "Unhedged: Why the term premium is rising", *FT Newsletter*, October 9, 2023.

63 "Statement by the Deputy Prime Minister on the Bank of Canada's interest rate pause", Department of Finance Canada, September 6, 2023.

64 Note the BoC's inflation concern about shelter inflation remaining more robust than anticipated in its *Monetary Policy Report*, January 2024.

65 BoC Governor Tiff Macklem's written responses to the premiers' September 2023 criticism included "instructions or requests from elected officials about how we should set interest rates could create the impression that the Bank of Canada's operational independence is at risk." In his year-end 2023 interview with *The Globe and Mail*, he stated that "specific advice about what to do with interest rates" creates or could create "a perception that the central bank is not independent". Mark Rendell & David Parkinson, "Bank of Canada's Tiff Macklem talks interest rates, inflation, and being cast as Canada's economic villain", *The Globe and Mail*, December 22, 2023.