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King Abdullah Petroleum Studies and Research Center

Long- and Short-Term Economic Impact of COVID-19: Does the Future Look Greener?

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COVID-19 initially broke out in China in early January. It has since posed a severe threat to our lives and economies. Millions of infections and hundreds of thousands of deaths have been recorded globally, with more casualties expected in the coming days and months. In response, many countries have had to halt daily life and suspend all but essential international travel. The measures taken to limit the spread of COVID-19 have hit all economies. As general economic data lags by several months, financial data is one of the few data sources that can be used to assess the immediate impact of COVID-19 on economies. Such an assessment is also useful to infer the possible paths forward.

This short note first discusses the immediate impact of COVID-19 on economies using financial data. It also provides an overview of the recent relative performances of 'green' and traditional assets. The discussion then focuses on how the recent multi-trillion-dollar rescue packages might have altered investor expectations and, thus, alleviated some of the immediate economic impacts of the pandemic. It concludes with remarks on what the post-COVID-19 future might look like.

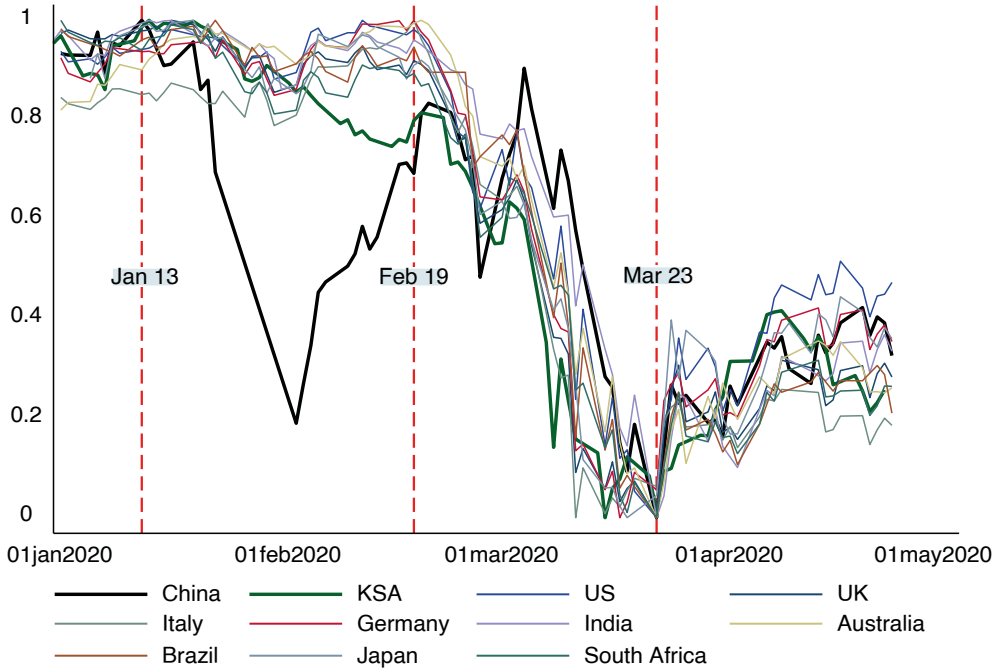
How has COVID-19 hit world economies?

China's Shanghai Composite Index (SSE) peaked on January 13 before starting to decline. At the time of its peak, there had been fewer than 50 COVID-19 cases recorded in the country. On January 22, the World Health Organization (WHO) confirmed the human-to-human transmission of the virus, which led to further drops in global financial markets. After China's one-week New Year holiday between January 24 and February 2, the SSE opened with a 7.7% drop. Other major global indices remained mostly stable, with some mild swings (Figure 1). In the early days of the COVID-19 pandemic, the focus was primarily on China and the expectations of potentially mild effects of the virus on its economy. The virus started to become a global phenomenon when it spread to Europe and the Middle East in mid-February. The focus turned to the potential for it to precipitate a significant global economic slump. Many major western financial markets peaked in the third week of February, more than a month after the top in the SSE (Figure 1).

Major oil and gas exporters appear to have been hit during both phases of the outbreak due to concerns over energy demand. For instance, Saudi Arabia's Tadawul All Share Index (TASI) peaked around the same time as the SSE, before declining until February 19. After that, the decline in TASI steepened as global financial markets started to fall. The stock markets of Qatar, Saudi Arabia, and Russia appear to follow similar trends as they are major energy suppliers to China (Figure 2).

In the first phase of the pandemic (until February 19), the economic impact was mostly confined to China, with relatively moderate impacts on oil and gas exporters. However, in the second phase, from February 19 to March 23, as the virus spread to Europe and the Middle East, the economic impact became global, and most major global stock markets experienced significant falls[1] of between 15%-50%. The Dow Jones index in the U.S. dropped by 37%, the Italian MIB index fell by 42%, the German DAX index fell by 39%, the U.K. FTSE 100 index fell by 35%, the Saudi Arabian TASI was down by 30%, and the Abu Dhabi General Index fell by 37%.[2]

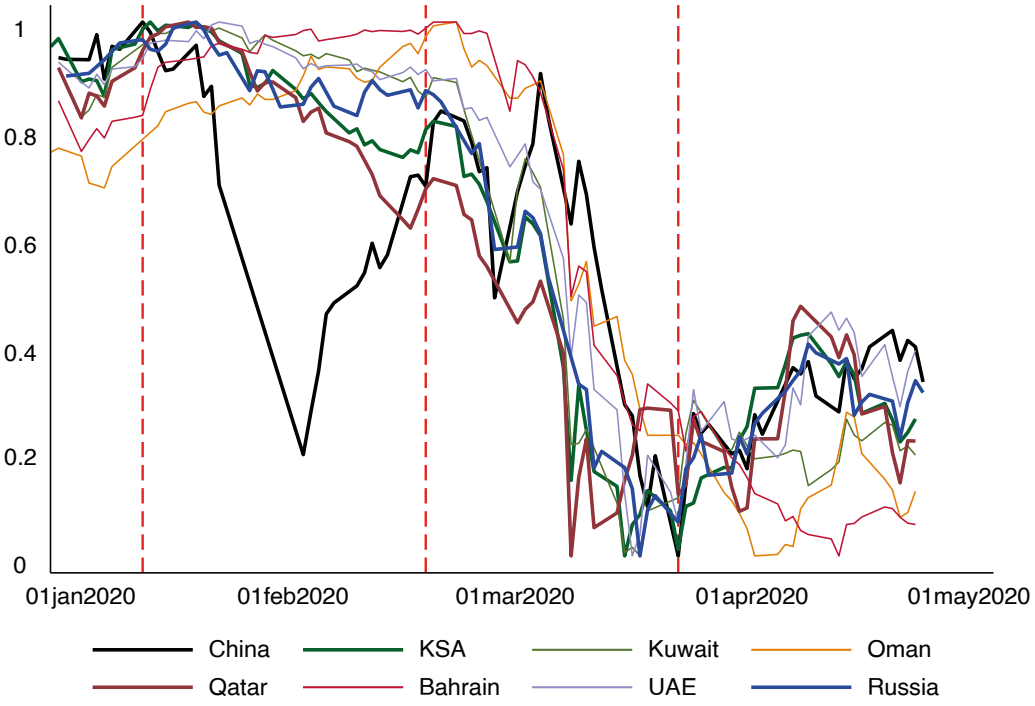
Figure 1. Stock market indices of major financial markets.



Source: Bloomberg.

Notes: The market indices are China (SSE), KSA (TASI), U.S. (Dow Jones), U.K. (FTSE 100), Italy (MIB), Germany (DAX), India (NIFTY50), Australia (ASX200), Brazil (IBOVESPA), Japan (NIKKEI) and South Africa (ALSI). All the indices are rescaled to be between zero and one.

Figure 2. Stock market indices, China, Russia and GCC countries.



Source: Bloomberg.

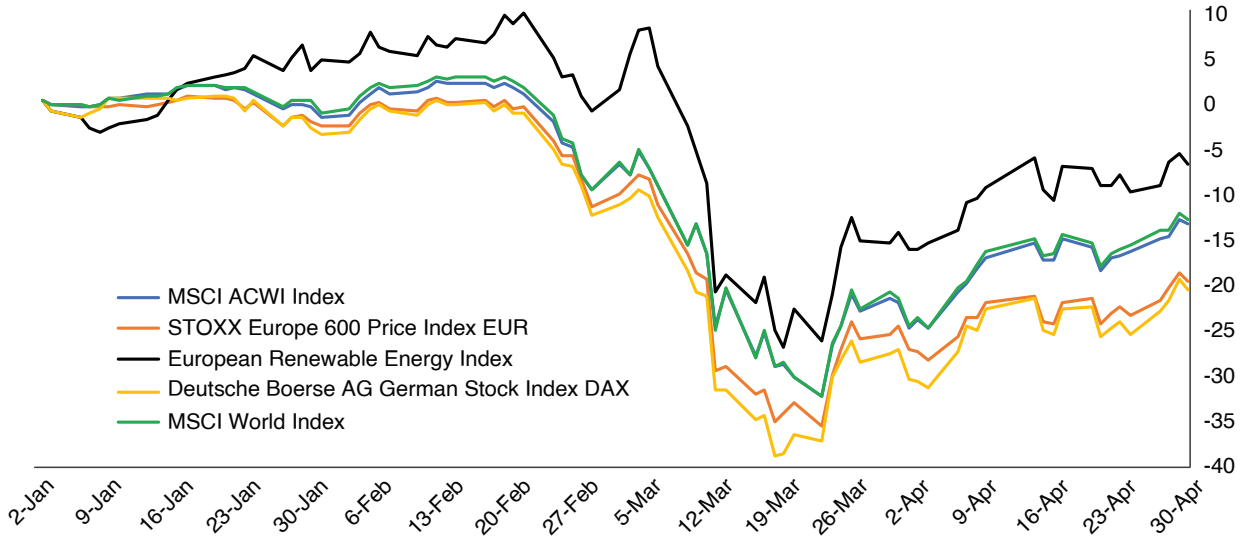
Notes: The market indices are China (SSE), KSA (TASI), Kuwait (BKA), Oman (MSM30), Qatar (QE), Bahrain (BSEXN), UAE (ADI), Russia (MOEX). All the indices are rescaled to be between zero and one.

How did ‘green’ assets perform during this time?

The COVID-19 pandemic has affected most sectors. One exception to the general trend appears to be the green energy sector, whose financial assets have been only slightly hit by the shock and have recovered faster than those of other industries.

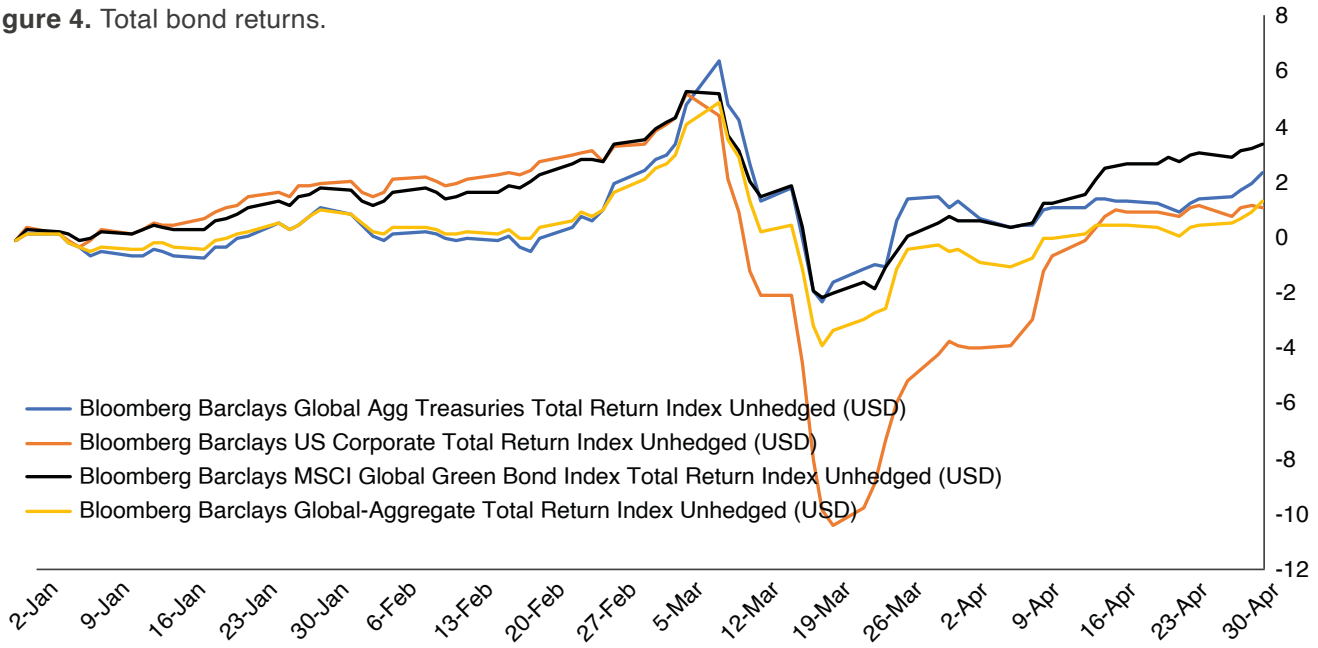
Figure 3 shows the total return of the European Renewable Energy Total Return Index (ERIX) against European and world stock market indices. As can be seen, returns from renewable energy equities have historically been higher than those of any major index. The COVID-19 shock appears to have had a moderate and short-lived impact on the ERIX. In contrast, the benchmark indices have been experiencing deeper and longer-lived declines.

Figure 3. Total equity market returns.



Source: Bloomberg.

Figure 4. Total bond returns.



Source: Bloomberg.

Figure 4 shows the performance of green bonds, another primary source of finance for many green projects. As can be seen, green bonds generated a similar level of return to corporate bonds in the pre-shock period. However, this changed after the shock. Total returns from corporate bonds fell more than threefold, while green bonds generated similar returns to treasury bills. More importantly, green bonds have produced the highest returns since the end of March. Green financial assets have been more resilient in the post-shock period than their benchmarks.[3] This is perhaps unsurprising as they are aimed at generating long-term and sustainable returns, and do not appear to be impacted by short-term shocks.

Fighting the economic impact of COVID-19

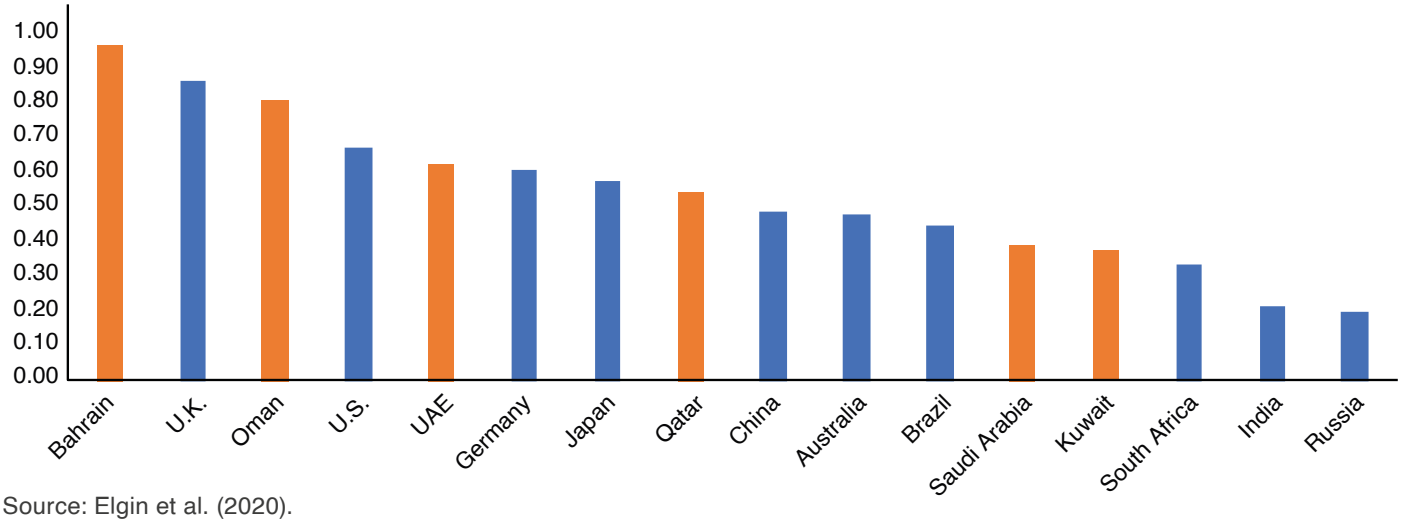
Almost every country took measures to fight the virus, from placing restrictions on daily activities to enforcing 24-hour curfews. These measures were necessary to protect public health. However, just like with any medicine, side effects were inevitable. The COVID-19 pandemic created a unique economic shock as it affected both the supply and demand sides of economies simultaneously (OECD 2020). Halting daily life suppressed demand for many goods and services. Unemployment rose in many countries, which, combined with altered consumption habits, could translate short-run shocks into long-run impacts. On the supply side, a slowdown in production may threaten firms' financial health, and the continuation of restricted economic activity could significantly distort supply chains. Such distortions may lead to undesirable equilibria, where either certain goods are unavailable or are unrealistically priced (World Bank 2020).

Recognizing the short- and long-run economic impacts of COVID-19, from mid-March, many governments announced unprecedented economic rescue packages. The bailouts dwarfed those implemented after the global financial crisis of 2008. Some of the most significant immediate rescue packages declared in mid-March included a $2 trillion stimulus package in the United States (U.S.) (10% of its gross domestic product [GDP]) and a $0.8 trillion package in Germany (20.5% of its GDP). The European Commission issued a $0.5 trillion bailout (2.6% of the European Union's [EU's] GDP) for EU countries and the International Monetary Fund (IMF) announced a $1 trillion support package for developing countries. Elgin et al. (2020) created the COVID-19 Economic Stimulus Index (CESI) using IMF COVID-19 Policy Tracker data.[4] The CESI gives an overview of the economic impact of COVID-19. Figure 5 shows CESI index scores for a selection of countries. It shows a considerable variation in the size of national bailouts. Countries with older populations, more COVID-19 cases, and higher average incomes tend to provide more significant stimulus programs, as highlighted by Elgin et al. (2020). Among the Gulf Cooperation Council (GCC) countries, Bahrain, Oman, and the United Arab Emirates (UAE) offer packages similar to those of most developed economies, such as the U.K., the U.S. and Germany.

The rescue packages contain various types of support for households, firms, and the financial sector. Fiscal support measures include direct cash transfers, tax breaks, zero-interest loans and grants for households and businesses. Monetary and macro-finance support programs include

various market liquidity injection policies, including lowering interest rates, enormous asset purchase programs[5] and easing some financial market regulations and supervision controls. In many cases, support packages target limiting increases in unemployment, avoiding business defaults, boosting consumption, and, overall, avoiding sudden economic stops.[6] Moreover, countries have used different combinations of policy tools – e.g., fiscal and financial/monetary tools – in their rescue packages. Countries with more fiscal capacity tend to provide more fiscal stimulus, while others are more inclined toward delivering macro-financial packages (Figure 6).

Figure 5. COVID-19 Economic Stimulus Index (CESI), selected countries.

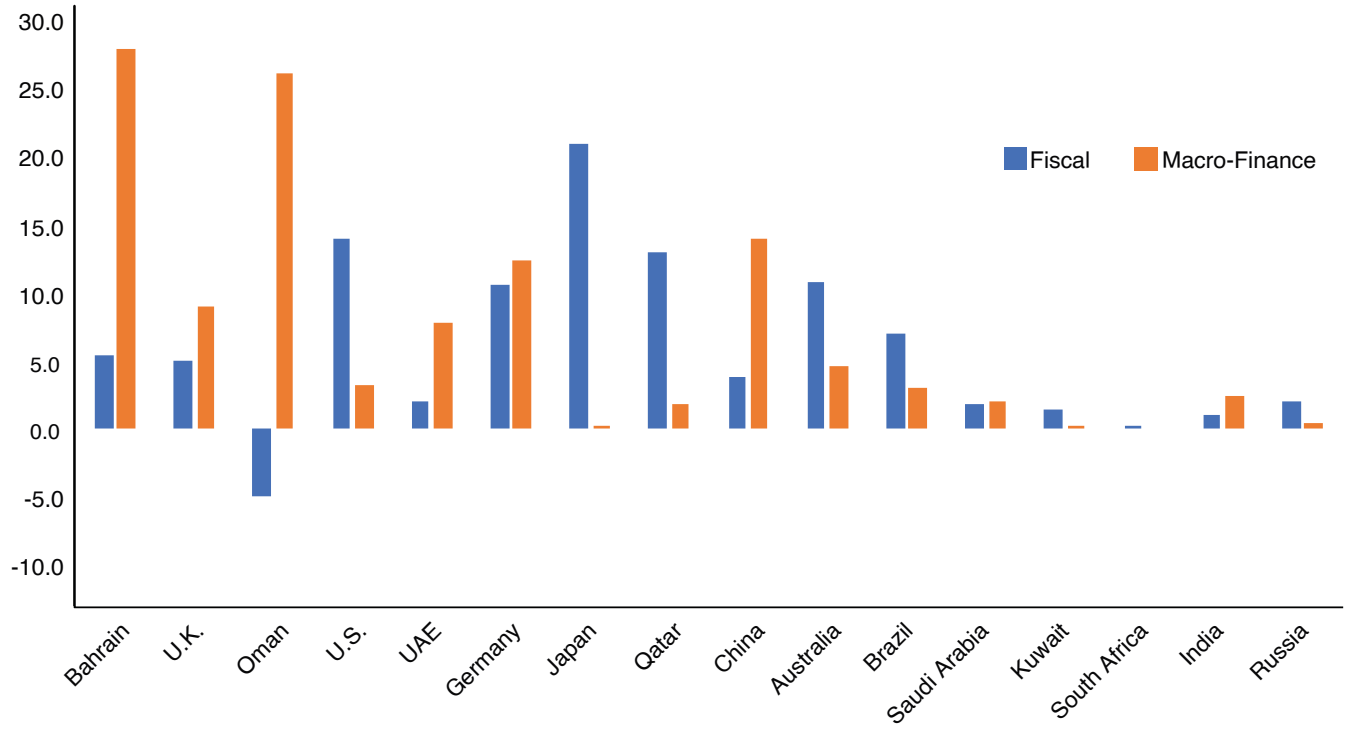


Source: Elgin et al. (2020).

Notes: The CESI is rescaled to be between zero and one. GCC countries are highlighted in light orange.

According to Figures 1 and 2, the rescue packages appear to be successful in restoring investor confidence, given the recoveries in most stock markets. Despite the growing concerns of a potential second wave of the pandemic, stock markets have made significant recoveries since March 23. As of April 24, the Dow Jones had recovered 47% of the losses it sustained between January 19 and March 23.[7] During the same period, the German DAX index recovered 35%, and the U.K. FTSE 100 regained 28% of its losses. The recovery has been more gradual in oil and gas exporting economies due to the slow recovery in energy demand and volatile oil prices. The Saudi Arabian TASI, for example, regained 26% of its fall from peak to trough, and Kuwait's BKA and Qatar's QE indices recovered around 19 and 22% of their losses. Oman's main market index, the MSM30, only recovered 5%, while Bahrain's BSEXN continued to fall.[8] As Chinese producers resume operation, the commodity markets will accelerate their recoveries. However, this may not be enough for a complete restoration of business-as-usual, before the rest of the world, particularly the U.S. and western EU countries, comes out of lockdown.

Figure 6. COVID-19 Economic Stimulus Index (CESI) components: fiscal and macro-finance support (% of GDP).



Source: Elgin et al. (2020).

Notes: The two most significant components of the CESI index, fiscal and macro-financial programs, are separately displayed as percentages of GDP.

Taking stock and looking forward

Social measures are undoubtedly crucial to mitigating the negative impact of the pandemic on public health. However, they negatively affect the global economy, and many governments provide rescue packages to compensate for this. Despite their importance, rescue packages will inevitably burden government budgets. In the post-COVID-19 era, we might expect to see more fiscal discipline in most countries, including higher taxes, expenditure cuts, and reductions in social programs, among others. This discipline is particularly crucial for oil-and gas-exporting GCC economies amid volatile oil prices and long-term diversification goals (Mirzoev et al. 2020). Real sector firms will struggle to clean their balance sheets in order to survive after the crisis. Perhaps many more investment projects will be halted, and a 'wait and survive' strategy may slow the recovery.

Central banks will carry larger balance sheets, which have already more than doubled since the global financial crisis of 2008. There appears to be mid-term inflationary pressure in most countries, as central banks focus on preserving employment by increasing the money supply.[9] Firms in the financial industry are also enlarging their balance sheets, while the question remains, Is this really sustainable? An increase in the size of non-performing loans, along with distortions in local credit markets, appear to be likely scenarios.

Green financial assets have remained somewhat resilient throughout the crisis. This may be an indication that the more sustainable our economies get, the stronger they will be. In a recent quote, IMF Chairwoman and Managing Director Kristalina Georgieva warned against pausing action on climate change goals and urged governments to use multi-trillion dollar rescue packages, including the $1 trillion IMF support, to tackle both COVID-19 and climate change.[10] United Nations Secretary-General António Guterres has stated that COVID-19 presents a "profound opportunity" to get more serious about transitioning to a low-carbon, sustainable, and equitable global economy.[11] There seems to be a general view among international institutions that both COVID-19 and climate change have commonalities and, perhaps, similar policy solutions. However, it remains to be seen how governments can achieve both climate change mitigation and combat the spread of COVID-19, given their increasing deficits, slowing economies and national priorities such as preserving employment.

Endnotes

[1] For a more thorough analysis of the phases of the COVID-19 pandemic and its impact on global financial markets, see Zhang et al. (2020).

[2] Market loss is calculated as the percentage change in the index value from its peak (i.e., the maximum index value recorded between January 1 and February 28) to its dip (i.e., the minimum index value recorded in March).

[3] For a more detailed analysis of the performance of green assets during the Covid-19 crisis, see the link for green equity and the link for green bonds.

[4] For the data, see the link.

[5] Asset purchase programs are particularly important as they are designed to provide large liquidity to financial institutions and, thereby, to firms and households, and governments through the purchase of financial assets, including stocks, loans and bonds/treasury bills, among others.

[6] In a recent book, edited by two prominent economists, Richard Baldwin and Beatrice Weder di Mauro (Baldwin and di Mauro 2020), Gourinchas (2020) provides an extensive chapter on the importance of government responses to COVID-19.

[7] The recovery rate is defined as the ratio of the recovery (i.e., the change in the index from its dip in March to April 24) to the market loss (i.e., the change in the index from its peak in January or in February to dip in March) defined above.

[8] During this time, the Russian MOEX and the UAE's main market index, the ADI, performed somewhat better than the main trend of major oil and gas exporters, given the MOEX recovered by 31% and the ADI by 28%.

[9] In a recent decision, Germany's Constitutional Court found the European Central Bank guilty of illicitly financing EU governments outside its mandate (link).

[10] For the full story, see the link.

[11] For the full story, see the link.

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