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BC Investment Outlook

Fall 2024 Edition

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January 23, 2025 | 5:30 pm – 9:30 pm PT

Vancouver Convention Centre – West Building

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Emcee: Salman Ahmed, CFA, CFA Society Vancouver

Moderator: Andrew Sweeney, CFA, Portfolio Manager, PH&N Institutional

Guest Speaker: Margaret Franklin, CFA, President & CEO, CFA Institute

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Fiscal Tightening Expected in the Eurozone

by Jocelyn Paquet

NATIONAL BANK
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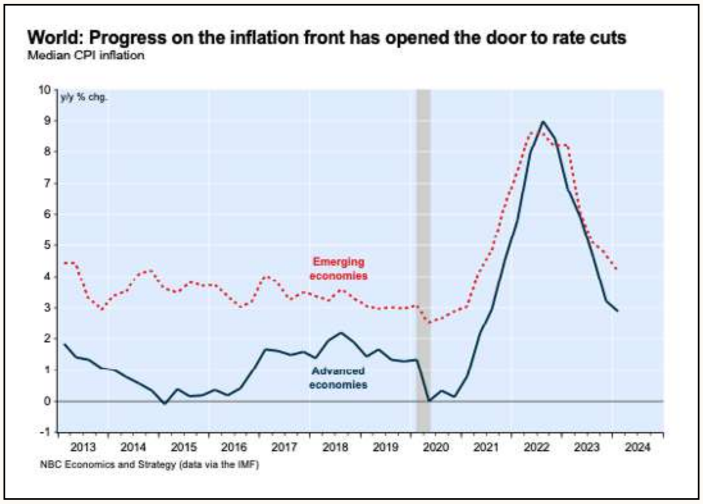
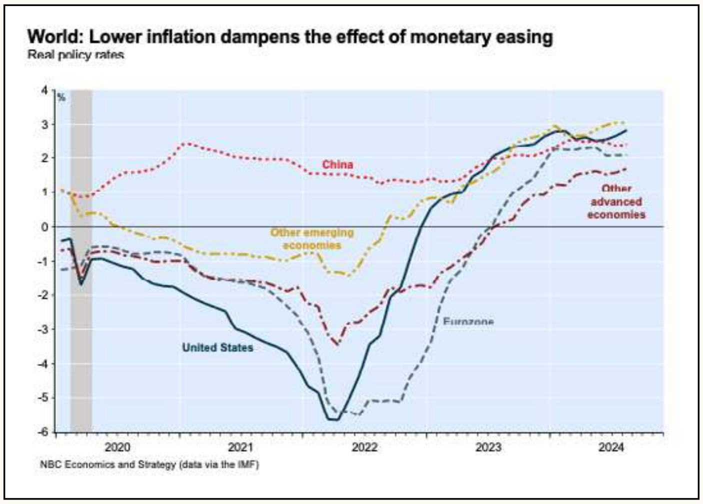
Summary:

- Inflation continues to fall worldwide, allowing central banks to consider cutting interest rates. However, real rates remain restrictive in many places, limiting the immediate acceleration of the economy.
- China is facing unique challenges, with the weakness of the consumer price index reflecting weak domestic demand. Foreign demand, meanwhile, does not appear to be much stronger, as evidenced by low producer prices that are weighing on industrial profitability. These data merely confirm that the monetary stimulus measures already announced are not enough on their own to boost the economy
- After years of government profligacy in Europe, the IMF expects fiscal consolidation by 2025. Some are skeptical about the chances of this happening, but fears of disruption to the bond market could prompt some discipline. The recent rise in bond yields in the UK and France shows that investors are keeping a close eye on governments at the moment.
- With headwinds in China and Europe, global growth is expected to reach 3.2% in 2024 and 2.9% in 2025.

New data published by the IMF suggests that progress in the global fight against inflation has continued in recent months. Although not quite back to pre-pandemic levels, CPI inflation has continued to fall in both advanced and emerging economies.

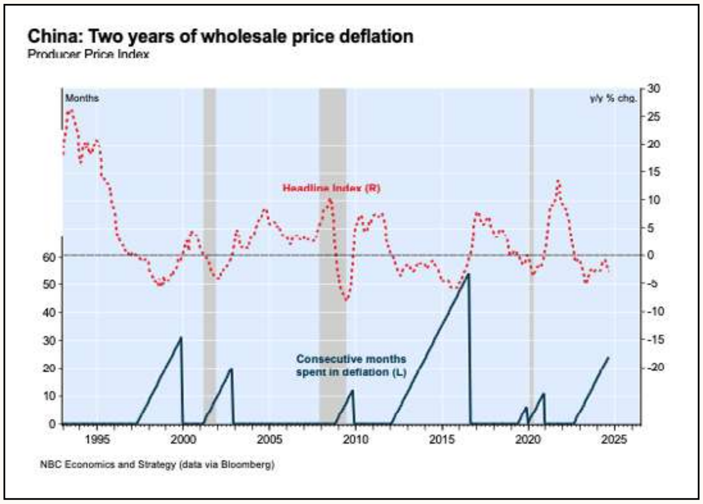


This setback is undoubtedly good news, as it now allows central banks to ease the pressure by reducing their policy rates. However, it will be some time before this easing translates into an acceleration in global growth. For, although they have fallen slightly, policy rates remain restrictive in many parts of the world, particularly in real terms.

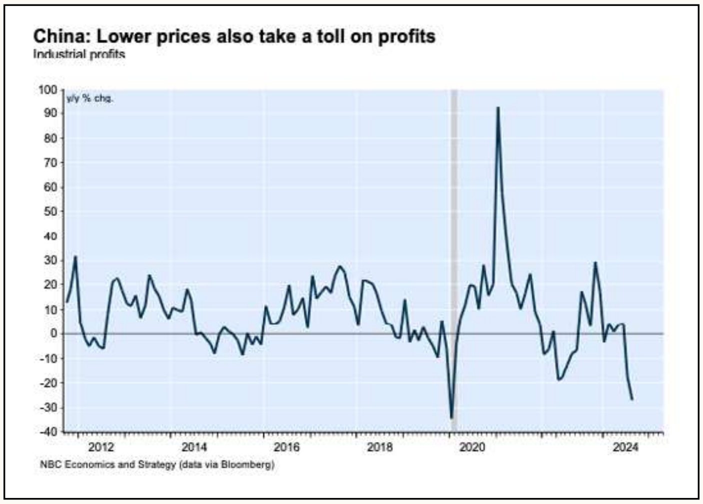


China is one of the regions where the positive impact of rate cuts has been largely cancelled out by weakening inflationary pressures. Weighed down by weak domestic demand, core inflation fell to just 0.1% on an annual basis in September, one of the lowest figures ever recorded.

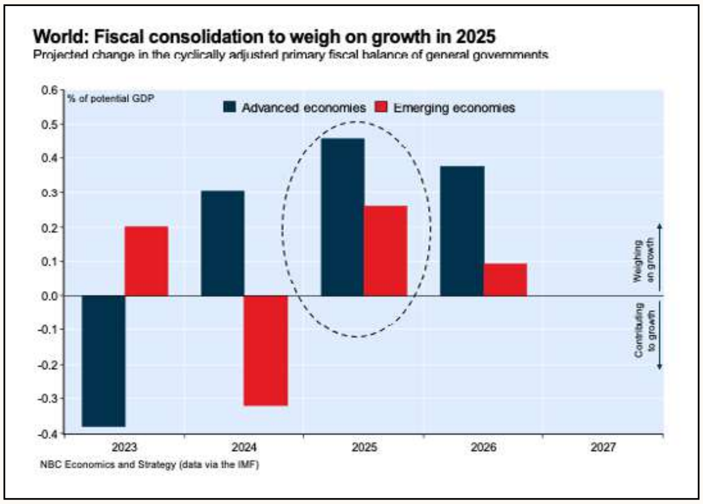
The producer price index, meanwhile, remained in deflation for a 24th consecutive month, the third longest such sequence since these data started being compiled in the early 1990s.



As well as keeping real interest rates higher than they otherwise would have been, the fall in prices has also hurt the profits of industrial companies, which fell by no less than 27.1% year-on-year in September.



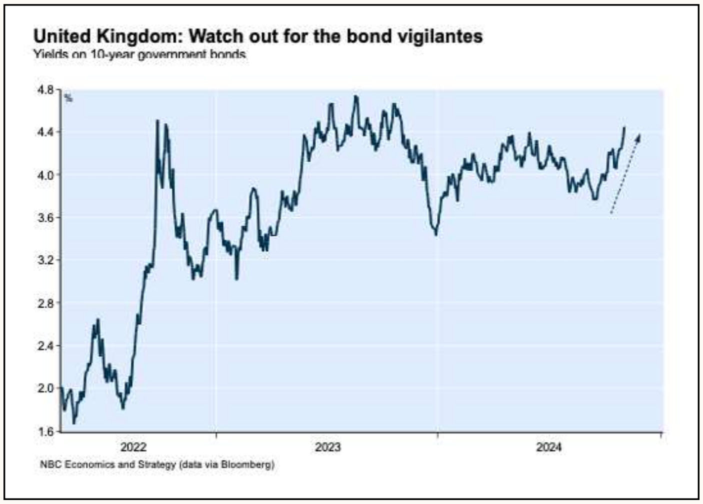
These data merely confirm that the monetary stimulus measures already announced are not enough on their own to boost the economy. All eyes will be on the Chinese authorities, who will unveil a fiscal stimulus plan in early November. For the time being, this forces us to maintain our growth forecasts below consensus expectations for the world's second-largest economy.



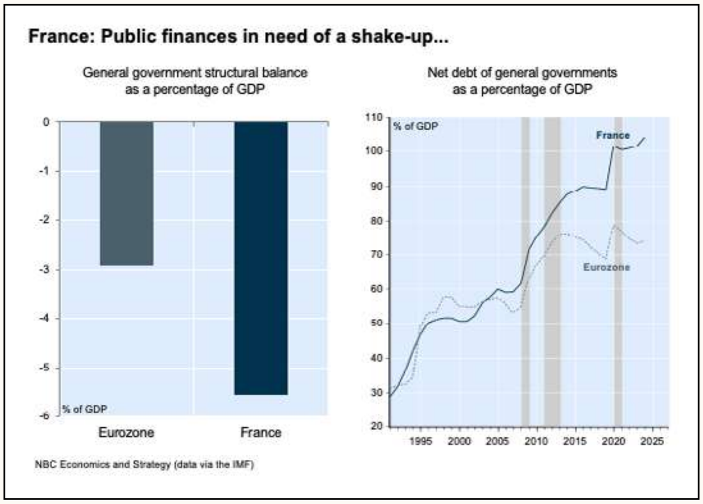
In addition to relatively weak Chinese growth on a historical basis, the emerging economies could also suffer from fiscal consolidation in 2025. This, at least, is the view of the IMF, whose most recent forecast assumes an improvement in the structural balance of public administrations in these countries.

Fiscal policy could be even more damaging to growth in the advanced economies, where the structural budget balance of general government needs to improve even more than in the emerging economies by 2025. Of course, this will require policies to reduce deficits in several European economies. And after years of profligacy, our readers would be forgiven for thinking that the chances of this happening are pretty slim. To this, we would reply that it is the fear of disruption in the bond market (and the fear of rapidly rising borrowing costs) that is likely to bring governments back onto the path of sounder fiscal management, not any desire to be better stewards of the public purse. In a world of shrinking central bank balance sheets, it is likely that fundamentals such as fiscal management will take on greater importance in decisions about the allocation of public funds. Any doubts about the sustainability of public finances could therefore translate into greater volatility in bond yields than in the past.

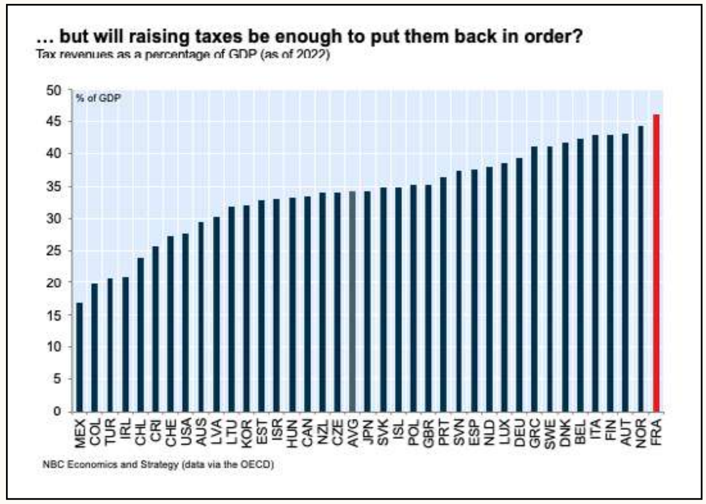
The budget unveiled by the British government can serve as a warning in this respect. Although it provided for significant tax rises, these were largely offset by a substantial increase in spending. The result was a sharp rise in bond yields, which even reached their highest level in a year at the long end of the curve.



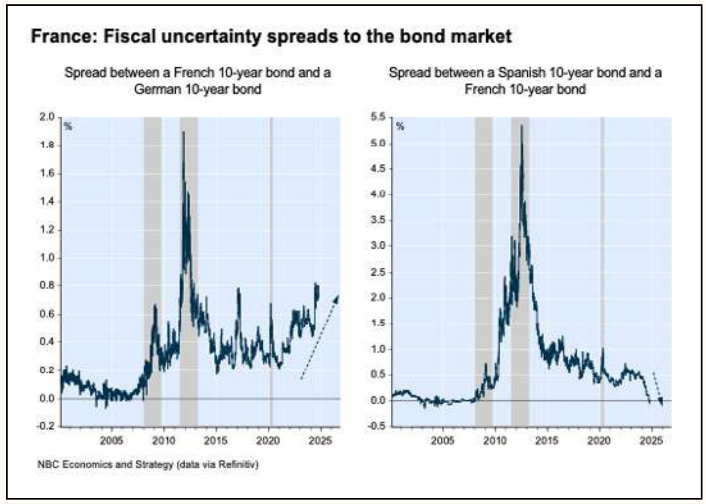
A similar situation can be observed in France, where the government has announced its intention to significantly reduce the budget deficit by the end of next year. There is an undeniable need to tighten the reins in France, where the deficit as a share of GDP is well above the 3% limit imposed by the Maastricht Treaty, and where public debt levels are well above the average for eurozone member countries.



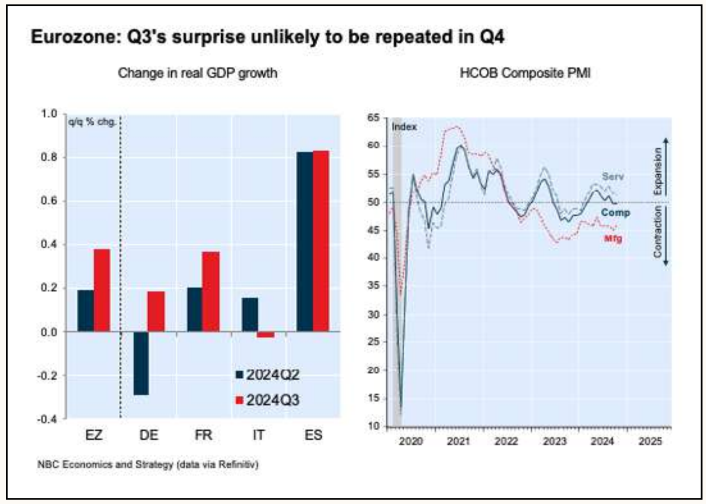
However, the markets are wondering how the government intends to achieve its objectives. While the new Prime Minister, Michel Barnier, seems to think that temporary tax hikes on big business will be enough to get public finances back on track, many commentators are pointing out that, given France's already high tax rate, deeper spending cuts will also be needed.



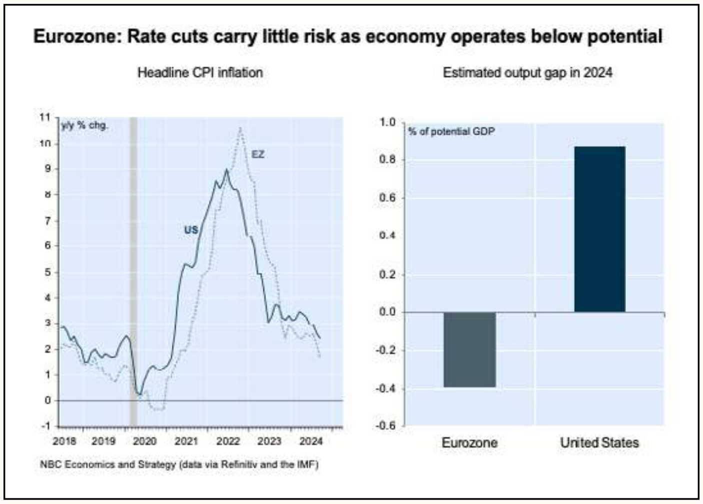
In the absence of clarification on this last point, French bonds have lost ground. Not only have the spreads between German and French bond yields widened, but French bond yields have even exceeded those of Spanish bonds for the first time in over 15 years.



The choice therefore seems clear for the eurozone economies: consolidate public finances or risk paying the price of inaction on the bond markets. And since even the slightest effort on the fiscal front will be detrimental to growth, we continue to believe that growth in the eurozone will remain below potential for some time to come. Despite the positive surprise on the economic growth front in Q3, we still see a loss of momentum as the likely scenario in view of the most recent PMI report published by HCOB, which signaled a second consecutive contraction in private sector activity in October.



It is only in the second half of 2025 that we expect a significant acceleration in growth in the eurozone. Even then, this scenario depends on a significant easing of monetary policy by the European Central Bank. Fortunately, the context seems favourable for such an easing, as inflation has slowed considerably in recent months. The fact that the eurozone is operating below potential also allows the ECB to bring policy rates back to neutral more quickly than in the United States, where the positive output gap makes rate cuts more likely to rekindle inflationary pressures.



With growth in China and the eurozone set to remain relatively weak for a few more quarters, we have decided to leave our global growth forecasts largely unchanged this month. The world economy should grow by 3.2% in 2024 and 2.9% in 2025.

World Economic Outlook

	2023	2024	2025
Advanced Economies	**1.7**	**1.7**	**1.2**
United States	2.9	2.7	1.3
Eurozone	0.4	0.8	0.8
Japan	1.7	0.2	0.9
UK	0.1	1.1	1.3
Canada	1.2	1.0	1.3
Australia	2.0	1.2	1.9
Korea	1.4	2.5	2.0
Emerging Economies	**4.2**	**4.2**	**4.1**
China	5.2	4.7	4.6
India	6.3	7.0	6.3
Mexico	3.2	1.5	1.2
Brazil	2.9	3.0	1.9
Russia	3.6	3.5	1.5
World	**3.2**	**3.2**	**2.9**

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Jocelyn Paquet

Jocelyn Paquet joined National Bank Financial in 2014 after completing his Master's degree at the London School of Economics. First recruited within the financial market rotation program, he then joined the ranks of the Economy and Strategy group in 2016. His responsibilities include writing analyses of trends in the American economy and providing coverage on North American bond markets and central banks.

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Executive Summary:

Harris and Trump on the Issues

by Kelly Bogdanova

Digital Teaser: A gulf exists between Kamala Harris and Donald Trump on policy issues. Following is an executive summary of the third article in our U.S. election series in which we address key policy differences that matter most to the economy and stock market.

We have long held that the stock market doesn't march to the president's drum—or Washington, D.C.'s for that matter. Quite often other factors supersede developments inside the Beltway. And let's face it, many campaign proposals don't see the light of day because of the checks and balances built into the system. Yet it's still useful to consider candidates' economic proposals given that some presidential decisions can impact the market overall or select industries, even if just for a short time.

TAX PLAN TAKEAWAYS

The large tax cuts on individuals, investments, and estates that were implemented in 2018 during Trump's presidency, known as the Tax Cuts and Jobs Act (TCJA), will expire at the end of 2025. If nothing is done, they will automatically revert to higher levels previously in place.

- Trump proposes to extend all of the low tax provisions in the TCJA beyond the year-end 2025 sunset date, regardless of household income, and he wants to cut taxes on Social Security retirement benefits.
- Harris seeks to extend the low tax rates for most taxpayers but is in favor of raising taxes on households with incomes above $400,000 per year, and increasing the long-term capital gains tax for those earning $1 million or more. She would boost the TCJA child and small business tax credits and would introduce a new tax credit for certain first-time homebuyers.
- The corporate tax rate, which the TCJA cut to 21 percent from 35 percent, does not sunset at the end of 2025—it will stay in place until it is proactively raised or lowered.
- Harris advocates raising the corporate tax rate to 28 percent from 21 percent. While Trump had previously called for lowering the corporate rate to at least 20 percent, more recently he proposed reducing it to 15 percent for companies that manufacture goods in the U.S., with some restrictions.

DECODING THE IMPACT OF TAX CODE CHANGES

Regardless of who is elected president in 2024, the congressional election results will play an important role in determining tax and other fiscal policies.

- We don't think major tax code changes on individuals or corporations are factored into stock market sentiment as of this writing.
- We also don't think a corporate tax rate change is factored into S&P 500 consensus profit margin forecasts, which are currently near the upper end of the range since 1990.
- Even so, it's notable that a Bloomberg study found, "Over the long run there has been essentially zero correlation between the effective corporate tax rate and the performance of the S&P 500 ..."
- But investors should keep in mind that before we get to the "long run," the policy debate between the next president and Congress (and lobbyists) about tax rates and other fiscal issues could have a short-term impact on U.S. stock market volatility following the election, including at times during 2025.

Source - Bloomberg data, chart from Bloomberg News article "What the data says about actual corporate tax rates: Macro Man" 8/20/24; data represent the median 12-month effective tax rate through 4/30/24

THE TAX CUTS WORKED – THE MEDIAN TAX RATE OF S&P 500 FIRMS SIGNIFICANTLY DECLINED AFTER TCJA

PRICE PLANS AND POPULISM

Despite the significant decline in the year-over-year consumer inflation rate, the presidential candidates and most voters are still focused on the fact that overall prices remain very elevated.

- Harris proposes to tackle high prices by targeting "price gouging."
- We believe any new, comprehensive price gouging legislation would go nowhere in the next session of the Senate and would also struggle to gain support in the House of Representatives, no matter which party wins control of these two congressional chambers.
- Nevertheless, we would expect a Harris administration to more aggressively investigate and prosecute federal antitrust and consumer protection cases compared to the Biden administration and previous Trump administration.
- Trump's strategy to bring prices down focuses on incentivizing more domestic oil and natural gas production and energy exports, with the aim of substantially lowering energy and power prices overall, which are key cost inputs of many goods and some services.
- Even if this were to dampen global oil and goods prices, we believe some of Trump's other policies, namely tariff increases, could partly or fully wipe out the benefits that lower energy and power prices would bring.

TALKING TARIFFS

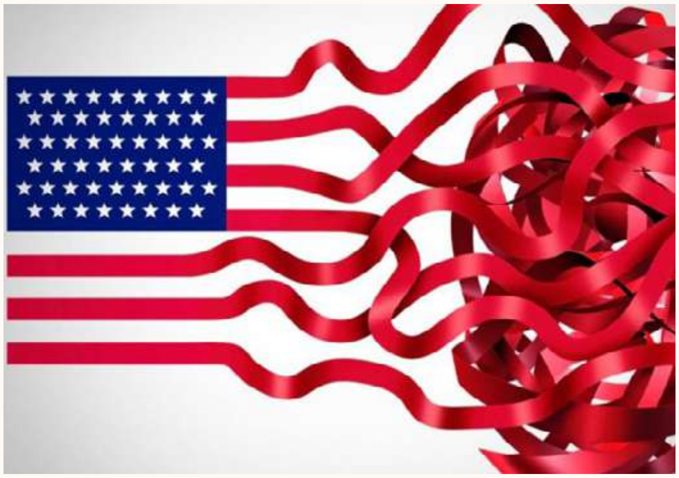
Many of Trump's tariff policies are more sweeping than those he implemented during his previous term, and they differ greatly from those of Harris.

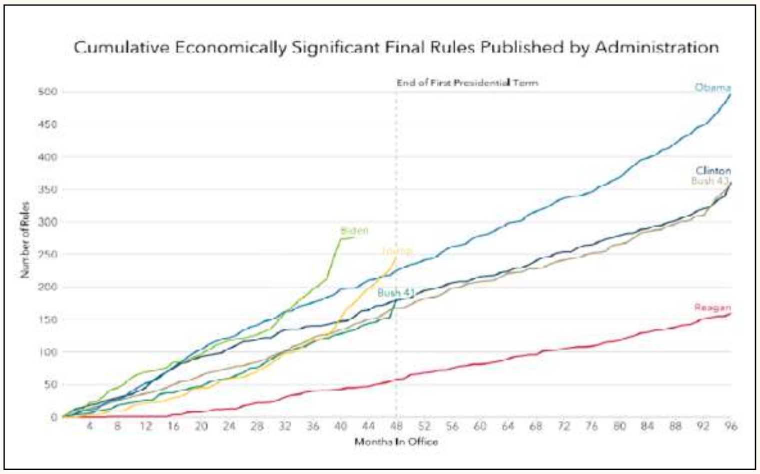
- Trump supports across-the-board tariffs on all imports of 10 percent or more, and high tariffs on Chinese imports of 50 percent or more. He would levy tariffs on goods of U.S.-based companies that are produced overseas and imported into the country, and would use tariffs against domestic companies that outsource American jobs. He has also threatened to use tariffs against countries that trade outside of the U.S. dollar system.
- Harris does not support across-the-board tariff increases and views such tariffs as "in effect a national sales tax." She also does not support significantly raising tariffs on Chinese imports but would likely keep in place the China tariffs and sanctions that Trump and President Joe Biden implemented.
- RBC Global Asset Management Inc. Chief Economist Eric Lascelles contends that tariffs "undeniably hurt the country that has tariffs levied against it …" However, he cautions, "Less intuitively, tariffs usually also hurt the country levying them."

REGULATIONS AND RED TAPE

The widespread perception among market participants that Trump is likely to have a more business-friendly regulatory regime than Harris rings true to us, except there are nuances.

- While the Biden-Harris administration added 11 percent more "economically significant regulations" in almost 3.5 years than Trump did in his full four-year term, Trump's administration ended up implementing more regulations than President Barack Obama did in his first term.
- We think a Harris administration would implement more proactive and stringent environmental regulations. She would look for opportunities to advance the ball on climate-related issues, whereas Trump stated he would roll back existing climate regulations and targets.
- Despite multiple presidential candidates' pledges to "cut the red tape" in campaign after campaign, a heavy regulatory load on businesses has been the norm for decades. Only a concerted, laser-focused effort on reducing regulations would change this, in our view. For deregulation to work for both the business sector and society, we think a scalpel would be needed rather than a sledgehammer.





Source - Regulatory Studies Center at The George Washington University; data through 8/5/24

REGULATION HAS INCREASED UNDER EVERY PRESIDENT SINCE REAGAN, AND ACCELERATED DURING THE LAST THREE ADMINISTRATIONS

INFLUENCE ON INDUSTRIES

The candidates have different approaches when it comes to certain industries, but more similar approaches for other industries than is commonly understood.

- **Banks and financial services:** Trump's regulatory policy proposals and his administration's approach to mergers and acquisitions within the industry and in general would likely be more favorable than those of Harris. Among other regulations, Harris seeks to limit customer fees.
- **Oil, natural gas, coal, power, and rare earth minerals:** Trump is willing to declare a national emergency to significantly increase domestic energy supplies and exports, and to build out power infrastructure, including to support the growing power needs of artificial intelligence (AI). While Harris no longer supports a fracking ban, we think she would likely impose more stringent regulations on oil, gas, coal, power producers, and mining than Trump.
- **Clean energy and cleantech:** Harris seeks to keep in place and build on the Inflation Reduction Act's (IRA) unprecedented industry subsidies and incentives. Trump seeks to "rescind all unspent" IRA funds through legislation.
- **Pharmaceuticals and health care insurers:** Harris proposes to add more pharmaceuticals to the Medicare price cap list, building on Biden's policies. She also wants to extend the price cap list to all Americans, not just retirees in Medicare, and she seeks to permanently cap out-of-pocket drug spending at $2,000 per year for everyone. Trump has previously supported granting Medicare the ability to negotiate prescription drug prices and to level-out prices between the U.S. and other countries. More pharmaceutical pricing restrictions could benefit some health care insurers.
- **Technology:** We believe each candidate would be supportive of the technology industry overall, including AI development, as they understand tech firms are key drivers of innovation and GDP growth. However, both candidates will likely maintain and add more restrictions on tech exports to China, citing national security concerns, which could negatively impact select U.S.-based companies.

- **Military weapons contractors:** Both candidates support significant weapons spending and exporting U.S. weapons to allies and friendly countries. Historically, Republicans have advocated for higher spending levels, but over the years weapons spending has become more of a bipartisan issue as both parties are now dominated by foreign policy hawks.

While candidates' industry leanings are useful to consider, individual investors should be careful not to jump to conclusions on how stocks of particular industries or sectors might fare depending on who wins the presidential election.

PRESIDENTS DON'T GOVERN THE STOCK MARKET

Whether Harris or Trump wins in November, we remain convinced that the formal and informal checks and balances built into the government's structure will constrain the next president from fulfilling her or his full slate of policy goals. Furthermore, other factors will likely play greater roles in shaping the market's direction such as the natural ebb and flow of the business cycle, the Fed's monetary policies, and industry innovation.

For individual investors, we think the best investment strategy vis-à-vis elections is to give deference to the long-term investment strategy that is already in place, and to avoid the temptation of making drastic asset class or sector changes based on various election outcome scenarios.

For more on this topic, see the complete report, *"Harris and Trump on the issues."*

Kelly Bogdanova
Vice president and portfolio analyst – RBC Wealth Management

Kelly Bogdanova is vice president and portfolio analyst at RBC Wealth Management and specializes in equity market strategy. Specifically, she analyzes how macro events, economic conditions, fiscal issues and monetary policies impact the stock market and sectors.

Investing in Data Centres
A Revolutionary Technology or a Bubble?

by Juliana Faircloth, CFA & Evan Chen, CAIA, CFA

At a glance: Computing power is not a new concept but having it as centralized, large-scale infrastructure throughdata centres (DCs) is. With the advent of cloud technology, companies can now rent computingpower from someone else instead of managing it on their own premises. Massive amounts of computingpower made possible by DCs is a key foundation in generating and deploying artificial intelligence.

This trend is spurring a whole new retooling of spending, building and investment and has been reflected in higher equity prices, which have many asking whether we are in a DCs equity bubble or not?

There are real implications for all asset classes whether its real estate where DCs have been oneof the best performance industry groups, or infrastructure where renewable power assets have seensignificant growth, to tech giants including the Magnificent 7.

Having the foresight to see trends, future opportunities and challenges is part of the foundation of any successful investment team. Lately, there has been a lot of talk about DCs in the investment world, and for good reason.

We are at the cusp of what is set to be a huge technological infrastructure build out, boosted by the prospects of artificial intelligence (AI) and a completely new way for humans to leverage data.

THE DATA ON DCs

Before we take a deep dive into the dynamics and implications of DCs, let's setup the groundwork for what DCs are and how they have morphed into something that (while is behind the scenes) is an increasingly an important aspect of our economy.

Simply stated, DCs are a physical location that stores computing machines. It contains computing infrastructure, such as servers, data storage drives, and network equipment. They can vary considerably in size. Small DCs can be less than 5,000 square feet, while the largest hyperscalers (large scale DCs) can span 57 football fields.

With the advent of cloud technology, companies could now rent computing power from someone else instead of managing it on their own premises.

THE EXODUS OF THE DATA

Servers were always around. They were often found in storage rooms or basements of office buildings. But this left something to be desired. Enter the cloud. With the advent of cloud technology, companies could now rent computing power from someone else instead of managing it on their own premises. This technological advancement was driven by the need for more compute and the rise of large data centre providers such as AWS, Azure and GCP and was welcome by many companies for three key reasons:

Flexibility – Capacity can be tweaked higher or lower based on customer needs.

This can be very helpful when evaluating whether a business wants to try a new feature but doesn't want to purchase an additional server.

Scalability – A growing company can grow without having to buy new servers. An example of this is Netflix who went from 10 million to 260 million users. You can't budget for hypergrowth, and this allows you to add new capacity quickly.

Affordability – Efficiencies of scale means in general things will be cheaper. The hyperscalers are able to pass on these savings to the customer.

Computing power is not new but having it as infrastructure in such large amounts is. The hyperscalers are driving efficiencies of scale and have created a whole new industry and specialization.

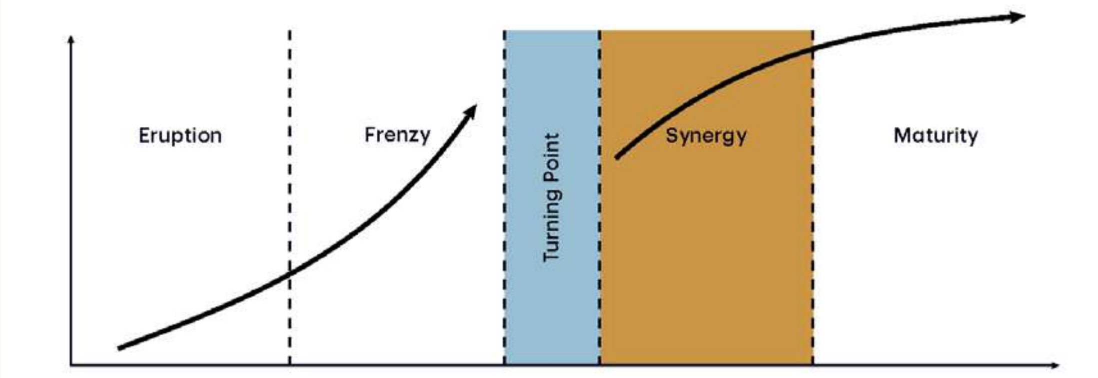
This amount of compute never existed before because it was so decentralized but now with the centralization of it, we have the capability to do more complex tasks, like AI. This trend is spurring a whole new retooling of spending, building and investment and has been reflected in higher equity prices, which have many asking whether we are in a DCs equity bubble or not?

Computing power is not new but having it as infrastructure in such large amounts is.

TECHNOLOGICAL REVOLUTIONS AND BUBBLES

Before we get into the merits of whether we feel we are in a technological bubble, it's important to provide some initial thoughts on the impact of a bubble, particularly a technological one. Bubbles sound bad, and often are. They can mean significant financial loss for investors and the public and can lead to recessions (even depressions). However, in cases where there is advent of productive technology, they can actually serve a purpose.

MARKETS FOLLOW A PATTERN WHEN IT COMES TO TRANSFORMATIVE INNOVATIONS



Note: For Illustrative Purposes Only. The Framework is based on the research and work of Carlota Perez.

Financial bubbles are a tool for propagating and deploying new technology. They help overcome the "chicken and egg scenario" that can come with investing in new technologies. An example of this that we are seeing today is the need for electric vehicles (EV). EV charging infrastructure is required to increase EV users and market penetration, but we need EV penetration to make investments in EV charging infrastructure.

A BUBBLE OR STILL A LONG RUNWAY?

To help determine if we feel we are really in a bubble or the early stages of a massive technological build out, it's helpful to explore the various rationales and evidence available to us.

EVIDENCE OF A POSSIBLE BUBBLE:

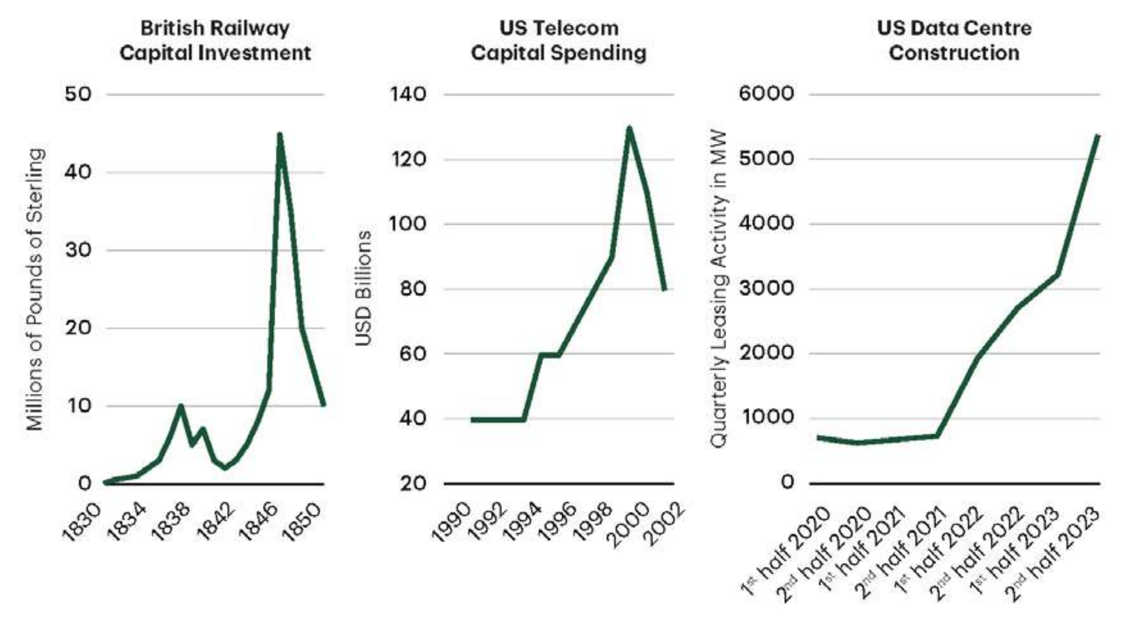
1

A Tendency to Overbuild

Drawing parallels from prior bubbles can provide some useful insight from the past. For example, the railway mania in the U.K in 1840s or internet bubble in the U.S. in 1990s/2000s suggests societies tend to overbuild new technological infrastructure.

British Railway capital expenditures (capex) roughly quadrupled over the decade between 1835 to 1845. Similarly, U.S. telecommunications companies went from spending about $60 billion on capex in 1995 to about 130B in 2000 (charts below). That's not to say this infrastructure was not eventually put to productive use, but there was a digestion period. That's a risk as we see big jumps in data centre leasing activity and huge investment by hyperscalers.

HISTORICALLY WE HAVE OVERBUILT



Source: 1. Andrew Odlyzko "Collective hallucinations and inefficient markets: The British Railway Mania of the 1840s";
2. "Doug O'Laughlin "Lessons from history: The Rise and Fall of the Telecom Bubble";
3. JLL "North America Data Center Report" Feb 27, 2024. https://www.jll.ca/en/trends-and-insights/research/na-data-center-report.

2 We may be Over-valuing Already

Bubbles occur when financial market reality detaches from economic reality and there may be instances where we are seeing this already. This is evidenced in companies with a very small exposure to the DCs supply chain that have been re-rated materially as a "data centre play".

An example of this is Caterpillar. Caterpillar is mainly a construction and mining machinery company with a low single digit percentage of revenue from backup power generation (with applications for data centres). However, the stock has re-rated significantly despite an environment that normally would not be overly supportive of the stock – high interest rates and slowing construction. This stretch for finding ways for DCs exposure can be evidenced from shareholder meeting transcripts. From 2022 to 2023 the use of the words "data centre" jumped by 120%.

CATERPILLAR

LSD% of Revenue from Data Centres | 120% increase in "Data Centre" transcript mentions from 2002 to 2023

Source: Bloomberg, TDAM.

3 We may be over-hyping AI

There is a possibility that we are overhyping AI and what the future looks like from a technological standpoint. One way we may be overhyping AI is that there hasn't been any sort of revolutionary app yet. For instance, ChatGPT initially gained a lot of popularity but growth in users has somewhat plateaued[1]. We have seen over-hype by big tech before with the Metaverse investment at Meta, Amazon overbuilding warehouses during the pandemic thinking brick and mortar would never come back.

Another factor that could also put the brakes on AI includes regulation. While there is not a ton of regulation around AI yet, this is an area that is likely to be targeted by regulation to maintain security, safety and perhaps protect employment. If AI growth does not materialize to the levels many feel it reach, the need for DCs can slow.

There is a possibility that we are overhyping AI and what the future looks like from a technological standpoint.

Technology

[1] The Wrap, Alex Kantrowitz. "ChatGPTs Growth is Flatlining"

NOT A BUBBLE

To help determine if we feel we are really in a bubble or the early stages of a massive technological build out, it's helpful to explore the various rationales and evidence available to us.

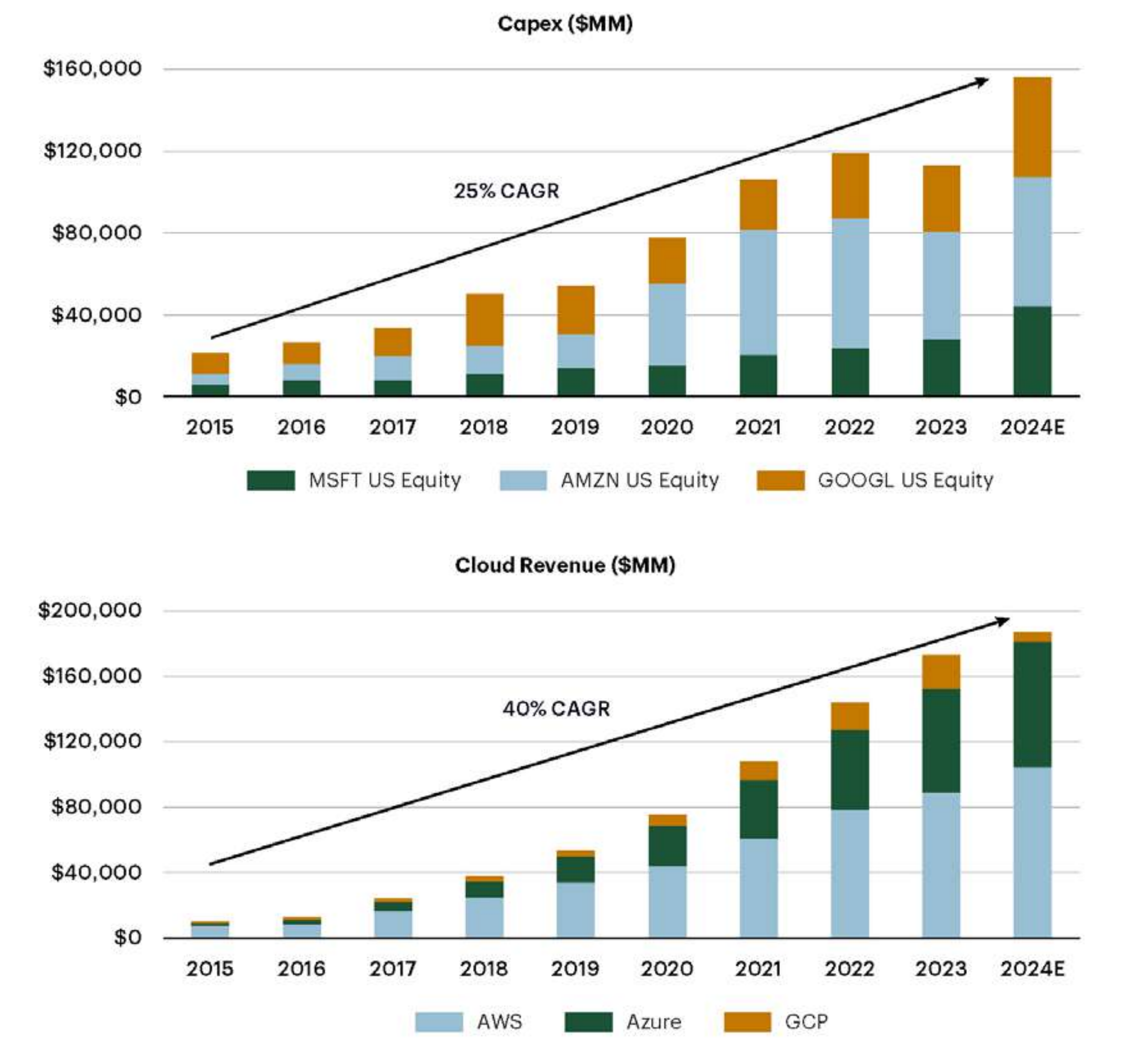
EVIDENCE OF A POSSIBLE BUBBLE:

1

We are spending productively

Hyperscaler investment in cloud infrastructure has grown at a 25% compound annual growth rate (CAGR) since 2015 and that has contributed to cloud revenue growth at a 40% CAGR. This is clearly productive spending with a return. The charts below helps illustrate this by using Microsoft, Amazon and Google as examples. These companies are already earning returns on their capital.

HYPERSCALERS ARE ALREADY EARNING RETURNS ON CAPITAL



Source: Company Filings, TDAM.

2

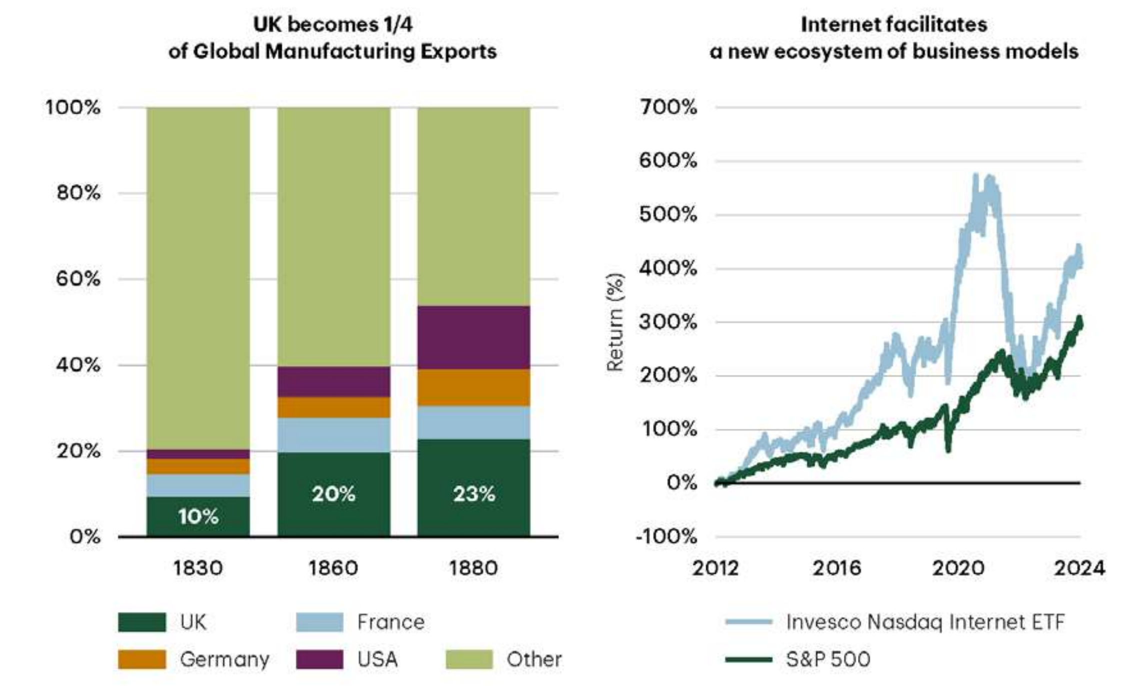
We underestimate the potential of new technologies

Society often underestimates the potential externalities of new, revolutionary technologies like AI. Again, using rail and internet as examples (charts below), it was not conceivable in the early days of rail and early days of internet that externalities would extend well beyond the intended use case. Rail resulted in improved manufacturing output (UK became ~25% of global exports, doubling over 50 years and cementing the country as a global economic powerhouse), but also allowed for a national postal service, faster communication, a boom in leisure travel.

The internet resulted in better and faster access to information and communication but also paved the way for entirely new business models including Amazon, Facebook, Google. The sharing economy was made possible by the invention of internet.

Today, you no longer need to own an asset to use it – Uber, Airbnb, Netflix (charts below).

EXTERNALITIES OF REVOLUTIONARY INFRASTRUCTURE DRIVE BROAD ECONOMIC CHANGE



Source: 1. Azar Gat, "War in Human Civilization: Unbound and Bound Prometheus: Machine Age War"; 2. Bloomberg, TDAM.

Data Centres

3 We are limited by bottlenecks

Demand for DCs is currently outstripping supply and there are bottlenecks in the supply chain that limit explosive growth and overinvestment. Some of these bottlenecks include labour, electrical equipment, power, permits and environmental permits. Examples of this can be found at two large corporations within this space: Eaton (electrical supplies, equipment, and products) and Quanta Services (construction engineering). Eaton has a work backlog has doubled in since 2020. With Quanta Services, skilled labour is the bottleneck because since experienced engineers are not exactly easy to come by[2].

There is a possibility that we are overhyping AI and what the future looks like from a technological standpoint.

INVESTMENT IMPLICATIONS

DCs are generational infrastructure and are the backbone to the AI buildout. Investments in DCs tend to be already profitable and tend to be providing good returns. With this, it's hard to feel like we are in a bubble. From an investing standpoint, there are real implications for all asset classes whether its real estate where data centres have been one of the best performance industry groups, or infrastructure where our teams own renewable power assets that stand to benefit from growing demands on the grid. There is a broad range of sectors and business models that stand to benefit from this trend.

Thorough fundamental analysis can uncover underappreciated stocks that stand to benefit beyond just mega cap tech. For example, the Magnificent 7 stocks catch all the attention of outperformance related to this trend, however there are several DCs equities across the supply chain have kept pace or even outperformed the Magnificent 7 with less attention. Important for investors to pay attention to broad themes that touch many aspects of the economy. For DCs, this theme encompass companies in technology and semiconductors but also industrials, real estate, utilities, energy and materials.

Technology

[2] Eaton and Quanta Services company filings, TD Asset Management Inc.

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Joined the firm: 2016 Began career: 2016

Juliana is a member of the Public Equities Team and provides recommendations on the Global Industrials sector. She previously covered the Global Consumer Staples sector. Juliana completed the Rotational Program, rotating through the Strategy, Asset Allocation and Public Equities Teams. She holds a B.B.A. with Honours and an M.Sc. in International Business, both from the Ivey Business School at Western University.

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Here Comes the Sun

by Russil Lea, Brad Radin, Joseph Fei, Sean Oye, Jeff Ryan and Ben Jang

NICOLA WEALTH

> *Little darlin', it's been a long, cold, lonely winter*
> *Little darlin', it feels like years since it's been here*
>
> *Here comes the sun, doo-doo-doo-doo*
> *Here comes the sun, and I say*
> *It's alright*
>
> *– The Beatles*

THE INVESTMENT BACKDROP IS CHANGING

Around the world, many countries have seen interest rates peak. Some central banks have already started to cut rates, while others are likely to follow soon. As the environment changes, we continuously adjust our portfolios to optimize exposure.

After reaching a peak of 5%, the Bank of Canada began cutting rates on June 5, 2024, with a second cut on July 24th. The economy has slowed, the labour market has cooled, and many homeowners will renew their mortgages at much higher rates in 2025 and 2026. The path to lower rates seems clear. Provided inflation remains under control, the consensus is that rate cuts will continue. Economists estimate the BOC Overnight Lending rate will drop to 4.15% by the end of 2024 and further to 3.05% by the end of 2025. Consequently, we expect a shift in investment leadership.

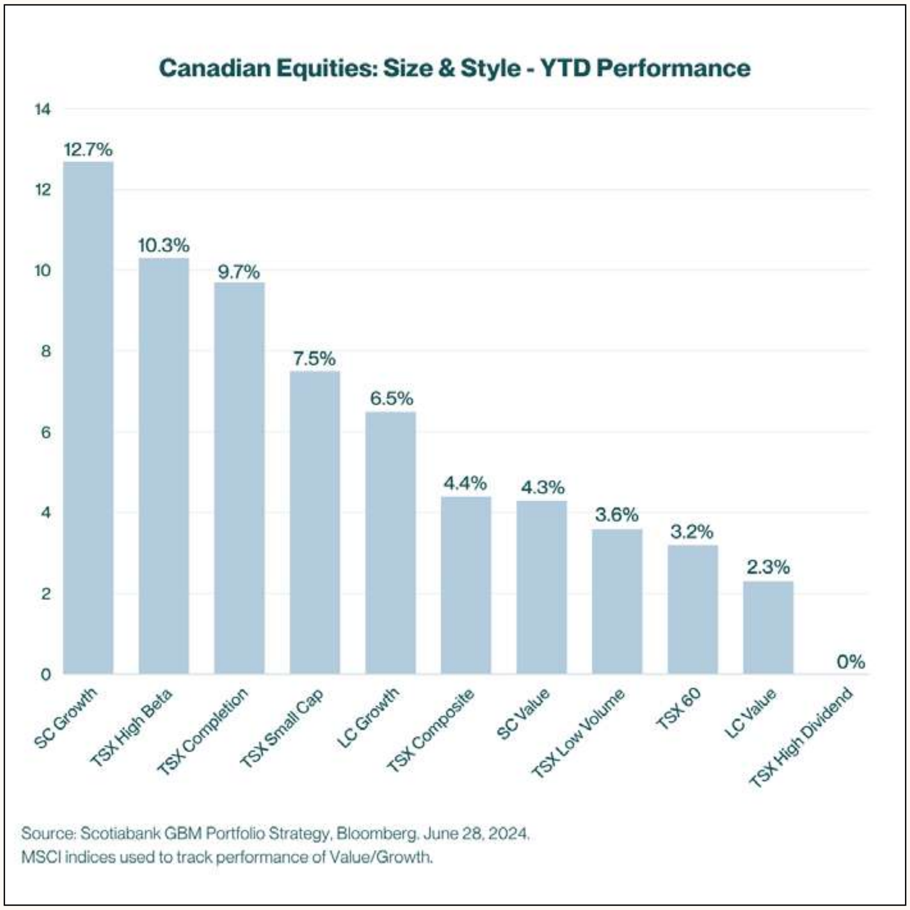
Rate	Mkt Yld	Q3 24	Q4 24	Q1 25	Q2 25	Q3 25	Q4 25	Q1 26	Q2 26	Q3 26	Q4 26
Canada 30-Year	3.37	3.31	3.22	3.21	3.18	3.19	3.21	3.11	3.12	3.09	3.12
Canada 10-Year	3.34	3.39	3.25	3.22	3.17	3.20	3.18	3.10	3.11	3.13	3.04
Canada 2-Year	3.60	3.71	3.43	3.23	3.10	3.05	3.05	2.92	2.91	2.98	2.96
Canada 3-Month Banker Accepta...	4.97	4.59	4.37	4.12	3.89	3.72	3.53	3.44	3.44	3.44	3.20
Canada 3-Month Bill	4.44	4.30	3.96	3.64	3.35	3.14	3.05	2.95	2.90	2.86	2.87
BOC Overnight Lending Rate	4.50	4.45	4.15	3.80	3.50	3.20	3.05	2.95	2.90	2.90	2.90
2 Year 10 Year Spread	-0.26	-0.32	-0.18	-0.02	0.07	0.15	0.14	0.17	0.20	0.15	0.08

Source: Bloomberg

In fixed income, despite tight credit spreads, we continue to see value in investment-grade credit supported by relatively strong fundamentals and a supply/demand imbalance. We have cautiously increased our duration while managing our overall exposure prudently. The yield curve remains inverted, already pricing in interest rate cuts, making large increases in duration exposure less attractive. However, equity markets are not aligned with the fixed income market in their pricing of interest rate cuts.

CANADIAN MARKET

After a challenging 2023, dividend investment strategies have continued to underperform in 2024. The S&P/TSX High Dividend index, which includes 50 to 75 stocks with dividend yields above the median in the S&P/TSX Composite, has struggled. The main issue has been competition from higher bond yields, GICs, and high-interest savings account rates. Higher rates and bond yields have overshadowed high dividend-paying stocks, attracting investors seeking yield. After all, why opt for dividends from potentially volatile stocks when short-term risk-free rates are so high?

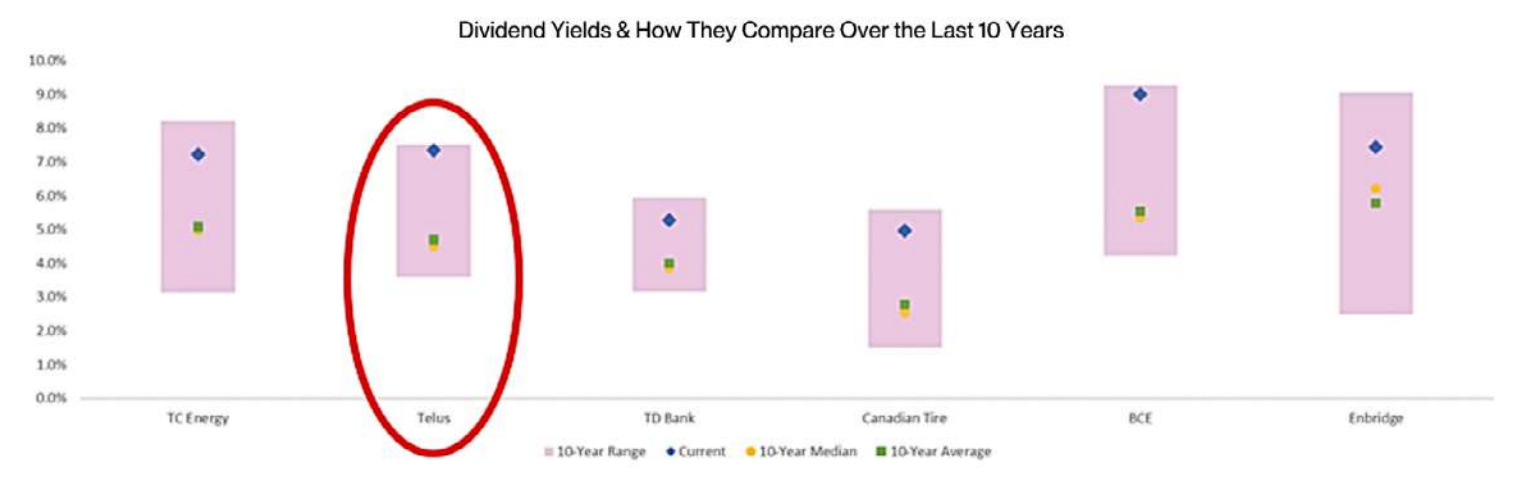


Source: Scotiabank GBM Portfolio Strategy, Bloomberg, June 28, 2024.
MSCI indices used to track performance of Value/Growth.

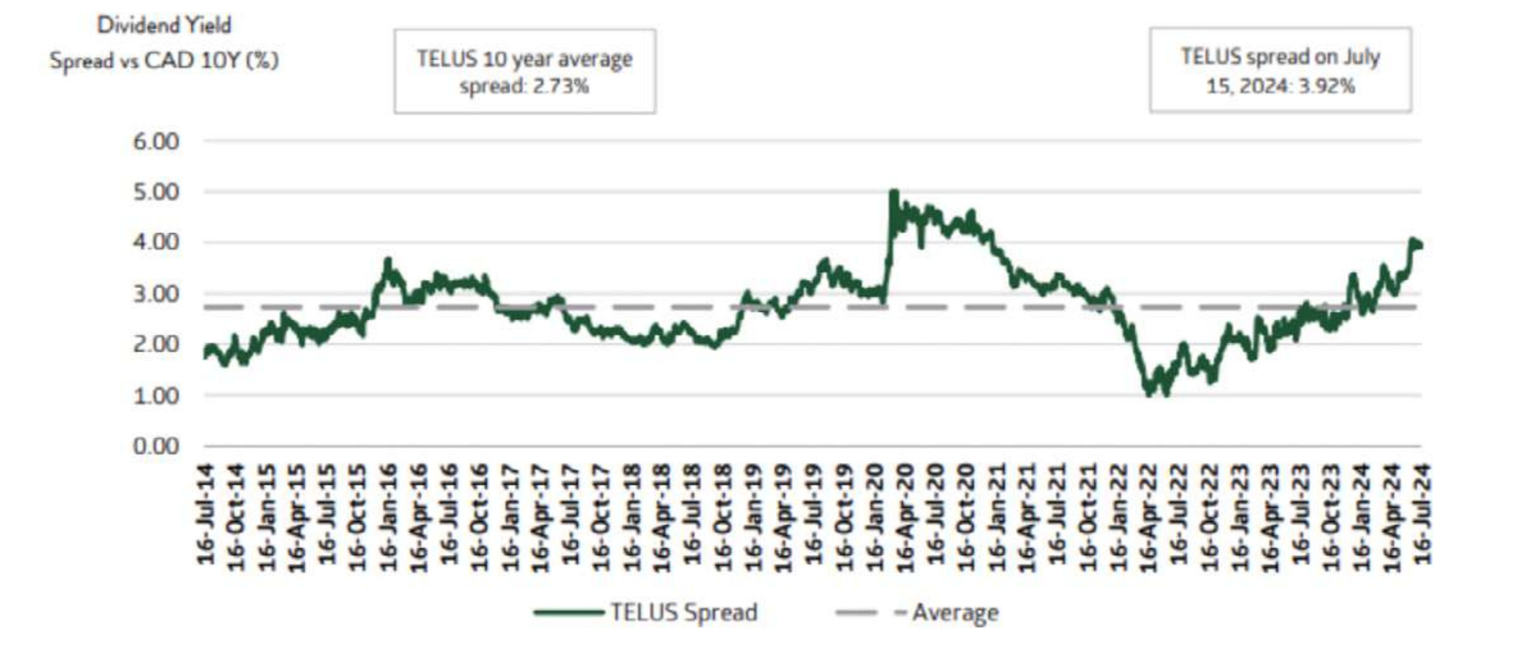
Looking ahead, the pressure on high dividend-paying stocks should ease as the rate-cutting cycle continues. In the meantime, we see a buying opportunity in many blue-chip companies that have been overlooked and ignored.

For instance, the past few years have been challenging for Telus, but we believe the future looks brighter. Traditionally, the telecom sector has provided stable but low growth, resulting in companies paying elevated levels of dividends. Buyers of Telus own it for the yield, and predictably, the stock has sold off since the rate hikes began. Telus is a prime example of a stock suffering from competition with high rates offered by GICs and high-interest savings accounts, despite resilient corporate results.

Currently, the yield is over 7%, the highest level in the past decade. The yield it pays compared to the 10-year Government of Canada bond yield is attractive and well above the long-term average. While increased competition in both the wireline and wireless businesses has pressured profitability, we do not have any concerns about the company's ability to pay the dividend. As the company nears completion of its $7 billion fibre-to-the-home program, we anticipate there should be plenty of free cash flow starting in 2025 for dividend increases, debt repayment, and possibly share buybacks. As interest rates fall, this sets up a better environment for Telus, and we believe yield-hungry investors will return.



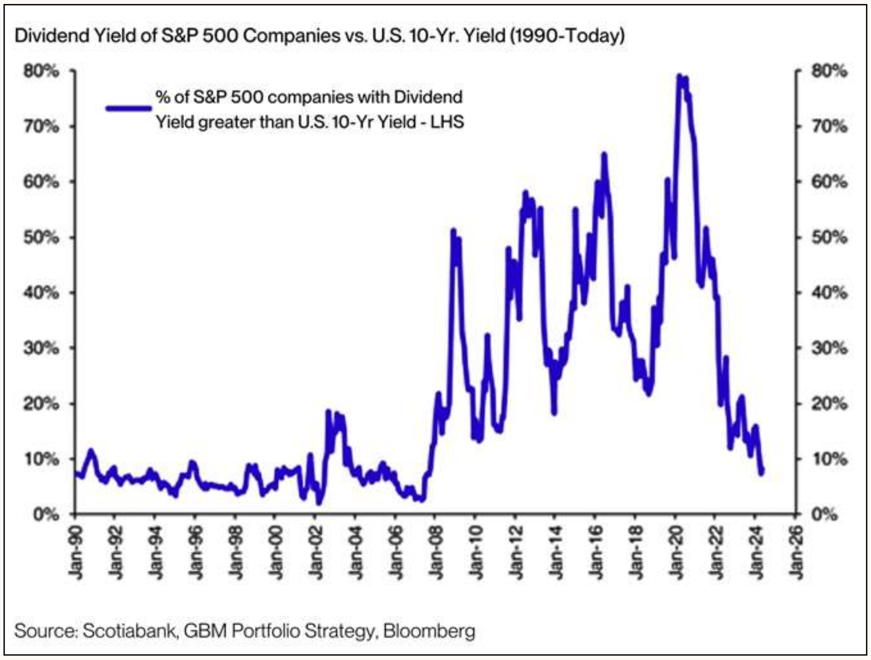
Source: Capital IQ



Source: Capital IQ, TD Cowen

U.S. MARKET

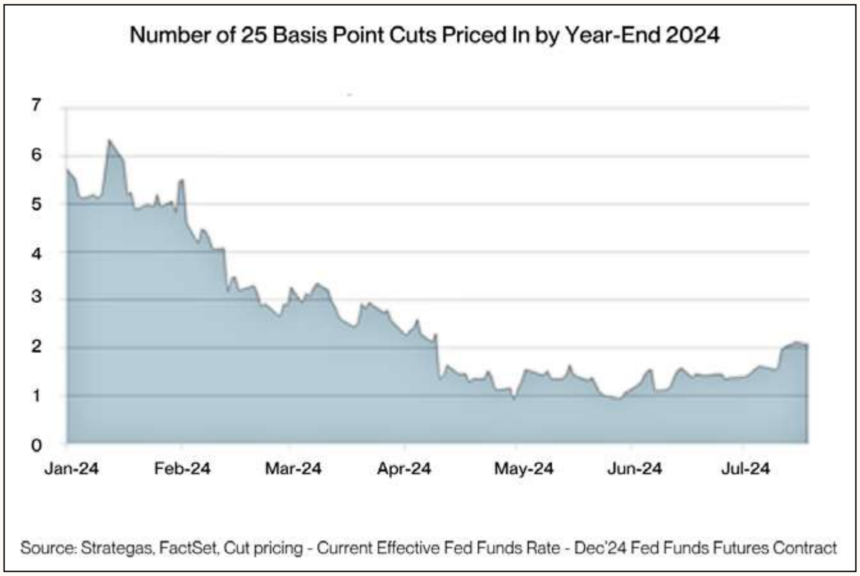
Similar to Canada, U.S. dividend strategies are having a difficult year. The S&P 500 Dividend Aristocrats has underperformed the S&P 500 Index by 13% year-to-date (as of June 30th). The driving force of the market over the last 18 months has been large-cap technology names with exposure to artificial intelligence. Significant fund flows into these technology names have pushed the S&P 500 technology weight close to levels last seen during the 2000 Tech Bubble.



Source: Scotiabank, GBM Portfolio Strategy, Bloomberg

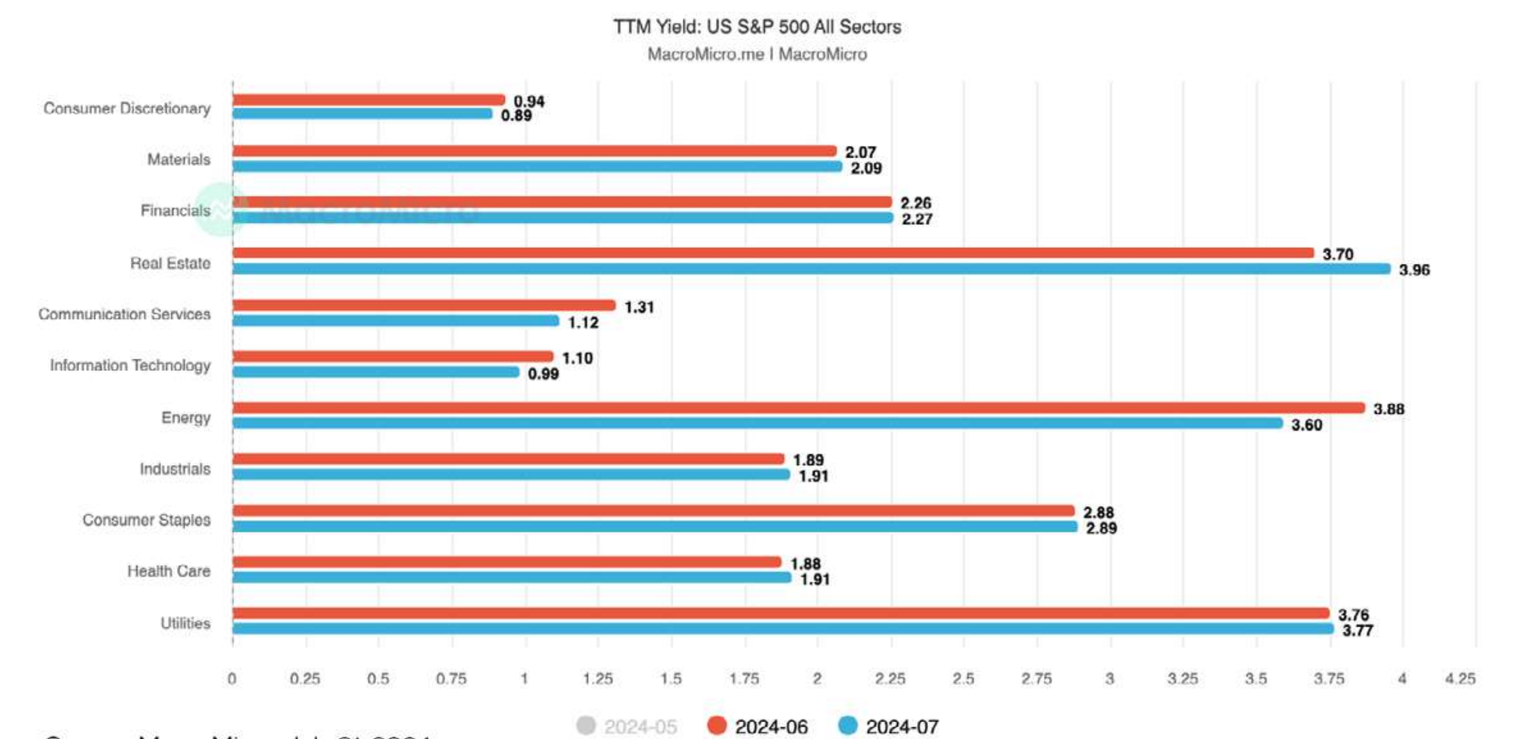
Investor interest has also been strong in retail money market funds, where retail investors can earn close to a 5% yield. There is over $2.4 trillion in retail money market funds, which now exceeds retail bond funds; the last time this occurred was during the Great Financial Crisis. These headwinds have led to many high-quality dividend-paying stocks being left out in the cold, as they are viewed as less attractive relative to the yields earned on U.S. Treasuries or the enticing growth opportunities found in AI-related names. In fact, only 8% of S&P 500 companies are paying a dividend higher than 10-year U.S. Treasury yields, the lowest since October 2007.

More recently, we have started to see a broadening out of the market. Companies with stable and growing dividends should start to get the attention they deserve. A reduction in interest rates would provide a boost to the interest rate-sensitive sectors.



Source: Strategas, FactSet, Cut pricing - Current Effective Fed Funds Rate - Dec'24 Fed Funds Futures Contract

The Fed has been reluctant to lower the Fed Funds rate, but recent data, such as the June CPI (Consumer Price Index) report, showed lower inflation, service wages slowing down year-over-year and returning to pre-pandemic levels, and a mixed employment picture where the Household survey has been weakening over the last few months. These factors could justify a cut at their September meeting. The market seems to agree, with two rate cuts expected and a third one fully anticipated for the first quarter of 2025.



Source: MacroMicro, July 31, 2024

Some sectors and names in the Nicola U.S. Equity Income Fund that have defensive features and sensitivity to interest rates could benefit from lower interest rates and increased uncertainty in the latter half of 2024 due to the events leading up to the U.S. election. The fund currently has more exposure to Real Estate, Energy, and Consumer Staples than the S&P 500, which are some of the highest-paying sectors on a trailing 12-month basis. A high dividend yield is not enough to justify owning a name; a company must also have strong fundamentals such as steady and growing earnings, a responsible balance sheet, and capable management with good capital allocation discipline to sustain and increase the company's dividend.

Some of the companies we invest in, such as Walmart, Becton Dickinson, Lowe's, and Texas Instruments, have not only maintained but also raised their dividends since the 1970s. These companies even raised their dividends during the Great Financial Crisis, demonstrating their strong dedication to shareholders.

One of the fund's names with the highest dividend yield is AT&T. AT&T is a major wireless operator in the U.S. with more than 114 million wireless customers. The company has made several moves in the last five years to simplify its business operations and lower its debt level. They offloaded DirecTV in a partnership with Private Equity Firm TPG in 2021, separated and combined Warner Media with Discovery in 2022, and sold the advertising business, Xandr, to Microsoft in 2022.

We believe the company is in a better position with a healthier balance sheet and more focused business segments (mobility, business, and consumer wireline). It has a strategic edge over its rivals in fibre deployment due to its ability to use its existing wireline network. AT&T offers a strong dividend of almost 6%, which only accounts for 45% of its free cash flow; the rest of the free cash flow can be used to reduce debt and buy back shares. We like AT&T for its defensive qualities, solid dividend yield, and attractive valuation, trading at 8.2x 2025 earnings compared to the S&P 500 at 20.2x.

UTILITIES AND THE ENERGY TRANSITION

Over the last few years, rising interest rates have been a significant headwind for utility stocks, including those with large investments linked to the energy transition, given their capital-intensive nature. With the interest rate outlook stabilizing, we expect investor interest to return to the sector due to its relative stability and consistent dividends over time. This change in sentiment could uplift our funds with large exposure to the sector, including the Nicola Sustainable Innovation Fund, where utilities make up more than a third of the portfolio today.

Among our core holdings in the fund is Brookfield Renewable Partners, one of the largest publicly traded companies focused on renewable power and decarbonization. Their portfolio spans five continents and includes technologies such as hydropower, solar, onshore and offshore wind, and storage solutions. Investors benefit from Brookfield's scale, expertise, and experience. The company has a relatively strong, investment-grade balance sheet with several levers for future growth. Their current yield is over 5.6%, and they expect to deliver 5-9% annual distribution growth, targeting a 12-15% total return.

Despite uncertainty around global election outcomes, which may drive further market volatility, we expect operators like Brookfield to continue being opportunistic and prudent investors. They are likely to further establish themselves as global leaders in clean energy development and operations, supporting our long-term outlook.

INTERNATIONAL MARKETS

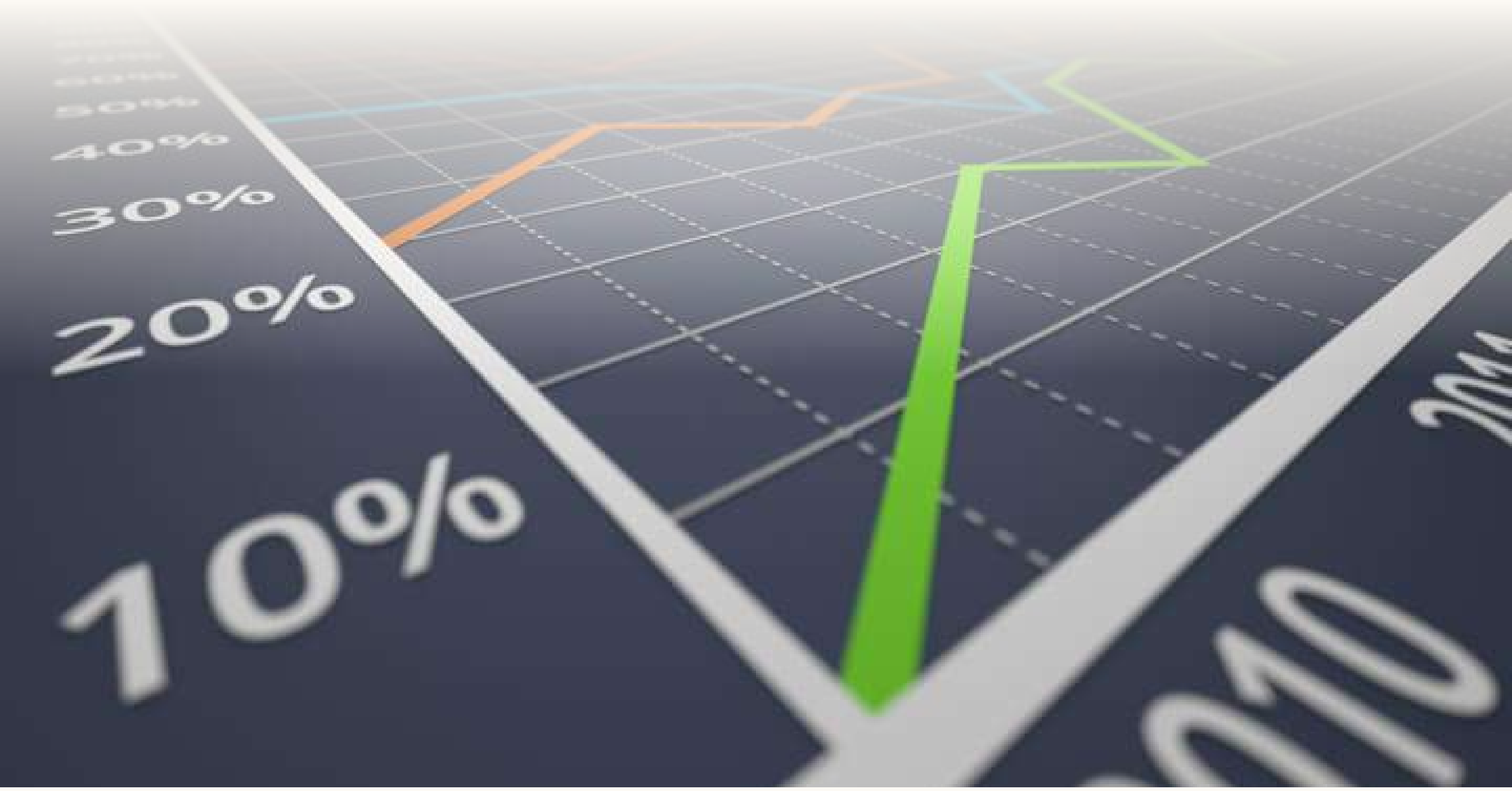
In international markets, the ECB (European Central Bank) has begun its easing cycle as lower growth and a reversal of energy prices have helped bring inflation back towards the central bank's target. Similar to domestic markets, high dividend-paying stocks have been out of favour over the past two years in international markets. The MSCI ACWI ex-USA Dividend Masters Index has underperformed the MSCI ACWI ex-USA Index by approximately 13% cumulatively over the past two years. The Nicola International Leaders Fund should benefit from a larger focus in Europe and companies with high dividend yields.

An example of one of our stocks that should benefit from declining rates is Vonovia, which owns and manages the largest multifamily residential property portfolio in Germany (almost 500,000 units). Vonovia's portfolio is focused on middle-income households and is diversified across several urban centres in Germany. The brutal real estate cycle of the last few years gave us the opportunity to purchase Vonovia at a 50% discount to its NAV (Net Asset Value). Although recent times have been challenging, the company has made solid progress towards its goal of reducing leverage by selling down assets. Vonovia has likely made it through the worst part of the cycle. Going forward, we believe the company remains well-positioned to benefit from favourable supply/demand dynamics in Germany, lower interest rates, and a return to growth as it nears completion of its asset disposal targets.

THE COMPLEX RELATIONSHIP BETWEEN INTEREST RATES AND MARKET DYNAMICS

The relationship between interest rates and the overall market is complex. Central banks are more comfortable lowering rates due to softening inflation; however, several economic indicators are also rolling over. Only time will tell if elevated interest rates have had a lasting impact on consumers. However, our focus on quality companies with resilient earnings and attractive valuations creates a buffer if such impacts do emerge. With over $2.4 trillion sitting in cash alternative investments, investors have significant amounts of dry powder. As rates move lower, sentiment will likely change, and concerns about overly tight monetary policy will ease, increasing the appetite for alternative sources of yield.

Thematically, we adjust our portfolios to take advantage of emerging opportunities. The strength in many equity indices has been driven by select sectors and a concentrated list of names. Despite some markets hitting all-time highs, many dividend-paying stocks have been left out in the cold and trade at attractive valuations. With rates having peaked, the environment is warming up for these dividend payers, and we are well prepared for the summer sunshine.



Russil Lea, Portfolio Manager

Russil Lea is an accomplished Portfolio Manager with nearly two decades of experience in the financial industry. He joined Nicola Wealth in February 2004, with experience working in the mutual fund and institutional management industries. Russil's previous positions include roles in risk management, quantitative research, and equities analysis.

Brad Radin, Portfolio Manager

Brad is Portfolio Manager & Head of International Equities at Nicola Wealth. Mr. Radin has been recognized with a Lipper Award and a Morningstar Canadian Investment Award. Brad previously managed the Templeton Global Smaller Companies Fund for over eleven years, a period during which it outperformed the S&P 500 index by more than 10% per year on average. The fund became the largest mutual fund in its category nationally. Brad's media appearances have included the Wall Street Journal, New York Times, Globe & Mail, National Post, Value Investor Insight, as well as BNN/Bloomberg.

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Understanding the "Rule of 16"

by Steve Sosnick

Professional options traders are really good at dividing and multiplying by 16. That seems like a weird skill, but it is a crucially important one for anyone who wants to fully understand the terminology used in options markets. No matter how you utilize options, the "Rule of 16" is critical for analyzing volatility, particularly for short-term options.

Whether you utilize options to trade, hedge or invest, you should be familiar with common volatility measures. Volatility is at the root of all options pricing. It is based on the statistical concept of **standard deviation**, which measures the dispersion of a security's returns around its average. Stocks move up and down during each trading day, and one with larger up and down daily price moves would have a higher standard deviation. The dispersion of daily price movements, measured in percentage terms over a period of time, is the basis of the concept of volatility.

Implied volatility is a commonly discussed and observed statistic, with many vendors and brokerage platforms (such as Interactive Brokers') displaying it alongside options prices. There are two features of implied volatility that tend to be poorly understood. First, it is a derived number – it is the last variable remaining in an options pricing model after accounting for the stock's price, the option's striking price and time to expiration, the stock's expected dividends before expiration, and prevailing interest rates over the life of the option. Second, it is typically expressed in annualized terms. This where the Rule of 16 comes into play.

Table 1: Pricing Data for XIU 37 strike puts, expiring November 15th, 2024 from the MX End of Day Report for October 16th, 2024

	Strike Price	Call/Put	Days to Expiry	Volume	Bid Price	Ask Price	Open Interest	Implied Volatility
iShares S&P/TSX 60 Index ETF (XUI)								
May-20	**20**	**Put**	**31**	**121**	**0.36**	**.45**	**28,885**	**43.85%**

Source: MX

In the example above, the specific option is the 37-strike put on XIU expiring on November 15, 2024. Using the data in the table, with a closing price for XIU of $37.25, the 30 days to expiry and the midpoint of the strike's bid/ask spread, which was $0.23 ((.12+.34)/2), the implied volatility was calculated to be 8.34%. By that measure, the market is anticipating that XIU will have annualized movement over the next 30 days of about 8%. Unfortunately, an annualized measure is essentially meaningless to holders of an option that expires in about a month. The Rule of 16 is what allows us to place that implied volatility reading of 8.34% into a meaningful context.

There is a simple method for converting annualized volatility into daily volatility – divide the annualized number by the square root of business days in a year, which is normally just under 256. Coincidentally, that square root of 256 is 16, hence the rule. Using the example above:

8.34% / 16 = 0.52%

This means that the options market is anticipating that XIU will have an average daily up or down price movement of about 1/2% per day over the life of the option. With XIU trading at $37.25 that is roughly $0.19. It is far easier to visualize XIU moving up or down an average of about 19 cents a day over the coming few weeks. Those who think that the market is understating the daily price movement should consider buying options at that current volatility level. Those with the opposite viewpoint should avoid buying those options and even consider selling them.

The Rule of 16 is especially useful just before companies release their earnings. Here is a line from the prior MX End of Day Report:

Table 2: Pricing Data for TECK 69 strike calls, expiring October 25, 2024 from the MX End of Day Report for October 15, 2024

	Strike Price	Call/Put	Days to Expiry	Volume	Bid Price	Ask Price	Open Interest	Implied Volatility
iShares S&P/TSX 60 Index ETF (XUI)								
25-Oct-24	**69**	**Call**	**10**	**38**	**1.61**	**1.94**	**0**	**48.69%**

Source: MX

The option displayed above is the 69-strike call on TECK.B expiring on October 25th, 2024. Teck Resources is scheduled to report earnings on October 24th, just a day before that option expires. Using the methodology above, we can convert that 48.69% annualized volatility into a 3.04% daily volatility, or average daily movement of about $2.07. Since stocks often display greater volatility in the trading session after they release their earnings, it can be much easier for traders to visualize whether the market's anticipated movement for Teck's stock price seems adequate.

At this point you may be wondering why markets persist in expressing implied volatility in annualized terms, even though it is far less useful. Quite frankly it is an archaic market custom. The Black-Scholes model, which was the first widely adopted pricing mechanism for options, utilizes annualized volatility. In fact, it explicitly takes daily price moves and converts them into an annualized value. Prior to the emergence of Black-Scholes, options were a poorly understood corner of the investing universe, not the core component that they are now. Because that model was established using an annualized volatility measure, that's what the options markets that sprung up in its wake utilized. And that practice persists to this day throughout the industry.

It is my sincere hope that this article demystifies volatility terminology for many of you and gives you a better sense of how to better interpret an arcane number into real-world scenarios. With another quarterly earnings season approaching – one that is likely to bring added uncertainty – an understanding of the Rule of 16 should give you a stronger skill set for determining the options market's outlook for post-earnings price moves.

Click here to read a full complement of Steve Sosnick's articles

Steve Sosnick,
Chief Strategist, Interactive Brokers

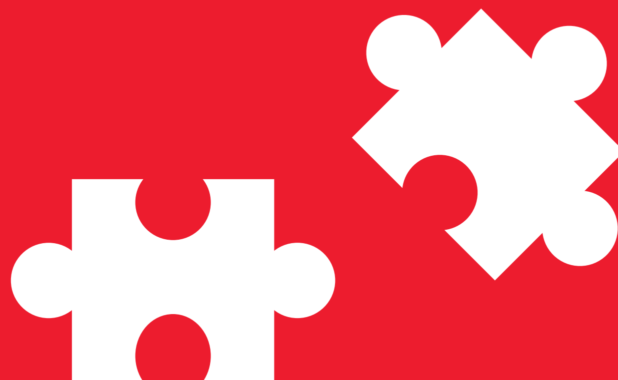
Steve is the Chief Strategist at Interactive Brokers. He also serves as Head Trader of IBKR Securities Services, the firm's trading division (formerly known as Timber Hill), and is a Member of Interactive Brokers Group, the firm's holding company.

Steve has held numerous roles in the organization since joining Timber Hill in 1995 as Equity Risk Manager and an options market maker. He led the firm into Canada in 1998 and managed Timber Hill Canada throughout its existence. Much of Steve's career was spent quietly developing and implementing algorithmic and electronic trading strategies for stocks and options before moving into a more visible role as IBKR's Chief Options Strategist and later Chief Strategist.

Steve has guest authored several columns in Barron's and made numerous live appearances on Bloomberg TV and Radio, CNBC, Yahoo Finance, Fox Business, and several other media outlets in North America, Asia, Australia, and the Middle Eastin addition to being quoted frequently in print and electronic media. He has held board memberships at various stock and options exchanges. He currently serves on the board of MIAX Pearl, after stints on the boards of CBSX, NSE and ISE-SE. In Canada, he is a member of the MX Regulatory User Group and the IIAC Derivatives Committee.

Prior to joining Interactive Brokers, Steve held senior trading roles at Morgan Stanley, Lehman Brothers, and Salomon Brothers, where he completed the firm's famed training program.

He holds both an MBA in Finance and a BS in Economics from the Wharton School of the University of Pennsylvania.



Japan Today: Gaman & the Capacity to Endure

by Steven Boisvert

BURGUNDY
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Amid claims of a corporate governance makeover and an endorsement from Warren Buffett, many foreign investors have developed a renewed interest in Japan. Drawing on his expat perspective, Investment Analyst Steven Boisvert navigates through this market exuberance, examining the influence of gaman and providing an update on Burgundy's investment strategy in the island nation.

ENDURE THE UNENDURABLE

At noon on August 15, 1945, days after atomic bombs reduced the cities of Hiroshima and Nagasaki to rubble, citizens across Japan rallied around their neighbourhood radios. Through crackling static, Emperor Hirohito told his subjects that Japan had lost the war. They would now have to endure the "unendurable" and bear defeat's "unbearable" consequences. In the wake of the broadcast, Hirohito's call for endurance ignited a collective determination to rebuild, setting a trajectory for economic growth and transformation.

In Japan, prioritizing harmony over individual desires is called, 我慢 or *gaman* in English. During times of hardship, you are expected to restrain selfish emotions.

As a child, I have early memories of learning Hirohito's lessons in the classroom. This call for endurance shaped daily life, influencing the country's structures and systems. Later, I witnessed its impact in my workplace, where personal economic profits were sacrificed in favour of the collective good. Though this context is often overlooked in the headlines, you can't fully grasp Japan today without it.

INTEREST IN THE ISLAND NATION

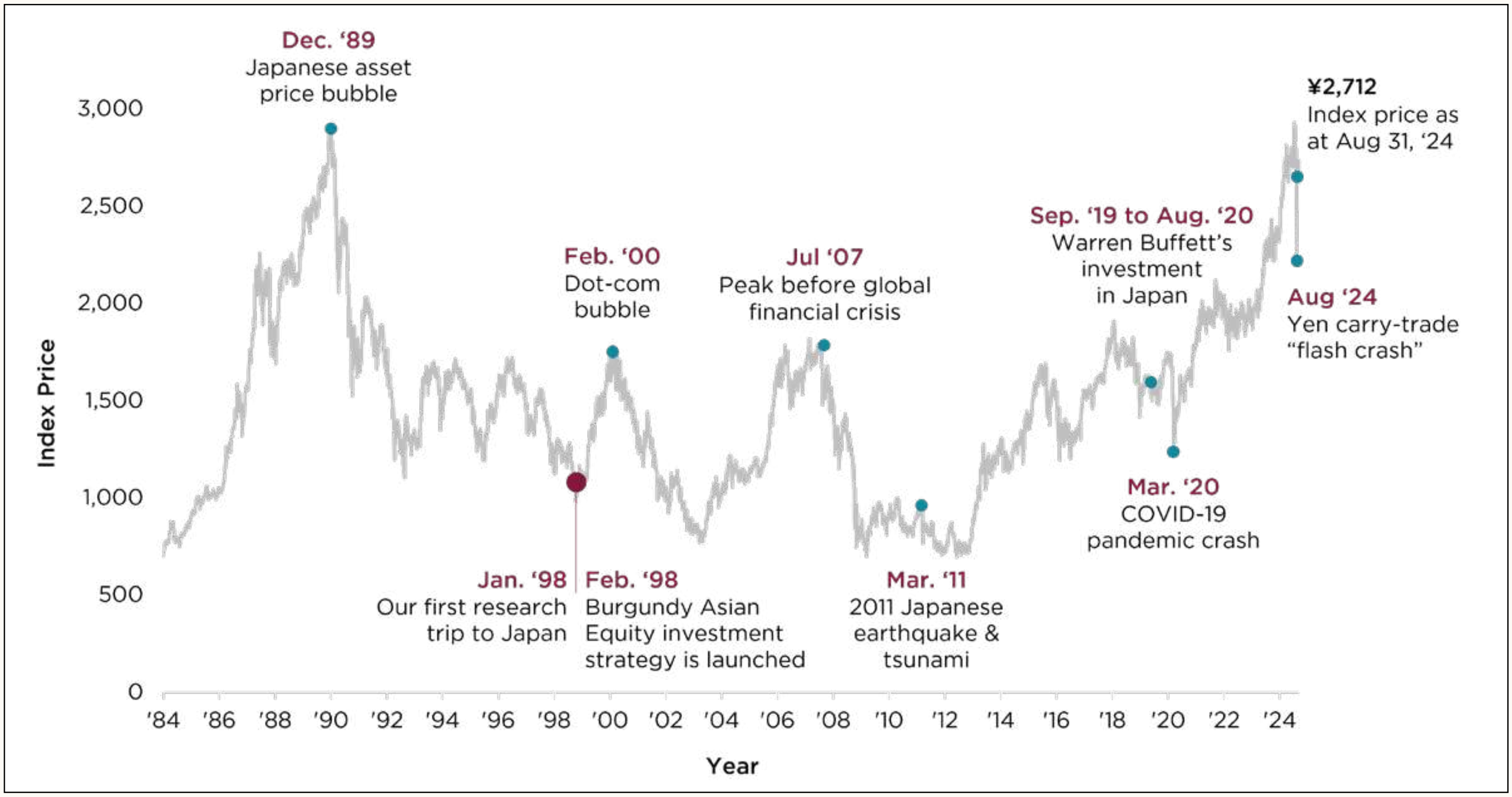
In recent years, there has been a significant uptick in investment interest in Japan. Before we explore this trend, let's rewind to when we first entered the region.

When Burgundy began investing in Japan in 1998, the country's financial system was in ruins, and sentiment was dismal. "Value only appears when things look bleak," reads a line from The View from Burgundy The Sun Also Rises, "and things look very bleak in Japan." After Japan's post-war "economic miracle" from 1945 to 1991, where it became a manufacturing juggernaut climbing to the number two economy in the world, the Asian Financial Crisis kicked off a period of economic stagnation known as the "lost decades."

KEY POINTS

- ***Gaman's* Influence:** The cultural emphasis on collective well-being permeates various aspects of Japanese society, including corporate governance.
- **Gradual Reforms:** While progress is ongoing, corporate governance reforms are not uniform across all Japanese companies.
- **Long-Term Perspective:** A disciplined, long-term approach is essential for navigating the challenges and opportunities in the Japanese market.
- **Our Expertise:** With a 25-year track record and a deep understanding of Japan, Burgundy is well-positioned to capitalize on the country's evolving investment landscape.

Just imagine investing in the stock market for 30 years and seeing no returns. Until this past year, this was the reality for many passive investors in the Japanese market. Since its peak, which occurred alongside the Japanese asset bubble collapse of the early 1990s, the Tokyo Stock Price Index (TOPIX) struggled to sustain growth, with a gradual recovery marked by periods of volatility. Despite the sentiment, Burgundy still found opportunities by choosing the right companies, the ones able to weather this challenging backdrop. Such companies generate profits and cash flow during uncertain times, allocate that cash flow into areas with long-term potential, and differentiate from their competitors by developing new products. For example, the year we started investing in Japan, we initiated a position in **Keyence**, a provider of factory automation solutions. We continue to own the company today. Ultimately, we opted to explore, while others chose to ignore.



Source: FactSet in Japanese Yen as at August 31, 2024
Historical prices for the Tokyo Stock Price Index (or TOPIX) for the last 40 years.

Investor sentiment in Japan underwent significant changes during the COVID-19 pandemic when, following the sharp declines experienced by global markets, investor confidence gradually improved. By mid-2024, the TOPIX climbed to a new all-time high. So, why, after two lost decades, are global investors paying attention?

An endorsement from Warren Buffett for one thing. Over the past few years, the Oracle of Omaha has sent a powerful signal to the global market, investing billions into Japanese trading houses through Berkshire Hathaway. Perhaps more compelling than Buffett's bullishness, we've seen growing excitement surrounding ongoing corporate governance reforms and an increased focus on shareholder returns. The prospect of such improvements has sent many foreign investors flocking to Japanese stocks. To understand why, we need to revisit the reasons Japan's corporate governance had a poor reputation in the first place.

VOLATILITY STRIKES

Japan continues to attract significant global attention, as demonstrated by the dramatic stock market swings during the summer of 2024. After hitting all-time highs in mid-July, the latter part of the month and early August saw Japanese stocks experience a violent crash before largely correcting. The crash and subsequent rebound were triggered by a combination of the weak yen and a carry-trade blow-up (where investors borrow at a low interest rate, like in Japan, and invest in an asset that provides a higher rate of return), all unfolding over just a few days.

Despite dropping over 20% in just a matter of weeks, Japanese markets continue to trade above their levels when entering 2024.

THE CORPORATE GOVERNANCE MAKEOVER

When we began investing in Japan back in the late 1990s, the country's poor corporate governance was one of the main reasons foreign investors avoided it. Japanese management lacked accountability to shareholders. They also had bloated and inefficient boards of directors reticent to accept external influence. Returning to Japanese cultural practices, including gaman, the emphasis on harmony and collective well-being has historically taken precedence over shareholder rights and transparency.

Recently, however, this has started to loosen. Japan's corporate governance reforms have garnered significant interest in the market, both domestically and internationally. Longstanding practices that discouraged foreign investment, such as limited board representation and cross-shareholdings (where one publicly traded company holds a significant number of shares of another publicly traded company), are now giving way to reforms.

> ***"Returning to Japanese cultural practices, including gaman, the emphasis on harmony and collective well-being has historically taken precedence over shareholder rights and transparency."***

Many companies have begun to embrace outside directors, prioritize profitability and shareholder returns, and focus on efficient capital allocation. Internationally, foreign investors see these reforms as a positive step toward improving the country's investment climate, welcoming the changes and increasingly engaging with Japanese companies on governance-related issues. Though not applied across all companies, we have seen evidence of these changes. Looking to our portfolio, **Ariake Japan**, the leading provider of natural seasonings, is an example of a company seeking to implement these positive practices. Following a recent change in the management team, improvements in corporate governance have started to take hold, and we have noticed that the company is now actively communicating with its shareholders. We are seeing this trend elsewhere as well. More companies are now willing to speak with investors; some that historically wouldn't engage at all are more open to meetings and conversations. Through our interactions with companies and other research, we will pay close attention to disclosure and transparency, stakeholder engagement, and shareholder rights.

Another recent reform aimed at improving transparency comes from the Tokyo Stock Exchange (TSE), which now requests that companies disclose their cost of capital. The TSE is also asking that all the prime companies (1,500 of the 4,000 companies listed in Japan) disclose key financial statements in English, lifting what was previously a significant barrier for foreign investors. Although there are encouraging signs of progress, it remains slow and inconsistent, and additional efforts are needed to satisfy the high expectations of investors.

IF A RISING TIDE LIFTS ALL BOATS, WHAT ABOUT OUR COMPETITIVE EDGE?

With a heightened focus on corporate governance, companies are expected to raise their standards, prioritizing sound business decisions with the cost of capital in mind. This shift should help narrow the valuation gap compared to global counterparts. Japan will continue attracting more investors, boosting liquidity and strengthening its investment landscape. As the investment pond deepens, the adage "a rising tide lifts all boats," should hold.

> ***"While greater attention may heighten investor competition, it also brings benefits. These reforms may accelerate the improvement process, potentially transforming businesses with mediocre governance into companies that meet Burgundy's quality standards."***

You may question whether increased eyes on Japan will impact our competitive edge. While greater attention may heighten investor competition, it also brings benefits. These reforms may accelerate the improvement process, potentially transforming businesses with mediocre governance into companies that meet Burgundy's quality standards. As strong governance becomes more prevalent among quality businesses, our opportunity set will broaden, and we will have more to look at. Yet, change is gradual, and with its unique cultural nuances, this is especially true in Japan.

Looking at this from another angle, good and bad businesses will continue to coexist amid heightened competition. To borrow from Charlie Munger, "If you mix raisins with turds, they're still turds." There are still good and bad businesses and inherently poor ones can't be fixed. So, we will continue to choose the raisins and avoid the turds disguised as raisins. This is where our process comes in — a process that hinges on dedicated research and a 25-year history of investing in the region.

Another differentiator for us is where we are looking. While the market currently favours large-cap Japanese stocks, we remain focused on small and medium-sized businesses, which historically have proven advantageous. We will continue to favour this subset of businesses, as they are often less understood and offer greater opportunity for market mispricing – or the "value" component of our quality/value approach.

AN IMPORTANT REMINDER

Burgundy's approach is different. We are long-term investors who aren't afraid to stand apart from the crowd or an index, and we maintain a disciplined focus on quality and value. These principles are fundamental to our strategy, but they can, of course, be imitated. Studying anything for a long time leads to experience, which in turn shapes judgment. We believe our experience gives us an advantage relative to newer investors in understanding and capitalizing on changes in Japan. However, experience does not ensure success. Continuous learning, growth, and adaptation are critical to our progress as investors. Like the companies we look for, we must relentlessly pursue opportunities while staying true to our principles.

AN APPROACH THAT LASTS

We can't understand Japan today without looking back at the country's historical evolution. Devastation and recovery, explosive transformation, and the profound influence of gaman's hand are all part of the story. While it may be tempting to apply a Western lens, we must also remember that the Japanese economy isn't Adam Smith's economy. While profitability remains important for Japanese businesses, these pursuits are still motivated by contributing positively to society. Even as this stronghold of society over shareholders begins to relax, changes in corporate governance will be gradual and inconsistent among companies.

At Burgundy, our approach to investing in Japan has not wavered since 1998, concentrating on the careful selection of both the right companies and the right management teams. And like Japan, our portfolio is poised to endure, whether the popularity of Japanese equities keeps climbing or investor interest shifts. With over two decades of experience and a steadfast commitment to quality and value, we are confident in our ability to continue to deliver strong, long-term results for our clients, regardless of the changes or fluctuations in the Japanese market.

Steven Boisvert,

Investment Analyst, Burgundy Asset Management Ltd.

Steven was born and raised in Japan and has 15 years of experience working at a number of companies in Japan. During this time, he gained an understanding of the unique ways in which Japanese companies operate. This gave him a strong desire to pursue a career that enabled him to learn about the underpinnings of a successful company. Steven seeks to identify investment opportunities by combining his firsthand experience with his strong interest in what makes a great company.

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From Bad to Worse: Canada's Productivity Slowdown is Everyone's Problem

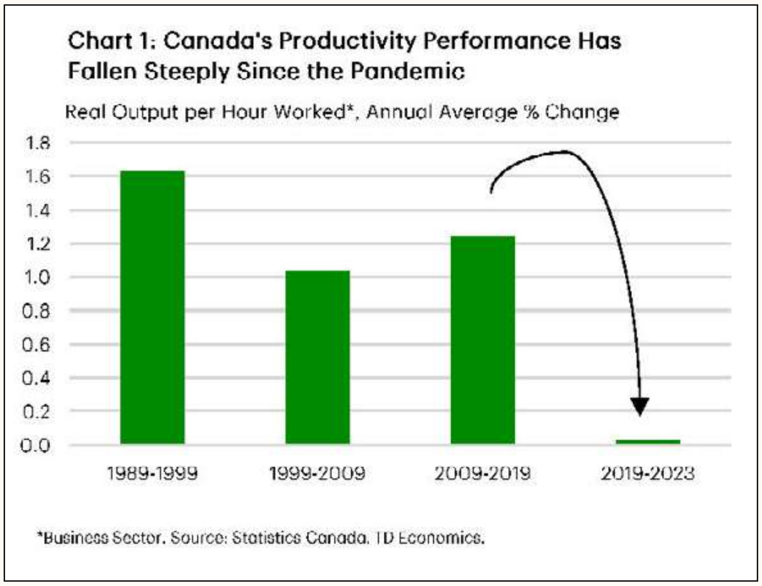
by Beata Caranci & James Marple

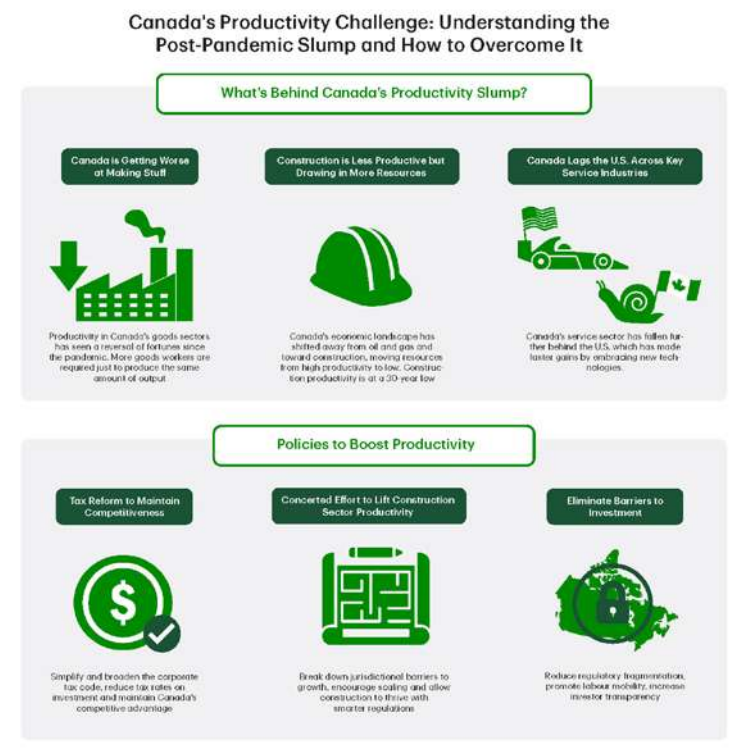
HIGHLIGHTS

- If Canada does not play to win on labour productivity, it risks a continued drop in living standards, worsening wage stagnation and a dangerous deterioration in public services.
- The pronounced downshift in labour productivity since the pandemic has manifested in most industries.
- The goods-producing sector accounts for the lion's share. In a turn of fortune, a decade-long outperformance in productivity is now marred by a 1.2% average annual decline since 2019. More goods sector workers are required just to produce the same level of output.
- Among industries, construction is the worst of the lot with labour productivity at a near 30-year low.
- Construction's deepening presence will keep Canada on its backfoot relative to peers in the absence of greater innovation adoption and a reshaping of the industry.
- Canada's service sector has also slowed, but to a lesser degree. Compared to the U.S., most major industries severely lag.

Hearing the word, productivity, often brings to mind a negative image of accomplishing more work with less people. It's a hard sell for policymakers to get Canadians fired up on the concept, let alone to make the necessary financial sacrifices and policy adjustments toward solutions. Yet, healthy growth in productivity is key to a dynamic, prosperous, and resilient society. Productivity improvements drive real wage growth and are essential to maintaining quality public services.

So the fact that Canada's performance has deteriorated so materially since the pandemic should be of grave concern to all Canadians, particularly younger generations. Canadian's standard of living, as measured by real GDP per person, was lower in 2023 than in 2014. Without improved productivity growth, workers will face stagnating wages and government revenues will not keep pace with spending commitments, requiring higher taxes or reduced public services.





SO WHAT AILS CANADA?

Over the decade prior to the pandemic, business sector productivity grew by a respectable rate of 1.2% annually (Chart 1). Since 2019, it has ceased to expand at all, setting Canada apart as one of the worst performing advanced economies, not to mention in stark contrast to the United States (see earlier report).

We wish we could tell you that only a single or handful of industries are the culprit. However, the woes are widespread. Relative to growth in the decade prior the pandemic, only a few service industries have managed to improve their performance. Those working in the goods sectors have felt the downshift the most, where productivity has gone in reverse in the years since the pandemic. What does that mean? To get the same output, it now requires more hours from workers. Hard to believe this could occur in a digital age.

There is one sector in Canada that wears the Scarlet Letter more prominently than the others: construction. Due to its increasing size within the economy, its declining productivity has been an increasingly important source of overall weakness.

Among service-producing industries, most have experienced a productivity slowdown since the pandemic, but not as severe. Still, when compared to the U.S., stark differences occur in key service industries.

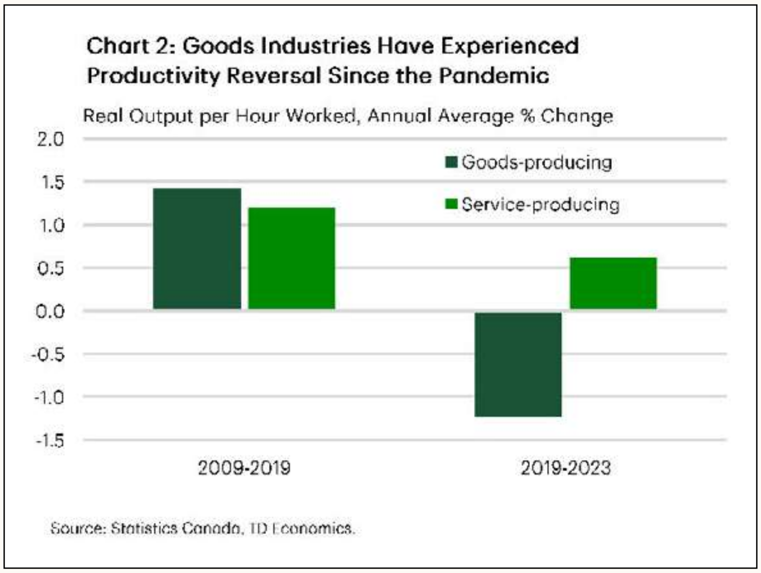
There is no silver bullet to fixing Canada's productivity woes because the underperformance has become so pervasive. The often-cited solutions are intuitive but elusive for Canada: fostering competition, retaining skilled workers, reducing barriers to trade and investment (both internally and externally), and improving incentives for technology adoption. This is the minimum needed to keep Canadians from being the poor cousins of the G7.

However, a focus needs to be on the construction sector, especially residential building. It is composed mainly of small firms, which are slower to adopt new technologies. Productivity has been weakest in building construction, which has the largest share of small firms. Targeted strategies to address constraints to growth could be beneficial. Harmonizing building codes and licensing requirements across provinces could help increase competition while allowing for greater returns to scale across the industry.

For service industries, greater reliance on non-permanent residents appears to have contributed to the productivity deterioration since the pandemic. This may seem counterintuitive amidst an aging labour force, but the concentration of non-permanent residents in low paid work has worsened Canada's productivity performance.[1] Raising productivity growth in services will require supportive tax and regulatory policy that encourage greater investment and accelerate technology adoption.

GOODS SECTOR PRODUCTIVITY HAS CONTRACTED SINCE THE PANDEMIC

Canada's economy is primarily one of services. This is not a new development, but one that is steadily marching forward. The flip side of that coin is that over the past two decades, the combined activity of goods sectors — agriculture, utilities, manufacturing, and construction — has fallen from one-third to a quarter of the Canadian economy.



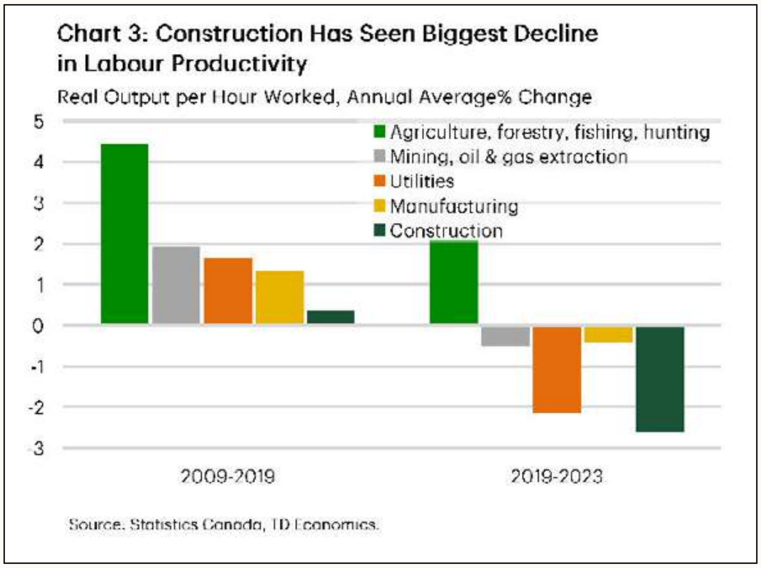
In terms of productivity, however, the goods sector punches above its weight. Labour productivity is over 30% higher than in the service sector. Bragging rights go to the relatively capital intensive mining, oil and gas extraction, and utilities sectors. Manufacturing, construction and agriculture have much lower levels of productivity by comparison.

Unfortunately, since the pandemic, with the exception of agriculture, forestry, hunting and fishing, productivity growth within goods-producing industries has not only slowed but has outright reversed (Chart 2). From an annual increase of 1.4% in the decade prior to the pandemic, it has declined by 1.2% annually since.

As a result, the goods sector has subtracted an average of 0.4 percentage points from Canada's overall productivity growth every year since the pandemic. Had the sector just stayed flat, Canada's pace would have risen 0.5% annually. Although this performance still pales to that of five years prior, it would have been sufficient to outpace the Euro Area.

CONSTRUCTION PRODUCTIVITY HAS BEEN IN DECLINE FOR DECADES

Chart 3 breaks down the problem. The utilities sector experienced a signficant deterioration since the pandemic, but this is not a primary area of concern as it was largely due to record-high temperatures that led to a decline in the production of hydroelectricity in 2023.[2]



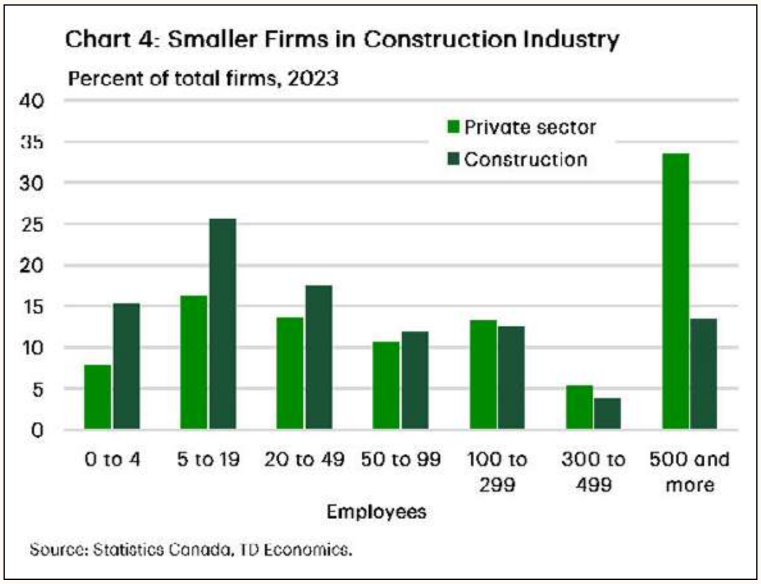
The sectors of concern start with mining and oil and gas extraction, which experienced healthy productivity gains in the decade prior to the pandemic but has since fallen 0.5% annually. While measuring productivity in the sector is challenging (see text box below), there are some attributes unique to Canada. Investment in the sector has fallen in part as key infrastructure such as the Keystone XL pipeline was cancelled, but also as a result of reduced investment in the wake of carbon pricing and the energy transition.[3] Although this is a necessary transition, decarbonization is likely to further weigh on investment in the sector. Given its relatively high level of labour productivity, this automatically presents a productivity challenge for Canada over the next several years.

Manufacturing is experiencing the smallest decline relative to its pre-pandemic average, but here too productivity has swung from gains to losses, with a particularly sharp drop over the past year.

And then there's the construction sector, which has experienced the worst productivity of any goods sector. This is a longstanding pattern that has worsened, injecting more pain into Canada due to its rising share of economic activity.

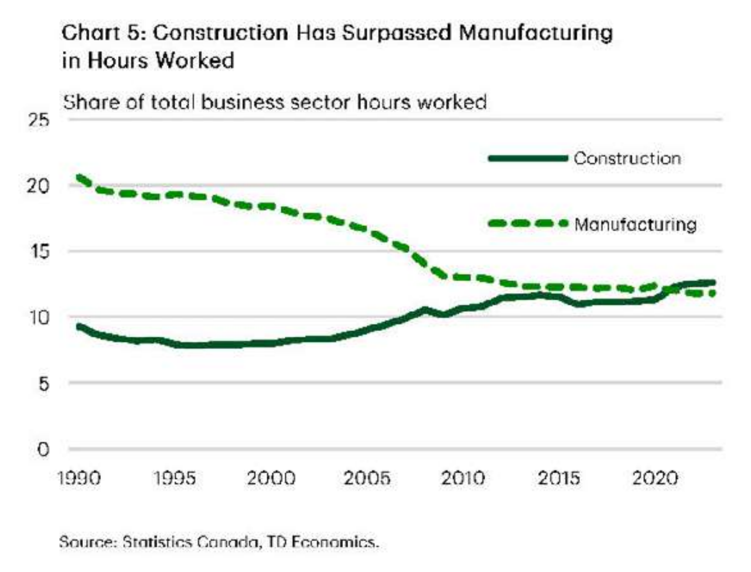
Construction has generated no productivity growth over the past forty years! It's not a uniquely Canadian problem, but rather global in nature. For instance, U.S. productivity growth in construction has been worse relative to Canada over the last 30 years and only slightly better since the pandemic. Studies in the U.S. have shown resources moving from higher productivity regions to lower – the opposite of allocative efficiency. The decline in productivity has coincided with an increase in land-use regulations, suggesting that non-economic factors have played a central role.[4,5]

The same appears to be true in Canada. For example, as documented by CMHC, there are considerable differences in residential construction productivity across the country, suggesting that differences in regulations and permitting play a role in productivity performance.[6] More than other sectors, construction is characterized by very small firms – 40% have fewer than 20 employees (Chart 4). Smaller firms have been shown to have lower levels of productivity and are slower to adopt new technologies than larger firms.[7] They also face larger regulatory burdens relative to their size than larger businesses, which materially weighs on productivity.[8] There are a number of 'low-hanging fruit' barriers to growth in construction such as building codes, permitting and licensing requirements that differ across provinces and make it difficult for firms to operate across jurisdictions. A lack of standardization is another challenge that makes innovation harder to scale up across the industry.



CONSTRUCTION IS GROWING IN IMPORTANCE

Unfortunately, the poor performance of the construction sector is an increasingly important driver of Canada's overall productivity story because it is growing as a share of the economy more than other countries (Chart 5). In 2023, the construction sector represented 12.6% of all labour hours worked in Canada, up from 8% in 1997. Isolating to just the goods-producing sector, construction hours worked now exceed those in manufacturing, nearly doubling from 23% in 1997 to 42% of today.



Now consider the increasing shift of resources into construction activity rather than other areas, and the impact on total Canadian productivity intensifies. Adding this "reallocation effect" to the "within-sector effect" described above reveals a construction sector that has subtracted 0.5 percentage points from annual productivity growth since the pandemic. It has accounted for the vast majority of the decline in overall Canadian productivity relative to the pre-pandemic period.

And the problem deepens when we cast an eye forward. Construction is unlikely to become less important over the next five years, or more. Canada suffers from a housing deficit, suggesting a need for more resources to be sucked into the sector. The Bank of Canada's recent Monetary Policy Report reduced their forecast for overall Canadian productivity over the next two years citing "constraints on housing construction coming from structural factors, such as the availability of land, zoning restrictions and a lack of skilled labour."[9]

The rising importance of construction increases the urgency to improve productivity in the sector. But this requires more outside-the-box thinking, including moving to more prefabricated or modular building, developing a reskilled workforce around it, and rethinking the building code to allow for more flexibility in the sources of materials used that maintain the same results in terms of safety and durability. There are examples of this in other countries, such as Sweden, where modular building has a significant presence.[10]

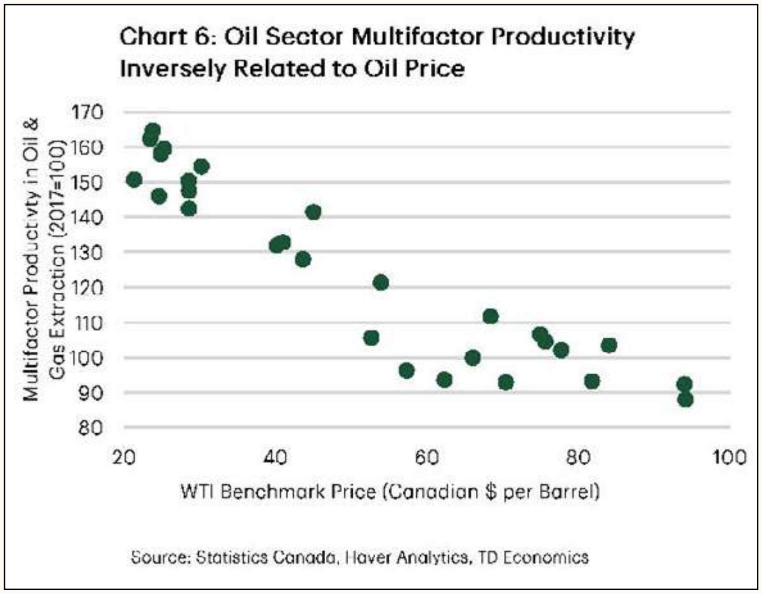
A SELECT FEW SERVICE INDUSTRIES HAVE SEEN FASTER PRODUCTIVITY GROWTH SINCE PANDEMIC

It's not all downbeat news. A few sectors stand out with improved productivity growth since the pandemic. Among them are wholesale and retail trade, information and cultural industries, accommodation and food services, and real estate, rental, and leasing. Many of these industries were hit hardest by the pandemic with greater employment disruptions, reinforcing the belief that productivity growth is about fewer people. As of 2023, hours worked in retail trade and real estate, rental and leasing was still lower than in 2019.

THE CURIOUS CASE OF PRODUCTIVITY IN CANADA'S OIL & GAS SECTOR

Canada's oil and gas sector has one of the highest productivity levels in the Canadian economy as well as some of the highest wages. Due to the size of its productivity outperformance relative to the rest of the economy, the sector has played an outsized role in driving Canadian productivity. Although the sector has seen labour productivity growth ebb and flow over several decades, it was on an encouraging upswing in the years leading up to the pandemic.[11] Nonetheless, a decline in labour hours in the sector weighed materially on aggregate labour productivity growth.

Underneath the surface, things get even more complicated. Labour productivity can be broken down into the amount of capital per worker, the skills of those workers, and the technology that determines how inputs (capital and labour) are turned into outputs (termed multifactor productivity or MFP). In the textbook case, lifting productivity growth is simply a matter of increasing the capital and skills of workers and/or spurring innovation (MFP growth).



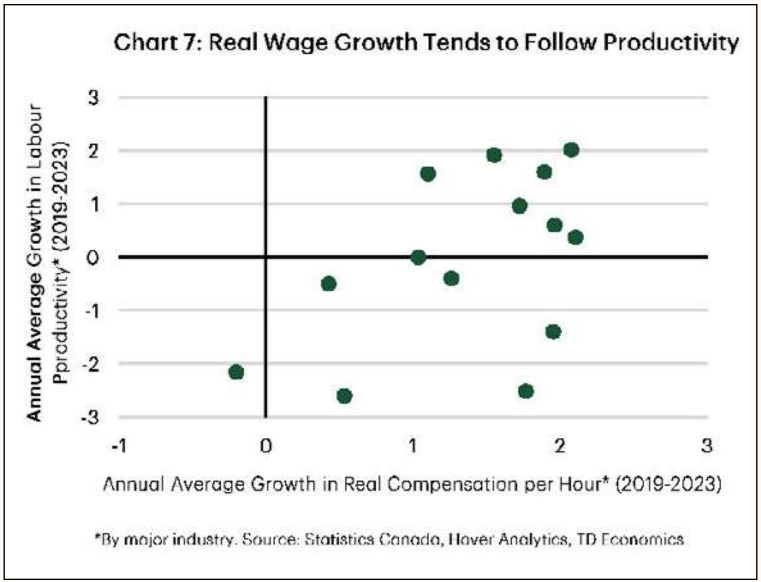
But in the real world, the oil and gas sector appears to have a counterintuitive relationship between the amount of capital it adds and growth in innovation. While the sector has consistently increased capital per worker, MFP has generally declined over the past 50 years. How could this be for a sector that has seen a steady stream of innovation from the early-days of steam-assisted gravity drainage in oilsands development to digital oil field technologies recently.

One reason is that the productivity statistics do not account for the price of the non-renewable resource. As oil prices have risen, companies have been induced to invest more into difficult deposits that take more labour and capital to extract. This shows up in an inverse relationship between oil prices and MFP (Chart 6).

A second reason is that productivity statistics do not account for the non-renewable nature of the resource. Even without the price effect, more labour and capital must necessarily be expended as easier geology deposits are exhausted. This contributes to the statistical underestimation of MFP growth.[12]

Finally, the sector must increasingly contend with the necessity of reducing its carbon footprint. This requires both investment and innovation – carbon capture and storage as an example – that does not necessarily raise output in the sector.

All of this suggests caution in interpreting weak MFP in the oil and gas sector and its negative effects on Canadian productivity growth. Labour productivity should be the focus.



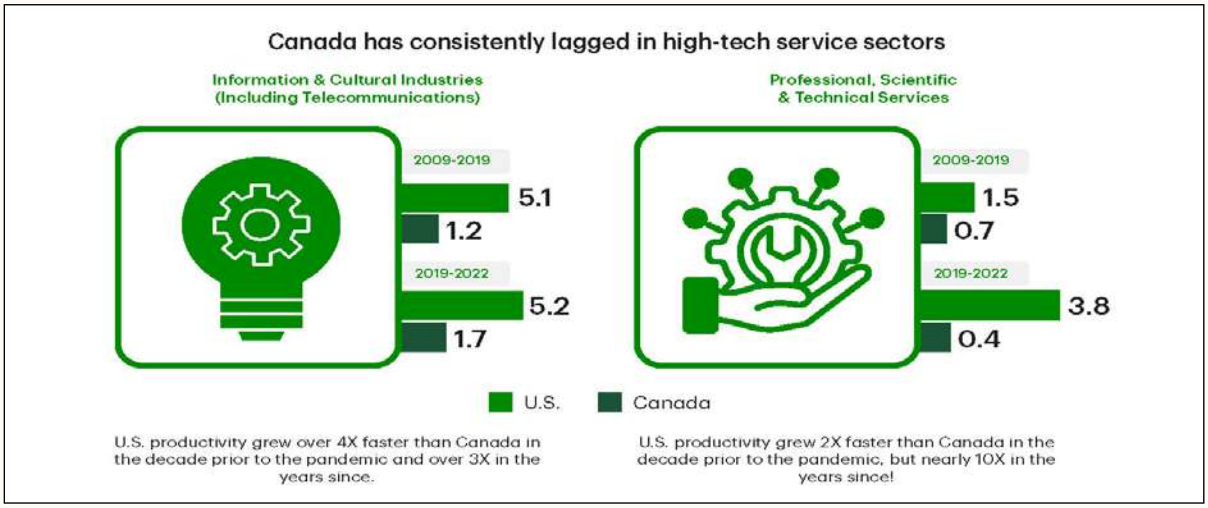
However, as in the past, gains from productivity are showing up in rising compensation for these workers. Since the pandemic, real (inflation adjusted) compensation per hour has grown faster in sectors with greater productivity growth. Service industries have experienced annual average growth in real compensation of 1.8% compared to 1.0% in goods sectors. The strongest productivity sectors have seen the strongest wage growth (Chart 7). Information and cultural industries have experienced real wage growth of 2.1% annually and accommodation and food services are not far behind at 2%.[13]

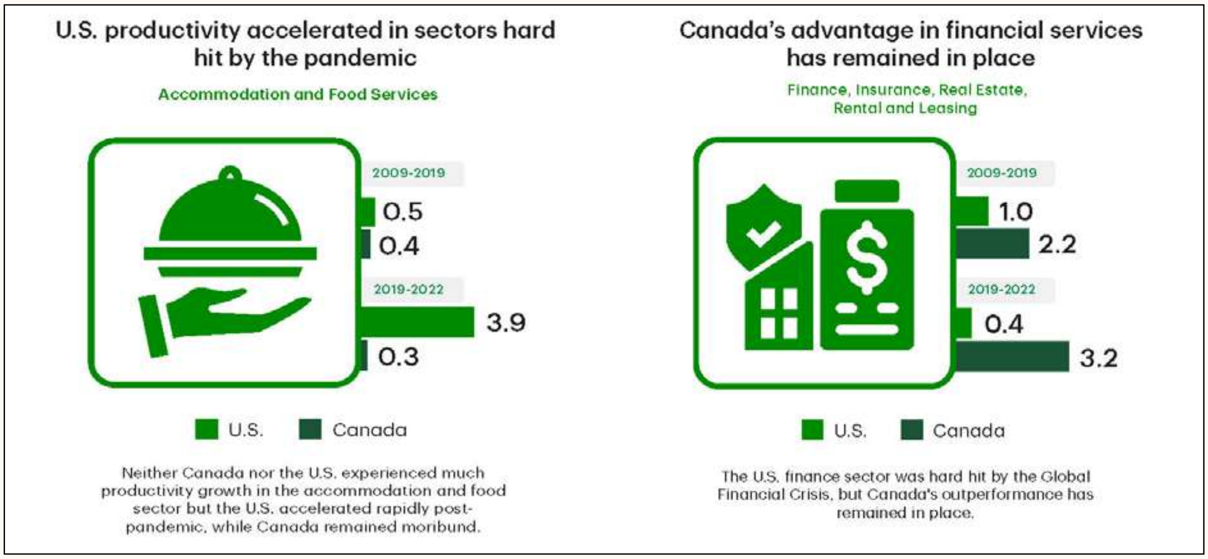
It is too early to say whether the pandemic shock has caused more permanent changes to these industries. Some of the productivity improvement may reflect trends in automation and digitization since the pandemic. This offers hope that as digital technologies and artificial intelligence (AI) are more widely adopted, productivity growth could accelerate. As we have argued (see report), Canada has a significant share of high-skilled occupations that could benefit from considerable improvements in productivity through AI.

CANADA LAGS THE U.S. ACROSS MOST INDUSTRIES, ESPECIALLY SERVICES

And this is where the big push must ultimately come from. Canada has lagged U.S. productivity growth for the past several decades, but the deterioration has worsened since the pandemic. Since then, the U.S. has seen business sector productivity growth of 1.6% annually, while Canada has failed to produce any advancement. From 2019 through 2022 (the latest detailed industry data available for the U.S), the U.S has outperformed Canada across most major industries.

U.S. productivity has been particularly strong within retail trade, information, and cultural





industries (including telecommunications), professional, scientific, and technical services, and accommodation and food services. Although many of these same industries have led productivity growth for Canada more recently, they have consistently and significantly lagged the U.S. over the past two decades.

The greatest cross-country wedge has occurred within the professional, scientific, and technical services and accommodation and food services. The U.S. experienced accelerated and robust growth of 3.8% for the former and 3.9% for the latter from 2019 to 2022. By contrast, productivity growth in Canada's professional services sector slowed from its pre-pandemic average. Productivity growth improved in the retail sector, but to a much smaller degree than in the United States.

Some of the challenges are longstanding. Canada has been a laggard in adopting information and communication technology (ICT) and meaningfully slower growth within this area explains much of the growing U.S.-Canada productivity gap in the two decades prior to the pandemic.

In fact, there's only one sector that has consistently outperformed its American counterparts over the past decade and through the pandemic: finance, insurance, real estate, rental and leasing (FIRE). In the decade prior to the pandemic, labour productivity in the sector grew by 2.2% annually in Canada compared to 1.0% in the U.S. Since the pandemic, the gap has increased, with growth of 3.2% in Canada and just 0.4% in the United States. Output of the financial sector in the U.S. was impacted to a much higher degree by the Global Financial Crisis, but that does not explain Canada's more recent outperformance. Some of it may reflect catch up growth, as the U.S. sector exhibits higher levels of labour productivity than Canada. While comparable data on the details between the two countries is only available to 2020, in the five years prior to the pandemic, the sectors in both countries saw similar contribution from investment-driven growth in capital per worker, but Canada's industry saw relatively faster MFP growth.

MAINTAINING A COMPETITIVE TAX REGIME

An internationally competitive tax system is an important contributor to investment and productivity. Canada made a concerted effort to lower its corporate income taxes in the early 2000s and had lower corporate income tax rates than international peers through the decade that preceded the pandemic. However, this advantage has eroded considerably in recent years as other countries have lowered tax rates. The Tax Cuts and Jobs Act of 2018 for example lowered the U.S. corporate income tax rate by fourteen percentage points from 35% to 21%. Several European countries also reduced their tax rates over this period. With these changes abroad, Canada's average tax rate is now roughly in line with the U.S. and OECD average, but higher than Europe. A tax rate just in line with the U.S. is probably not sufficient to counteract the country's inherent strengths in drawing in investment and talent. Canada must aim to do better in order to level the playing field.

The profitability of new investments is also influenced by a host of other measures that interact with the tax system, including interest, depreciation, inventory cost, fees, and other deductions. A measure that includes these factors is the marginal effective tax rate (METR).14 Canada's METR was temporarily reduced below peers by accelerated depreciation measures in 2019, which allowed investment in manufacturing and processing machinery and equipment to be fully deducted from taxes. The deduction was, however, temporary, and is set to be fully phased out by 2028. As this temporary measure expires, Canada's METR will rise considerably, raising the cost of new investment and weighing on productivity growth.[15]

Some might wonder if these tax credits have been effective, considering Canada's deteriorated investment and productivity backdrop over the last several years. The flip side of the lens is to consider how much worse the investment impulse would be in Canada in their absence. Unwinding it would fly in the face of "do no harm" principle, reducing Canada's competitiveness during a period when the struggle runs so deep. In addition, measurements like the METR do not include regulations or provisions in the tax code that favour certain industries over others. These have also been shown to impede markets signals, weigh on productivity and reduce competitiveness.[16]

BOTTOM LINE

Canada has seen its productivity go from bad to worse since the pandemic. Labour productivity was temporarily and artificially lifted by pandemic lockdowns in early 2020 when hours were cut more than overall economic activity. But in the three years since productivity has declined every single year, with the decline worsening in 2023 relative to 2022. An outright decline in productivity in the goods sector explains much of Canada's moribund productivity growth. While the service sector slowed more modestly, this is nothing to crow about. It stands in sharp contrast to the improved performance stateside.

Addressing Canada's productivity issues requires comprehensive strategies, including promoting competition, incentivizing technology adoption, reducing barriers to growth across jurisdictions, and implementing smarter regulations. At a minimum, government should focus on doing no harm, maintaining incentives for capital investment. The expiry of the accelerated depreciation allowance (discussed in textbox above) is a move in the wrong direction, raising the cost of new investment. Reforming the tax code more broadly to reduce the cost of new investment should be a policy priority. Focusing on improving productivity in construction sector is particularly urgent due to its growing economic importance. If Canada does not play to win on labour productivity, it risks a continued drop in living standards, worsening wage stagnation and a dangerous deterioration in public services.

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11. Due to the size of its productivity outperformance relative to the rest of the economy, movements in resources in and out of the sector can play an outsized role in driving Canadian productivity. In the five years prior to the pandemic one of the key drags on Canada's productivity was the decline in production and hours in the oil and gas sector.

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13. Without productivity growth, increases in wages imply a decrease in relative competitiveness. This is a particular challenge for export-facing industries. As a result of poor productivity growth, the cost of labour relative to output has risen faster in Canada than in the United States, making it harder for Canadian companies to compete at the going exchange rate.

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