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Disruption, ESG, and the Power of Investing in Innovation

EXECUTIVE SUMMARY

- Environmental, Social, and Governance **(ESG) risk analysis** is integral to assessing the long-term competitiveness of any company. ESG risk analysis is considered in this paper in the context of climate change and the social and governance challenges that may result from climate change. Governance is often where shareholders can have the most immediate influence on a company's affairs.

- ESG risk analysis includes the **physical risk** (that a company's physical assets lose value due to fires, floods, pandemics or other climate-related causes) and **transition risk** that occurs as laws designed to mitigate physical risk result in regulatory responses that render a company's assets less valuable. Transition risk may also include society's response to climate change as companies that are slow to respond to societal concerns lose the endorsement of consumers and their **social license to operate**.

- As climate-related physical and transition risks increase, disruptions to business-as-usual are likely to be more frequent and more severe. The intensity of the **disruption/adaptation cycle** is likely to be amplified by the transition to a low carbon economy and create significant opportunities for innovative companies to rapidly win market share. The corollary is that incumbents facing significant ESG risks may rapidly lose market share and market value. Examples are given from the energy sector.

- **Tipping points** in environmental and social risks can cause **severe disruption**, not only when the buildup is slow-moving or abstract, but also when slow-building trends are misinterpreted as unconnected events. The COVID pandemic has demonstrated that, at tipping points, consumers are capable of rapid mass adoption of new behaviours and enabling technologies. Examples are given from the transportation sector.

- Investors in mutual funds should expect **transparent disclosure** of how their investment managers are managing ESG-related risks and identifying ESG-related opportunities. An investment manager should be able to provide its investors with a responsible investment policy that clearly connects the firm's view on responsible investing with the firm's investment philosophy. The identification of material ESG risks should be integrated into the investment research process.

- Pembroke integrates the analysis of non-financial factors, including ESG factors, into its appraisal of the long-term risks and growth prospects of companies through a process of **risk-prioritized inquiry**, engagement, and collaboration. The operative idea is that a company's long-term growth prospects are directly connected to the ESG-related risks and opportunities it faces.

Disruption, ESG, and the Power of Investing in Innovation

Montreal, August 4th, 2020

Pembroke employees continue to work from home and to self-isolate 146 days after the World Health Organization declared COVID-19 to be a global pandemic. Montreal employees are currently under a simultaneous "Rainfall Warning" from Environment Canada and a "Tropical Cyclone Information Statement" from the Canadian Hurricane Center as Tropical Storm Isaias approaches.

We are being affected by increasingly tangible environmental and social disruptions. These are not transient incidents from isolated climate events that will pass and clear the way back to "normal". These are systemic environmental and social shocks that have been predicted by climate scientists for decades and are acknowledged, measured, and tracked not only by policy-makers, but by the world's largest energy companies and reinsurers which are concerned with managing the **transition risk** to a lower carbon economy and insuring against the **physical risks** from a high carbon economy.[1] Environmental disruptions contribute increasingly to the dislocation of vulnerable populations, to climate migration, to denser urbanisation, and to social unrest in migratory destination zones. The risks to investors from these disruptions are categorized as **environmental risks** and **social risks**. These risks are magnified by the **governance risks** that occur when the boards and managements of companies lack sufficient diversity, structure, or alignment of interests with other shareholders, to identify and manage such exigencies while maximising shareholder value.[2] Governance is often where shareholders can have the most immediate influence.

Managing transition risk requires coordinated public policy and a robust private sector response. Private sector innovation that is aligned with public policy and which accelerates the transition to a more inclusive, lower carbon economy can result in dramatic **market-share shifts**. When climate-related disruptions occur, the share shifts can be tectonic in scale. For example, Zoom Communications, which quickly emerged as the dominant communication tool during the COVID-19 pandemic, today has a market capitalisation that is larger than the combined market capitalisation of all ten of the largest passenger airlines in North America.[3] While the airlines could not have prepared adequately for a global pandemic that halted air traffic, their financial flexibility to respond to the pandemic is impaired by the increasing cost to the industry of obligatory carbon reduction projects (transition risk).[4]

In this paper we make the point that ESG analysis is a necessary and inseparable component of analyzing the long-term competitiveness of any company. As physical and transition risks increase, the disruptions to business-as-usual practices are likely to be larger and more frequent. The COVID-19 pandemic has demonstrated that consumers are capable of rapid mass adoption of new behaviours and enabling technologies. The amplitude of the disruption/adaptation cycle is likely to be heightened by the transition to a low carbon economy and to create significant opportunities for innovative companies to rapidly win market share.

Seeing Clearly - Events versus Trends

The COVID-19 pandemic is the sudden materialisation of a long-expected, much warned against climate-related risk that, because it was abstract and possibly distant, was not adequately prepared for. The Intergovernmental Panel on Climate Change (IPCC) warned in 2014 that risks from vector-borne diseases were likely to increase with global warming as the size of infection areas and the duration of the infection seasons increased.[5] In the same year, the

[1] See BP's Energy Outllook 2019 at www.bp.com and MunichRe's treatment of climate change, natural catastrophes, their natural catastrophe loss database, and Climate change risks – A challenge for humanity at www.munichre.com
[2] Collectively, environmental, social, and governance risks are referred to as ESG risks
[3] Zoom has a market capitalisation of US$75.4bn. American Airlines, Delta Airlines, United Airlines, Southwest Airlines, Jetblue Airlines, Alaska Airlines, Hawaiian Airlines, Spirit Airlines, Allegiant Travel, and Air Canada have a combined market capitalisation of US$64.4 billion, Bloomberg data, August 4, 2020.
[4] The airline industry, in an effort to cut emissions by 2.5 billion tonnes in the next 15 years, plans to invest US$40 billion in verified carbon reduction projects through CORSIA, the UN's global offsetting scheme. Source: IAG Air Annual Report & Accounts 2019, page 39.
[5] Intergovernmental Panel on Climate Change (IPCC), The Synthesis Report (SYR) of the IPCC Fifth Assessment Report (AR5), page 69.

World Health Organization, noting the rapid cross-border spread of SARS (severe acute respiratory infections), avian influenza, and Pandemic (H1N1) 2009, attributed the emergence and spread of such diseases to factors including climate change and urbanisation and warned of a significant threat to global health security.[6]

Tipping points in environmental and social risks can cause severe disruption, not only when the buildup is slow-moving or abstract, but also when building trends are misinterpreted as unconnected events. The recent asset-write-downs totalling tens of billions of dollars by international oil majors are an example. While the proximate cause of the write-downs may be low oil and gas prices caused by the shutdown of global travel during the pandemic, the deeper and more lasting causes are likely the growing government and non-government pressure to meet 2050 climate-neutrality targets and associated laws.[7] There is an increasing social and political consensus that the CO^2 emission targets associated with the global warming scenarios in the 2015 Paris Agreement mean that substantial hydrocarbon reserves may become "unburnable carbon" - stranded assets on the pathway to a low carbon economy. The other indication of this trend is the share shift taking place in the industry that is the biggest consumer of oil – the global auto sector. The market capitalisation of Tesla, the all electric leader which is now the world's most valuable auto company, is greater than the combined market capitalisation of nine of the top eleven global auto companies.[8]

Tipping points can also be seen in the social contract. The worldwide support for efforts to combat climate change and the growing momentum behind the Black Lives Matter movement are recent examples of social movements that can influence voters and consumers and have consequences for politicians and companies. Political parties and companies that fail to keep pace with social trends may lose support or even face boycott.

ESG risk analysis includes the physical risk that a company's physical assets lose value due to fires, floods, pandemics or other climate-related causes and the transition risk that occurs as laws designed to mitigate physical risk result in regulatory responses that render a company's assets less valuable. Transition risk may also include the social response to climate change as companies that are slow to respond to the climate emergency lose the endorsement of consumers and their social license to operate. The market share shifts in the energy and transportation sectors appear to have elements of both physical risk and transition risk.

Identifying Risks and opportunities

Investors in mutual funds should expect transparent disclosure of how their investment managers are managing ESG-related risks and identifying ESG-related opportunities. An investment manager should be able to provide its investors with a responsible investment policy that clearly connects the firm's view on responsible investing with the firm's investment philosophy. The identification of ESG risks should be integrated into the investment research process and each investment's long-term return potential and downside risk should be explored within the context of transformations already under way as the world moves toward a lower carbon economy.

Pembroke's Approach

In its responsible investment policy, Pembroke states its belief: "that sound ESG practices can reduce a firm's risk and improve its operational, financial and stock price performance. Pembroke integrates the analysis of non-financial factors, including ESG factors, into its appraisal of the long-term risks and growth prospects of companies through a process of risk-prioritized inquiry, engagement and collaboration." The operative idea is that a company's long-term growth prospects are directly connected to the ESG-related risks and opportunities it faces.

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[6] World Health Organization, Regional Office for South-East Asia. (2014). A brief guide to emerging infectious diseases and zoonoses. WHO Regional Office for South-East Asia.

[7] See for example March 4, 2020 European Union press release at ec.europa.eu

[8] Tesla's market capitalisation of US$274.9 billion is larger than the combined market capitalisation of General Motors, Ford, Honda, Nissan, Fiat Chrysler, BMW, Hyundai, SAIC, and Peugeot. August 5th, 2020 market capitalisation data from Bloomberg.

Risk-prioritized Inquiry and Engagement

Risk-prioritized inquiry means focusing ESG inquiries on those issues which show the potential to affect long-term risk-adjusted returns of a company. Pembroke starts by reviewing the most financially material issues to a company's industry and then researching the level of exposure of the company. To the greatest degree possible, that means identifying the materiality of ESG impacts on the line items in the financial statements: prices and volumes in the revenue mix, cost structure and supply chains, and the cost and availability of capital. For some companies, industry-level risks are a headwind, for others, they are a tailwind. Understanding these risks means engaging with the companies, their customers, and their suppliers to build a 360-degree view of risks and opportunities. When companies refuse to recognize a risk or to face a governance shortcoming, engagement may mean challenging management. Finally, engagement entails reporting our responsible investing approach and our portfolio ESG metrics transparently to our shareholders and other stakeholders. As signatories to the **United Nations Principles for Responsible Investing (UNPRI)**, Pembroke has aligned itself with the leading proponent of responsible investment.

Conclusion

The current trajectory of greenhouse gas emissions is consistent with rising global temperatures and an increase in environmental and social risks from climate change.[9] Accepting that the disruptions we are experiencing may be trends rather than events, investors should put increasing effort into identifying ESG risks and opportunities and consider their portfolio's long-term exposure to physical and transition risks. To learn more about Pembroke's Responsible Investment Policy and approach to managing ESG risk, contact your Pembroke representative or visit www.pml.ca.

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[9] World Meteorological Organization (WMO), WMO Statement on the State of the Global Climate in 2019, WMO-No. 1248, 2020