Portfolio Manager Summit 2024: Secular Themes and Investment Opportunities

Scotia Global Asset Management®

Contents

Coming together to discuss and debate

I have the privilege of leading the Scotia Global Asset Management (Scotia GAM) Investment Team, which draws on decades of portfolio management experience and firmly held principles to deliver high-conviction, active investment management that is supported by a robust risk management framework. The Team manages more than $350 billion[1] of assets on behalf of our clients, leveraging a variety of investment philosophies and processes across a broad range of asset classes, geographies and sectors.

Jim Morris
Head of Investment Management,
Scotia Global Asset Management

SCOTIA GLOBAL ASSET MANAGEMENT BY THE NUMBERS[1]

$359 billion
AUM

3 million+
clients

200+
investment professionals

400+
investment mandates

15+
distribution channels

While the Team's breadth of experience and expertise is extensive, what we pride ourselves on is our performance-driven culture of open intellectual debate to help inform better investment decisions for our clients.

While debate is ongoing, our annual offsite allows us to collectively step back and consider significant secular themes that could drive global capital markets in the coming decades, leveraging the combined intellectual capital of our entire Team.

This year we took a wide lens to secular themes ranging from the winners and losers in artificial intelligence (AI) adoption, the headwinds and tailwinds we may see from impending climate change policy initiatives, how changing demographics could impact retirement-focused industries, health and wellness trends in emerging markets and closer to home, and lastly, the groundswell of geopolitical change ahead.

Market realities continue to evolve and our investment views pivot accordingly, but we are confident that this vibrant discussion and debate over key themes can help us in our quest to uncover compelling long-term investment opportunities for our clients.

I am pleased to share some of our Team's leading views and how they may shape investment opportunities, capital markets and the broader world for decades to come.

[1] Data as of July 2024. Assets Under Management (AUM) represents assets managed by Scotiabank (through its Global Wealth management division) on a discretionary basis and in respect of which the Bank earns investment management fees. AUM are beneficially owned by clients and are therefore not reported on the Bank's Consolidated Statement of Financial Position. The number of active client accounts for which Scotia GAM and its affiliates earn investment management fees.

Investment professionals includes registered individuals employed by Scotia GAM and its affiliates.

Investment mandates includes investment strategies managed by Scotia GAM and its affiliates across different brands and global regions.

Distribution channels represent different types of financial intermediaries through which Scotia GAM makes its investment solutions available.

Global investing theme: Artificial Intelligence – the hype and hope for increased productivity

Artificial Intelligence (AI) has been the subject of considerable hype and hope as a dominant market theme for the past two years. The launch of GPT 4.0 by OpenAI in November 2022 was a watershed moment and a wake-up call for the transformative potential of AI-related tools. To help manage the scope of the analysis, the Team focused on areas where there is reasonable visibility on potential winners or losers from the adoption of AI. The Team reviewed a few interesting use cases for AI, but avoided attempting a comprehensive overview of potential use cases.

SUBTHEME: INPUTS

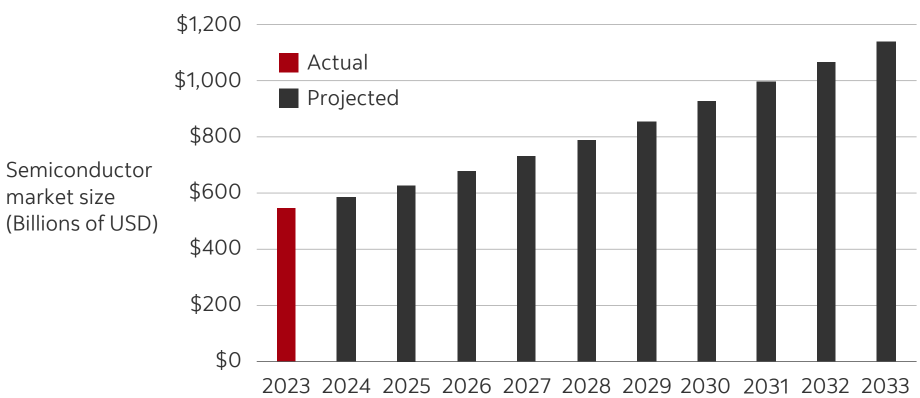
NVIDIA has been the poster child of AI and has dominated markets. Demand for NVIDIA GPU (Graphics Processing Unit) semiconductors has exploded with the ramp up in AI adoption, with NVIDIA GPUs currently holding an 80% market share for global AI applications.

As a testament to the strength of the Scotia GAM culture, there was a respectful debate on the outlook for NVIDIA stock. One Senior Portfolio Manager felt NVIDIA was a momentum stock to be wary of, while another believes the best days are ahead for company. The Team is perfectly comfortable maintaining and encouraging differing views. A prevailing view in Team discussions, is that even in a best-case scenario for NVIDIA, competition will likely grow from new hardware AI accelerators with different performance trade-offs.

The adoption of AI that has led to an increased demand for semi-conductors, which in turn creates higher demand for commodities needed to produce the chips, such as platinum alloys and gold. Finding effective ways to invest in those commodities was an interesting topic of discussion. Another key commodity input to support AI adoption is electricity. The computing power behind AI applications requires immense amounts of electricity. The data centres that support AI developers are in specific counties and states in the U.S. and in other countries. The Team discussed where key data centre clusters are located and the power suppliers that will likely benefit as AI-related power demands grow.

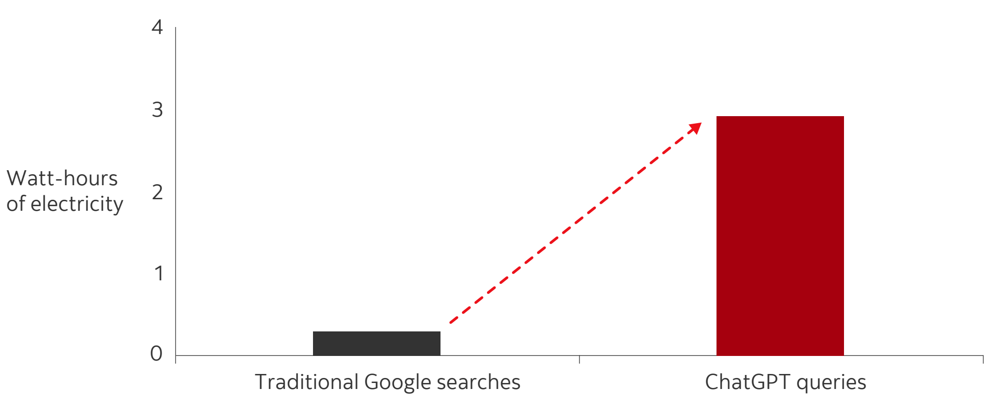
AI models require large datasets to train on, and proprietary data is being labelled as the modern equivalent of oil as a foundational input. Two key vendors stood out to the Team as best positioned in the coming decade.

Demand for semiconductors is projected to increase



Source: Precedence Research, as of April 2024

Increased power demand from ChatGPT queries vs. traditional Google searches



Source: International Energy Agency, Electricity 2024 Report

SUBTHEME: THE ENGINE

The scale of computing power required to support AI models and applications is immense. A small number of large-scale data centre providers that can reliably supply the needed computing power have already been, and are expected to remain, key beneficiaries of current trends. Although seemingly obvious winners from AI-related trends, they appear, based on available information, well positioned to continue to generate strong investment returns.

Where the Team had considerable debate and found it hard to identify high conviction investment ideas was in the actual developers of AI models, such as OpenAI. While OpenAI and others have gathered considerable investment, we believe it is still too early to identify clear winners among the model developers. Uncertainty remains regarding the business model, there is the risk that certain types of AI models become commoditized.

The Team also had questions about how regulation would approach the ethics of AI models, and there were significant concerns about how compensation for training data would impact the potential investment returns of AI model developers over time. The Investment Team effectively had more conviction in a 'picks and shovels' approach to investing in the AI theme.

SUBTHEME: OUTPUTS

Attractive potential use cases for AI were reviewed in healthcare and consumer industries. Specific companies have an edge in AI-powered innovations and should be able to drive investor returns. An interesting contrarian thesis was reviewed for a customer service company, left for dead by the market as a likely victim of new AI-powered tools. However, the company does have a history of surviving apparent existential innovations.

No shortage of AI investment – Top 12 biopharma companies placing bets on AI

abbvie
AMGEN
AstraZeneca
Bristol Myers Squibb
Johnson & Johnson
Lilly
MERCK
NOVARTIS
novo nordisk
Pfizer
Roche
sanofi

Source: Bernstein, Global Healthcare Report, 2023

SUBTHEME: KEY RISKS REMAIN

While the transformative potential of AI creates opportunities, the right amount of caution was debated by the Team. Many historical innovations were accompanied by speculative bubbles and subsequent crashes in investor returns.

Regulation is still catching up to AI innovations. How regulation will handle AI ethics and who gets compensated for data used to train AI models are still unclear. Unintended consequences such as increased levels of misinformation, unemployment from job disruptions, and unforeseen contributions to political tension are significant risks that could eventually impact investment outcomes in different companies.

Global investment theme: Opportunities in addressing climate change

The Team deliberately avoided engaging in a debate about the impact of human activity on the climate. The scope of the discussion acknowledged the challenges that come with a changing climate but focused on the potential opportunities for investors. Climate change is having a profound impact on government policy choices around the world – and policy initiatives, like the U.S. Inflation Reduction Act for example, can provide tailwinds for many companies.

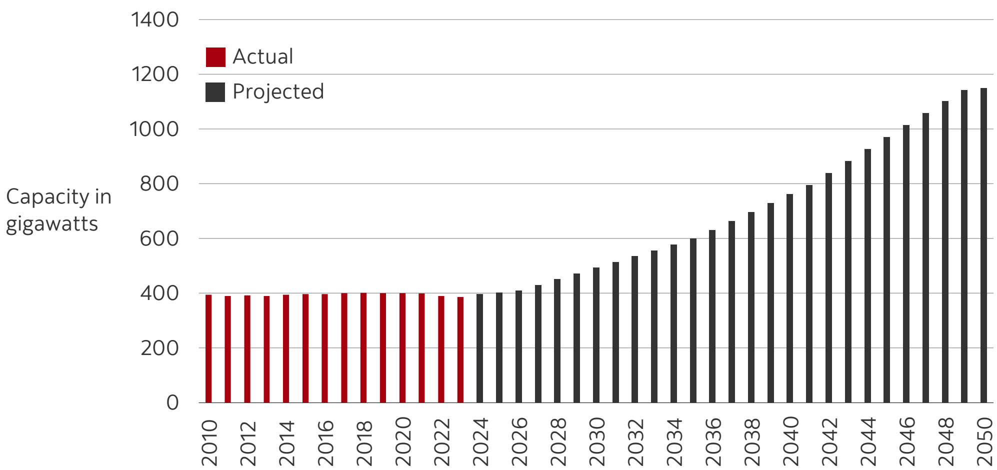
SUBTHEME: THE SEARCH FOR LOWER CARBON ENERGY SOURCES

There is significant global policy support for lower carbon energy sources, such as wind and solar power. While headline economics for wind and solar continue to improve, they are also hampered by intermittency, permitting challenges, and supply constraints on key commodity inputs such as copper. While opportunities exist in wind and solar, the Team felt the upside potential was larger in nuclear.

Despite lower carbon footprints, nuclear remains underpenetrated in the global power generation mix. With the advent of small modular reactors and other enhancements, governments are increasingly considering nuclear power in their mix. Multiple new nuclear facilities are in development in the U.S., while 22 countries signed a pledge to triple their nuclear capacity by 2050. Nuclear growth is projected to rise between 24% and 300% in the same time frame. The expected rise in nuclear power generation will likely create significant opportunities for contractors with nuclear expertise and uranium miners.

Despite objective and open analysis, the Team agreed that it is difficult to find conviction in the long-term outlook for thermal coal suppliers.

Nuclear capacity is projected to grow significantly



Source: International Atomic Energy Agency, Climate Change and Nuclear Power Report 2024

SUBTHEME: REGENERATIVE AGRICULTURE

Regenerative agriculture is a more sustainable approach to farming that focuses on soil health, crop diversity and rotation, low tillage, integrated livestock farming, and improved efficiency to reduce the requirements for fertilizers and pesticides that can negatively impact the environment.

Regenerative agriculture has also demonstrated tangible benefits for humans, including increased nutritional value and a reduction in human toxicity. Many companies in industries that rely on agriculture, such as fashion and food, have committed to regenerative agriculture sourcing to improve their brand image. Specific bioscience and industrial equipment companies are well positioned to satisfy the requirements for regenerative agriculture.

SUBTHEME: ELECTRIFICATION

Assuming electricity is generated by lower carbon power sources, converting transportation and industrial equipment to electric power is a key initiative for most countries in the world. Electric vehicles (EVs), in particular cars, and other industrial uses are the main focus of incentives.

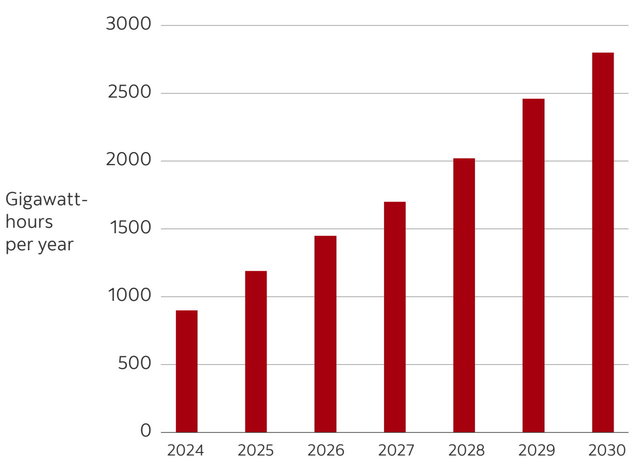
Considerable debate centred around the outlook for car manufacturers that invest in EV development. The potential for actual contribution to investor returns from EV sales was viewed as tenuous at best given current realities. The exceptions noted were a small number of pure-play EV manufacturers that benefited from smaller scale and lack of legacy fixed costs to manage.

Significant advancements in EV battery technology, and/or shifts in consumer preferences would be required to make the overall investment opportunity from EVs more compelling. While EVs are likely to remain a meaningful portion of global vehicle sales, meeting stated sales targets or getting to a dominant portion of global sales will remain a challenge.

Investing in top-tier producers of commodities, such as lithium or copper, and manufacturers of electrical components for industrial uses were viewed as more compelling ways to gain exposure to electrification at this time.

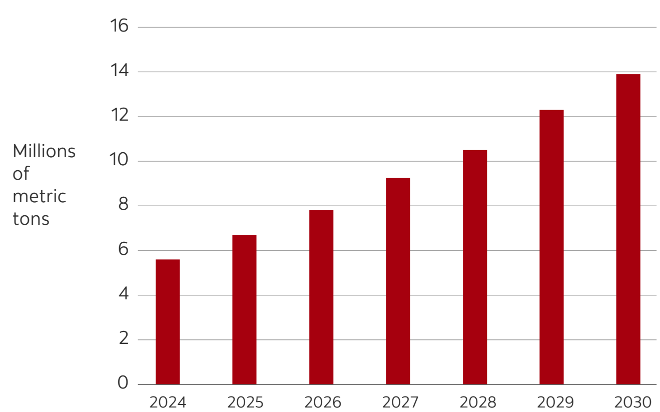
Increases in demand for batteries will drive demand for related commodities

Projected global demand for lithium-ion batteries



Source: Bloomberg, as of 2021

Projected global demand for battery related metals (Copper, aluminum, phosphorus, iron, manganese, graphite, nickel, cobalt, lithium)



Source: Bloomberg, as of 2021

SUBTHEME: IMPROVING EFFICIENCY

Companies across sectors that are already efficient and best-in-class from a greenhouse gas (GHG) emissions standpoint should be well positioned against competitors, as policy initiatives impose costs on emissions around the world.

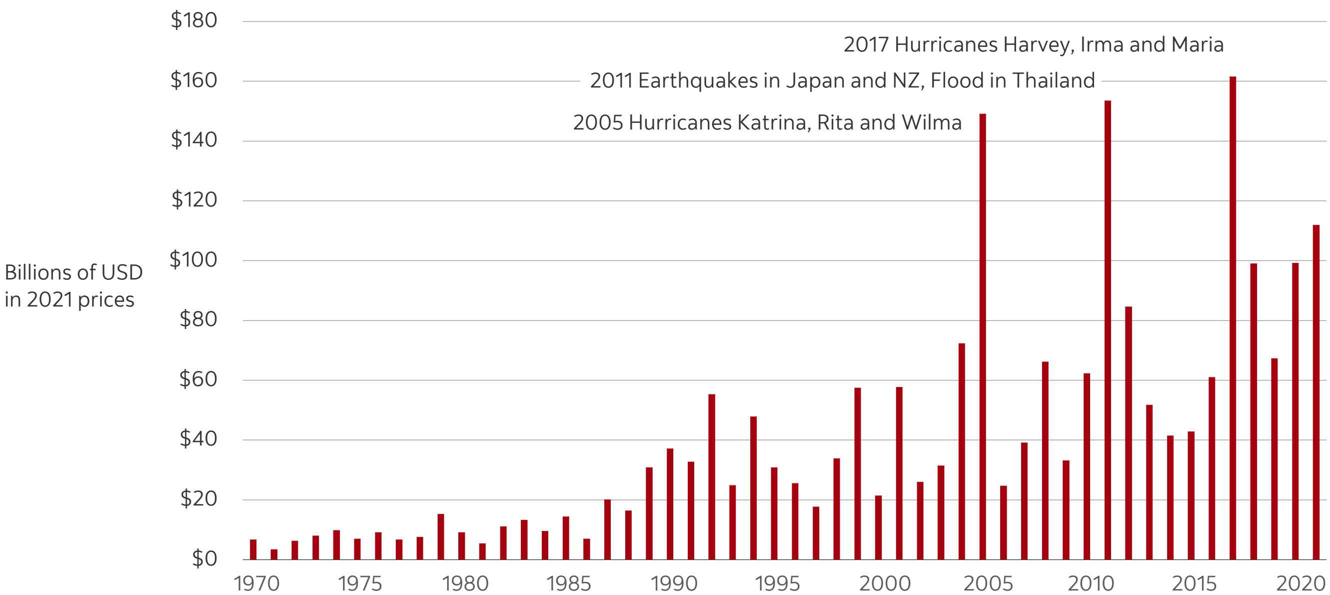
Real estate investment trusts (REITs) that are willing to invest, will have the opportunity to improve efficiency through innovative designs, but also new 'greener' building materials. Those REITs will also have to invest in extreme weather resiliency, depending on location. The offsite discussion focused on one of the largest and most efficient REITs in the world as a strong opportunity, given that real estate accounts for 40% of global GHG emissions.

Not only will efficient buildings be attractive to tenants looking to reduce their own carbon footprint, but certain REITs, like the one discussed, have invested significantly in solar panels on, otherwise idle, rooftop spaces, to generate increasingly meaningful additional revenues and cash flow for investors.

SUBTHEME: INSURANCE

The increasing frequency of extreme weather events is driving up claim costs for property insurers. That trend is expected to increase even more over time. Although insurance providers may try to exit certain geographies, pressures are likely to persist on their business fundamentals and margins. There was agreement that analysis of property insurers will have to be especially mindful of regional exposure in the future to separate attractive companies from those to avoid.

Insured losses continue to increase over time



Source: Swiss Re institute, as of 2021

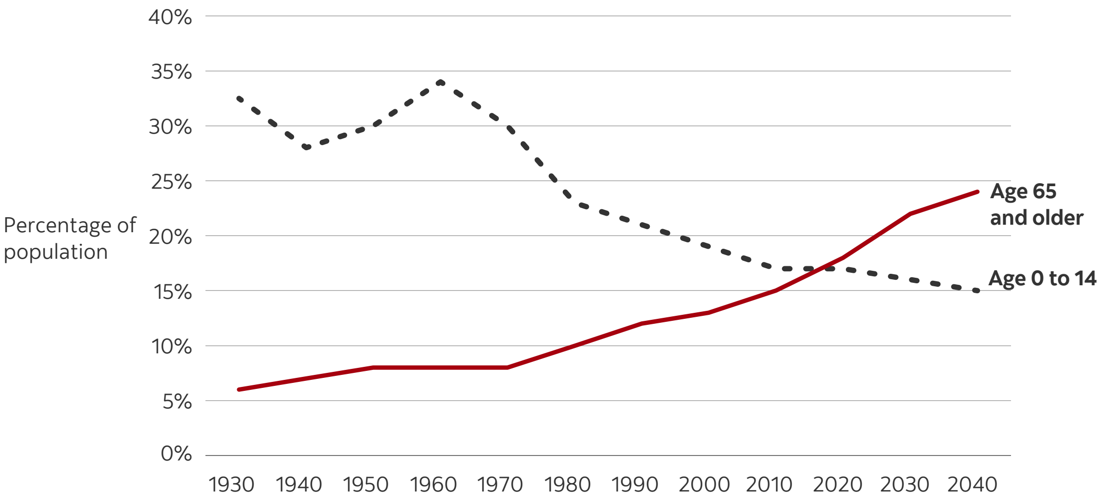
Global investing theme: Impact of changing North American demographics on retirement

A wide range of research confirms that spending patterns shift throughout a person's life cycle. With North America's population ageing, spending patterns are expected to shift, carrying significant implications for a variety of industries. The Team focused on North American trends but noted that another potential shift in spending patterns will emerge from immigration trends that will transform the cultural mix of North American societies. In terms of investment implications, the discussion focused on likely beneficiaries as spending patterns shift.

SUBTHEME: SENIOR HOUSING

To further magnify the details of demographic trends, the population over 80 years of age is expected to grow at more than 4% per year in the coming decade. The Team identified providers of senior housing as well positioned. However, key attributes to identify attractive providers include predominant reliance on private pay tenants and modest exposure to long term care.

In Canada, the population is getting older (1930 - 2040)

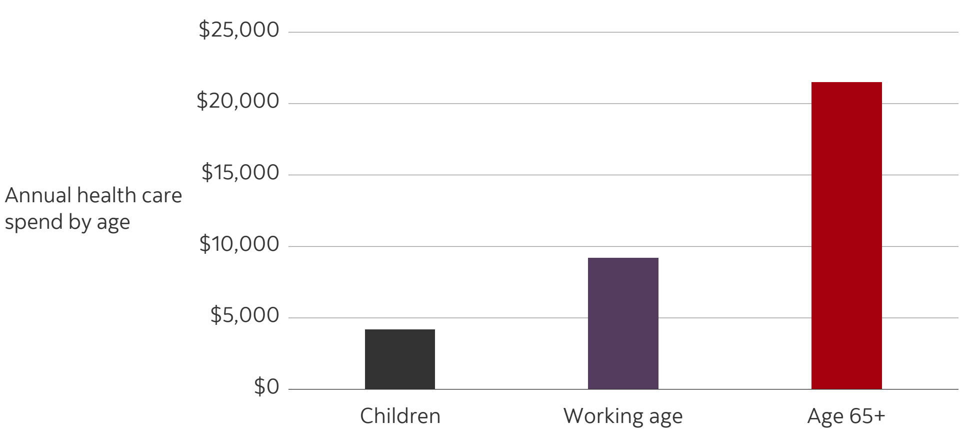


Source: Environics Analytics, Statistics Canada, as of 2023

SUBTHEME: HEALTHCARE

Another obvious beneficiary of an ageing population is healthcare providers as spending on healthcare increases dramatically with age. Managed care companies that provide health insurance and coordinate care should benefit from increased demand. Although costs per patient will likely increase for the providers, their short repricing cycle for policies allows them to maintain strong margins over time. Medical device companies, those producing artificial joints in particular, should see strong growth in demand.

Expenses related to healthcare increase with age



Source: U.S. Centers for Medicare and Medicated Services (CMS), U.S. Personal Health Care Spending by Age and Sex 2020

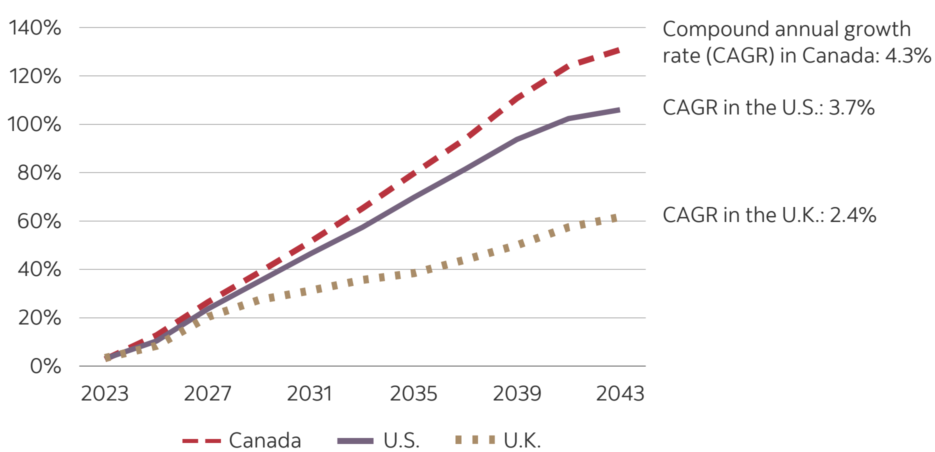
SUBTHEME: LEISURE

For households with sufficient retirement savings, a common shift in priorities is to spend more on leisure and enjoyment during retirement. Data already confirms that a dominant source of demand for travel cards and awards points cards, cruise lines, luxury cars, and niche hobby purveyors tends to be from older customers. The Team debated the best names and companies to take advantage of that expected shift in demand. Cruise lines were a topic of much debate as the highly levered capital structures of cruise lines give serious concern. However, some on the Team had high conviction on the outlook for demand and the delivery of potentially strong returns through deleveraging.

SUBTHEME: DEATH CARE AND FUNERAL SERVICES

Unfortunately, after all taxes are paid, another life event is tied to an aging population. The Team reviewed a small number of publicly traded opportunities in the death care industry. An often-overlooked niche business, death care providers have historically performed well for investors through consolidation of a fragmented industry, while secular trends provide a continued attractive outlook for business fundamentals.

Growth in 80+ year old population is increasing



Source: StatsCAN, U.S. Census Bureau, U.K. Office for National Statistics, as of 2023

SUBTHEME: RETIREMENT PLANNING

While saving for retirement is important, support in managing household finances in retirement is also a vital element. Various ways to take advantage of greater financial planning demand were discussed, however annuity providers stood out as unique beneficiaries of an aging population. While often attractive for clients, annuities have at times delivered a poor outcome for providers. The Team identified and discussed one of the top annuity providers in the U.S . that has competitive advantages in scale, brand, and diversification.

Global investment theme: Global health and wellness

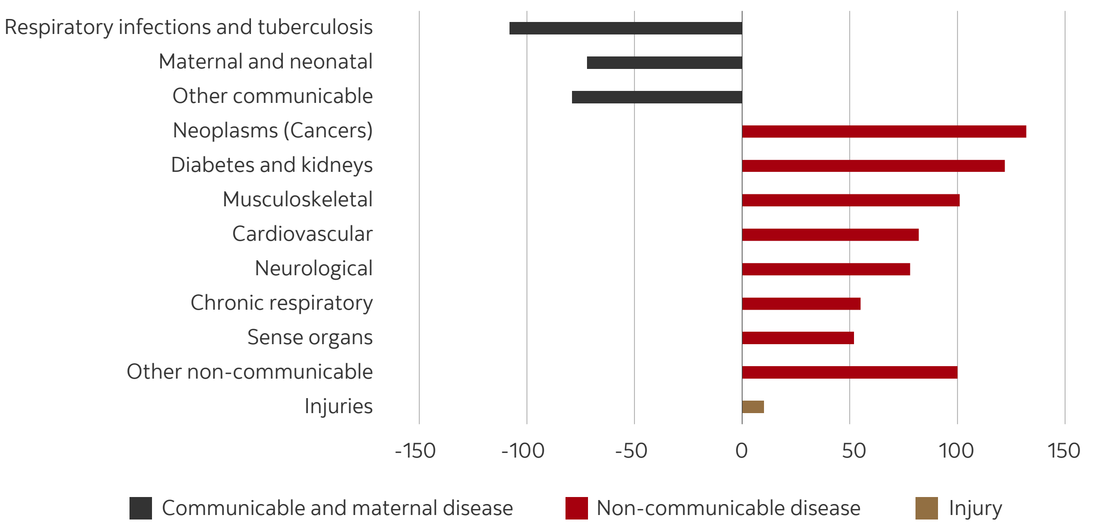
While with demographics, we focused on North America, here we take a more global perspective. Populations are ageing in many developing countries and have a rising middle class that is changing dietary habits in a way that contributes to a higher incidence of various diseases.

SUBTHEME: CHANGE IN GLOBAL HEALTH CHALLENGES

Shifts in access to clean water and clean air are expected to shift the key global health challenges from neonatal and communicable diseases to diseases that are more associated with older age, such as musculoskeletal or cardiovascular disease.

The amount spent on healthcare as a percentage of GDP is likely to grow globally in coming decades, but the focus of that spend should also evolve.

Key global health challenges are forcasted to shift



Source: Financial Times, as of May 2024

SUBTHEME: HEALTHCARE INNOVATION

The Team agreed that healthcare innovation from private companies will be essential to deal with these global challenges, which will create significant investment opportunities. Innovations will be essential, not just in new pharmaceutical drugs and treatments, but also new payment models for healthcare, new treatment locations and greater spending on preventative care.

From a different perspective, the Team reached similar conclusions on the demographics secular discussion on beneficiaries from an ageing population and higher healthcare spending. Top-tier managed care companies can help manage costs for the healthcare system, but those that are vertically integrated are better positioned to innovate with new healthcare delivery models. Medical device companies focused on helping with longevity-related ailments, such as providing artificial joints, will benefit from higher demand.

Additional opportunities were identified in companies that are facilitating health treatments outside of traditional hospitals. The same treatment can cost dramatically more inside of a hospital than if it is provided in smaller clinics or similar locations. A leading provider of ambulatory surgical centers, charges less for many treatments, yet still has a higher margin and lower capital intensity than traditional hospitals.

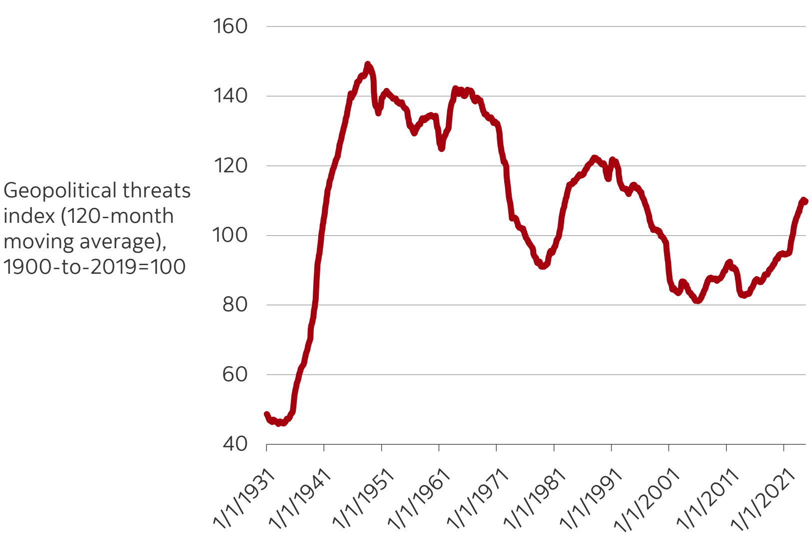
Unfortunately, often too little attention is paid to preventative healthcare interventions that can help avoid diseases and lead to better, more cost-effective outcomes for both patients and the healthcare system. However, a leading bio-solutions company in Europe continues to innovate to improve the nutritional content of food while reducing waste. It has a strong runway for growth and is often overlooked as a healthcare-related investment opportunity because it is in the Specialty Chemicals Global Industrial Classification Standard (GICS) sub-industry. There are other peers whose potential the Team felt may be overlooked, because they are not specifically in the healthcare sector.

One additional potential factor that may end up being dominant in coming decades is Glucagon-Like Peptide-1 (GLP-1) drugs that help lower blood sugar levels and promote weight loss, such as Ozempic. The near-term implications of GLP-1 drugs has been a key topic of discussion for the Team, given their almost immediate impact on the healthcare, food and beverage, and other industries. However, the Team felt there are still significant questions about side effects, long-term health impacts, and health insurance economics to have an informed discussion about the secular implications.

Global investing theme: Geopolitical uncertainty is on the rise

After two decades of relative stability since the Cold War ended, quantitative analysis indicates that global geopolitical threats are once again on the rise. Geopolitics is a broad area to define and there are many key issues that could have profound implications for investment decisions. To manage the breadth of the analysis our Team identified specific sub-themes to assess for investment risks and opportunities.

Geopolitical threats are increasing



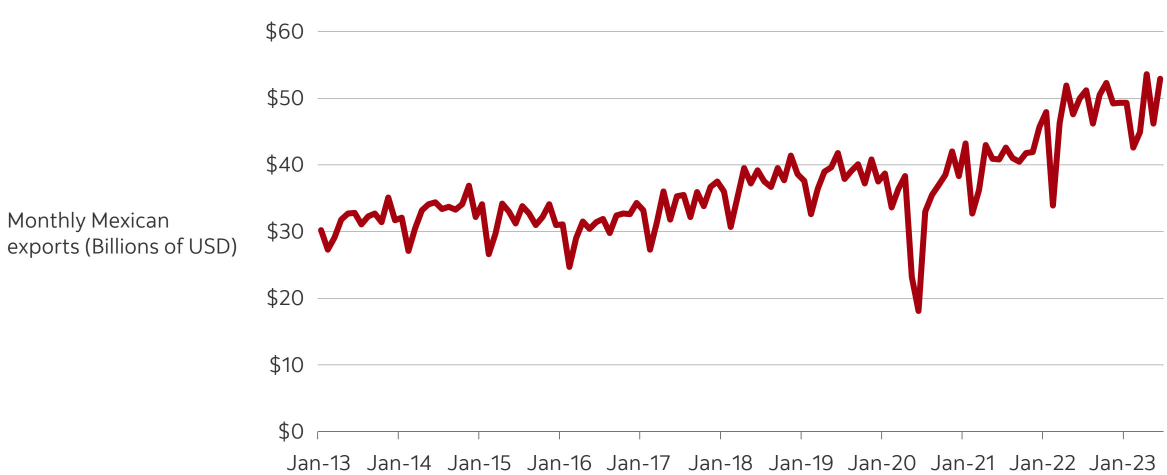
Source: PolicyUncertainty.com, Haver Analytics, as of October 2024

SUBTHEME: 'NEARSHORING'

The globalization of supply chains has been a multi-decade secular theme that accelerated with China's joining the World Trade Organization (WTO) in 2001. Globalization helped lower costs and drive higher margins for companies across many sectors. However, globalization also resulted in supply chain concentration and dependence on certain countries, most notably China. COVID-19 exposed the lack of resiliency that comes with supply chain concentration, while geopolitical competition with China raises concerns about the unbalanced dependence on Chinese suppliers.

The globalization trend appears to have peaked with 'nearshoring,' the practice of outsourcing business processes to a nearby country, having become an important emerging trend. The Team identified specific additional companies across industries highlighted as potential opportunities as global supply chains diversify away from China.

Mexican exports swell on increasing U.S. demand



Source: National Institute of Statistics and Geography, as of June 2023

SUBTHEME: ENERGY SECURITY

A compelling narrative was shared that natural gas will likely remain a key component of the global energy mix, even as the energy transition to more renewable power continues. Natural gas is expected to remain a key input for electrification as it is usually paired with renewable power to stabilize power supply given the intermittent nature of renewable power sources.

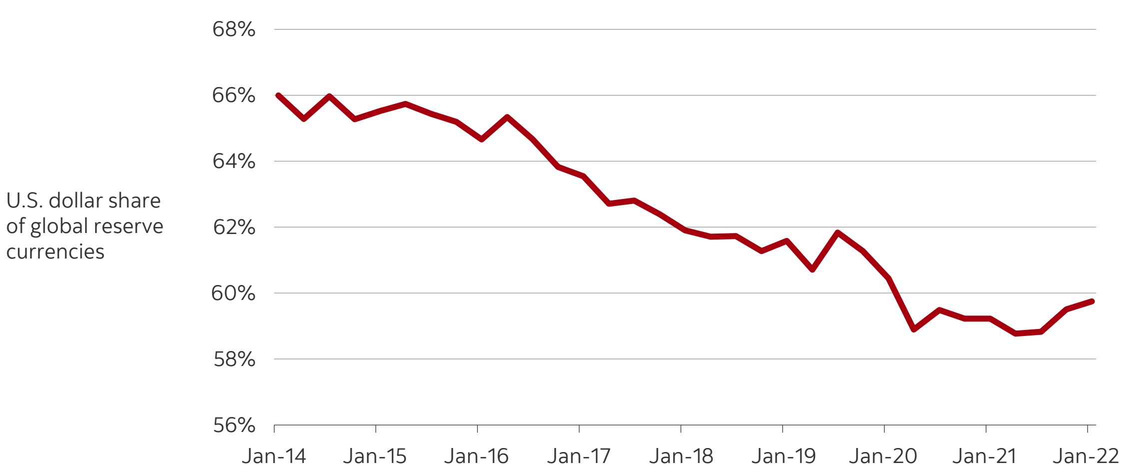
Significant amounts of global oil and gas reserves are in volatile regions (e.g., Middle East, Russia, and Africa) and controlled by cartels. Stable sources of long-term supply in favorable jurisdictions will have growing strategic importance (e.g., Germany, Nord Stream). The U.S. shale basins have been a large source of incremental energy supply; however, shale producers are rapidly depleting Tier 1 inventory and there are open questions about the future sustainability and economics of their supply. The Western Canadian Sedimentary Basin remains a massive source of supply favourable to Western nations, with predictable economics, decades of proven reserves, and improving emissions profiles. A small number of best-in-class Canadian producers were discussed as well-positioned in coming decades to supply the global demand for natural gas.

SUBTHEME: 'DE-DOLLARIZATION'

There has been a global shift away from the U.S. dollar, also known as 'de-dollarization'. The U.S. dollar has historically been the dominant global reserve currency and has been a safe-haven asset through periods of geo-political volatility, however it appears that its dominant position is evolving. The declining geopolitical strength of the U.S., concerns about its fiscal position (with debt now above 120% of GDP, according to the International Monetary Fund), and an increasing U.S. M2 money supply are combining to erode the primacy of the U.S. dollar as the global reserve currency.

Several governments, central banks, and private investors around the world are looking to diversify their foreign exchange reserve holdings, while cross-border payments are moving towards other options such as the Chinese yuan, Indian rupee, and the BRICS local currency payment project. The price of gold is expected to benefit from this trend, and the Investment Team debated whether direct physical gold, gold producers, or other vehicles were the best way to take advantage.

Reliance on the U.S. dollar continues to shrink



Source: International Monetary Fund, as of January 2022







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To do this, our multi-disciplined Investment Teams draw on decades of portfolio management experience and firmly held principles, aiming to deliver high-conviction, active investment management that is supported by a robust risk management framework.

As one of Canada's largest asset managers, Scotia Global Asset Management and its affiliates offer a wide range of choice. We serve an array of clients through multiple brands and distribution channels, all of which are wholly committed to enriching our clients' futures with outstanding investment solutions delivered in partnership with comprehensive advice. For over 65 years, we have continued to evolve to best steward our clients' assets so they can reach their financial goals.

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