Morgan Stanley

INVESTMENT MANAGEMENT

Addressing Major Changes Relevant to Long-Term Responsible Investors

CALVERT VIEWPOINT | April 2023

Calvert

As we settle into 2023, we believe long-term responsible investors focused on risk management and opportunity capture, must consider material changes impacting four areas:

1 Changes to the global energy system, both in the existing fossil fuel system and in the development of a distributed, lower carbon system, are accelerating and revealing challenges for companies globally.

2 Demographic changes continue to impact the workforce and the ultimate size of consumer markets globally; the vast majority of companies have yet to fully adapt to these massive changes.

3 Increasing costs, including interest rates, wages and raw materials, present unique challenges to every industry; the result will be greater differentiation between companies that are able to manage their cost structure and improve productivity and those that are less efficient or stranded in high fixed cost models.

4 New costs in the form of priced externalities, implemented by governments or through market action, are taking effect serving to raise costs, influence corporate and consumer behavior.

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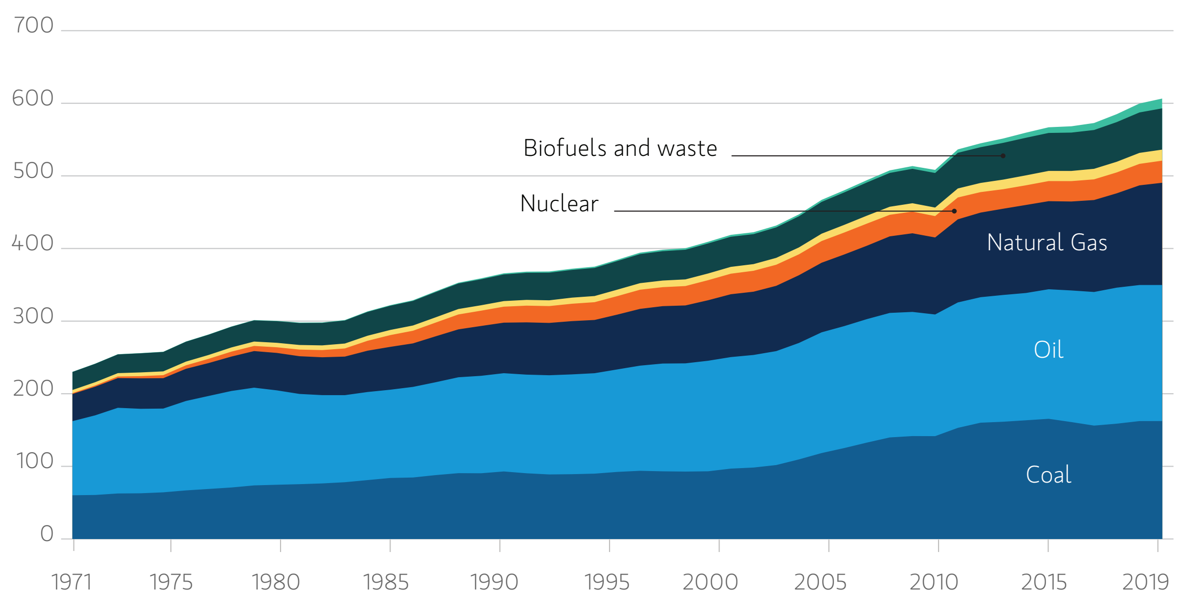
Changes to the Global Energy System

Calvert has historically noted two major risks to the fossil fuel based global primary energy system: geopolitical risk and product safety related to carbon emissions. These risks create a potential for innovative competitive products to disrupt fossil fuel as the world's primary energy source. We are currently seeing accelerated disruption due to a spike in these two risk areas.

First, Russia's invasion of Ukraine and the weaponization of fossil fuels by both Russia and the U.S.-led Western Coalition have created the imperative to simultaneously strengthen the fossil fuel infrastructure globally and hasten the development of an alternate, clean and distributed system that will compete with fossil fuels as the world's primary energy source.

Exhibit 1 shows that fossil fuels continue to make up a majority of the world's primary energy supply. Shifting to clean sources such as hydro and nuclear will be a massive transition, requiring decades of work and innovation, while also posing threats to many large, existing businesses.

Exhibit 1
World Total Supply by Source: 1971-2019



Source: International Energy Agency 2021

Second, atmospheric carbon dioxide, methane and other greenhouse gas concentrations have reached levels that may be contributing to weather and environmental problems, with material economic impact. As a result, governments have taken actions to increasingly stimulate the development of the clean energy system through a series of financial incentives and externality pricing mechanisms.

The Inflation Reduction Act Bill in the U.S., the EU's Green Deal Industrial Plan and Border Tax on carbon, and the development of regulatory frameworks across global securities markets for corporations to disclose their carbon emissions are all major efforts to accelerate the development of a clean energy system.

The geopolitical and regulatory pressures to transition our energy system must be factored into long-term investment decisions. While there are clear contributors and benefactors in industries like Utilities, Mining and Metals, which provide products and services that can directly facilitate the necessary changes, all industries are dependent on the energy system and will be affected by the transition. Businesses dependent on fossil fuels face risks, but also could take advantage of many areas of potential opportunity across the energy system and related industries.

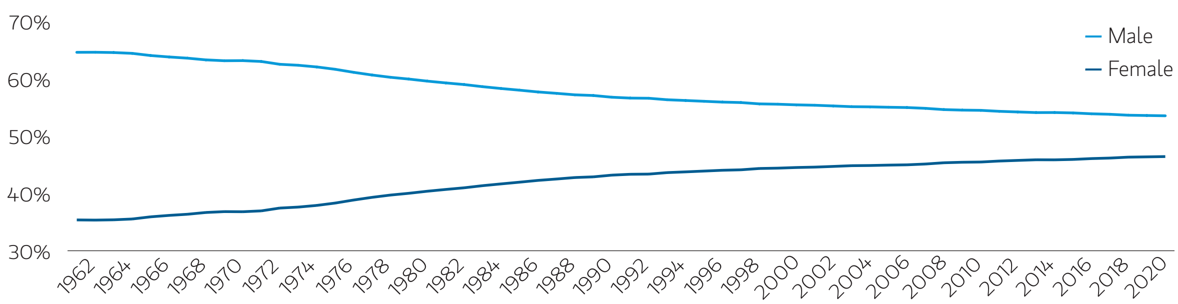
The current energy crisis has created a complex Environmental, Social, and Governance (ESG) landscape where long-term environmental risks are being precariously balanced against short-term social risks. We believe companies with the potential highest returns will have best in class development operations, be capable of creating positive outcomes for various stakeholders, be able to manage supply chain risks and minimize exposure to adverse political and regulatory changes in an evolving landscape.

Demographic Changes

Major changes have been underway over the past several decades that have altered the human capital risk and opportunity set for corporations. These changes touch upon both gender and race.

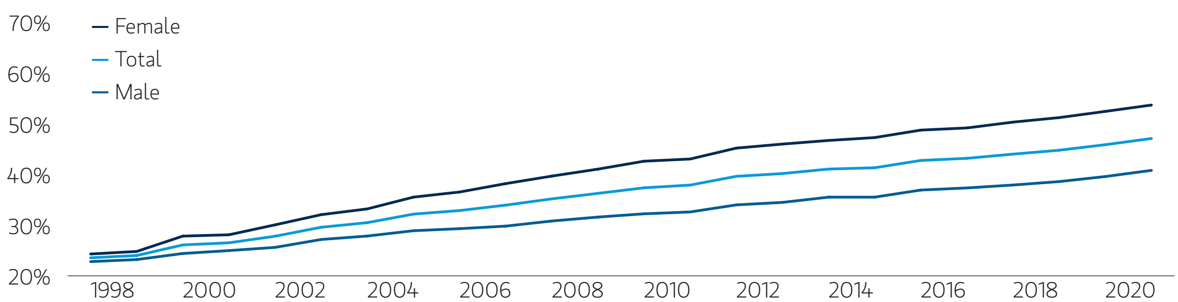
The gap between female and male labor market participation in developed markets is shrinking. Women in OECD countries now outnumber men pursuing higher education.

Exhibit 2
Male vs. Female Labor Force Participation among G7 Countries: 1962-2021



Source: OECD Data.

Exhibit 3
Males vs. Females with Higher Education in OECD Countries: 1998-2021



Source: OECD Data.

In the United States, we've also observed the diversification of the overall population, which has translated into higher levels of educational attainment for racial and ethnic groups other than white Americans. The most dramatic educational increase between 1997 and 2017 was observed among American Indians or Alaska Natives, Hispanics and Blacks.

Exhibit 4
Educational Attainment of Adults Ages 25 and Older by Race and Ethnicity: 1997 and 2017

	BACHELORS DEGREE			ADVANCED DEGREE			BACHELORS DEGREE OR ADVANCED DEGREE		
	1997	2017	Increase	1997	2017	Increase	1997	2017	Increase
All racial and ethnic groups	16.0%	21.3%	33.1%	7.8%	12.9%	65.4%	23.8%	34.2%	43.7%
White	17.5%	23.7%	35.4%	8.6%	14.3%	66.3%	26.1%	38.0%	45.6%
Amerian Indian or Alaska Native	7.8%	13.4%	71.8%	4.4%	7.1%	61.4%	12.2%	20.5%	68.0%
Asian	27.5%	30.7%	11.6%	15.2%	24.7%	62.5%	42.7%	55.4%	29.7%
Black	9.5%	15.3%	61.1%	3.8%	8.9%	134.2%	13.3%	24.2%	82.0%
Hispanic	7.4%	12.2%	64.9%	2.9%	5.1%	75.9%	10.3%	17.3%	68.0%
Native Hawaiian or other Pacific Islander	N/A	18.5%	N/A	N/A	6.7%	N/A	N/A	25.2%	N/A
More than one race	N/A	20.9%	N/A	N/A	11.7%	N/A	N/A	32.6%	N/A

Source: U.S. Census Bureau, Current Population Survey, 1997 and 2017. Notes: In 1997, the only racial demographic categories reported were: Hispanic; White; Black; American Indian, Eskimo, or Aleut; and Asian Pacific or Pacific Islander.

Higher levels of labor force participation and educational attainment by women and ethnic minorities have led to changes in overall employee makeup and boardroom diversity. However, we have yet to see these gains trickle down to the higher levels of women and ethnic minorities in executive and senior management roles. This is a critical issue affecting employee recruiting, retention, turnover, promotion equity and pay equity.

As numerous studies have now proved the linkage between diverse workforces and corporate performance, long-term oriented responsible investors should be demanding greater disclosure and transparency from companies on how they are attracting, retaining and promoting diverse talent.

Higher Costs

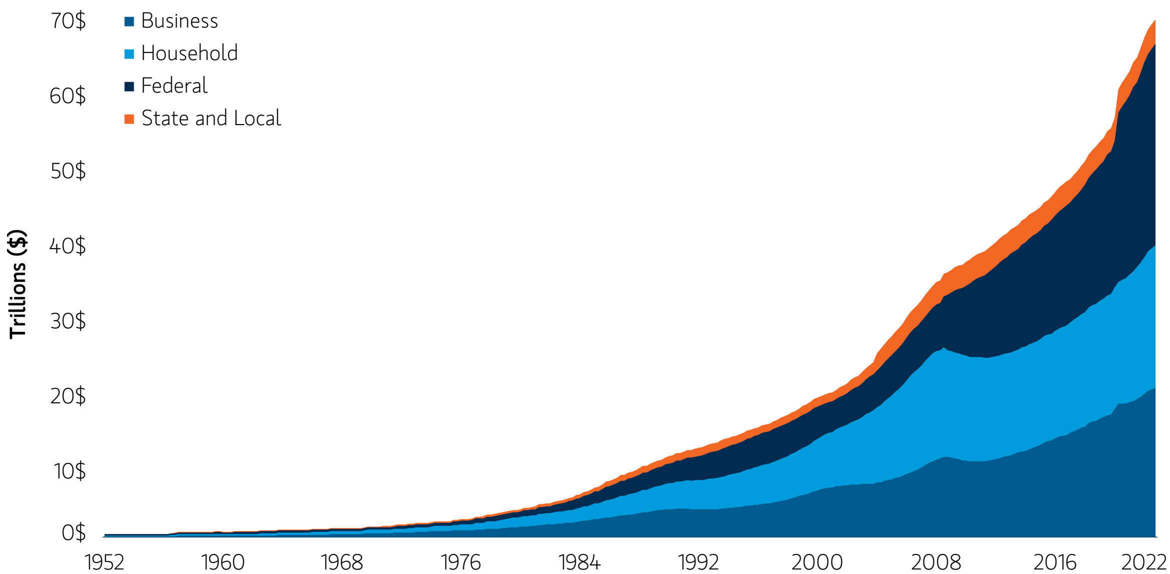
In 2022, we observed an interest rate regime change, brought on by Russia's invasion of Ukraine and the supply chain disruptions that followed. This regime change altered the cost of capital for companies across all industries and depressed valuations everywhere, except energy.

While higher costs create challenges for corporations, they also create greater opportunities for differentiation within industries. When prices are low and inputs are cheap, the payoff for excellence is not as high. But in the current environment, the difference between well-managed and less well-managed companies will become more pronounced. Companies that are better innovators and superior managers of human capital will capture greater market share and a larger share of economic profit.

Long-term oriented responsible investors will need to study not only the companies that are managing their costs, but also those that are innovating to continue to grow and expand in this high-cost environment.

Exhibit 5 reminds us that debt across all sectors has climbed over the past several decades. Higher debt levels put continued pressure on interest rates and therefore cost pressure on businesses and end consumers.

Exhibit 5
Debt in All Nonfinancial Sectors: 1952-2022



Source: Federal Reserve, 2023

Pricing Externalities

Externalities can create positive or negative impacts on society or the environment. When companies affect their local communities in positive ways that extend beyond the products they produce and jobs they generate, economist call these impacts positive externalities. Research and development (R&D) is an example of a positive externality. Conversely, companies also produce negative externalities, as is the case with pollution. Governments around the world are signaling that they are willing to step in to force businesses to address externalities, like carbon emissions and waste, by putting a price on these negative effects.

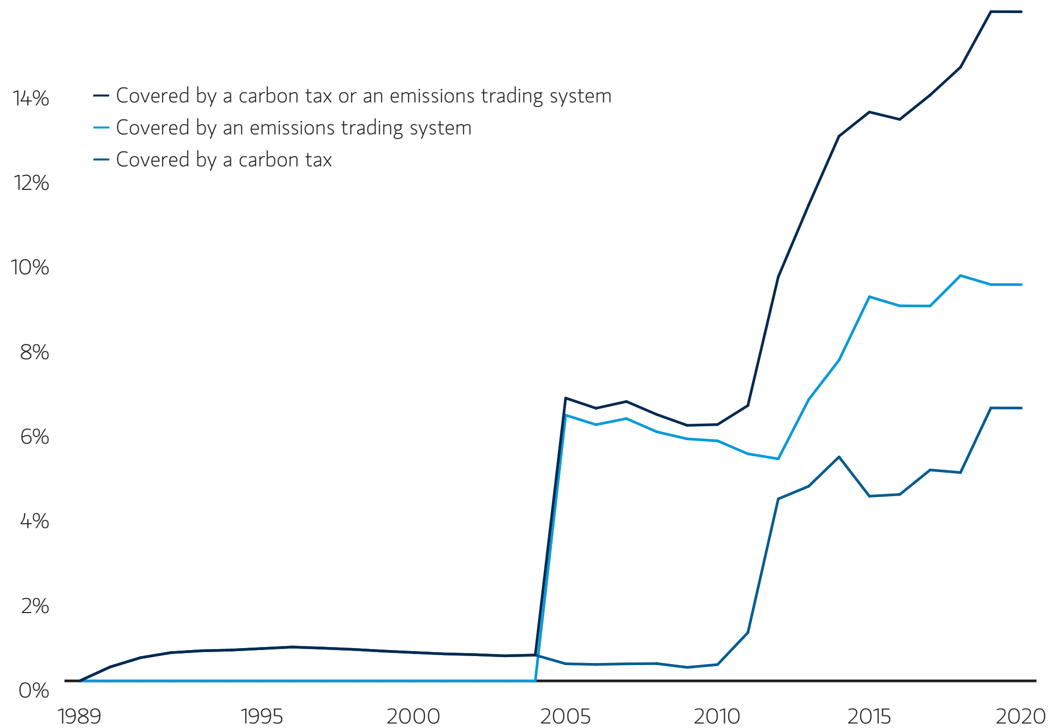
The U.S. Inflation Reduction Act contains various incentives to increase renewable power generation and speed the transition away from fossil fuels. While the act contains more carrots than sticks, the carrots do help to put an implicit price on externalities. And one of the most important sticks is an explicit price on methane emissions, which are a significant cause of climate change. Individual states have taken action as well. California and other jurisdictions have passed legislation to price plastics.

Similarly, the EU has been advancing numerous climate-related laws impacting the business and investment communities. Recent notable actions to price in externalities include a deal to phase out new fossil fuel car sales by 2035 and a border tax imposed on "high-carbon" products. The UK has also launched a consultation on the introduction of its own carbon border tax as part of a broader net zero strategy.

Exhibit 6 does not reflect Chinas launch in 2021 of their national carbon trading market, which seeks to facilitate stricter control of carbon emissions and contribute to the decarbonization of China's economy. Since then, carbon markets now cover 25% of global emissions[1].

Exhibit 6

Share of CO2 Emissions Covered by a Carbon Price



Source: Our World in Data, 2020

It's not just environmental externalities that will get priced. We are observing growing scrutiny and awareness from the medical and scientific communities on the health impacts associated with tobacco, alcohol and highly-processed foods. A recent study on the "commercial determinants of health," a term coined to describe the influence corporations have on what we consume, found that fossil fuels, tobacco, alcohol and highly-processed foods cause three quarters of all global deaths[2].

Warning labels have been imposed on tobacco and alcohol for several years. In September 2022, the U.S. FDA also announced that it will research and propose a food labeling scheme to clearly label foods as healthy or not. We expect to see more efforts to price these social externalities in the coming years.

Long-term responsible investors should take note of these changes as governments have signaled that they are no longer sitting on the sidelines. They are ready to step in and legislate where corporations are unable to self-regulate.

[1] Our World in Data

[2] Commercial Determinants of Health, March 23 2023, The Lancet

ADDITIONAL RESOURCES FROM CALVERT

Our Energy System

- Stop the Leaks

Demographic Changes

- What Has Been Driving Increasing Female Representation in the Global Workforce?
- 99% of Top Companies Agree to Disclose Diversity Data

IMPORTANT INFORMATION

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