Environmental, social and governance (ESG) considerations are being increasingly integrated in the decision-making of lenders, investors and firms. This is largely driven by rising concerns about climate-related physical risks (losses as climate-related changes disrupt economic activity and destroy capital) as well as growing awareness of transition risks (the potential for losses resulting from a shift toward a lower-carbon economy).

This ESG Monitor discusses the role of ESG factors in financial markets, covers global developments in sustainable finance, and provides periodic updates on ESG issuance, asset price performance, and ongoing policy initiatives that affect the private sector perception of ESG-related risks.

**Highlights of this ESG Monitor are:**
- The COVID-19 pandemic has contributed to a temporary decline of carbon emissions, but cheaper fossil fuels and fiscal contraints could delay a sustainable long-term reduction of emissions.
- ESG fund flows and asset performance suffered during the COVID-19 market crash, but equities with high ESG scores outperformed.
- ESG debt issuance was resilient so far in 2020.
- Transitions risks associated with the shift from combustion to electric vehicles (EVs) are becoming increasingly apparent.
- Stranded assets in the energy sector are a prominent transition risk, but funding for coal in Asia remains abundant.

Sustainable finance is the incorporation of a broad set of ESG principles in business and investment decisions.

1. Selected Environmental, Social, and Governance (ESG) Issues

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Source: IMF, Global Financial Stability Report (Chapter 6, October 2019).
COVID-19 has led to a drop in emissions, the public supports climate action, but there are challenges

The COVID-19 pandemic led to a large drop in CO2 emissions, but may be short-lived.

Across 14 countries, 71 percent of people believe that climate change is as serious a crisis as COVID-19 ...

2. Global Fossil CO2 Emissions and Carbon Intensity (LHS: Gigatons CO2; RHS: Kilograms of CO2 per GDP)

- Historically, while emissions have always fully rebounded following a crisis, the carbon efficiency (CO2/GDP) has tended to accelerate post crisis
- Chinese emissions data suggests a V-shaped rebound

... and 65% believe that climate change should be prioritized in the economic recovery.


- Support for a green economic recovery is highest in EM, lowest in the US and Germany.

Lower carbon prices, cheaper fossil fuels, and fiscal constraints could delay progress toward lower emissions.

5. Carbon Price in European Union Emissions Trading System (Euro per ton)

- Carbon prices in the EU have declined but remain above pre-2018 levels
- Fiscal space to fund investment in the energy transition is more constraint in many countries
ESG fund flows and asset performance suffered during the COVID-19 market crash, but equities with high ESG scores outperformed, primarily due to lower commodity and higher tech exposure.

**ESG fund flows rebounded in April.**

6. Overall Equity and Bond Flows into ESG/SRI Funds (Billions of US dollars; latest end April)

- Flows into equity ESG funds remained positive even in March
- Bond ESG funds saw outflows in March, but inflows resumed in April

**Equities with high ESG scores outperformed through the COVID-19 crash.**

8. S&P Global 1,200 Equity (High and Low ESG Baskets) (Index; Normalized to 100 as of End-19)

- Global equities with high ESG scores outperformed equities with low ESG scores significantly since mid-March, partly due to less exposure to commodities and higher exposure to tech
- High ESG equities outperformed across advanced economies and EM

**Climate change-themed global equities performed in line or outperformed conventional global equity indices.**

7. MSCI All-Country World Index (ACWI) and Various ESG Indices (Index; Normalized to 100 as of end-2019)

- Climate-themed exclusionary indices performed in line
- The broader thematic MSCI Global Environment index outperformed

**Climate adjusted bond indices slightly underperformed.**

9. FTSE World Government Bond Index and Climate Adjusted Index (Index; Normalized to 100 as of Jan 2, 2020)

- The climate adjusted WGBI tilts toward sovereigns with lower exposure to climate risk
ESG debt issuance was resilient in Q1 2020 relative to 2019 despite difficult market conditions.

10. Global Sustainable Debt Issuance (2020 as of April 8) (Billions of US dollars)

- Sustainable debt issuance for Q1 2020 stood at $103bn compared to $87bn for the same period in 2019

11. Global Sustainability-linked Loans (Billions of US dollars)

- European banks are dominating in sustainability-linked loans
- Sustainability-linked loans are predominantly to non-financial corporates. 84% are revolving credit facilities and 16% term loans (Moody’s)

Transitions risks associated with the shift from combustion to electric vehicles (EVs) are increasingly on the industry’s and investors’ minds

12. Auto Equity Performance (Index; Normalized to 100 as of Jan-17)

- Investor focus on the shift to EVs has contributed to Tesla’s stock surge ...
- Tesla quickly recovered losses after the COVID-19 sell-off, unlike its competitors, suggesting that investors are confident that low oil prices will not derail the shift to EVs

13. Auto Market Capitalization (Billions of US dollars)

- ... making the company one of the most valuable global automakers despite comparatively small production.
- Tesla’s market cap is close to 100bn, exceeding car makers with much larger volumes
- BYD, a Chinese EV manufacturer, is also highly valued
EVs are projected to have lower purchase prices than combustion cars in the mid-2020s.

14. US EV and Internal Combustion Engine Vehicle Pre-tax Retail Prices (Real 2018 thousands of dollars)

- Recent news on faster-than-expected declines in battery prices suggest that EVs could be cheaper than comparable combustion vehicles even earlier

Currently EV subsidy schemes are in place in many countries and further EV support in the context of post COVID-19 fiscal stimulus is under discussion.

15. Battery EV Purchase Assistance (US dollars)

- Most advanced economies and some EMs, notably China, provide subsidies that make EVs competitive

Stranded assets in the energy sector are another prominent transition risk


- The IEA estimates that close to 90% of proved coal reserves and 40% of proved oil reserves must remain in the ground to limit global warming to 1.8 degrees Celsius

17. Stranded Assets in 2070 By Country (Percent of Proved Reserves in 2018)

- Stranded assets could be substantial for some sovereigns as well as corporates

As substantial part of proved energy reserves could be stranded ...

... with important implications for fossil energy exporters.

Sources: JP Morgan estimates, BP, IEA
Note: Based on IEA Sustainable Development Scenario - limit global warming to below 1.8 degrees celsius, relative to pre-industrial levels , with 66% probability.
Insurers, banks, and asset manager have pledged to get out of coal, but funding remains ample for coal projects, especially in Asia

Global coal production peaked in 2013 and profitability of many coal companies is suffering (such as in the US).

18. Operating Margins of US Coal Companies (Billions of US dollars)

- Between 2012 and 2019, half of US coal companies failed to break even, and the aggregate operating margin for all US coal companies is expected to remain negative through at least 2023


- Close to half of global insurers have limited insurance for coal related activities

Insurers are increasingly curtailing insurance for coal related activities.

Major asset managers hold large coal investments and have pledged divestments.

20. Top Coal Investors (Millions of US dollars; As of September 2019)

- Major asset managers have pledged divestment from coal, but currently hold large coal related assets

Several banks have stopped lending to coal projects, but financing is still easily available especially in Asia.

21. Bank Funding for Coal Mining and Power Plants (Billions of US dollars)

- Asian banks and export credit agencies remain major financiers of coal projects
- Private equity firms are also stepping up funding
- This calls into question the efficacy of divestment pledges to make funding for coal projects more difficult
Glossary of Frequent Terms in Sustainable Finance

COP21  21st Conference of the Parties (2015 United Nations climate change conference)

ESG  Environmental, Social and Governance

ETS  Emissions Trading System (related to carbon emissions)

GRI  Global Reporting Initiative

NGFS  Network (of Central Banks and Supervisors) for Greening the Financial System

SASB  Sustainability Accounting Standards Board

SDGs  United Nations Sustainable Development Goals

SRI  Sustainable, Responsible and Impact Investing

TCFD  Task Force on Climate-related Financial Disclosures

PRI  Principles for Responsible Investment (international network of investors)

Endnote: Sustainable and Responsible Impact Investing Strategies

Impact and underperformance concerns have led the evolution of ESG strategies from exclusions to more selective inclusion and investor activism. Initially, sustainable investing was primarily about negative screening strategies that excluded firms or entire sectors from investment portfolios. Over time, concerns about risk management, benchmark underperformance, and a need to demonstrate material ultimate impact have given rise to strategies based on positive screening for companies with good ESG performance (best-in-class, improvement), companies that fulfill certain minimum standards or norms (norm-based screening), or sectors that are considered sustainable (sustainability-themed investments). For more information see Chapter 6 of the October 2019 Global Financial Stability Report.