

Ignoring Climate Change Risks Market Chaos

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The [S&P 500](#) reached a record high on Feb. 19, crowning a decade-long bull market and the United States' longest economic expansion. Over the next 22 trading days, the S&P fell more than 30%, faster than ever before. The speed of the fall revealed just how few market participants anticipated any immediate risk of a [pandemic-induced recession](#). Yet investors had plenty of warning. For over a decade, experts had forecast the high probability of a global pandemic and the resulting damage to human health and economies. Still, when evidence of such a pandemic began to emerge, it was largely ignored. The markets waited until the forecasted risk was not just at our doorstep but in our house.

Scientists are increasingly raising the alarm about an even more economically destructive risk—climate change. The [Fourth National Climate Assessment](#) [☐](#), released in 2018, predicted that the U.S. economy could shrink by up to 10% annually if significant steps are not taken to rein in global warming. Leaders in the world of business and finance have begun to [recognize](#) [☐](#) and [warn](#) [☐](#) corporations

about sizable economic near-term risks from climate change. Like the threat of a pandemic, these warnings have been largely unheeded by investors and many governments, as human-caused emissions of greenhouse gases continued to increase through 2019.

Unlike a pandemic, which will be resolved with testing, treatment, and a vaccine, we cannot hope for a quick solution to global warming. Climate change takes place over decades, if not centuries, and is essentially irreversible on the time scale of a human life. When market participants recognize the inevitability of climate change, large economic shifts will affect entire industries and sectors, causing dramatic job losses and the devaluation of vulnerable infrastructure assets. But maybe the most important difference between a changing climate and a pandemic is that there is no possibility of a quick economic recovery. Any lost capital when the market reprices climate risk will almost certainly be permanent.

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worse, incentivized—in investment analysis. Investors reward global corporations for optimizing efficiency with long and complex supply chains and minimal inventories—companies that are often vulnerable to disruptions, including extreme weather, which is becoming more frequent due to climate change.

This pandemic has highlighted once again that capital markets are ill-prepared to efficiently price prospective costs with no recent historical reference. This is particularly true for the cost of burning carbon, which continues to be ignored—or

We have an opportunity now to begin to correct the market failures that are the root cause of climate change by adopting climate-aware investment strategies, moving government subsidies from fossil fuels to renewables, and most importantly, putting a price on carbon. This will not only drive reductions in greenhouse gas emissions and enable capital markets and companies to efficiently price climate risks, it may prevent a “Minsky moment,” where the market collapses due to a sudden recognition of the costs of burning fossil fuels.

Can we afford to take the steps necessary to limit climate change? Actually, we can’t afford not to, for two reasons. First, the cost will only go up. As Nassim Taleb [points out](#) ², the Covid-19 pandemic is not a rare, black swan event, but an entirely predictable white swan. Our unwillingness to prepare for it despite warnings by scientists means it will be costly. Governments “did not want to spend pennies in January; now they are going to spend trillions,” Taleb said. New [research](#) ³ from Columbia University also drives home the human cost of delayed action, finding that implementing social distancing two weeks earlier could have prevented 84% of deaths. Because climate change is effectively irreversible, the same is true for climate action, except on a longer and larger scale. Measures taken now will save money and lives later.

In addition, the tradeoff between economic prosperity and personal or environmental health is largely imaginary, even in the short term. Jurisdictions that have been most aggressive in addressing climate change—China and California, for example—have experienced better than average economic growth. The State of California [estimates](#) ⁴ that the financial cost of decarbonizing the state’s economy will be offset by health-care savings resulting from cleaner air. The International Renewable Energy Agency, an intergovernmental

organization, recently [released](#) a report concluding that each dollar of stimulus spending on renewables would generate three to eight dollars of benefits.

The devastation of the coronavirus pandemic holds many lessons, including this one: Ignoring scientific forecasts can be costly to our economy and markets. There will be no vaccine against greenhouse gases. The costs of climate change will be measured over decades and centuries and will not be helped by social distancing. We must heed the warnings and accelerate long-overdue action to address the greatest economic risk of the century.

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