Overtaken by the Anthropocene:
From Crashed to Climate to COVID - Writing 2019-2020

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New York, July 2020

It is not easy to do, but if you think back to the beginning of 2020, the world seemed liked a very different place. Climate change was the topic de jour. It was commonly agreed to be the largest collective challenge facing humanity. The question was whether the forces of finance and economics were finally getting on board. There were signs that they were. Investment funds and central banks were joining the green bandwagon. Meanwhile, young people were demonstrating all over the world. The Green New Deal was energizing the left wing of the Democratic Party. At the same time the momentum of global economic growth was massive. Energy consumption and CO2 emissions continued to rise inexorably. How would governments around the world come to grips with the climate emergency? How would the economic system be bent to the project of decarbonization? This was the question that I was supposed to be pursuing in the follow-up to *Crashed.* At the beginning of the year I was deeply immersed in the history of energy politics in the 1970s and 1980s. I was engaged in debates about the role of central banks in greening the economy and the historical location of the Green New Deal. And then the news began to trickle out of China about a new corona virus.

I have since reconstructed the timeline of COVID-19 reporting in the financial media. It is striking to see at what an early stage the *FT*, *WSJ*, *Bloomberg* were preoccupied with the story. The financial markets scan the world for risk. Even the slightest disruption in the vast networks of finance, production and trade offers the opportunity for profit or the threat of loss. So, the news on 23 January, that the outbreak of an unknown virus was sufficiently serious for Beijing to impose a gigantic quarantine, hit the traders on their Bloomberg terminals hard. Hubei province and its capital Wuhan may not have been familiar to most people in the West. But they are a major industrial center. The supply-chains of global manufacturing businesses like Samsung and Nissan were going to take a hit. Bank economists struggled to get a grip on the dimensions of the problem. Would this be a minor disruption like SARS in 2003? Or were we facing the nightmare scenario of the Hollywood film, *Contagion*?

In late January, investors began to move more and more money out of things like commodities and shares in companies, and into the relative safety of government bonds. What comforted them was the idea that the virus was a problem contained in China. The day that illusion burst, the day that investors realised that COVID-19 was becoming a global pandemic, was Monday 24 February. Over the weekend, the Italian government had announced that it was imposing a quarantine in parts of northern Italy. It was the first place in the West to do so.

At this point, not everyone was taking the threat seriously. I did not understand it myself. I did not know anyone who did. The caseload in the US still looked tiny. Donald Trump dismissed the virus as a “scare” and encouraged Americans to go bargain hunting on Wall Street. But rather than “buying the dip” investors were now seriously worried. Over the week that began on 24 February, America’s main stock market index, the S&P 500, lost ten percent of its value. By early March, whatever complacency had prevailed was long gone. The death toll in

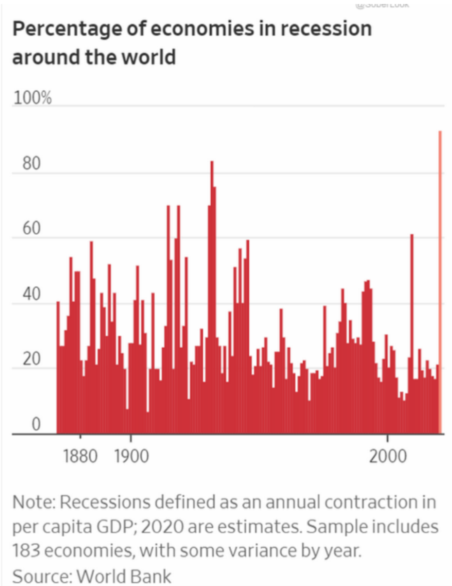
Northern Italy was rising into the hundreds and it was only a matter of time before Rome would be forced to declare a nationwide lockdown. Investors the world over began to panic.

On Monday 9 March, as markets opened, the market collapsed. The selling was so violent that the circuit-breakers – automatic stops to trading that are triggered when prices fall by a certain amount – were activated. This was supposed to slow a wild sell off. But it sent a message of panic. As soon as trading resumed, everything sold. There were no buyers.

That same morning, I received an email from one of the editorial groups at the *Financial Times*: "Turmoil in the financial markets. We are all thinking of *Crashed*. We would like to see anything you might like to write about it."

From that moment onwards, the corona crisis has dominated my life.

Quite suddenly we have found ourselves facing the most dramatic economic crisis not since 2008 but since the 1930s. Stocks markets haven fallen faster and harder than at any time since 1929. Across the world hundreds of millions of people have lost their jobs. The skies are empty of aircraft. Petrol consumption in the EU plunged by 88 percent. Goldman Sachs estimates that in the second quarter of 2020 output in the United States economy was falling at an annualized rate of 34 percent. This is not a recession in one part of the world economy. For the first time since World War II the entire global economic system is contracting. No one knows at this point how long the recovery will take or what it will look like. We have never stopped the world economy before.



I approached the history of the financial crisis of 2008 through the safety of a rearview mirror. This time I have not had that luxury. I have found myself in a Moebius loop in which the narrative of 2008, which *Crashed* distilled out of the reportage of that crisis, is being played back as a template for understanding our current reality. I am being asked, in real time, by the same journalists and economists, whose work I used as sources, who are now devotees of *Crashed*, to extend the narrative into the present. I have been enrolled in writing the history of the crisis as it happens, shoulder to shoulder with the people whose writing I used as sources in *Crashed*.

This selection of writings from the last 12 months, is my personal and immediate record of the shock. I have chosen these pieces because they seemed to speak most directly to broad questions we have discussed. For readers familiar with *Crashed*, the continuities to that earlier work will be obvious. To situate the pieces, it may be helpful to read them with the following timeline in mind.

2018 Sep US imposes 10 % tariff on $200bn of Chinese imports
2018 Oct Release of the alarming IPCC report on 1.5 degree global warming
2018 Nov Democratic wins in US mid-terms -> Green New Deal launched

2019 May Sharp escalation of US-Chinese trade tension -> mounting global uncertainty
2019 June Fear of trade war triggers intense debate about central bank policy
2019 June Fed reverses interest rate increases
2019 July "Why Central Banks Need to Step Up on Climate Change", Foreign Policy
2019 July Doveish/green Lagarde picked to succeed Draghi at ECB over hawkish Jens Weidmann
2019 July Urusula von der Leyen campaigns for Presidency of European Commission on Green Deal ticket
2019 Aug Further escalation of US-China trade tension
2019 Sep In last few months at ECB, Draghi initiates QE -> triggers conservative backlash & calls for Green QE
2019 Dec Sanders bid for Democratic nomination running strong
2019 Dec Deadlock at Madrid COP meeting

2020 Jan Piece 2 How Climate Change has Supercharged the Left, Foreign Policy
2020 Jan Piece 3 The Fierce Urgency of COP26 Social Europe
2020 Jan 23 Wuhan shutdown
2020 Feb EM sudden stop
2020 Feb 23 Xi speaks to 170,000 party cadres on the success of containing the virus
2020 Feb 24 Lockdown begins in Italy
2020 Mar 9 Global financial market meltdown
2020 Mar 15 Fed makes first major move
2020 Mar 18 Maximum moment of financial market panic
2020 Mar 20 Piece 5 Coronavirus has shattered the myth that the economy must come first, Guardian
2020 Mar 23 Fed "all in"
2020 Mar 24 India declares lockdown, followed by Bangladesh and South Africa
2020 Mar 28 Piece 8 The Coronavirus Is the Biggest Emerging Markets Crisis Ever, Foreign Policy
2020 Apr 4 Piece 14 Politics for the end of the world New Statesman, April 2020
2020 Apr 4 Piece 7 Shockwave, LRB
2020 Apr 9 Piece 9 The Normal Economy is Never Coming Back, Foreign Policy
2020 April 15 IMF spring meetings at which the US blocks concerted push to launch SDR
2020 Apr 16 Piece 6 How coronavirus almost brought down the global financial system, Guardian
2020 Apr 27 Piece 10 Should we be scared of the coronavirus debt mountain? Guardian
2020 May 5 German constitutional court ruling questioning legality of QE
2020 May 7 Piece 4 COVID: First Economic Crisis of the Anthropocene, Guardian
2020 May 13 Piece 12 The Death of the Central Bank Myth Foreign Policy

2020 May 25	**Piece 11 Time to expose the reality of ‘debt market discipline’ Social Europe**
2020 June 3	**Piece 13 The death of globalization has been announced many times, Guardian**
2020 July	Dramatic escalation of anti-China measures in the US

Piece 1
"Why Central Banks Need to Step Up on Climate Change"
Foreign Policy July 2019

In October 2012, the global financial system got its first taste of the effects of climate change when Hurricane Sandy roared through lower Manhattan, shutting down Wall Street. Amid the blackout, the power remained on in the tower containing the headquarters of Goldman Sachs, offering to the world a striking if accidental symbol of a future age of climate inequality.

As the investment bank stood firm, the U.S. government's outpost on Wall Street, the New York branch of the Federal Reserve, made plans to pull up stakes. In response to the hurricane, the Fed created new backup capacity for market operations farther inland, at the Federal Reserve Bank of Chicago.

Descended from historical port cities, it is not by accident that the world's leading financial centers—New York City, London, Singapore, Hong Kong, Shanghai—are vulnerable to flooding. But the larger challenge that climate change poses is not so much the physical as the systemic risk. What central bankers—the world's preeminent economic decision-makers since the 1980s—are beginning to worry about is the potential for climate change to trigger financial crisis.

They have been relatively late to the problem. Mark Carney—formerly of Goldman Sachs and the Canadian central bank, now governor of the Bank of England—can take credit for first raising the issue in financial circles at an after-dinner speech at Lloyd's of London in September 2015. Two years later in Paris, leading central bankers and regulators founded the Network for Greening the Financial System (NGFS), which aims to throw the weight of key financial institutions behind the goals of the Paris climate agreement. The membership of the NGFS now includes most of the central banks of the G-20, such as the European Central Bank, the Bank of Japan, and the People's Bank of China.

Private financial actors have also joined the green finance bandwagon. At the One Planet Summit in New York City in 2018, 23 leading global banks, eight of the top 10 global asset managers, the world's leading pension funds and insurers, the two preeminent shareholder advisory service companies, and other major financial firms—which are together responsible for managing almost $100 trillion in assets—committed themselves to the transparency principles of the blue-ribbon Task Force on Climate-related Financial Disclosures, which was launched by Carney in his capacity as head of the Financial Stability Board and is chaired by Michael Bloomberg.

It is telling that the only financial authority not to be involved in these initiatives is the U.S. Federal Reserve, the most powerful central bank in the global financial system. But even if it were to come aboard, the most critical question would remain whether the green agenda of the world's central banks is adequate to the challenge of mitigating the effects of the climate crisis—and perhaps holding it within manageable bounds.

The central banks have the powers to be a major part of the climate response. As of yet, their response is defensive, focusing on managing financial risks. The rest of us have no choice but to hope that they move into a more proactive mode in time.

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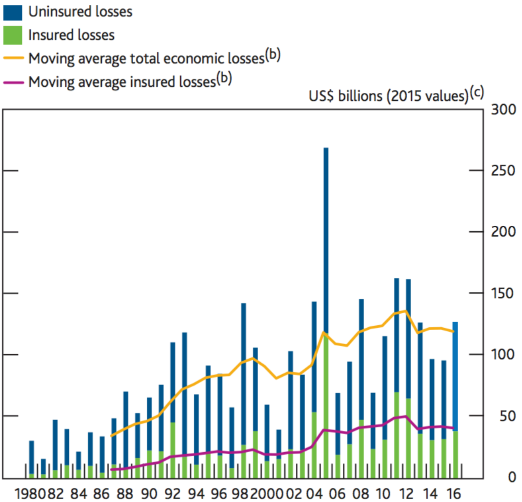
As Carney laid it out back in 2015, three types of risk could strike the financial system: losses in the insurance system, climate change liability, and the problem of stranded assets.

The insurance system is the economy's shock absorber. Its role is to spread the impact of losses from those immediately affected to those with the wherewithal to bear the shock. In good times, the insurers earn handsome returns for accepting this risk. They cover their own liabilities by taking out reinsurance, further spreading the losses.

It is a highly effective system and enormous in scale. Property and casualty insurance (as distinct from life and health insurance) generates global premiums in excess of $1.4 trillion a year. The business is profitable so long as the risks remain within familiar limits and largely uncorrelated with each other. But that is precisely what climate change has called into question. As Carney put it in 2015, as a result of climate change, "the tail risks of today" will be "the catastrophic norms of the future." Since the 1980s, the scale of weather-related insurance losses has risen fivefold to about $55 billion a year. Uninsured losses are twice as much again.

Chart 2 Weather-related losses worldwide (1980–2016)[(a)]



Sources: Geo Risks Research, Munich Reinsurance Company and NatCatSERVICE 2017 (data does not account for reporting bias).

(a) Total Economic Losses = Insured + Uninsured losses.
(b) Eight-year moving average.
(c) Values as at 2015 adjusted for inflation based on country Consumer Prices Index.

Source: https://www.bankofengland.co.uk/quarterly-bulletin/2017/q2/the-banks-response-to-climate-change

In theory, the costs due to this shift in risk profiles should be capable of being contained within the insurance sector itself. But as the fate of AIG made painfully apparent in 2008, insurance firms are key nodes in the global financial system. The money accumulated by the insurers is reinvested in money markets, banks, and other funds. Eight major insurers are listed as globally systemically important by the Financial Stability Board. They are too big to fail.

Driven by the desire for self-preservation, insurers and actuaries have begun to develop highly sophisticated models for handling catastrophic risk. But that is precisely the kind of reassurance doled out all too often in the years before the 2008 financial crisis. A recent modeling exercise by the rating agency S&P suggested that the insurance industry may still be underestimating possible losses from extreme weather by as much as 50 percent. Given the complexity of physical and financial interactions, the margins for error are terrifyingly small. Research sponsored by Lloyd's of London calculated that the 20-centimeter rise in sea level near Manhattan in the prior decades increased the insured losses inflicted by Superstorm Sandy in New York by 30 percent. The far more dramatic rises forecasted for the coming decades will do incalculably more damage.

Given the increase of catastrophic risk, the basic question for the insurance industry is who will pay. Will it be the industry and its shareholders, or will it be those forced to purchase coverage at exorbitant rates? One likely outcome is the worst of all: that nobody in the market could afford to pay. As the former CEO of AXA insurance group warned, referring to potential changes in average annual temperatures, whereas "a [2 degrees Celsius] world might be insurable, a [4 degrees Celsius] world certainly would not be." Without the ability to insure against catastrophic loss, the global credit system as we know it would simply cease to function.

At some point, market solutions won't be sufficient for the financial problems posed by climate change. Disaster will be so frequent that there will be no alternative either to abandoning insurance protection or to nationalizing risks and transferring them to taxpayers at large. In some places, that is already happening. In the United Kingdom, for example, after a bout of catastrophic flooding, a national fund was established in 2016 to offer affordable insurance to buildings in exposed areas. A bitter argument promptly ensued about whether the insurance industry or the taxpayer should provide the ultimate backstop. As of now, it is funded through a flat-rate levy on everyone taking out home insurance in the U.K., transferring the cost from owners of riverside mansions to inner city apartment dwellers.

For large countries with solid tax bases and relatively favorable climates, the socialization of climate risk may be manageable. For smaller, highly exposed island nations, it will be overwhelming. Before they are physically inundated, their sovereignty will be drowned under an economic and financial deluge.

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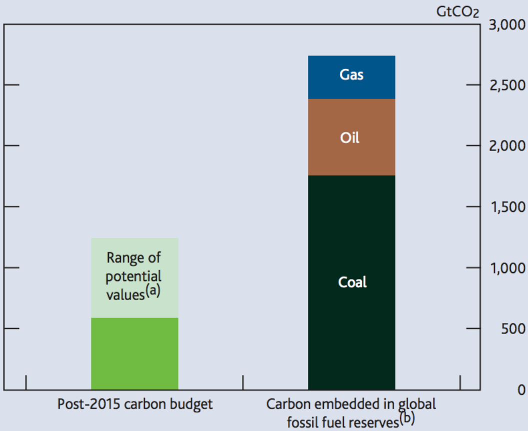
From the point of view of humankind's collective survival—certainly of the economic and political systems we have come to know—it seems obvious that the world needs to do everything possible to mitigate the risks of climate disaster. But that comes with its own costs, so-called "transition risks."

As optimists never fail to point out, decarbonization need not be an economic damper. It will bring spectacular new business opportunities for renewables and low-carbon technologies of all sorts. There is no reason why an environmentally sustainable economy should be one of zero growth. Nevertheless, there are bound to be losers. Investment in renewables is not free. If undertaken on the scale needed, which will run into the tens of trillions of dollars over several decades, it will squeeze consumption and investment spending in other activites, in the same way that the shale boom squeezed out other activities in Texas and Oklahoma.

Furthermore, legacy energy assets have to be taken out of commission. Assuming no spectacular breakthrough in carbon capture, if we are to stabilize temperatures below catastrophic levels, the vast majority of the world's known fossil fuel reserves will have to stay in the ground.

Chart A 2°C carbon budget versus carbon embedded in global fossil fuel reserves



Sources: Heede and Oreskes (2016) and Rogeli *et al* (2016).

(a) Carbon budget estimates are uncertain and depend on a number of factors, including the probability with which warming is kept below 2°C; the contribution to warming from non-CO_2 emissions; and uncertainties in climate processes and feedbacks.
(b) Values are for end-2013.

Source: https://www.bankofengland.co.uk/quarterly-bulletin/2017/q2/the-banks-response-to-climate-change

Leaving that energy untapped will mean as much as $28 trillion in lost revenue for oil, gas, and coal companies over the next 20 years. And that matters for the financial system because investors already own bonds and shares connected to those assets. All told, one-third of equity and fixed income assets issued in global financial markets can be classified as belonging to the natural resource and extraction sectors, as well as carbon-intensive power utilities, chemicals, construction, and industrial goods firms. Decarbonization would essentially strand those assests, resulting in losses in asset values for the energy sector of between $1 trillion to $4 trillion. In the broader industrial sector, the stranded asset risks could rise to $20 trillion.

If financial markets have time to adjust, even such huge losses could be absorbed. But if the changes strike lenders and investors suddenly and unexpectedly, they risk triggering what Carney referred to as a "climate Minsky moment." Hyman Minsky is the legendary financial economist whose model was widely deployed to understand the 2008 financial crisis. What Minksy describes is the way that unsustainable financial bubbles tend to expand on waves of confidence and then burst, threatening not just a recession but a financial heart attack, a crippling blow to bank balance sheets that radiates, as we saw in 2008, to the entire economy. In the subprime mortgage sector, which was worth around $1 trillion, losses ran to a few hundred billion dollars. The carbon bubble is far larger. The question is whether the losses from shifting to a zero-emission economy have the potential to unleash a financial chain reaction as in 2008.

Optimists insist that there will be no shock. Markets will adjust smoothly. The present decline of the coal industry, they argue, is a case in point; there have been a string of bankruptcies, but the misery has been concentrated and has not triggered a systemwide crisis. In advanced economies, coal has already effectively been priced out of the market by much cheaper gas, oil, and renewables. For rich countries, abandoning coal ought to be a no-brainer. Oil, by contrast, remains too cheap and too convenient to forgo. Ending its consumption will require deliberate government action.

And that is precisely what fossil fuel interests have been lobbying hard to prevent. This resistance may make sense from the industry's narrow point of view, but by blocking proactive decarbonization and clinging to a vision of a fossil-fueled future, it also maximizes the risk of a large-scale buildup of stranded assets. It is the old dilemma of conservative politics: By resisting progressive adjustment, they are courting a revolution. For the financial system, that is very bad news.

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Economists at the Bank of England have laid out two divergent economic scenarios for the transition away from fossil fuels. One is a world in which governments are able to persuade industry that they are serious about zero emissions. Steep taxes on carbon are backed by all parties and stakeholders and are telegraphed far in advance. This clarity of vision encourages industry to invest heavily in alternatives to carbon. As a result of large-scale investment, the cost of renewable energy falls swiftly. That, in turn, makes it more credible for governments to commit to full-scale decarbonization because the trade-offs will be less painful. Financial markets' positive assessment of government climate policy then serves to confirm the investment decisions of the private sector. In this scenario, those with fossil fuel assets face losses, but those losses are clearly identified and can be efficiently priced. The financial system doesn't suffer a shock.

In the other scenario, governments talk about climate change but take no credible steps to shift the energy mix. As a result, private sector investment in renewables remains low. Fossil fuels continue to enjoy significant cost advantages in key areas such as motor vehicles, airline travel, and electricity generation in poorer countries. Oil companies continue to deploy sophisticated new technologies to unlock new reserves. The fracking revolution continues at pace and spreads worldwide. The low cost of fossil fuels makes it hard to believe that politicians are serious about a zero-emissions future. In this scenario, fossil fuel companies like ExxonMobil and their shareholders are the winners—at least until catastrophic global warming takes hold.

When it does, the insurance industry is not the only institution that will face calamity. As people struggle to maintain their way of life, severe clashes will ensue. In 2015, Carney discussed what he called "liability risk"—the risk that heavy polluters will be sued by victims of climate change and will face crippling court-ordered damages. Among U.S. states, Massachusetts, New York, and Rhode Island have all begun to take legal action against fossil fuel companies, as have at least eight major cities and a bevy of children's charities. Those cases are making their way up the chain of appeals. The business lobby is fighting back.

But to assume that the distributional struggles unleashed by massive climate change will take the form of courtroom drama is to indulge in wishful thinking. Climate change is not the same as asbestos poisoning or tobacco litigation. It is not individualized medical conditions but an environmental shift that will affect the very basis of human existence on the planet. It will likely create hundreds of millions of refugees. If that happens, the distribution of costs is unlikely to be decided mainly in the form of financial liability assigned by the courts. Rather, more direct and unpredictable forms of political action will come into play. Some seeking redress will be reduced to social protest; the better-off will have direct access to levers of political power.

Against that backdrop, how will politicians react, and what economic consequences will those reactions have? Having failed to manage climate change, it is easy to imagine a variety of scapegoating tactics. German Chancellor Angela Merkel's snap decision to end nuclear power generation in Germany after the Fukushima nuclear accident in Japan in 2011 may be a foretaste. Sensing the popular mood, she overturned an elaborately negotiated phasing-out timetable for Germany's atomic power plants. Germany's energy utilities have still not recovered from the shock to their share prices.

This kind of scenario—protracted denial followed by panic-driven decarbonization—is what concerns the central bankers most of all. And it is closest to our reality.

On the basis of a report by the Intergovernmental Panel on Climate Change (IPCC), the world is already past the point at which a drastic turn away from fossil fuels can be avoided. In a few decades' time, nothing less than a revolution will be required. Yet under U.S. President Donald Trump, energy and environmental policy in the United States is headed in the wrong direction. And even if the Democrats gain the White House in 2020, there is little prospect that they'll manage to muster a congressional majority for rapid decarbonization. The Europeans remain nominally committed to targets set out by the 2015 Paris climate change agreement, which the United States has abandoned. But even supposedly enlightened Germany still cannot envision giving up coal before 2038.

China's authoritarian regime has come closest to following the first scenario outlined by the Bank of England—a government-assisted glide path away from fossil fuels that prevents the stranding of fossil fuel assets. Beijing has supercharged its solar power, battery, and electric vehicle industries. But overall economic growth remains Beijing's main priority, and it has struggled to contain the runaway construction of coal-fired power plants by regional governments. The same is true in India. All the signs suggest that we are headed for a scenario of continued growth in carbon dioxide emissions, disastrous global warming in the 3 to 4 degree Celsius range, and a multitrillion-dollar problem of stranded assets.

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One might think that this terrifying scenario would shake even the most sanguine technocrat into radical action. But central bankers and financial regulators have found a way to translate it into familiar terms. Since the 2008 financial crisis, they have busied themselves with something called macroprudential regulation. Bank regulators oversee private balance sheets, and they conduct resilience and stress tests. Financial stability is their most important goal. The financial sector is proposing to take the same approach—of oversight and regulation—to climate change.

That is the thinking behind Bloomberg's financial disclosures task force: identify and disclose risks so that markets and regulators can prepare themselves for the worst case. As Carney envisions it: "[Stress testing] is another area where insurers are at the cutting edge. Your capital requirements are based on evaluating the impact of severe but plausible scenarios. You peer into the future, building your defenses against a world where extreme events become the norm. … Stress testing, built off better disclosure and a price corridor, could act as a time machine, shining a light not just on today's risks but on those that may otherwise lurk in the darkness for years to come."

Taken at face value, the macroprudential approach makes sense. It is better for the financial system to be resilient. But in adopting this approach, the central banks are using the same conservative approach to climate change that proved lacking when it came to financial reform. In the years since the 2008 financial crisis, they have perfected their tools of crisis management but without addressing the root cause of the problem: that banks were too big to fail. More than a decade on, they still are.

Of course, everything possible should be done to make the financial system resilient in the face of climate-related Minsky moments. But why is financial stability the principal concern? Central banks and financial regulators should instead be urgently exploring what they can do to alter the course of economic growth so that the world can rapidly decarbonize and thus prevent worst-case climate change—and the related financial fallout—in the first place. How can they help governments to make credible commitments to paths of investment, taxation, and pricing that take us to zero emissions?

One of the goals of the NGFS is to promote markets for green bonds. This is commendable. The first green bonds were issued by the World Bank in 2008. By 2018, that market had expanded to an annual volume of $170 billion. The central banks hope to further encourage that growth by developing legal standards and an agreed classification of what actually constitutes green finance. China is leading the way in this regard. Indeed, it is one of the first areas of financial governance in which China is setting the pace. But this almost certainly won't be enough.

According to authoritative estimates by the Organization for Economic Cooperation and Development and the IPCC, an energy transition adequate to stabilize global warming will involve investing trillions of dollars per year over the next two decades. Nothing in the central bankers' discussion so far acknowledges the spectacular dimensions and urgency of this challenge.

What could central banks do to help sustain a historic investment drive running into the tens of trillions of dollars? One promising—though rather technical—possibility is to use capital requirements and collateral rules to favor green investments. Capital requirements govern the amount of money banks must hold against the risk of losses on their loans and other investments.

If central banks required lower capital allocations for green investments, private banks would be keener to lend for that purpose. The incentive would be reinforced if central banks gave privileges to green bonds when they were offered as collateral in exchange for cash borrowing by stressed banks. Such a system would involve a bias by the central banks toward a particular class of investment. But precisely such preferences have been routinely used to favor both sovereign borrowing and mortgage lending. They are the foundation of government bond markets and private homeownership.

The problem is not that such rules would induce bias. The problem is that the bias might still not be sufficient to address the urgency of the climate crisis.

If the world is to cope with climate change, policymakers will need to pull every lever at their disposal. Politicians will need to abolish carbon subsidies and replace them with a steep and growing carbon tax. Only when carbon is properly priced will there be a major economic incentive to large-scale private investment. But even that may not be enough. To generate substantial private investment, governments will need to establish a credible commitment to decarbonization. The scale of the leap required is huge. Between fiscal years 1978 and 2018, spending by the U.S. Energy Department on research in renewable energy came to a grand total of $27.65 billion in constant 2016 dollars. That's less than Americans spent on pet food and treats last year.

Accomplishing the necessary transformation will require a huge redirection and increase in public spending on infrastructure, research and development, and assistance to lower-income countries. Those in the United States who call for a Green New Deal or a Green Marshall Plan are, if anything, understating the scale of what is needed. Compared to what the global energy transition demands, the historic programs evoked as namesakes were modest in scale and short in duration. What is needed is something less than the kind of mobilization achieved by rich democracies such as the United States and Britain during World War II, let alone the total war efforts of the Soviet Union or Nazi Germany; nevertheless, the energy transition must be sustained over decades, and it offers no promise of the restoration of pre-crisis lifestyles in years to come.

Such a gigantic mobilization will have to be financed. Carbon taxes may look tempting. But as the yellow vest protests in France have shown, such taxes are politically disastrous. By trying to impose new fuel taxes while cutting taxes for the most affluent, French President Emmanuel Macron only succeeded in driving a wedge between lower-income taxpayers and green politics. It would be far better to distribute the proceeds of the carbon tax to the entire population, as a carbon dividend, and to rely on conventional revenue sources—progressive taxes on income, wealth, and borrowing—for the other necessary investments.

Given the long-term nature of those investments, there is a strong case for funding a large part of this decarbonization drive through the issuance of long-term debt. It is not the business of central banks to issue such loans. The debts should be issued by public investment banks or directly by national governments. But it should be the job of central banks to support this push by acting as a buyer of last resort for those long-term debts.

The public discussions of the central bankers have not yet extended this far. But managing the secondary market for public debt is historically the essential function of central banks. It is what makes them one of the most powerful agencies of the state. Like any major financial mobilization, this will no doubt raise fear of inflation. But this is one respect in which the world is fortunate: As advanced economies age, central bankers are struggling not to tame inflation but to ensure that it remains at least 2 percent per year.

Acting as a backstop to the issuance of a massive volume of publicly issued green bonds is certainly a novel role for the central banks. But after their exertions in the 2008 financial crisis, central bankers, of all public officials, can't plausibly retreat into an insistence on the limits of their mandate. When faced with the prospect of global financial collapse, they engaged in extraordinary measures to stabilize the global banking system and flood the world with liquidity. The climate emergency poses a risk that is even more existential. Faced with this threat, to indulge in the idea that central banks, as key agencies of the state, can limit themselves to worrying about financial stability and can confine themselves to designing better rules for the private issuance of green bonds, is its own form of denial.

If the central bankers need inspiration, they should remember Mario Draghi's decisive intervention as president of the European Central Bank (ECB) at the height of the eurozone crisis. In the summer of 2012, with the future of the eurozone on the line, Draghi did not talk about regulation or risks or even the technicalities of the intervention he planned. What turned the tide was his determined declaration of the role of the ECB as an agency of an emerging European state: "Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough." In 2012, it was the financial markets themselves that were panicking, so Draghi's words had an immediate, almost magical, effect in restoring confidence. Decarbonization is a vastly more complex technical, economic, and social problem. But to embark on solving it we need to mobilize all the resources we can muster. The essential responsibility of the central banks is to ensure that money does not stand in the way.

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Piece 2
How Climate Change has Supercharged the Left
Foreign Policy January 2020

The climate emergency is stirring radical politics across the world. Most notably, the left wings of both the Democratic Party in the United States and the Labour Party in the United Kingdom have committed themselves to programs known as the Green New Deal. Across Europe, the Greens now rival right-wing populists in their political energy.

For the established environmental movement, this surge in attention has come as something of a shock. The original green movement of the 1960s and 1970s had strong radical elements in its social and economic vision. But for much of the 1990s and 2000s, "Big Green" went mainstream. When it came to climate change, government regulation and investment were unfashionable. Market-based solutions focused on emissions trading and carbon pricing were the flavor du jour. Global climate negotiations became a giant diplomatic roadshow.

The sudden mobilization from the left—with its calls for large-scale public investment in the green economy, bans on high-carbon industry, and nationalization of private energy interests—is a radical response to what is undeniably a dramatic situation. But the revived left faces both the old dilemmas of radical politics and the new challenges of a changed world.

I

The left's reoccupation of environmentalism is no accident. It is driven by the urgency of anti-capitalist protest in the wake of the financial crisis and the protest movement against the lopsided austerity that followed. It is energized by the extraordinary escalation of the climate crisis, as was made clear by the Intergovernmental Panel on Climate Change (IPCC) in 2018. A left-wing critique of capitalism and urgent climate activism are linked as never before.

In 2013, motivated by frustration at the limits of the Obama administration's climate change policy, the writer and activist Bill McKibben's climate campaign movement, 350.org, began to direct its fire against fossil capitalism. The huge climate protest in New York in 2014 developed a left-populist discourse, appealing to a public united against fossil capital. The denunciation of neoliberalism in Naomi Klein's *This Changes Everything* gave a manifesto to the new green left. This movement includes the Fridays for Future campaign of school strikes and the Blockadia activist group, for which Klein is the figurehead, which seeks to coordinate blockades of key sites of fossil fuel development around the world.

The new green left restates the inconvenient truth that it is not humanity as such that is responsible for the climate crisis but profit-driven, fossil-fueled capitalism. The consumption habits of a small fraction of the most affluent people worldwide fuel much of this giant machine. The extreme inequality of our age is thus an environmental issue. So is corporate power. It was ExxonMobil and its partners in the fossil fuel industries that conspired to muddy the waters of the scientific debate about climate change, even though their in-house experts had given their management a clear view of the risks.

For 30 years, the basic logic of climate change has been well understood, yet emissions have continued to surge. At this point, radical action is not so much a choice as a necessity. It is conceivable that if there had been a giant push in the 1980s and 1990s, not just into nuclear but into the full bandwidth of low-carbon technologies, we might now be in a position to avoid radical choices. But that was the age of the market revolution; the stage was set for globalization and the giant boom in emerging market growth. A glut of oil, gas, and coal sent energy prices to historic lows. Government research and development on non-fossil energy collapsed.

The world has now left things so late that drastic measures are required. Even if we do not aim for radical social transformation, even if we aim for nothing more than to preserve the status quo, the environmental movement now argues persuasively that we must go beyond the hallowed toolkit of carbon pricing and cap and trade. The climate left argues, instead, for a broad-based push, led by government and backed by a popular coalition behind decarbonization. This push will not only price carbon but ban its use. It will require fundamentally reorienting the energy sector and curbing the excessive consumption of the superrich. If capitalism's adherence to property rights and markets is allowed to dictate what is possible, the left argues, it will lead us all to disaster.

Not only are the affluent driving the crisis, but as the effects of climate change begin to make themselves felt, the impact will be most severe at the bottom of the social pile. This, too, is a driver for the new green left. After decades of neglect, the challenge is to reinvent the welfare state.

Of course, the climate emergency is not confined to national borders. It is, quintessentially, a global issue. And here, too, the left claims leadership. The left is the only political tendency in the West that has consistently stood for cosmopolitan solidarity and has worked to recognize the legitimacy of the interests and demands of indigenous peoples and the interests of small island and least developed states. Nor is this a matter of altruism alone. If you are going to insist that the Amazon rainforest is not only a Brazilian national asset but a carbon sink for the world, how are you going to avoid the charge of ecoimperialism? Given humanity's mutual entanglement, building a platform of credible internationalism and solidarity is a political necessity.

II

What is to be done? The left has thrown itself with new vigor into the environmental struggle with a sense of both crisis and historic opportunity. The question is what tensions this new engagement will expose.

Framing the climate challenge as one of capitalism and deep structures of social inequality has given the contemporary environmental movement a powerful intellectual grip on the problem. It calls on both politicians and the public to think beyond technical fixes and gee-whiz pricing mechanisms that will properly align incentives. But it also raises the question: If the problem is capitalism, what on earth can you do about it? As the saying goes, we live in an age in which it is easier to imagine the end of the world than the end of capitalism.

It is not for nothing that the historical imagination of the climate left, at least in the Anglosphere, circles around the 1930s and 1940s. The Green New Dealers situate themselves in the narrative that spans the Franklin D. Roosevelt administration, the trans-Atlantic war effort of World War II, Bretton Woods, the postwar welfare state in Britain, and the Marshall Plan. This history evokes a moment in which progressives answered a historic set of crises, from the Great Depression to fascism, with a concerted program of domestic reform, economic mobilization, and international cooperation. For a spectrum that stretches from the radicals of the Democracy in Europe Movement 2025 to a Democratic Party centrist like Al Gore, the midcentury moment demonstrates that the left can lead in devising a response to the climate crisis.

Of course, Roosevelt, John Maynard Keynes, and the postwar Labour government in Britain were not revolutionaries. They did not end capitalism. Indeed, the midcentury moment gave birth to our modern fixation on growing gross national product. But they are also rightly credited with redistribution and a rebalancing of national priorities.

In this same spirit, the left-wing activists who captured the attention of Corbyn's Labour Party during its annual conference last September advocate their version of the Green New Deal not just as an environmental program but as a vision of a comprehensive industrial and social reconstruction. Cutting emissions will go hand in hand with ending poverty. Limiting gasoline-fueled cars will be offset with free public transport. They will address the entrenched problems of a fuel-inefficient housing stock by building green public housing projects. Likewise in the United States, Rep. Alexandria Ocasio-Cortez and her cohorts present their version of the Green New Deal as a program to address the multiple cleavages of inequality and racism that divide American society, linking the climate agenda to the demand for health care for all.

Given prevailing beliefs on the limits of public action, these proposals are radical. But what they amount to, in fact, is a form of social democracy reborn—social democracy with all its temptations to both compromise and mission creep.

The German Greens, the most important environmental party in the world, are a case in point. In the 1980s, a basic conflict between radical "fundis" and pragmatic "realos" animated the party. Today, the realos have triumphed. At last fall's party conference, they adopted a three-pronged approach to climate change, including stepped-up public investment, which involves modifying the cap on public debt; carbon pricing of 60 euros, or $67, per ton (one-third of the price demanded by Fridays for Future); and tougher regulations. The mere mention of the word "bans" (*Verbote*), such as on gasoline-fueled cars, was enough to set editorial writers clucking. The climate agenda was flanked by a demand for rent controls, tenants' rights, and a 12-euro ($13) minimum wage. It is a worthy progressive agenda but hardly one suitable for a revolution—if anything, it's designed for coalition negotiations with the center-right Christian Democratic Union come the next election. And, by that measure, the compromises have worked. The Greens are riding high in the polls, attracting above all younger, college-educated, white-collar, and self-employed voters.

The political vision of Ocasio-Cortez's Green New Deal is quite different, at least if we take its original manifesto at face value. It appeals to an impressive array of disenfranchised and marginalized groups that it dubs "frontline communities." Both the left-wing of the Democratic

Party and the U.K. Labour Party also gesture toward the well-paid, highly skilled blue-collar jobs that will be created by an energy transition.

How organized labor will respond is by no means clear. Labor unions may prefer the devil they know to a gamble on a decarbonized economy. At the Labour Party conference in September, the general secretary of the GMB trade union, Tim Roache, warned that a crash program of decarbonization would require the “confiscation of petrol cars,” “state rationing of meat,” and “limiting families to one flight for every five years.” He concluded: “It will put entire industries and the jobs they produced in peril.” To which Tony Kearns from the Communication Workers Union offered the rejoinder: “There’s no jobs on a dead planet.”

In the meantime, what is clear is that coupling climate change politics to demands for comprehensive social restructuring will create powerful enemies. If linking climate politics to health care brings in blue-collar support for the green cause, it also makes the private insurance industry into an opponent. And this leads environmental activists to ask: Can the climate afford a policy agenda as expansive as the Green New Deal?

When the new U.S. Congress sits in 2021, according to the IPCC we will have nine more years to stave off climate disaster. Given that timeline, does it make sense to start by linking action on decarbonization to the intractable issue of American health care reform? Not if you take the experience of the Obama administration as your guide. In 2009, implacable Republican opposition in Congress forced the administration to sacrifice its environmental program to the legislative priority of health care. Cap and trade, the totemic policy of the centrist environmental movement since the 1990s, was dead on arrival.

This experience points to the deeply ambiguous logic of crisis politics. Summoning the urgency of the climate crisis gives the left a new energy. But if the evocation of crisis is more than a rhetorical device, it must also impose constraints and choices. In a foxhole, survival is paramount, and radicalism fades. Against the backdrop of decades of neoliberalism, it is easy enough to see the attraction of World War II as a historic example of government action. In both the United States and Britain, the left played an important role in the war effort. But it would be naive to imagine that this was a moment of radical opportunity. Labour union activists and social democratic promises were always subordinate to the immediate demands of the war and the entrenched influence of big business. The radicalism of the early New Deal was buried in the war.

The climate emergency is apocalyptic in its implications. Does it leave any room for other agenda items? The militants of the Extinction Rebellion movement deny that anything else matters. Their cause, they declare, is “beyond politics.” They call on their followers to start by mourning the world that is slipping away before our eyes. In Britain, they have taken to sabotaging commuter trains, and in return they have felt the fury of irate passengers. Although individual activists associated with the movement are avowedly anti-capitalist in their politics, the movement as a whole is distinctive precisely for its refusal to engage with broader political questions. Extinction Rebellion demand people’s assemblies, not specific political commitments. They demand decarbonization by 2025 without offering a program to get there. In this way, they take the logic of emergency anti-politics to its extreme conclusion.

Not surprisingly, there are some on the left who regard them as a millenarian sect. In the midst of a general election in which Labour was campaigning for full decarbonization by 2030, the rebels, as they like to call themselves, launched a hunger strike outside the party's main office. "This is the first truly shared global crisis," declared Ronan Harrington, the coordinator of Extinction Rebellion's U.K. General Election Strategy Group. "It can't have a left-wing solution."

III

Not only do extreme crises force invidious choices. They also make strange bedfellows. In an emergency, you cannot afford to be choosy. Your enemy's enemy is your friend. Despite the fond imaginings of Ocasio-Cortez and her cohorts, World War II was not won by the New Deal or by digging for victory. The effort on the homefront in Britain and the United States was modest in comparison with that of the other combatants. The dirty work of winning the war against Nazi Germany was done by the Soviet Union and its Stalinist regime at a cost far greater than anything the West has ever experienced.

If the American and British advocates of a Green New Deal are inspired by Roosevelt's demand to deliver tens of thousands of warplanes, who, one must ask, will win the carbon war on the ground?[1] The basic lesson of the mid-20th-century crisis is not that Western capitalist democracy rose to the challenge. The basic lesson is that whatever progress we achieved was enabled by an alliance with the protean violence of the Soviet regime, with which after 1945 we found ourselves in a lethal standoff, which divided the world and threatened nuclear annihilation.

The obvious question for the present is the relationship of the new climate left in the West to China. In the 1930s and 1940s, the Popular Front gave shape to relations between socialists, social democrats, communists, and the Soviet Union. What is the relationship of the Western left to the Chinese Communist Party regime today?

The Soviet Union was spectacular in its manipulation of nature. China is even more extreme. The present incumbents in Beijing are the inheritors of the Great Leap Forward, the one-child policy, the most spectacular burst of economic growth and the largest dam-building program in history, an agenda of abolishing poverty for all 1.4 billion of its people, the most complete surveillance system the world has ever seen, and the most serious effort to engineer our way out of the climate crisis. It is not too much to say that the future of humanity depends on the success of Beijing's climate politics.

Since it inherited the title of the world's largest carbon dioxide emitter from the United States around 2007 the Chinese government, unlike the George W. Bush and Trump administrations, has recognized the need to act unilaterally to cut emissions. Lethal levels of air pollution and crippling congestion in rapidly growing cities have created political pressure to act. The industrial policy advantages of seizing the initiative in solar-, wind-, and electricity-powered transportation are obvious. But in China, too, the energy transition has costs. China's heavy

1 https://www.mtholyoke.edu/acad/intrel/WorldWar2/fdr16.htm

industrial workforce is gigantic. More workers have been let go from China's steel mills in recent years than work in the entire steel industry of the West. [2]

In a new era of geopolitical competition with the United States and fears of economic slowdown endangering national stability, the latest round of five-year planning places a new emphasis on energy security over decarbonization. In the first half of 2019, China's renewable energy investments dropped by nearly 40 percent compared with the previous year, and the next few years will see 148 gigawatts of Chinese coal energy—close to the European Union's entire output—come online. Coal may be dirty, but it is also cheap and local.

Meanwhile, U.S. and European liberals, faced with China, are divided between a desire to uphold a commitment to human rights, fading hopes of economic and political convergence, and the tug of realpolitik. What is the position of the climate left? History suggests it does not have an alternative to detente with China.

In the 1970s and 1980s, Europe and the Soviet Union built a network of gas pipelines running east-west across the continent. They did so in the face of protests from Washington and warnings that it would leave Europe dangerously dependent on a Cold War enemy. The Europeans argued that energy was if not beyond politics, then aside from it. It was a policy hedged with moral ambiguity. The gas not only flowed through states under repressive one-party rule but earned them precious hard currency. But the Europeans made the investments nevertheless. They wanted the cheap gas, and alternative sources of energy, whether shipped in from the Middle East or generated by domestic nuclear reactors, came with their own risks. And in the long run, the Europeans trusted that the balance of influence in their relations with Moscow would tilt their way. In 1989, West Germany reaped the benefits when Moscow acquiesced to German unification.

The sources of potential conflict between the West and China are obvious and can no longer be put aside as transitional tensions. They extend to the fields of energy and climate. Were China to resume a high-carbon, coal-based growth path, it would be cataclysmic. If it opts for relatively low-carbon imported oil and liquid natural gas, this will force the issue of maritime security. And if it plunges headfirst into renewables, given its size, this will create fierce competition over rare-earth deposits and dwindling copper supplies. But faced with the existential threat of the climate crisis, there are also obvious possibilities for cooperation. A short list would include helping to green China's international investments as part of its Belt and Road Initiative, cooperating on the administrative procedures necessary to make international carbon pricing work, and defining common standards for green finance. This is humdrum stuff, but it is what a green detente could be made of. For the climate left, there is surely no other option. China today already emits more carbon dioxide than the United States and Europe combined. The West is a junior partner in whatever collective climate solution Beijing and the other emerging Asian powers can live with.

Socialism will always be defined by its efforts to tame and overcome capitalism. In the 20th century, it was reshaped by total war, the struggle over decolonization, anti-racism, and the battle

2 https://www.scmp.com/economy/china-economy/article/3034753/global-steel-forum-scrapped-china-says-it-has-done-more-its

for recognition of women's rights. If socialism has a future in the United States and Europe today, it will be defined in relation to these twin challenges: the struggle to mitigate and adapt to climate change while adjusting to the West's junior position in a rebalanced world. None of the West's major political ideologies—conservatism, liberalism, or socialism, shaped as they are by the history of the 19th century—are particularly suited to such a future. The only sensible alternative for tomorrow may be the ideology most commonly dismissed as radical today.

Piece 3
The Fierce Urgency of COP26
Social Europe January 2020

There are turning points in history. Moments that matter. Moments that mark beginnings and ends. As Martin Luther King reminded us "There is such a thing as being too late."[3] It is that which can give politics its fierce urgency. As far as global climate politics is concerned 2020 may be such a moment and it is vital that Europe should not be late.

The latest round of global climate talks, COP26, to be hosted in Glasgow from 9 to 19th of November 2020, was always going to be important. This is the moment, when the Paris agreement of 2015 is scheduled for another round of updated national commitments that reflect the ever-more alarming reality of the climate emergency.

Even at the time, it was obvious that the national targets submitted as part of the Paris agreement were inadequate to meet the professed target of 2 degrees warming, let alone 1.5 degrees. The inconsistency was accepted back in 2015 because it was important to reach an agreement that bound everyone, from the most reluctant to the most climate-concerned nations. Climate activists gambled that the national targets would be progressively improved. Five years on, COP26 in Glasgow - the first global conference to be hosted in post-Brexit Britain - is the moment when that gamble has to pay off.

The bar is set high. As global emissions continue to rise, the clock is ticking. Year by year the glide path to sustainability becomes steeper and more demanding in technical, economic and political terms. According to the United Nations Environment Program's latest report on the "emissions gap"[4], published in December 2019, the targeted emission reductions need to be three times more ambitious.

What are the prospects of achieving those goals and what can Europe do to help?

Individual European states are no longer a large part of the global emissions puzzle. But taken as a bloc the EU is the number 3 emitter. And since the 1990s it has played a key role in climate diplomacy.

After the fiasco of the climate talks in Copenhagen in 2009, when the meeting broke up without reaching even a token agreement, the road to Paris in 2015 was opened by the EU's willingness to commit unilaterally to a second round of Kyoto emissions reductions. The EU's condition was that India and China would agree to join a comprehensive climate pact. It was that deal, struck at Durban in 2011, that opened the door to bilateral agreements between Beijing and Delhi and Washington.

Of course those agreement depended on having a climate activist in the White House. Today, Trump's America leads a coalition of the unwilling. The US is due to complete its formal exit from the Paris agreement only days before the start of COP26, on 4 November 2020. That also happens to be the day after the American Presidential election. The outcome of that vote is anything but certain. But, even in the increasingly unlikely event that the Democrats sweep both the Presidency and Congress, we know how little to expect from the US. Neither Clinton or Obama even tried to persuade the Senate to ratify a binding international climate treaty. It was

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3 https://kinginstitute.stanford.edu/king-papers/documents/beyond-vietnam

4 https://www.unenvironment.org/resources/emissions-gap-report-2019

the fact that Paris was never ratified by the Senate which made it so easy for the Trump administration to pull out.

But the damage goes deeper. Not only has Trump rejected America's global climate commitments. His administration has attacked the geopolitical premise of the Paris agreement, i.e. the possibility of lasting cooperation between the West and China. The United States has openly declared a great power competition with China. And this is not limited to mavericks in Trump's entourage or even the Republican party. This is a pivot that embraces the entire US security establishment and large parts of the Democratic Party. The recent Phase I trade deal between China and the US is nothing more than a truce. It deals with tariffs and bulk purchases of soy beans. It does not address the broader issues of strategic competition and technological "uncoupling". This is not just a matter of military competition. It is already affecting aspects of technological cooperation and trade ranging from University labs to subway trains and microchips.[5] Last year the US Department of Interior grounded the fleet of drones it uses to monitor changes in land use and wildfires because the drones are manufactured in China.[6]

Though less overt than in Trump's America, in Beijing too there are signs of backsliding from the Paris agreement. Under the pressure of the domestic air pollution crisis, in its early years Xi's regime was proactive on energy policy and climate, signaling a determination to clean up and run down its coal-fired power stations. With the recent slowdown in economic growth and escalating tensions with the United States that anti-coal stance has softened.[7] Coal may be dirty but it is a safe, domestic source of power. Though the pace of expansion has slowed, China is still today opening more coal mines than are being closed in the rest of the world put together. If America is going to define its relations with China in openly antagonistic terms, Beijing will not risk its energy supply becoming more dependent on oil and LNG imported along vulnerable sea lanes. This will not stop China's energy transition. China will continue to build its dominant position in solar, electric vehicles and battery technology. But geopolitical confrontation will cause China to cling to coal and it will inhibit the two-way technology transfer that should be a fly-wheel on the global energy transition. This will cost time that we cannot afford.

In the geopolitical arena in which China and the US increasingly compete, the Europeans have chosen powerlessness. This does not mean that they are inconsequential. A neutral party in a conflict has real advantages. European corporations may be able to benefit from closer collaborations with their Chinese counterparts than American firms are able to pursue. Through its market power and regulatory reach the EU may exercise a degree of leverage over both sides.

But on climate diplomacy the EU has a more active role to play. The success of COP26 in Glasgow hangs by a thin thread. The Spanish government, to its great credit, rescued COP25 after the mass street protests in Santiago forced Chile to bail as the organizer. But the talks in Madrid were unproductive and demoralizing. They deadlocked over the search for an international carbon trading mechanism and the rearguard action of the conservative

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5 https://www.ft.com/content/0be9ed74-3825-11ea-a6d3-9a26f8c3cba4

6 https://www.nytimes.com/2019/10/30/us/politics/interior-department-chinese-made-drones.html

7 https://www.wsj.com/articles/in-tougher-times-china-falls-back-on-coal-11577115096

governments in Australia and Brazil. Our best hope for Glasgow is that the EU and China arrive at a grand bargain ahead of time, which enables them to corral key members of the G20 like Japan, India. In the complex web of national groupings at the climate talks, deals are built one coalition at a time.

The EU should be under no illusions. As far as Beijing is concerned a deal with Europe is a second best. But in the absence of the US, the EU is the only near-peer that has anything to offer. As was noted in December by a global alliance of think tanks, the Sino-EU duo is crucial to driving the ambition of global climate politics.[8] The EU does have real strengths. It is a vast market. It has the technological capacity to be a worthwhile partner. It already had a carbon pricing system in place, a model which China is following. The question is whether Europe has the political will, leadership and institutions to deliver a worthwhile partnership for Beijing.

The von der Leyen Commission has come into office trumpeting a Green Deal. But the divisions and foot-dragging of the member states have made for a painful spectacle. France and Germany bicker over the incorporation of nuclear into the green taxonomy. Berlin delayed the move by the EIB to end the financing of fossil-fuels and is now expressing skepticism over increasing the EIB's capital. Poland remains wedded to coal and the compromise reached in Germany over its protracted exit from coal hardly offers a shining example for others to follow.

Of course, haggling and tactical delaying actions are the norm in EU politics. But did the protracted agony of the Eurozone crisis and the subsequent political fallout not teach a lesson? Timing matters. And in 2020 on climate, it really does. If Europe "sleepwalks" into COP26, it risks a historic failure.[9] All efforts must be bent both to concerting the EU position itself and arriving at an understanding with China.

Ahead of Glasgow, in September the Europeans and Chinese have a summit scheduled for Leipzig.[10] One should not expect too much from such talks. Many difficult items will be on the agenda including trade and Huawei. On climate, China's stance will be set by its own internal politics. A commitment to an early stabilization of China's emissions and a return to the policy of running down coal has huge implications for China's economy, society and strategic position. Europe's influence is marginal at best. But if it wants to strengthen the hands of those in Beijing who argue for a more ambitious climate stance, then Europe needs to make clear its own commitment to radical action as promptly and convincingly as possible.

In practice this means that alongside the green deal being advanced by the Commission, the European Council has an urgent task. If an EU-wide agreement is to be reached by the summer there is no time to lose. The Council must use the spring of 2020 to drive the ambition of nationally determined emissions cuts.[11] France and Germany need to concert their positions and avoid bickering over nuclear power. Neither Paris or Berlin is going to give ground on this issue and the Chinese, who have their own significant nuclear program, are unlikely to have

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8 https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Propositions/TT%20statement%20COP25_0.pdf

9 https://www.cleanenergywire.org/news/eu-and-germany-hold-pivotal-role-drive-global-climate-ambition-2020

10 https://www.climatechangenews.com/2019/11/11/eu-plots-climate-deal-china/

11 https://www.e3g.org/library/2020-will-be-al-about-the-EU-and-China

much patience for European bickering on this issue. It will take commitment from both Macron and Merkel if Xi himself is to be engaged at Leipzig, rather than lower-ranking Chinese figures. The British as hosts of Glasgow have a key role to play in the success of the talks. COP26 is also a test for the new diplomatic relationship post-Brexit between the EU and London. But above all the EU must do everything possible to avoid divisions in its own ranks. This means patching up a deal that keeps the recalcitrant Poles on board. Warsaw has made clear that it wants more money. No one likes being held to ransom. But this is a vital moment. It is crucial at this juncture to keep the COP show on the road. An internal EU-compromise, even if it is an expensive one, is a small price to pay.

Piece 4

COVID: First Economic Crisis of the Anthropocene, Guardian 7 May 2020

In the spring of 2020 the streets of the major commercial capitals of the world from Lagos to Shanghai, London, and New York were eerily quiet. So too was Washington DC. Normally in April the American capital plays host to the spring meetings of the IMF and World Bank, great global gatherings of money people. But in 2020 both DC and the global economy were on lockdown. IMF Managing Director Kristalina Georgieva addressed her colleagues on video.

The world was facing, she declared, a "crisis like no other". For the first time since records began, the entire world economy is contracting, rich and developing countries alike. In the space of six weeks 30 million Americans have tried to sign on for unemployment insurance. World trade is suffering an interruption even more savage than in 2008. In India, the unemployment rate has surged to over 23 percent.[12] Unofficial estimates put it at 20 percent in China.[13] By the end of April, more than half the membership of the United Nations had applied to the IMF for help.

But it is not just the immediate impact that makes this economic crisis unprecedented. It is its genesis. This isn't 2008, which was triggered by a meltdown of North Atlantic banking. This isn't the 1930s, which was an earthquake that originated in the fault lines left by World War I. The COVID-19 economic emergency of 2020 is the result of a massive global effort to contain an unknown and lethal disease. It is, both a surprising demonstration of our collective power to stop the economy and a shocking reminder that our control of nature, on which modern life rests, is more fragile than we like to think. What we are living through is the first economic crisis of the Anthropocene, the era in which humanity's impact on nature begins to blow back on us in unpredictable and often disastrous ways. Furthermore, it is a reminder of how encompassing and immediate that challenge is. Whereas the timeline of the climate emergency is measured in years, COVID-19 circled the globe in a matter of weeks.

The shock goes deep. By putting in question our mastery over life and death the disease shakes the psychological basis of our social and economic order. It poses fundamental questions about priorities that impose huge burdens on us both individually and collectively. It upends the terms of debate. Neither in the 1930s nor after 2008 was there any question that getting people back to work was the right thing to do. The only question was how to do it. In 2020 not even that is obvious.

Stressing the unprecedented nature of the COVID-19 shock is not to say that the problems exposed by the financial crisis of 2008 are not still with us today. As the pandemic surged in March 2020, the fragility of financial markets was only too apparent. If the lockdowns are followed by a prolonged recession, as is more than likely, the banks will suffer severe damage. To contain this risk is the battle that the central banks have been fighting.

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12 https://www.cmie.com/kommon/bin/sr.php?kall=warticle&dt=2020-04-07%2008:26:04&msec=770

13 https://t.co/pE8dYzVlP6?amp=1

Nor does a stress on the uniqueness of the COVID-shock imply that geopolitical tensions between China and the US do not matter. They do. The Sino-American conflict puts the future of the world economy in question and this is all the more alarming as tensions over the politics of the virus mount every day.

But financial stability and geopolitics are now entwined with a challenge, which, as President Macron has put it, is anthropological: what is at stake is the trade-off between economic activity and death. A chance mutation in the environmental pressure cooker of central China has put in jeopardy all our ability to go about our daily business. It is a malign version of the butterfly effect. Call it the bat effect.

As it has circulated around the world COVID-19 has scrambled the time line of progress. Sophisticated hospitals in China, Italy and the United States have been reduced to chaotic, impotent despair. Nurses in New York resorted to swaddling themselves in rubbish bags. Face masks were hand-fabricated on sewing machines. We stack the dead in refrigerator trucks.

It is a nightmare. But unlike in a bad dream, waking offers no relief. We have to face the possibility that we have been living in a charmed interval. In the century since the Spanish flu of 1918-19, the intertwined rise of globalization and national welfare states took place against the background of relatively benign disease conditions. Thanks to improved nutrition, sanitation and housing, public health, pharmacology and high-tech medicine we have seen remarkable progress in human life expectancy. The conquest of smallpox in 1977 was emblematic. The sense that infectious diseases were a thing of the past underwrote a promise of protection. With COVID-19 the cost of that protection has gone way up.

In a horrific mind-warp, advanced economies suddenly find themselves facing poor-country public health dilemmas. We don't have the tools. The only answers to the threat are exorbitantly expensive. In the developing world the result is that children are stunted and families are impoverished. Millions die for lack of treatment. COVID-19 has delivered a taste of that to the rich world.

We cannot say we were not warned. Since the famous report by the Club of Rome of 1972, *Limits to Growth*, experts have been highlighting the natural forces that could interrupt the triumphant path of economic growth. In the wake of the oil shocks of the 1970s resource depletion was a big concern. In environmental politics in the 1980s climate change took over. But at the same moment, the shock of HIV/AIDS sparked awareness of a different type of blowback from nature: the threat of "emerging infectious diseases" and specifically those generated by zoonotic mutation. Starting from a famous conference at Rockefeller University in 1989 it has been argued again and again that this is no coincidence. It is the result of humanity's relentless incorporation of animal life into our food chain. HIV/AIDS. SARS, avian flu, swine flu and MERS could all be attributed to that dangerous appetite. Like climate change, epidemics are not merely accidents of nature. They have anthropogenic drivers.

The implications of this analysis are radical. But the doctors and epidemiologists who make it are not revolutionaries. What they have insistently called for is a global public health infrastructure commensurate with the risks that globalization entails. If we are going to keep huge stocks of domesticated animals and intrude ever more deeply into the last remaining reservoirs of wildlife, if we are going to concentrate in giant cities and travel in ever larger numbers this comes with viral risks. If we wish to avoid disasters we should invest in research, in monitoring, in basic public health, in the production and stockpiling of vaccines and essential equipment for our hospitals. Of course, that would require considerable political coordination and some investment. But it has always been clear that the pay-off would be huge. The influenza pandemic of 1918 which is thought to have killed 50 million people sets a high bar. Scaling it up to the present would imply hundreds of millions of dead. If a pandemic erupted and had to be contained by quarantine it was always obvious that the costs would run into the trillions of dollars.

With climate change we know what stands in the way of an adequate reaction. Fossil fuels are essential to our way of life. Powerful business interests have a huge stake in climate denial. The strategic interests of the United States, Saudi Arabia and Russia are all invested in oil. Decarbonizing is expensive, technically complicated and the benefits are diffuse and long-term.

In regard to global health policy there are bureaucratic rivalries between different national and global agencies. There are differences in approach between hawkish experts in global health security and biomedical humanitarians. The pharmaceutical industry will not invest in drugs unless it sees a profit. Cost-conscious hospitals want to minimize spending on beds. But all this, frankly, seems small beer compared to the risks involved. Whereas one can reasonably say that giant structures like capitalism and geopolitics stand in the way of addressing climate change that seems far less obvious when it comes to containing COVID-19. The cost of vaccinating the entire world is estimated at around $ 20 billion. That is the equivalent of roughly two hours of global GDP, a tiny fraction of the trillions that the crisis is costing.[14] The fact that this virus was allowed to become a global crisis is not explicable in terms of massive opposed interests. It is first and foremost a failure of government.

Because they are relatively cheap and the scale of the risk is huge all major countries in fact had pandemic preparations in place. None were as ample as we might now wish. But in places like South Korea, Taiwan and Germany they have worked. Making good plans, following through on them and doing basic things right turns out to matter.

If we take climate change as our template for thinking about the challenges of the Anthropocene we are led to think about giant structural solutions. But COVID-19 teaches that that is only one type of challenge that managing our radically stressed environment poses. To win the battle with the virus has required not so much a massive structural approach as smart and consistent application of resources and rapid, tactical responses. If humanity, in its gigantic mobilization of nature, has saddled a juggernaught, there are many things of which we need to be aware. What climate change tells us is to slow down. What COVID-19 teaches is that we had better tighten our reins and pay attention. So tightly knit is our global system that a failure of governance in a few crucial nodes can affect literally everyone on the planet, individually.

At their peak, according to the ILO, the work activity of 2.7 billion people, 81 percent of the global workforce was restricted by containment measures. Orders from Beijing and Delhi account for the vast majority of that. But the remarkable thing about COVID-19 is that it brings the risks of the Anthropocene home to each and everyone one of us individually. The lockdowns were not simply top down government measure. It was people themselves who en masse decided on their own response to the threat, often ahead of their governments. Whether through working from home, absenteeism or through protest led by trade unions, workers signaled their preference for safety. Schools, factories and shops emptied. Supply chains broke down. Demand collapsed. Without demand, supply, or a willing workforce, employers more or

14 https://www.ft.com/content/bd28d79f-8a0a-44c6-ac74-1abb17344c5b

less reluctantly agreed that discretion was the better part of valor. Running ahead of the health policy debate, private responses to COVID-19 unleashed a spontaneous shut down of the economy. That was most dramatically reflected in the financial markets which began a global run to safety. It was that which triggered first the central banks and then parliaments and governments into action.

The result has been surprising. It turns out that we are capable of pausing the world economy. But this now faces us with the awesome responsibility of reopening. If Kristalina Georgieva is right that this is a crisis like no other so too is the problem of the restart.

The stakes could hardly be higher. On the one hand the huge medical risks on the other a disastrous economic crisis. How can we make the trade off? It is tempting to reject the choice as impossible or false. But not only is that not true but it also denies the fact that under normal circumstances we routinely engage in life and death trade-offs. Even in the most affluent societies, financially motivated decisions are made every day that decide the chances of death due to workplace accidents, pollution, car crashes, hospital funding, drug procurement and health insurance. An election in which spending on the national health system is at stake is an election about life and death. When you argue about funding the NHS you are arguing about marginal adjustments in the tax rate and spending priorities. By contrast, when you are arguing about lifting a lockdown you have to decide whether reopening a dry-cleaners as opposed to a gym poses an unacceptable risk to the pensioner who lives next door.

Never before has the question been put in such direct terms for entire nations. The result is predictably divisive. The United States is currently embarked on a crash test with the Southern Republican state like Georgia plowing ahead despite inadequate testing or medical backup. Incited by the American President himself, armed militia occupied the Michigan state capitol demanding "liberation" from the lockdown. Meanwhile in Germany, one of the few success stories, Chancellor Angela Merkel caused outrage by trying to stifle any discussion. This was not a moment for "orgies of debate about reopening" she insisted.

If the lockdown was tough, the decision to reopen is an even more fundamental test of our processes of government. In any case, whatever the timeline of the official reopening, it is far from clear whether this will mean a return to normal economic activity. The fear remains.

The magic bullet would be a medical solution – anti body tests, effective treatments, a vaccine. It took five years to develop a vaccine for Ebola but vastly greater resources are being thrown at this problem. But what we are counting on should not be confused with business as usual. We have never successfully developed a corona vaccine. We are betting not on normal science, but on a modern wonder, a "scientific miracle".

And, even in the best-case, if a vaccine is rolled out in 2021, we cannot escape the logic of risk society. We now know what this kind of threat can do. We know we lost a big chunk of 2020. How do we move on from here?

The obvious solution is finally to make the investments in global public health that experts have been calling for since the 1990s. That is sensible. But we know that there will be political and commercial obstacles to overcome. And it brings us up against the problems that predated the crisis. China and the US are at odds and seem determined to politicize the pandemic. On top of that the vast financial cost of the crisis will hang over us. Huge debts are likely to encourage talk of austerity. Since the 1990s market-focused politics of economy in the public sector have weakened health systems around the world. Ultimately politics will be decisive and the last six months have brought crushing defeats for the left on both sides of the Atlantic. The prevailing political tenor of the crisis, so far, has been conservative and nationalist.

Faced with the crisis Bolsonaro and Trump have cut ludicrous figures. But they express a deep desire to deny the significance of the shock. Who would not rather think that this was simply the flu. Given this temptation what we should guard against is not open displays of denial but the soft alternative. COVID-19, like the unprecedented hurricanes and devastating fires of 2019, will be dismissed as a freak of nature. That is comforting. It will be good for business in the short-run. But it sets us up for another crisis.

If it is right that compared to our previous experience COVID-19 is a crisis like no other, what is to be feared is that there will be more like it to come.

Piece 5

Coronavirus has shattered the myth that the economy must come first

Guardian 20 March

The corona shutdown of 2020 is perhaps the most remarkable interruption to ordinary life in modern history. It has been spoken about as a war. And one is reminded of the stories told of the interruption of normality in 1914 and 1939. But unlike a war the corona stop involves demobilization not mobilization. Whilst the hospitals are on full alert, the majority of us are confined to quarters. We are deliberately inducing one of the most severe recessions ever seen. In so doing we are driving another nail into the coffin of one of the great platitudes of the late 20th century: It's the economy stupid.

Once upon a time we thought we knew what was up and what was down. To the bowdlerized version of Marxism that was the lingua Franca of the 1990s it was obvious that the economics were the fundamentals, the rest followed. It was Western economic success that felled communism. And the economy ruled not only over creaky communist dictatorships. It defined the scope of possible politics in democracies too. Arguing against globalization, Tony Blair insisted, was as absurd as arguing against the seasons.

Then came 2008 and we were left wondering who the economic masters of the universe actually were. It was followed by the extraordinary, politically-induced catastrophe of the Eurozone in which conservative fiscal populism and dogma clad as expertise ruled over the need to ensure employment and grow the pie. Then in 2016 the UK referendum delivered a majority for Brexit in the face of predictions of economic disaster. Months later Donald Trump, a narcissistic billionaire was swept to power by working-class votes in the face of opposition by the great and the good. Both the UK and the US have since pursued policies of spectacular economic irrationality without fear of a crushing veto by the markets. Liberal elites waited in vain for the market vigilantes to arrive.

And now corona. Imagine if blunt economic interest was in fact dictating our response. Would we be shutting the economy down? What we know about the virus tells us that it kills precisely the least productive members of society. The vast majority of the working population experience symptoms barely more significant than a regular flu. Unlike regular flus it does not threaten children, the future workers. The virus may be bad, but simplistic economic logic would dictate that until we have a vaccine it would be best to keep life going, because, you know, "it's the economy stupid".

That was indeed the first reaction of the British government. The headline was that Britain was staying open for business. Journalists with good memories dug up Boris Johnson's fondness for the mayor in Jaws who insists that despite the fact that a sea monster is eating his constituents the beach should stay open. The higher wisdom of public health we were told was that the most vulnerable should continue working, whilst the productive workforce acquired immunity. We know how that bold experiment in heroic economism has ended: a panic-driven withdrawal in the face of the disastrous scenario of overwhelmed NHS hospitals, a breakdown in general medical services and a crisis of political legitimacy.

It suddenly became obvious that when matters of life and death are concerned the calculus is different. Of course, old and sick people die. We all will in due course. But it matters fundamentally how and under what circumstances. A huge surge in mortality even if it is limited to “vulnerable” populations with preexisting conditions is existentially unsettling. So too are the apocalyptic scenes that will unfold in our hospitals. In earlier age they might have remained behind a decent veil of obscurity. No doubt the NHS and the BBC will work out the protocols for “embedded” reporting from the clinical frontlines. But the words and images that have already come to us from Northern Italy and Wuhan are bad enough. Faced with all of this, the stupidity lies in not recognizing promptly that we must act, that we must shut down, that even the most essential individual activity of the market age, public shopping, has mutated into a crime against society.

This is not to say that economics is not shaping the corona crisis. It is the relentless expansion of the Chinese economy and the resulting mixing of modern urban life with traditional food ways that creates the viral incubators. It is globalized transportation systems that speed up transmission. It is calculations of cost that define the number of intensive-care beds and the stockpiles of ventilators. It is the commercial logic of drug development that defines the range of vaccines we have ready and waiting. Obscure corona viruses don’t get the same attention as erectile disorder. And once the virus began to spread, it was our attachment to business as usual that induced fatal delay. Shutting down comes at a price. No one wants to do it. But then it turns out, in the face of the terrifying predictions of sickness and death, there really is no choice. To imagine otherwise is stupid.

It is once you have overcome that political, intellectual and existential hurdle – to realized that this is a matter of life and death – that economics enters back in. And it does so with a vengeance. The logic revealed by the well-organized Asian states is that it is best to conduct a severe quarantine regime in the hope of being able to return to normal activity as soon as possible. The Chinese economy is already resuming step by step.

In the West the scale and breadth of the epidemic is such that our response now will have to be a blanket shutdown. And that begs gigantic questions of economic management. Even conservative governments on both sides of the Atlantic are pulling every lever of monetary and fiscal policy. In a matter of weeks they have embarked on gigantic interventions on a scale comparable to those in 2008. They may be able to soften the blow. But it is an open question how long we will be able to persist, how long we will be able to freeze the economy to save lives. In making the difficult choices that lie ahead we have at least gained one degree of freedom. Given the experience of the last dozen years we should never tire of asking, which economic constraints are real and which imagined. The big idea of the 1990s that “the economy” will serve a regulating superego of our politics is a busted flush.

Piece 6
How coronavirus almost brought down the global financial system
Guardian April 16

In the third week of March 2020, while most of our minds were fixed on surging coronavirus death rates and the apocalyptic scenes in hospital wards, global financial markets came as close to a collapse as they have since September 2008. The price of shares in the major corporations of the world plunged. The movement of the markets was so erratic that major banks withdrew from trading.

Meanwhile, the value of the dollar surged against every currency in the world, squeezing debtors from Indonesia to Mexico. Whilst consumers hoarded toilet paper, those businesses that could scrambled to draw down every available credit line. Trillion-dollar markets for government debt, the basic foundation of the financial system, lurched up and down in terror-stricken cycles. On the terminal screens, interest rates danced. Traders hunched over improvised home workstations – known in the new slang of March 2020 as "'Rona rigs" – screaming with frustration as sluggish home wifi systems dragged behind the movement of the markets. At the low point on 23 March, $26 trillion had been wiped off the value of global equity markets, inflicting massive losses both on the fortunate few who own shares and on the collective pools of savings held by pension and insurance funds.

What the markets were reacting to was an unthinkable turn of events. After a fatal period of hesitation, governments around the world were ordering comprehensive lockdowns to contain a lethal pandemic. Built for growth, the global economic machine was being brought to a screeching halt. In 2020, for the first time since the second world war, production around the world will contract. It is not only Europe and the US that are shutdown, but once booming emerging market economies in Asia. Commodity exporters from Latin America and sub-Saharan Africa face collapsing markets.

It is now clear that we can, if circumstances demand, turn the economy off. But the consequences are catastrophic. Across the world, hundreds of millions of people have been thrown out of work. From the street hawkers of Delhi to the personal trainers of LA, the service sector – by far the most important employer in the modern economy – has been poleaxed. Never before has the global economy suffered a shock of this scale all at once. In the US alone, at least 17 million people have lost their jobs in the last three weeks. A severe global recession is now inevitable.

The crucial question now is how much of the world economy will survive the lockdown and this depends on the availability of credit. Business runs on credit. The bits of the economy that do continue to function, the warehouses, the cell phone and internet firms, they all need credit. Wage bills for those still working are financed through credit. Even greater is the need of those that are not working. If they can't get loans, bills will go unpaid, which spreads the pain. To survive the lockdown, millions of families and firms around the world are relying on grants and loans from the state. But tax revenues have collapsed so states need credit too. Across the world we are witnessing the largest surge in deficits and government debt since World War II..

But who do we borrow from? Banks, financial markets, and money markets provide the financial fuel of the world economy. Normally, that credit is sustained by the optimistic promise of growth. When that snaps you face a self-reinforcing cycle of collapsing confidence, contracting credit, unemployment and bankruptcy which spreads a poison cloud of pessimism. Like an epidemic, if left uncontrolled, it will sweep all before it, destroying first the financially fragile and then much else besides. It is not for nothing that we speak of financial contagion.

There have been recession before of course. But what began with the lockdown in Wuhan in January 2020 is more intense and more fast moving than anything we have seen before. In a matter of weeks we have been confronted with an economic outlook that is as grim as at any moment since the 1930s.

But, now imagine something worse. Imagine a situation where on top of the pain of the lockdown and the hellish scenes in hospital wards we also faced a call for austerity because the government could not safely finance extra spending. Imagine that interest rates were surging and credit card balances were being called en masse. All of this may still happen. It is already happening to the weaker economies around the world. But it did not happen in Europe and the US, immediately, in March 2020 as the epidemic hit with full force.

What we have succeeded in doing is to flatten the curve of financial panic. We have maintained the all-important flow of credit. Without that, much of our economy would not be on life support. It would be stone dead. And our governments would be struggling with a financial crunch to boot. Maintaining the flow of credit has been the precondition for sustaining the lockdown. It is the precondition for a concerted public health response to the pandemic.

How did we do this? In major crises we are reminded of the fact that at the heart of the profit-driven private financial economy is a public institution, the central bank. When financial markets are functioning normally it remains in the background. But when they threaten to break down it has the option of stepping forward to act as a lender of last resort. It can make loans. Or it can buy assets from banks, funds or other businesses that are desperate for cash. Because it is the ultimate backer of the currency its budget is unlimited. We learned this in 2008. But 2020 has driven home the point as never before.

The last six weeks has seen a bout of activism and intervention without precedent. Many of these interventions are technical. They had to be done quickly. Some barely made the headlines. But the result is momentous. A giant public safety net has been spanned across the financial system. We may never know what went on behind the closed doors of the Fed, the ECB and the Bank of England in the critical moments in March. So far, only muffled sounds of argument have reached the outside. But as the virus struck, the men and women in those three central banks held the economic survival of hundreds of millions of people and the fate of nations in their hands.

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The financial markets scan the world for risk. Even the slightest disruption in the vast networks of finance, production and trade offers the opportunity for profit or the threat of loss. So the news on 23 January, that the outbreak of an unknown virus was sufficiently serious for Beijing to impose a gigantic quarantine hit the traders on their Bloomberg terminals hard. Hubei province and its capital Wuhan are a major industrial center. The supply-chains of global manufacturing businesses like Samsung and Nissan were going to take a hit. Bank economists struggled to get a grip on the dimensions of the problem. Would this be a minor disruption like SARS in 2003? Or were we facing the nightmare scenario of the Hollywood film, *Contagion*?

In late January, investors began to move more and more money out of things like commodities and shares in companies, and into the relative safety of government bonds. What comforted them was the idea that the virus was a problem contained in China.

The day that illusion burst, the day that investors realised that COVID-19 was becoming a global pandemic, was Monday 24 February. Over the weekend the Italian government had announced that it was imposing a quarantine in parts of northern Italy. It was the first place in the West to do so.

Ever since the financial crisis of 2008 Italy's economy had been stagnating. Both its banks and its public finances were in a precarious state. Italy's debt levels were high enough to cause bond markets to periodically panic. Now the country would become the frontline in the virus fight. The coronavirus would test the solidarity of the Eurozone at its weakest link.

At this point, not everyone was taking the threat seriously. The caseload in the US still looked tiny. Donald Trump dismissed the virus as a "scare" and encouraged investors to go bargain hunting on Wall Street.

But investors were now seriously worried. Over the week that began on 24 February, America's main stock market index, the S&P 500, lost ten percent of its value. The chair of the US Federal Reserve, Jerome Powell, was concerned enough to signal that he would soon be bringing forward a cut in interest rates, in order to stimulate consumption and investment. It was a conventional reaction, but COVID-19 was no longer looking like a conventional threat.

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By early March, whatever complacency had prevailed was long gone. The death toll in Northern Italy was rising into the hundreds and it was only a matter of time before Rome would be forced to declare a nationwide lockdown. Investors around the world started to panic.

In times of uncertainty, the things they want are safe haven assets. And what makes a government bond a safe investment is not only the financial standing of the borrower, but the depth of the market in which lenders can sell them if they want to get their money back sooner. There is no deeper market than that for US Treasuries, as American government bonds are known. The greater the demand for safety, the lower the interest rate the US government generally has to pay to borrow. In the first week of March those rates were at record lows.

For the rest of the world economy, this run to safety was an alarming signal. One sector that knew it was heading for trouble was oil. When the global economy slows, so does the demand for energy. The oil industry of the 21st century consists, on the one hand, of large, state-controlled producers – above all the OPEC group dominated by Saudi Arabia and Russia – and, on the other hand, of America's upstart fracking industry. To match falling demand for oil, the Saudis wanted to cut overall production and thus prop up the price. For this they needed the agreement of the other big producers, but Russia refused to go along with them. As Moscow saw it, cutting production with a view to propping up prices was an invitation to America's shale producers to fill the gap. If the politics of climate change meant that the future really would bring a transition away from fossil fuel, winning the end game involved seizing as much of the market as possible for as long as oil was being pumped. So Russia decided not to cut production, but to launch a price war. Not wanting to be outdone, over the weekend of 7-8

March, Saudi Arabia took up the challenge. It announced that it would be maximising production and discounting its prices.

On Monday 9 March, as markets opened, oil prices plummeted. The benchmark Brent crude fell 24% by the end of trading. By the end of the month its value had halved. From the point of view of the financial markets, the ferocity of the competition in the oil industry was a harbinger of things to come. Falling demand would force industry after industry to either slash prices or contract production. Either way, it was bad news for profits.

When trading opened on Wall Street that morning, the situation was so dire that the circuit-breakers – automatic stops to trading that are triggered when prices fall by a certain amount – were soon activated. This was supposed to slow a wild sell off. But it sent a message of panic. As soon as trading resumed, everything sold. There were no buyers.

A rout like the one that began on 9 March has a perverse logic. When fund managers face withdrawals from the people whose money they manage, they need cash and have to choose which assets to sell first. They might prefer to sell the riskiest investments, but those can be disposed of only for a large loss. So, instead, they attempt to sell their most liquid and safe assets, government bonds. Their prices fall dragging them into the maelstrom too. That has the knock-on effect of unravelling a basic relationship on which many investors rely: typically, when shares go down, bonds go up, and vice versa. So to protect yourself against risk, you buy a portfolio made up of both. If everything works as it's supposed to, the swings should balance each other out. But in the panic that began on 9 March, this stopped happening: rather than balancing out, the price of shares and bonds were collapsing together. The only thing that anyone wanted to hold was cash, and what they wanted most of all were dollars. The surging dollar in turn spread the pressure worldwide to everyone who owed money in the American currency.

The Fed desperately tried to halt the run. To signal its willingness to support the economy and ease the pressure on the world economy from the strong dollar, it brought forward the interest rate cut that had been expected for the middle of the month. But with the darkening horizon, lower interest rates did little to help. Who would borrow or invest under such circumstances? The desperate demand for dollars was not stanched by marginally less attractive American interest rates. Confidence was broken. Just how badly would become clear over the following two weeks.

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It was a cruel twist of fate that Italy was the first European country struck by the virus. Italy has a sophisticated medical system; Lombardy and Veneto are amongst the richest places in the world. The weakness lies in the country's public finances. To fight the crisis, Italy needed to be spending money, on public health and to support the economy during the lockdown. But would the corset of the euro give it the leeway?

The problem was that spending to meet the coronavirus crisis would raise Italy's public debts. The more indebted you are, the higher the price you pay to borrow. For a European government, that premium is measured by the difference, or "spread", between your interest rate and that paid by Germany, the highest-ranked borrower in Europe. Given the size of Italy's debts, even a fraction of a percentage point in spread cost the country billions of euro. With its pre-crisis debt at just under 135 percent of GDP, Italy was perilously close to the point at which rising spreads would drive up its deficit and thus, in a vicious circle, make its debts less and less sustainable.

There are, as economists like to say two equilibria, two states of the world, one in which investors have confidence, spreads stay low and debt is sustainable and one in which investors are panicky, interest rates are high and the debt burden is too much. To ensure that investors stay calm and you stay in the good equilibrium, it is the job of central banks to act as the buyer of last resort. But because Italy is a member of the eurozone, it no longer has an independent national central bank. Its monetary policy is set by the European Central Bank, which is prohibited from directly buying a member country's newly issued debt. That left the Italians exposed. As the coronavirus crisis intensified in late February and investors became concerned by the prospect of greater state spending, the spread to German interest rates increased. If they rose too far Italy would face not only a public health disaster but a financial crisis too. What could Europe do to help? Would Europe's governments agree to share some of the burden, or would the ECB step in?

Italy already had reason to feel abandoned by its European partners: they had done little to help it tackle its chronic unemployment problem, or to take in the refugees arriving from North Africa. The coronavirus was a new test. The signs were not good: other member states were grudging in their reaction to Italy's appeals for help. But what really mattered, for the country's financial survival, was the stance taken by the ECB.

Under its former president, Mario Draghi, the ECB had emerged in the course of the last financial crisis as the pivot of the European economy. Draghi's promise to do whatever it takes to hold the Eurozone together, uttered at the height of the crisis in July 2012, has become a mantra of modern economic policy. Faced with a financial panic, restoring confidence is key – and because a central bank is in charge of issuing currency, it is the only crisis-fighter that has truly unlimited firepower.

Northern European fiscal and monetary conservatives had always been suspicious of Draghi's interventions, which they saw as a way to transfer Italy's liabilities onto Europe's balance sheet. And his final round of bond-buying, in 2019, proved particularly controversial. By the time he ended his stint at the ECB, that autumn, it was all Angela Merkel's government in Berlin could do to ensure that there were no unseemly scenes at his retirement party.

Christine Lagarde, the former French Finance Minister and IMF boss, had inherited Draghi's extraordinarily difficult position. In her job application she had positioned herself as an advocate of climate politics and greening finance. Now she would have to demonstrate that she could handle a major financial crisis. The ECB press conference on 12 March was the crucial test.

The ECB had good news for Europe's banks: they would receive a huge amount of low-cost funding. It was also going to buy an additional €120bn in assets – although if that was spread across the members of the Eurozone, as the rules demanded, it would hardly give Italy the support it needed. But the critical moment came when Lagarde was asked a question about the ECB's attitude to sovereign debt. Her response was remarkable. "We are not here to close spreads," she said. "This is not the function or the mission of the ECB. There are other tools for that, and there are other actors to actually deal with those issues."

“Spreads” meant Italy. And what Lagarde seemed to be saying was that it was somebody else’s problem. But if the ECB wasn’t going to help Italy, who would? Did it really expect the other member states of the eurozone to string together a fiscal safety net for Italy? Obviously, given the bad blood between Italy and the Northern Europeans, Lagarde had to walk a fine line. But with hundreds of people dying every day, with global financial markets in a state of repressed panic, was the ECB seriously suggesting that it would wait for Berlin, Paris and Rome to settle their differences before putting out the fire? It was breathtaking.

For investors, Lagarde’s comment came like a bolt of lightning. And within minutes, she started to backtrack. She went in front of the cameras to promise that the ECB would use the flexibility of its €120bn program to prevent the fragmentation of the euro area – code for helping Italy. But the damage was done. The markets slumped, and the price that Italy had to pay to borrow leapt: the spread moved by 0.6-0.7%. That may not sound like a big difference, but when applied to a mountain of debt the size of Italy’s it raises the interest bill by as much as €14bn for just one year - €2bn for each of Lagarde’s seven words. It was the last thing Italy needed. In a rare public rebuke, both Paris and Rome distanced themselves from the ECB. The crisis was pulling Europe further apart.

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After five terrifying days of market turmoil, the weekend of 14-15 March was a moment for central banks around the world to coordinate their response. What everyone wanted was dollars, so it was above all the Fed that needed to take the lead. And Powell did. He called an unscheduled press conference for the afternoon of Sunday 15 March. The drama of the moment was somewhat spoiled by the fact that the Fed had problems with its telephone line and some of Powell’s remarks towards the end were lost to many of those listening in. But what he announced was remarkable.

With immediate effect the Fed was cutting interest rates to zero – something that it had done just once before, at the height of the crisis in 2008. To stabilise the Treasury market, it would be buying $700bn in a new round of so-called quantitative easing. And it would start big, buying $80 bn by Tuesday 17 March. In the space of just 48 hours it would buy more than the Fed bought in most months in the aftermath of 2008.

These were measures for the US economy. But the coronavirus was a global problem. The flight to safety and the ensuing rise in the dollar had put pressure on everyone who had borrowed in the American currency. So to ensure that dollars could be piped to every financial institution in every major financial centre in the world, the Fed announced that it was improving the terms on the so-called liquidity swap lines – deals by which the major central banks agree to exchange dollars for sterling, euros, swiss francs and yen in unlimited amounts.

Powell’s emergency announcement was a remarkable intervention. He was deploying the main weapons of the 2008 crisis but with far greater speed than his predecessors ever had. But it was not enough. When the markets opened on Monday the fall was vertiginous. The circuit-breakers are supposed to come into effect if the market falls by more than 7 percent. On Monday morning the fall was so quick that it hit -8.1% before trading could be stopped. The so-called fear index, VIX, a measure of market volatility, surged to levels last seen in the dark days of November 2008.

The fear in the markets was now feeding on itself. If the virus was different, if the Fed's magic of 2008 no longer worked, then what would?

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The foreign exchange market, where currencies are traded, is the biggest market in the world. And the place where the most transactions are booked is the City of London. On an average day, transactions back and forth total $6.6 trillion. But on Wednesday 18 March, London was in turmoil. Boris Johnson's virus strategy was in disarray and there were rumours that the capital would be locked down. On the terminals there was only one trade: people wanted to sell everything. The only thing they wanted to buy were dollars. Every other currency was falling.

The central banks' failure to calm the markets had set the stage for the worst days of the panic. Coronavirus cases were piling up in Europe more rapidly than at the peak of the crisis in Wuhan. Hedge funds were placing multi-billion dollar bets that the recession in Europe would be protracted. Blue chip companies like Apple were facing stiff premiums to borrow for as little as three months ahead. Even gold, a classic safe haven, was selling.

That Wednesday, on his third day as governor of the Bank of England, Andrew Bailey organised press conference via telephone in an effort at reassurance. But as he was speaking, sterling plunged by 5% to its lowest level since 1985. Meanwhile, the market for UK government bonds, also known as gilts – the oldest major asset market in the world – was witnessing unprecedented turmoil. For a ten-year gilt, the yield (the inverse of a bond's price) surged from a low of 0.098% on 9 March to a high of 0.79% at the close on the 18 March, a near eightfold increase. Unusual discrepancies were emerging between the prices for gilts of different duration which signaled a failure of the normal mechanisms that smoothly adjust demand and supply. In the understated phrasing of Governor Bailey, it was "bordering on the disorderly".

In response, the Bank of England Monetary Policy Committee met the next day in emergency session and announced that the Bank would be buying £200bn in gilts. Unlike in 2008 it would not be doing so on a prearranged schedule. As Bailey explained: "We will act in the markets promptly and rapidly as we see appropriate." This was no time for timetables. The central bank was, by its own admission, flying by the seat of its pants.

On an emergency conference call on the evening of 18 March, the ECB executive board decided that it too needed to act. Under a Pandemic Emergency Purchase Programme it announced that it would begin by buying €750bn of government and corporate debt. If necessary that would be increased. But the ECB was willing to go even further than that. It said that, if necessary, it would revise some of its "self-imposed limits". For an institution as hide-bound as the ECB, this amounted to a revolution. Self-imposed limits - inflation targets, rules on which European government's debt it could buy and in what quantities - are what the ECB lives by. It is clear that conservative members of the bank's Governing Council continued to resist such a move. But in the end it was the turmoil in the markets that decided the issue. The ECB needed to send a signal of determination. If Lagarde has fluffed her "whatever it takes moment", the ECB was now at least promising to do whatever was necessary.

By the end of the third week of March, 39 central banks around the world, from Mongolia to Trinidad, had lowered interest rates, eased banking regulations and set up special lending facilities. To ease the pressure on emerging markets the Fed widened the network of liquidity swap lines to cover 14 major economies including Mexico, Brazil and South Korea. This was a remarkable wave of activism. But the epidemic itself was only beginning to bite. Central banks could cushion the financial shock but not address the actual economic implosion, let alone the health crisis.

European governments had been quick to move. Germany had thrown aside its fiscal caution and was committed to a gigantic program of government guarantees for business lending. But this made all the more glaring the gap to Italy and Spain, which were not only hardest hit by the virus but also constrained by the financial legacy of the eurozone crisis. They did not want to risk sliding back into a debt crisis.

In the US, the Fed had leapt into action. But where were the politicians? Congress was distracted by the upcoming presidential election. What was needed was an unprecedented rescue package for an economy in freefall. How were Republicans and Democrats to reconcile fundamental differences over health care, unemployment insurance, or the notorious cronyism of the President and his clan? Since the Democrats had won control of the House of Representatives in 2018, legislation had been largely paralysed. Now, in the face of a tsunami of job losses, the two parties had to come to an agreement.

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As trading began in Asia early on the morning of Monday 23 March, the news from Washington made it clear that there had been no deal on Capitol Hill. For an unprecedented fourth time in succession, the futures market hit the lower buffer and trading was stopped. If it wanted to avoid a meltdown when Wall Street opened, the Fed would have to make another move.

Up to this point Jerome Powell had been moving in the shadow of his predecessor, Ben Bernanke. But by March 23th Powell had activated all the basic elements of the 2008 repertorie – slashing interest rates, using quantitative easing, support for money markets. But it had not worked, partly because it could not reach the source of the crisis itself, the virus and the lockdown, and also because it was not reaching the bit of the credit system that was most vulnerable in 2020: the borrowing of big corporations.

The Fed has always steered clear of corporate debt. It considered such debt politically sensitive. If you bought individual firms you were vulnerable to accusations of favoritism. If you bought a cross-section of debt you ended up holding many very poor-quality loans. And the higher risk end is where so-called private equity firms make winnings before which the profits of Wall Street bankers pale into insignificance. But by the early hours of 23 March it was clear that something had to be done to stabilise the corporate debt market. Since 2008, bonds issued by nonfinancial corporations have surged from $3.3 trillion to over $6.5 trillion. If their value fell too far, America’s corporations would not only face shutdowns and a complete loss of revenue but a crippling credit squeeze.

Ideally, the Fed would have made a grand announcement in conjunction with a Congressional stimulus package. But by the evening of 22 March, it was clear that the package being proposed by the Republicans was unacceptable to the Democrats. It might take days for them to square the difference. The financial markets would not wait.

On 23 March, 90 minutes before markets opened, Powell made his move. He announced that the Fed was setting up legal entities – off the books of the Fed but guaranteed by it – that would have the capacity to buy highly-rated corporate debt, or at least any debt that the ratings agencies were still willing to declare investment grade. In effect the Fed was establishing itself as the backstop to the trillion-dollar corporate bond market. It was taking the risk in the hope that Congress would in due course come to its rescue. In the mean time, as a legal fig leaf it invoked an emergency under article 13(3) of the Federal Reserve act which would enable any losses to be covered by the obscure US Treasury Exchange Stabilization Fund. Those funds were limited. To ensure that that limit was not tested the Fed ramped up its asset purchase program, to an astonishing $375 billion in Treasury securities and $250 billion in mortgage securities in a single week.

It was an extraordinary move to widen the scope of central bank intervention into the corporate economy. And it was understood as such by the markets. Having lost 30% of their value since the start of the year, the S&P500 and the Dow Jones, as well as the FTSE 100, began to recover that day.

Two days later, on 25 March, backing arrived from Congress when the Senate passed its giant package of $2 trillion – more than twice the size of the stimulus bill passed in 2009. It provided funds to top up unemployment insurance, to support small businesses and America's privatised hospital system. Crucially, it also set aside $454 billion to cover Fed losses. Since most loans would not be expected to go bad, this would enable the Fed to make more than $4 trillion in loans, if necessary.

In the US the public health campaign against the virus was still a shambles. But as far as economic policy was concerned, the full power of the American state was now being deployed behind the emergency program. And the Fed was also acting as a provider of dollar liquidity to the world economy. In the UK, too, the Treasury and the Bank of England were working closely to link the huge increase in government spending to efforts to stabilise financial markets.

But in the eurozone, that kind of coordination was lacking. The ECB had managed to stop the immediate panic. Yet there was still the question of whether the member states could come up with a financial plan to support their hardest hit neighbours, Italy and Spain. The obvious solution was to issue debt jointly to fight the crisis together. This would ensure that Italy was not constrained by its preexisting financial weakness.

It had been clear for years that what Europe needed to match its common currency and central bank was a proper budget financed by a common system of taxation and public debt. The idea of common borrowing had been raised repeatedly during the eurozone crisis but it had been bitterly resisted by a conservative Northern European coalition led by Germany. How would they respond now?

For a coalition of nine states led by France, Italy, Spain and Portugal, the case was obvious. On 25 March they called for a "common debt instrument" to fund a crisis response. The ECB threw itself energetically behind the proposal. But, once again, the Netherlands and Germany refused to budge. The issue was shoved off into the Eurogroup, a meeting of the eurozone's finance ministers, where the outline of a deal did finally emerge two weeks later. By then the immediate panic had passed. As Lagarde and her central banking colleagues had feared from the outset, it was on their shoulders that the stability of the eurozone continued to rest. As they are only too painfully this puts the ECB in the crossfire of national jealousies and vituperation from monetary conservatives across Europe.

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Will the massive financial firewalls built by central banks on both sides of the Atlantic be enough to withstand the bad news that is headed our way over the coming weeks and months? It is too early to tell. But the first test came on Thursday 26 March.

Every Thursday morning, the US Department of Labour releases a weekly compilation of data on the number of people signing on for unemployment insurance. The American unemployment insurance is a ramshackle federal structure designed in many cases to deter applicants as much as to provide income support. Nevertheless, as lockdowns came into effect across the United States, this would be the first jolt of news about what was happening to the largest economy in the world. For days, stories had been circulating about the extraordinary surge in applications received by state offices. Several online registration systems had collapsed under the weight of applications. The Trump administration had done its best to embargo the alarming news.

And then, on 26 March, the release hit the wires. In a single week 3.3 million Americans had signed on for insurance benefit. It was completely unprecedented. A graph stretching back over half a century simply turns upwards in a vertical surge. In the next two weeks, another 13.5 million people would be added to the insurance rolls. And there was no end in sight. America is on pace for national unemployment to reach 30 percent by the summer – greater than during the Great Depression of the 1930s.

The shutdown spelt disaster for millions of American families, at least half of whom have no financial reserves to speak of, and businesses up and down the land. How would the markets react? Astonishingly, they ended Thursday 26 March up 5%. The largest surge in unemployment ever recorded in history was met with a relaxed shrug.

Why weren't investors more terrified? Because the scale of Congressional stimulus made clear that, no matter how divided American politics were, that wouldn't stand in the way of a huge surge of spending. And the Fed, for its part, would make sure that the huge flow of new debt was absorbed, if necessary onto its own accounts. The private credit system, the government budget and the balance sheet of the Fed were welded together in a closed loop.

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In March 2020 what the Fed, the Bank of the England and the ECB managed to do was to prevent the damage being done by the shutdown from being compounded by an immediate collapse of corporate credit. At the same time, by stabilizing sovereign debt markets they have enabled a huge surge in public spending to fight the crisis and cushion its social and economic side effects. To do this they have both widened the safety net to parts of the financial system never before protected and intervened on a scale far greater even than in 2008.

In the final days of March, the Federal Reserve was buying Treasury bonds and mortgage-backed securities at the rate of roughly $90 billion per working day, or roughly $1m per second. On 9 April, at the same moment as the latest horrifying unemployment numbers, it announced another $2.3 trillion in support specifically targeted at municipal debt and lower-grade corporate debt. That same day, the Bank of England adopted an even more radical approach. Rather than going through the process of having the Treasury issue debt which was then bought by the central bank, it announced that it would be offering direct monetary finance to the government, to provide it with whatever funding it needed. This would be temporary and short-term, but it was still a radical move. The government's current account at the Bank of England would be repurposed to allow, if necessary, tens of billions of pounds in corona spending. Only once before, in 2008, had the British government resorted to this mechanism.

What we have seen in the financial system, over the last few weeks, is a victory of sorts – but it is a defensive one. Once again, we are propping up a fragile, profit-driven system to avoid something even worse. It is also limited in scope.

The advanced economy central banks have managed to ensure that by flattening the curve of financial panic the lockdown is bearable and the public health response to COVID-19 can proceed at any scale that is required. Within Europe there are questions about the equity between Eurozone members. Germany's fiscal response to the crisis is conspicuously larger than that of Italy, Spain. But those inequalities pale in light of the problems facing much of the rest of the world. There the crucial supply of credit is being cut off even before the virus arrives.

Corona reveals the stark fact that the global financial system is hierarchical. At the apex stands the Fed. The ECB, the Bank of Japan, the Bank of England and their advanced economy counterparts all enjoy the Fed's direct support. It is not a matter of altruism. The last thing the US central bankers want to be doing right now is untangling their own national problems from those of American and European banks in the City of London or Tokyo. In no small part due to US support, the advanced economy central banks enjoy great latitude in supporting their credit systems. They might suffer moderate movements in their exchange rate but no devastating financial squeeze.

That is what the emerging market economies have been suffering since February. It is hitting every part of the world economy. The World Bank is warning of a devastating set back to the economies of Nigeria, Angola and South Africa and along with them the rest of sub-Saharan Africa. By early April 2020 more than 90 countries, almost half the countries in the world, have been forced to apply to the IMF for financial assistance.

If flattening the curve in Europe and the US was the battle of March. The next challenge is to reduce the shockwaves radiating out to the rest of the world. If the last few weeks have seen a remarkable display of technocratic energy and imagination in the Western financial centers. That same level of commitment now needs to be brought to bear in supporting the rest of the world. We cannot either control the epidemic or restore the world economy without it.

Piece 7
Shockwave
LRB April 4

In March 2020 as Europe and the US were overwhelmed by the prospect of the COVID-19 pandemic, investors panicked. Had it not been for spectacular intervention by the US Federal Reserve, the Bank of England and the ECB, we would be facing not only the ravages of COVID-19 and the disastrous social and economic consequences of the lockdown, but a financial heart attack as well. As it is, we are left with a shockwave of credit contraction. Production and employment are shrinking before our eyes. Huge programs of government spending have been set in motion not to create new jobs but to sustain the economy on life support. And this is more than merely a technical challenge. This is a global crisis that is hitting virtually every community on the planet. In the process has exposed stark differences between major economic blocs that make it more unclear than ever how the thing that we call the world economy actually fits together.

The three great centers of production, exchange and corporate activity are the US, China and the Eurozone. These economic hubs are tied together through flows of trade, organized through complex supply chains that span the entire breadth of the globe. Each of the three main zones has a hinterland extending into neighboring regions in Latin America, East Central Europe, Africa and across Asia. They are all immersed in a global financial system that uses the US dollar as its currency of trade and credit.

Each of the three great hubs of the world economy has characteristic weaknesses. The worry about China is the sustainability of its debt-fueled economic growth. The basic weakness of the Eurozone is the fact that its institutions still do not include an adequate fiscal capacity or a backstop for its rickety banking system and Italy's finances are so weak that they pose a running challenge to European solidarity. In the US, the national institutions of economic policy actually work. They demonstrated this in 2008 and are doing so again in this crisis. The Fed and the Treasury exert a huge influence not only over the US economy but the entire global system. The question is how they stand in relation to a profoundly divided American society and how their technocratic style of policy-making relates to the know-nothing nationalist right-wing of the Republican party and its champion in the White House.

Over recent years, each of these weaknesses has at times seized the attention of the fund managers and business leaders who direct the fate of the global business and the experts and technicians who advise them. It is no secret that China's debt bubble, Europe's divisions and America's irrational political culture pose a challenge to the functioning of what we know as the world economy. What caused the dramatic panic in March 2020 was the realization that COVID-19 has exposed all three weaknesses simultaneously. Indeed, in Europe and the US the failure of government is so severe that we now face both a public health catastrophe and an economic disaster at once. And to make matters worse, the man in the White House appears to want to juggle the two.

Since 2008, the extent to which the growth of the world economy has come to depend on government stimulus has been disconcerting. No one can pretend that our reality bears much resemblance to the pristine market models so popular in the 1980s and 1990s. But anyone who took those at face value was missing the point. All along, the state was actually in the picture, whether as a creator of markets, or a distributor and enforcer of property rights. What is new is that the central banks are now permanently on-call adding stimulus whenever growth flags. And they are called upon regularly because productivity growth has been so slow. Furthermore, in an age of austerity one can no longer count on politicians to deliver adequate fiscal stimulus. The EU was until the current moment deaf to any calls to loosen the purse strings. The Republicans play political football with the American budget. Only Beijing appears to hold all the strings of industrial policy, fiscal and monetary stimulus in its hands.

The continuous injection of monetary stimulus by central banks offers differing degrees of profit and risk for its very unequal beneficiaries. In the US and Europe stock markets roared ahead of earned incomes, exacerbating inequality. All over the world businesses borrowed in dollars taking advantage of America's deep financial markets and the ultra-low interest rates that followed 2008. But that exposes them to risks. The first shock came in 2013 – the so-called "taper tantrum" – triggered by Fed chair Ben Bernanke's suggestion that America's central bank might be about to take its foot of the accelerator. For many emerging markets 2013 was the turning point when growth slowed and their currencies began to lose ground.

In 2014 oil producers were hit by the first big slump in energy prices. Oil prices were only restabilized in 2016 after OPEC and Russia reached an uneasy agreement. Before that deal could be put in place the world economy weathered the first real setback to China's recent run of economic success. In 2015 the Shanghai stock market plunged and a trillion dollars fled the country, depleting China's immense reserves by a quarter. At the same moment the Eurozone was racked by the struggle with the left-wing government in Greece. This time not only the Chinese but the ECB as well reacted with a massive wave of monetary stimulus. This delivered support to their economies. But the fact that the Fed was beginning to edge up US interest rates precisely as Europeans, Japanese and Chinese were adding stimulus had the effect of causing the dollar to appreciate. This exerted pressure on businesses and governments around the world that had taken up dollar credits. They now cost more in their local currencies. For the same reason a strong US dollar was also bad for US exporters. A mini-recession in US manufacturing that hit industrial regions like Michigan and Wisconsin was an underappreciated factor in setting the stage for Donald Trump's surprise victory in 2016.

When Trump took over the White House in January 2017 there was anxious talk about the threat of populism. From its dominant position in Congress since 2010, the GOP had been throwing spanners in the works of America's hegemonic machine, opposing stimulus, threatening to default on America's debt, sabotaging quota reform at the IMF. With Trump at the helm, was the US national political system about to throw off any aspiration to global leadership and stabilization?

True to his election promises the first order of business was to declare trade war on NAFTA, on the EU and on China. This was highly disruptive to sectors like automotive and agriculture, which are highly internationalized. Even more alarming was the fact that tariff competition shaded into talk of systemic rivalry that put in question the license of tech firms like Huawei or Apple to pursue their global ambitions. America's allies faced tough choices. From the point of view of a bewildered EU, both America and Xi's China looked like they were putting priority of globalization in question.

By this time last year, a miasma of uncertainty was clouding global markets. Investment was retreating. As in 2015 it was highly networked global manufacturing that felt the recessionary pressure. If you were a global manufacturing hub like South Korea or Germany, the outlook looked bleak. And lurking in the background, filling the reports of the IMF, were worries about the huge mountain of debt piled up since 2008. Trillions of dollars would in due course have to be repaid in the American currency. What would happen if financial conditions suddenly tightened?

True conservatives, as opposed to those merely wedded to the religion of the stock market, welcomed the prospect of a shakeout. It was time for a purge, time to shed the businesses that had thrived on too much cheap funding and to return to discipline. By that route we would find the exit from the weird alternate reality created in the aftermath of 2008 through Fed stimulus. Instead, in the summer of 2019 the central banks once again stepped into the ring. Harried by President Trump, the Fed pivoted back to expansion. Over howls of protest from German conservatives, Mario Draghi, on his way out the door at the ECB, launched a new round of quantitative easing. So serious seemed the risk of recession that it concentrated the minds of Washington and Beijing. The warring over Huawei continued as did dark talk of strategic competition, but China and America agreed a trade deal.

As 2020 began, technocratic self-confidence was still intact. It was a measure of that fact that the chief preoccupation in Europe was not with the immediate economic situation, but with Green Deal. Climate change and the energy transition were a huge and urgent challenge that was all the more preoccupying because it further unmoored Cold War alignments. It was China rather than the US that looked like a potential partner. President Trump and his party simply denied the science. COP26, still scheduled for Glasgow in November 2020, was a date with destiny, a moment to renew the vows made in the Paris climate agreement of 2015.

Then, the news of another natural threat began to trickle out. On 31 December 2019 China informed the WHO of a novel virus. Its genetic novelty was rapidly confirmed as was its lethality and the fact that it could be passed from human to human. But Trump and his followers had no more time for the “Wuhan virus” than they did for climate. On the stump at Davos on 22nd January Trump scornfully waived away questions about corona. He trusted his new friends in Beijing. America had the situation under control. But the markets were worried. On 23 January the Chinese leadership began an unprecedented lockdown, to that point the most dramatic cordon sanitaire ever attempted, around the huge city of Wuhan.

Hubei province may not have been familiar to many people outside China. But it is squarely on the map of global investors. 9 percent of China’s motor vehicle industry – the largest in the world – is sited there. Whilst health experts struggled to get politicians to take COVID-19 seriously, Samsung, Hyundai and Jaguar Land Rover were struggling to maintain production because vital parts from China were missing. Over the weeks that followed bankers were amongst the first to join the new breed of amateur epidemiologists.

How to gauge the threat? The obvious model was SARS in 2003 and that was reassuring. China may have botched the first steps in reacting to the virus. But it would soon regain its grip. The neo-Maoist overtones of Xi’s people’s war against the virus were intimidating. But the markets were comfortable with their Faustian pact with the CCP’s authoritarianism. It was a relief that the virus took other troubling news about China such as Xinjiang and Hong Kong out of the headlines.

In the course of February, economic forecasters began adjusting their predictions downwards by a tenth of one percent or two. But the worry at this point was still how the shutdown in China might impact global economic growth, not about the virus itself spreading. Asian states closest to China – South Korea, Japan, Taiwan – were all doing an exemplary job in containing its spread. The US continued to report a tiny number of cases. It had also done a derisory number of tests, but the significance of that fact was not obvious at first. On February 14th the IMF launched a global appeal. The risk it highlighted was that the virus might spread to a developing economy with an under-resourced medical system, not that it would overrun another major hub of the world economy. The meeting of the G20 Finance Ministers in the cloistered calm of Riyadh over the weekend of 22-23 February was a routine affair. All Trump's minions wanted to talk about was the lessons that Europe's laggards might learn from America's example of entrepreneurial energy.

It was that same weekend that the news from Italy hit home. Beijing might be winning its war against COVID-19, but in Europe containment had failed and the first country in the frontline would be Italy. As the quarantine line stretched around Milan, the weakest link in the eurozone was about to lose half its national output. Given the impasse over banking risks and a common fiscal policy, how would Europe rise to the challenge of public health? The signs were not encouraging. France displayed a degree of strategic vision. Finance Minister Bruno Le Mair seconded by Mark Carney of the Bank of England, urged joint action. But Le Mair's German counterparts dragged his feet. It was set to be a typical Eurozone fiasco.

Hard on the heels of the Italian shock came the dawning realization that something was terribly wrong in the United States itself. America has a formidable public health apparatus. It had well laid plans to deal with a pandemic. But, as became increasingly clear, the CDC and the FDA had disastrously botched the deployment of a test. Nevertheless, President Trump remained obstinately unconcerned. On the day after the Italian shutdown, as financial markets began to show real signs of nervousness, he advised investors to "buy the dip" and lashed out at China and the Democrats for fear-mongering. The interplay between COVID-19 news and the latest movements of Wall Street are not incidental to Trump's politics. The markets, along with TV rating, are one of the few tests of his performance that the President takes seriously.

Meanwhile, people who actually do the sums were arriving at terrifying conclusions. If this was a true pandemic the entire world economy was heading over a cliff. Industry, services and the entire network of transport that connected them would come to a standstill. The common denominator of that system are energy. As 2020 began, amidst the clamor about the climate crisis, the major oil producers had reason to believe that they were entering the end game of fossil fuels. Anticipating a big fall in demand due to the shutdown in China, Riyadh spent February pleading with Moscow for a production cut. The Russians refused. Who after all would benefit if they and the Saudis cut output? It would be America's upstart shale industry – the vehicle for what hawks in Washington DC like to call "energy dominance". Faced with that prospect, Moscow was only happy to see America's oil industry broken on the anvil of the pandemic. On Saturday 7 March Riyadh announced that it was opening the taps. Prices plunged.

It was over that weekend that confidence in the market finally snapped. The historic collapse in oil prices drove home the magnitude of the corona shock. As trading began in Asia on the morning of Monday 8th it was clear that a massive sell off was under way. Over the next two weeks markets collapsed. Everything sold. The dollar surged, threatening to crush those who had borrowed dollars. To halt the wave of panic-stricken selling, the Fed has propped up every major domestic credit market. At the same time it has extended dollar liquidity to the major centers of global finance through the network of liquidity swap lines. After initial hesitations, the ECB has unleashed a giant asset buying program. Both the ECB and the Fed are making their interventions at a far greater rate than at any time after 2008. For the UK as the government floundered in search of a policy, the critical moment for the Bank of England came on Wednesday-Thursday 17-18th March. As sterling plunged the gilt market became disorderly. To stabilize prices and push down yields the Bank has adopted a massive and discretionary bond buying program. In 2012 Mario Draghi's "whatever it takes" was the climax of more than two years of political and economic struggle. This time around it is the first principle of central bank intervention.

The massive response of the central banks has stopped the panic. But the shutdown is only just beginning. Every day brings new news of corporate downgrades which will progressively tighten the supply of credit. The recessionary spiral is only just beginning. In the US the unemployment numbers released on 26 March were unlike anything before seen in history. 3 million people registered for benefits in a single week. Even worse is expected for the coming weeks.

Forecasting at this point is little more than a guessing game. What is clear is that the virus has become a brutal test of the ability to formulate, structure and implement a coherent crisis response. One measure of success will be the economic cost measured in jobs lost and GDP foregone. The other will be corona-deaths per head of population.

The idealized strategy of hitting the epidemic hard with a hammer-like blow, before engaging in a protracted dance, as we seek to curtail futher outbreaks, is a stylized description of what has actually been achieved so far in China, South Korea, Hong Kong, Taiwan and Singapore. In China this involved a massive and coercive mobilization. As laid out in Xi's address to the Politburo on 3 February 2020 this involves a comprehensive mobilization of the entire technical, economic, political and social apparatus of the Chinese regime. This is nothing less than formidable. The Chinese effort to enforce social distancing involved an army of supervisors, monitors and para-military police forces. Scaled to the size of a city like London or New York, it would require an army of 50,000 underlings equivalent to the entire uniformed strength of the NYPD including all auxiliaries, devoted exclusively to epidemic control. South Korea, Singapore and Taiwan have all deployed more high-tech, less suppressive approaches. What they have in common is that they have stopped the epidemic and enabled the beginnings of a return to normality. How far this return to growth can proceed depends largely on the strength of the Chinese economy as a locomotive. So far the degree of stimulus has been relatively muted, especially when compared to the heroic Chinese effort in 2008. China today is richer but it is more constrained than it was in 2008. The anxieties that haunted economic policy pre-corona have not disappeared. It still has to contend with a fragile banking system, over-indebted corporations, an excess of unproductive infrastructure and the haunting memory of the turmoil of 2015 when the Chinese currency was under serious pressure.

But these are good problems to have. In the West our reality is far darker. Europe is becoming not one but a series of disasters on the scale of Hubei. By confining the worst of the outbreak to one province China retained its strategic capacity to deploy medical resources. Imagine if the EU had been able to scramble 15,000 medical personnel into Italy. Europe never had that capacity and the spread of the epidemic will now not permit it. The crisis is being fought nation by nation, according to whatever resources are available. Those are defined by the limited fiscal capacities of each member state. What is to be feared is that this prays on deep weaknesses in the construction of the Eurozone. Though the medical impact of the crisis has been far less severe in Germany, it is affording itself a vastly larger stimulus than that which Rome dares to mobilize. Preexisting divisions will be further compounded. The Netherlands and Germany have fought to a standstill a push led by the French, Italians, Spaniards and Portuguese to issue joint corona bonds. The only reason there has not been an immediate return of the sovereign debt crisis is that the ECB has stepped in. This is not what the ECB wants. Lagarde has repeatedly made clear her support for corona bonds, as has the rest of the ECB council. This is not what markets want. But it is all that a coterie of North European politicians think they can ask of their electorates, a self-fulfilling prophecy because no one has had the courage to make the argument, to explain and sell the proposal.

From the point of view of Europe, it is a dispiriting impasse. From the point of the view of the wider world what matters is that Europe not unleash a sovereign debt crisis. It must also be hoped that the crisis does not lead to a further widening of the gap between Europe's exports and imports. The scale of the stimulus launched by Germany looks impressive on paper and ought to provide support to the exports of its trading partners. But by far the largest items in the German crisis response consist of credit guarantees rather than actual spending. And it remains to be seen how far it actually stimulates overall demand.

If the options for the EU are grim those for the US may be even worse. To fight the implosion of the economy Congress passed a truly remarkable $ 2 trillion stimulus package. It is far larger than the resources mobilized in 2008-9 and far quicker. The checks to be sent to most families in America are a watered-down and temporary form of universal basic income. The loan schemes involve a variety of provisions to protect workers who are still in their jobs and to cap excessive management compensation and share buy backs with which corporate America has been rewarding the wealthiest in society. But more radical and systematic proposals that might have actually gone some way to covering the trillions of dollars in lost income suffered as a result of the shutdown were stymied. They fell victim not only to the bargaining between Pelosi and her Republican counterparts. They were also unrealistic in light of the inadequacy of America's administrative machine, which is itself a product of its divided politics. America does not have a single national unemployment scheme. It has a patchwork of state level systems many of which are carefully designed to hold what is called the recipiency rates below 20 percent of those who would actually qualify for benefits. It is not a system on which you would want to put an economy on life support.

The crisis once again confirms the preeminence of the Federal Reserve as the center of economic governance. Written into its core is a new mechanism for cooperation with the Treasury that can now absorb up to $450 billion in losses on Fed lending. Given that most loans will be repaid this provides the Fed with absolutely enormous firepower. But it cannot address what is actually the decisive force in the crisis, namely the epidemic. Less than ten percent of the stimulus spending is for the health care sector and the funds are desperately needed to patch up a system which even as it is driven beyond maximum capacity is threatened with a yawning financial crisis. America's best hospitals are good at high-tech high-fee medicine. But what fighting virus requires is comprehensive suppression and mass treatment of respiratory disorders. That is not what America's overly bureaucratic system is designed to deliver. States like California and cities like New York are rich and relatively well equipped to respond to the emergency. But next in the line in the epidemic is impoverished beaten up New Orleans and Detroit only recently escaped from bankruptcy.

This leaves individuals retreating into private solutions. As the epidemic exploded in New York City, the wealthy upper east side of Manhattan has emptied out as the rich flee to their beach houses or country estates in the hills upstate. In Red States there has been a run on ammunition stores. It isn't for use on the virus. You only have to glance at the twitter feeds of the gun lobby to see scare-mongering images warning of marauding bands of prisoners being released from America's overcrowded unsanitary prisons by liberal governors.

Meanwhile, on national television the President has turned the allocation of the nation's strategic reserve of life-saving ventilators into a reality TV show, which, as he boasts, attracts more viewers than the latest season of *Bachelor*. He conjures the idea of a restart by Easter and is then forced to backtrack. Once again the painful inadequacy of his personality is exposed. But deeper forces are at work. Heavy-hitting conservative voices and leading business-men have pushed the President in this direction. The issue isn't for or against herd immunity. What prompts talk of alternatives, is the sheer difficulty of imagining how the US could make a lockdown work either economically or politically. Fighting the virus with lockdowns and social distancing painfully exposes America's inadequacies. The President and his advisors are impatient to play to America's strengths, which in in their self-serving way they imagine to be business not public health. But as the administration's own experts warn without testing and tracing it is a recipe for an uncontrolled epidemic that will overwhelm America's hospitals. Added to which 7 million at-risk elderly Americans live in counties where there is no intensive care bed within reach.

What we are witnessing in the American response to the crisis is more than merely the flame out of Trump. What is on show is the gulf between competence of American government machine in managing global finance and the Punch and Judy show of its politics. That tension has been increasingly glaring at least since the 1990s but the virus has exposed it as never before. It has after all forced a choice which, not just in America, is profoundly shocking to prevailing common sense.

In 1992 Bill Clinton's chief political advisor had one message: it's the economy, stupid. At the time that seemed like the voice of power and reason speaking. Clearly the epidemic upends that simple assertion of the priority of economic policy. But as the Asian states have demonstrated it need not have been a fundamental overturning. In the well-ordered responses both of China and South Korea the economy temporarily takes a back seat, but the clarity of their focus on public health and public order is, it turns out, the best way back to business as usual. If you swiftly declare an emergency and interrupt business as usual, both the medical and economic costs of confronting the virus appear reasonable. All the conventional priorities of modern politics remain basically in place.

As the Europeans and Americans have discovered once you lose control all the options are bad: stop your economy for an unforeseeable duration, or hundreds of thousands die. It is a formidable challenge for any political leader. Trump does not so much master the challenge as to express through his vacillations and erratic utterances the impossibility of doing so by any means that is not deeply painful. He oscillates between draconian threats of cordoning off New York States, New Jersey and Connecticut and an impatient demand to restart as soon as possible. In his utterances the economy returns not so much as a masterful superego laying down the law, but as an erratic but irrepressible impulse that insists we satisfy its demands regardless of cost, a symptom not of realism but of derangement.

Trump thus personifies what is in fact common to both Europe and the US: a lack of leadership at the scale that would be appropriate to the pandemic. Instead, the job devolves to regional governors in the US and national governments in Europe, to desperately overstretched medical services on the one hand and the technicians of economic policy and social relief on the other. Meanwhile, hundreds of millions of individuals and their families make out as best they can. As is the case for climate change we are left praying for a deus ex machine in the form of a saving scientific breakthrough.

And once we are through the crisis. What then? How exactly do we imagine the restart? Trump evoked the image of churches filling at Easter. Will the world economy arise from the dead? Are we going to rely once more on the genius of modern logistics and the techniques of dollar-finance to sew the Frankenstein monster of the world economy back together again? It will be harder than before. Any illusions of convergence we might have cherished after what we used to call the "fall of communism" have surely now been dispelled. What we would need to patch together is China's one-party authoritarianism, Europe's national welfarism and whatever it is we are going to call the United States in the wake of this national disaster. Where would we look to for leadership at this point? Whose vision will shape the restored system?

In any case, for us all these questions are premature. In Europe and America the worst is just beginning.

Piece 8
The Coronavirus Is the Biggest Emerging Markets Crisis Ever
Foreign Policy March 29 2020

We used to think that the 2007-2008 financial crisis set the standard for a savage global shock. But that crisis took more than 12 months to spread from the overbuilt suburbs of California and southern Spain to the financial centers of the world. The coronavirus pandemic has taken just three months to engulf first China and now Europe and North America. As it has swept west it has triggered an economic crisis whose violence is set to exceed anything we have previously witnessed.

The global shock has an uneven chronology. In the West it was the virus that triggered the financial crisis. In the large emerging markets of the world economy—the likes of Brazil, Argentina, sub-Saharan Africa, India, Thailand, and Malaysia—the virus has yet to arrive at full strength. For them, the financial shock wave is running ahead of the disease. Back to back, the two crises threaten to create an overwhelming maelstrom for emerging markets whose impact on the world economy will be far greater than any rogue U.S. president or trade war.

With their populations at risk, their public finances stretched, and financial markets in turmoil, many emerging market states and developing countries face a huge challenge. Will they have the resources to ride out the challenge? And if not, where will they look for outside assistance in an increasingly divided and multipolar world in which the United States, the European Union, and China have all been through an unprecedented shutdown?

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At the head of the list of vulnerable countries is South Africa. The virus count in South Africa is heading rapidly towards a tipping point. Its health system is stretched at the best of times with a population of 7.7 million living with HIV. A lockdown has been declared. The military are being called out. Meanwhile, the rand is collapsing and South Africa's sovereign debt has been cut by the ratings agencies to junk status. In Brazil, another of the superstars of the globalization era, President Jair Bolsonaro's inner circle are infected. The currency was reeling even before Bolsonaro decided to discard any strategic approach to the virus. Chile, Thailand, Turkey have all been knocked back. Argentina's much-needed debt restructuring has been blown off course. India's stock market is plunging, its exchange rate has slumped and its banks are under pressure. Meanwhile, its booming tech industry and call centers are paralyzed. (If your insurance claim in the United States is held up, don't be surprised. The back-office workers in Bengaluru who normally process your paperwork don't have the laptops that would enable them to continue working from home during India's massive lockdown.)

The shock has delivered a blow not just to stock markets and government bonds. It has hit commodities too. One of the main triggers for the big sell-off came on March 6, when oil talks between Saudi Arabia and Russia broke down. Since then the relentless dumping by the main producers has driven prices down. The high-cost upstarts in the United States' shale fields are their intended victim. But spare a thought for the other oil exporters. Think of desperately poor Nigeria. Think of fragile Algeria, where oil and gas account for 85 percent of export revenue.

To understand the factors at play in this giant unwinding of investment in emerging markets, consider a business proposition that was iconic of 21st-century globalization: A big-name corporation in the emerging world would offer $500 million in corporate bonds offering a yield slightly above those available in the crowded U.S. market.[15] The size of the issue meant it was included in a influential international index of bonds such as J.P. Morgan's Corporate Emerging Market Bond Index, which since 2007 has been used by institutional investors in the West to diversify their portfolios. Fund managers would happily take the higher yield on offer from Asian and Latin American corporations whose balance sheets were often more conservatively managed than their daredevil Western counterparts.[16] The emerging market borrower benefited from the margin between U.S. funding costs and the rates of return to be earned in fast-growing economies in Asia or Latin America. At the same time, the currencies in which the emerging-market borrower operated would likely appreciate against the dollar, eroding the cost of the loan.

To finance the deal you would never need to set foot in the United States itself. Huge volumes of dollar-denominated credit circulate outside the United States. Deals such as this are done in places such as Dubai, Singapore, and Hong Kong, key nodes in the global exchange of dollar claims and liabilities. The flag carriers of this globalized world were the likes of Emirates and Cathay, huge international airlines with no domestic market to call their own.

Between 2007 and 2019 the value of internationally traded emerging market corporate debt almost quintupled from $500 billion to $2.3 trillion.[17] And, over a similar period, foreign investors bought up one-quarter of the local currency sovereign bonds issued by emerging-market governments, helping to pay among other things for impressive new infrastructure.[18] Observers of the world economy have been warning for some time that this global debt mountain harbors risks. This is particularly true for so-called frontier borrowers, high-risk low-income countries, whose commercial hard-currency debt tripled over the five years to 2019 to more than $200 billion.[19] At the end of 2019, almost half of the lowest-income countries in the world were already in debt distress.

Now the entire logic of emerging-market investing has gone into reverse. As investors everywhere run for safety, the dollar has surged, making dollar debts more expensive. Commodity prices have tanked. With China, Europe, and the United States shut down, exporters of manufactured goods and commodities have no one to sell to. Hardly surprising that the stock markets from Jakarta to Sao Paulo are in free fall. Emirates, the iconic airline of globalization, has shut down. In the past week, gigantic fiscal and monetary efforts have breathed a flicker of

15 https://ftalphaville.ft.com/2019/06/27/1561626529000/Reaching-for-yield--the-reshaping-of-the-EM-corporate-debt-market/

16 https://bondsloans.com/news/how-em-corporate-debt-came-to-out-perform-us-high-yield-tcw

17 https://www.investmenteurope.net/opinion/4011222/rethinking-core-em-debt

18 https://www.bis.org/publ/arpdf/ar2019e2.htm graph II.6

19 https://www.imf.org/en/Publications/GFSR/Issues/2019/10/01/global-financial-stability-report-october-2019

life into stock markets. The sell-off has been too massive for investors not to hunt for bargains. A huge injection of dollar liquidity has pushed the dollar off its highs. But the actual recession in the world's developed economies has only just begun, and the pandemic has not even arrived in full force in the emerging markets yet.

The pandemic is not the first shock that emerging markets have recently faced. In recent decades, the gigantic flow of investment and trade that has interconnected the world economy as never before has been subject to repeated interruption.

There was the dangerous miniature crisis in China in 2015, when the stock market crashed, the currency slid, and $1 trillion fled the country. A year earlier, oil prices and other commodity prices sagged, sending a shock wave through commodity producers. For many emerging markets, the general slowdown began in 2013 with the so-called taper tantrum, when rumors of a tightening in U.S. Federal Reserve policy had money sloshing back to the United States in search of higher interest rates. Ever since, many emerging market currencies have been on the skids.

The prelude to the taper tantrum was the huge wave of dollar liquidity unleashed on the world economy by the Fed during the tenure of Chair Ben Bernanke. That began with the financial crisis of 2008. Emerging markets, with the notable exception of South Korea, were generally spared the banking crises of that year. The shock for them came in the form of what was up to that point the largest and most sudden collapse in global trade. 2020 will easily outdo it. What rescued emerging markets in 2008 was among other things the gigantic stimulus delivered by Beijing. China launched a credit expansion of wartime proportions, confirming the role that it had increasingly played since the early 2000s as an engine of global growth. China also towed the world economy out of an earlier phase of turmoil that spanned the period between the Asian financial crisis of 1997, Russia's implosion in 1998, and Argentina's meltdown in 2001. The crisis in Argentina was particularly severe, resulting in the closure of the entire national banking system, mass rioting, and the evacuation of the humiliated president by helicopter.

Since the 1990s, in short, as much as the emerging markets have benefited from globalization, they have also had to deal with intense volatility. The crises of 1998 and 2001 scarred Russia and Argentina deeply. What we have witnessed in recent months, however, is unprecedented, because it is a comprehensive and almost indiscriminate sell-off on a gigantic scale.[20]

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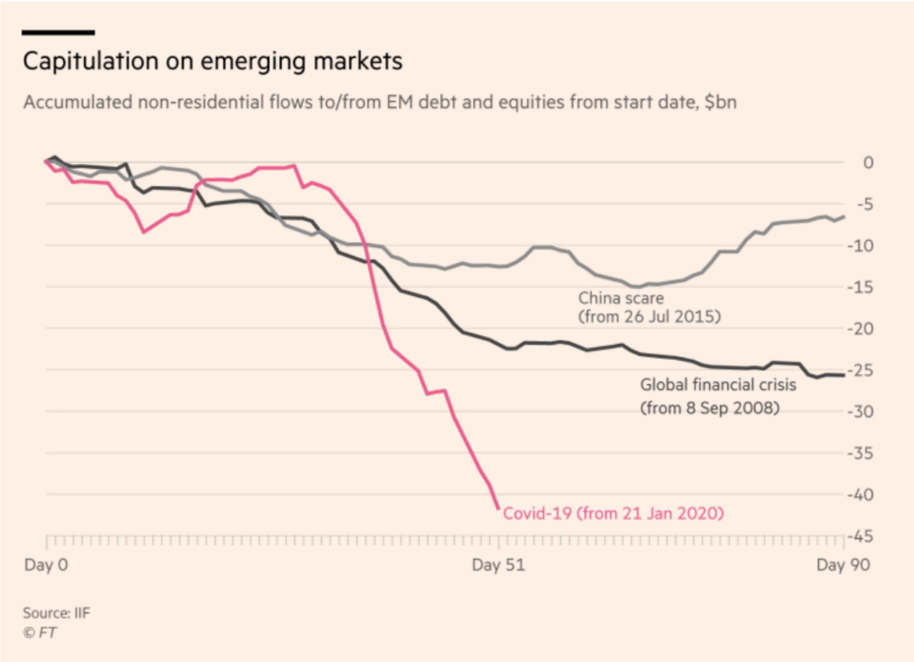
[20] https://www.ft.com/content/8562417c-63c4-11ea-b3f3-fe4680ea68b5



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There is a playbook for an external shock of this kind. It isn't what we used to call the Washington Consensus, the pristine free-market version of 1990s globalization. That approach was buried for good in the wake of 2008. Measures that might once have been considered scandalous, such as capital controls to limit the inflow and outflow of funds, have since been approved not only by desperate national governments, but by the International Monetary Fund (IMF).

In the summer of 2019 no lesser authority than the Bank for International Settlements (BIS), the international club of central bankers, issued a frank summary of how highly globalized emerging markets have learned to deal with financial risks.[21] This advice had three components. First, national governments should use large foreign reserves to supply dollars to their financial systems and slow an excessive devaluation of their currencies. The BIS then advises preemptive regulatory interventions in the balance sheets of corporations—banks, financial funds, and industrial corporations such as oil companies—that are large enough by themselves to upset the national economy. Finally, as a way of stanching an excessive capital movement, the BIS, like the IMF, admits that capital controls may be necessary. For the BIS and IMF to be endorsing capital controls is, as the *Economist* remarked, a bit like the Vatican giving its blessing to birth

21 https://www.bis.org/publ/arpdf/ar2019e2.htm

control; removing capital controls was the totemic policy of globalization from the 1970s to the 1990s.[22] But the evidence of recent decades is undeniable. The risks of unlimited financial integration are simply too great, especially in an era in which the Fed, the European Central Bank, and the Bank of Japan are engaging in massively expansive monetary policy.

Though neither the BIS or the IMF say so in so many words, these are in fact precisely the kinds of tools that Beijing has used to manage the rise of the Chinese economy since the 1990s. This is the "Beijing Consensus" that dare not speak its name. The Chinese have set a high standard, and the current crisis puts the model to a stern test.

Many emerging markets have followed the Chinese example in accumulating large foreign currency reserves, although South Africa and Turkey in particular are thinly armed in light of their outstanding debt obligations. As for the recommendation to police risks in corporate balance sheets—so-called macroprudential management—that is always a tough proposition in political terms. Banks are influential and politically well connected. Huge state-owned corporations such as Eskom in South Africa, Petrobras in Brazil, and Pemex in Mexico generate risks that are hard to manage. Finally, resorting to capital controls when a country is under pressure is a risky business, because it may spook the market and further escalate the movement of capital that it is trying to calm. The emerging markets' situation is made even harder to manage by the fact that financial markets in London and Wall Street are gyrating and the major economies of the world are either in, or just barely escaped, free fall. In a world riding out a massive, simultaneous shock, what is the point of strength on which emerging markets should anchor themselves?

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Given the crises in the West, one might assume the West's economic policymakers were exclusively focused on problems at home. But the interest of the West and the United States in particular in globalization is huge. In recent years, emerging markets have contributed ever more to global economic growth. In 2017 the firms in the S&P 500 generated 44 percent of their sales outside the United States.[23] In the financial centers of London and Wall Street, the risk of financial contagion—a viral metaphor that is suddenly very apt—is real.[24] If the efforts by major economies to contain the pandemic are hampered by a financial crisis, that would both protract the humanitarian catastrophe and slow the process of restoring the global economy.

What can the West do? Declaring a trade peace would help, as would getting the economies of Europe and the United States back on their feet. But those are medium-term projects. The urgent requirement, given the kind of financial run we have seen since the start of 2020, is to ensure that emerging markets can meet their needs for dollar funding and defend attacks on their exchange rates—especially with the U.S. dollar, in which their corporations have borrowed billions—without exhausting their financial reserves.

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22 https://www.economist.com/special-report/2013/10/10/just-in-case
23 https://seekingalpha.com/article/4264354-s-and-p-500-stocks-are-successful-domestically-in-foreign-operations
24 https://www.ft.com/content/56d52ce6-6a92-11ea-a6ac-9122541af204

During the previous financial crisis, the two main means for channeling dollar liquidity to emerging markets were the Fed and the IMF. In 2009, the Fed offered Mexico, Brazil, South Korea, and other countries liquidity swap lines under which the central banks credited each other with rations of each other's currencies. Dollars could thus be passed on to the financial system of the recipients. In recent weeks those swap lines have been restored, and Brazil, Mexico and South Korea are once again the three major emerging markets selected for inclusion. The action taken so far has stanched the spectacular rise of the dollar. But Mexico continues to be under extreme stress. In its case the only option may be more direct assistance from the United States, to which the Mexican economy is umbilically attached.

Brazil, Mexico, and South Korea were included because of their size, the fact that their policymakers enjoy the confidence of their counterparts in the United States, and because of the potential for blowback to the U.S. economy. Among other members of the G-20, it is surprising, given its size and the sophistication of its policymaking, that Indonesia was not included this time around. We do not know what debates have gone on inside the Fed, but it would seem likely that India, Turkey, South Africa, and Thailand were ruled out by a combination of the fragility of their finances, doubts about the autonomy of their central banks, their limited interconnection with the United States, and their ability to deploy other tools such as exchange controls to limit outflows.

Other than direct support by the Fed, the IMF remains the last resort.

After the controversy stirred up by its interventions in the Asian financial crises of the late 1990s, the IMF underwent a profound crisis of legitimacy. Its intrusions into the sovereignty of states such as Indonesia were deeply resented. By 2007, the fund's client list of borrowers had shrunk to a handful. Its budget was cut and its staff was shrinking. There was even talk of abolishing the IMF altogether. The crisis of 2008 saved the fund. For those outside the charmed circle of dollar liquidity provided by the Fed, the IMF rolled out a range of programs to provide further funding. To enable it to do so was one of the first major tasks of the G-20, which agreed at its second-ever leaders' summit in London in the spring of 2009 to raise the IMF's funding to $750 billion. Today, the IMF, under new leadership, is readying itself to offer those funds if necessary. Who will be its first client? One might have expected a queue to form—but there will be no urgency among potential borrowers, most of whom will likely consider a trip to the IMF a humiliating ordeal. The first in line will likely be the poorest and most desperate "frontier markets." Sub-Saharan Africa may well face a new debt crisis like that which culminated in the debt-relief campaign of the early 2000s. Others may wait for longer than is good for them to apply for help. Hence the urgent calls from development economists for the IMF to issue $500 billion in Special Drawing Rights (SDRs). The SDR issued by the IMF is the closest thing we have to a universally acceptable global currency not tied to a national central bank. Giving credits of SDRs to those under greatest stress would provide immediate relief. And if the rich countries that do not need the SDRs lent their quotas back to the fund, they would significantly increase its overall firepower.[25]

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[25] https://ftalphaville.ft.com/2020/03/20/1584709367000/It-s-time-for-a-major-issuance-of-the-IMF-s-Special-Drawing-Rights/

Beyond the need to cushion acute financial stress, what emerging markets really need is a restoration of business as usual in the world economy. For that, the Europeans and Americans must rescue themselves. But there is now a third key party in the global economy: China. Having successfully achieved a grip on the virus, China appears to be exiting the economic crisis sooner than either Europe or the United States. It has rapidly rewritten the script of its own botched efforts to deny the virus in January. It is rolling out medical aid to other countries. But can it do more? What can it do in economic and financial terms?

What is striking so far is how quiet the economic news about China has been. Though the crisis started there, the Chinese financial system has been carefully shielded by the People's Bank of China. The Chinese currency has been relatively stable. This is a huge blessing for emerging markets. The only thing that would be worse for them than the dollar surging would be the dollar surging and the renminbi falling at the same time. They depend for their competitiveness on the balance of those two currencies. Both China and the United States are major markets. Commodities are priced in dollars, and so, too, is funding.

But if the Chinese financial system has so far been relatively immune to the panic, what has been missing is the kind of spectacular economic boost arranged by Beijing in 2008.[26] The battle against the virus has been conducted in the manner of a Mao-era "people's war". Financial stimulus including special lending by policy banks amounted to no more than $ 430 billion, less than either the US or Germany has mobilized.[27]

Of course, the regime may be biding its time, regaining its balance after the shock of the medical emergency. But there is no doubt that Beijing is also more constrained than it was 12 years ago. Not only is controlling new outbreaks of the virus a delicate task. There is also the fragile state of China's financial system after years of stimulus. Huge risks are buried within China's overgrown shadow banks and its bloated real-estate sector. Developers such as the hugely indebted Evergrande are disasters waiting to happen. Beijing may need to prioritize the health of its banks before it can press the economy's accelerator pedal.

It also needs to consider the accumulation of relatively unproductive infrastructure that has burdened its economy with debt. And the People's Bank of China will be mindful of the dramatic flight of money with which it struggled in 2015 and 2016, when it lost one-quarter of its giant reserves and was forced to dramatically tighten controls. Even then, it needed the help of the Fed, in the form of an accommodating interest-rate policy on the part of then Chair Janet Yellen.[28] The Fed under its current chair, Jerome Powell, has been nothing but generous in its response to the crisis so far. U.S. interest rates are effectively at zero and credit is being pumped vigorously. That relieves pressure on Beijing to keep its interest rates high. But beyond that,

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26 https://asia.nikkei.com/Opinion/China-will-struggle-to-help-economies-at-home-and-abroad

27 https://blogs.wsj.com/dailyshot/2020/03/26/the-daily-shot-how-will-americans-spend-stimulus-cash/

28 https://money.cnn.com/2015/09/18/news/economy/china-yellen-global-economy-worry/index.html

China would clearly be unwise to assume that any stimulus on its part would be flanked by cooperation on the part of the administration of U.S. President Donald Trump. The Trump administration seems more interested in pinning the blame for the pandemic on China.

Given these constraints, it would be vain to expect China in 2020 to provide the locomotive force to pull the world economy out of recession. Indeed, China may find itself dealing with its own global debt crisis in microcosm. Prior to 2020, China had established itself as the major lender to the developing world. According to pre-crisis estimates, China had made foreign direct investment and direct loans equivalent to roughly 1.5 percent of global gross domestic product.[29] Lending under the Belt and Road Initiative since 2013 had run to several hundred billion dollars. China was unusual precisely for its willingness to lend to poor countries which will be among the hardest-hit by the global downturn. How Beijing decides to treat that debt will be a telling test of the kind of hegemony to which it aspires.

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Since the end of the Cold War, export-oriented emerging markets have flourished in a world in which they could arbitrage between an ocean of dollar funding, ample consumer demand in the United States, and China's booming growth machine. Even before the coronavirus struck, that world was coming apart. The Belt and Road Initiative, Huawei, the South China Sea, trade wars, the politics of climate change and decarbonization—a whole series of wedge issues were forcing painful choices, and not just between the United States and China. Malaysia resentfully rejected the EU's efforts to clean up the palm oil business. Brazil, while its farmers profited from the soybean war between China and the United States, was locked in a war of words with France over the Amazon rainforest.

Even if we can get through the next few months of acute threat remotely intact, the coronavirus shock will leave daunting problems of reconstruction. The medium-term outlook for emerging markets depends critically on how the world economy is put back together again.

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[29] https://www.ifw-kiel.de/fileadmin/Dateiverwaltung/IfW-Publications/Christoph_Trebesch/KWP_2132.pdf Figure 2.

Piece 9
The Normal Economy is Never Coming Back
Foreign Policy April 9

As the coronavirus lockdown began, the first impulse was to search for historical analogies—1914, 1929, 1941? As the weeks have ground on, what has come ever more to the fore is the historical novelty of the shock that we are living through. The economy is currently in something akin to free fall. If it were to continue to contract at its current pace, 12 months from now GDP would be one-third lower than at the beginning of 2020. That is a rate of shrinkage four times faster than during the Great Depression of the 1930s. There has never been a crash landing like this before. There is something new under the sun. And it is horrifying.

As recently as five weeks ago, at the beginning of March, U.S. unemployment was at record lows. By the end of March, it had surged to somewhere around 13 percent. That is the highest number recorded since World War II. We don't know the precise figure because our system of unemployment registration was not built to track an increase at this speed. On successive Thursdays, the number of those making initial filings for unemployment insurance has surged first to 3.3 million, then 6.6 million, and now by another 6.6 million. At the current rate, as the economist Justin Wolfers pointed out in the New York Times, U.S. unemployment is rising at nearly 0.5 percent per day. It is no longer unimaginable that the overall unemployment rate could reach 30 percent by the summer.

Thursday's news confirms that the Western economies face a far deeper and more savage economic shock than they have ever previously experienced. Regular business cycles generally start with the more volatile sectors of the economy—real estate and construction, for instance, or heavy engineering that depends on business investment—or sectors that are subject to global competition, such as the motor vehicles industry. In total, those sectors employ less than a quarter of the workforce. The concentrated downturn in those sectors transmits to the rest of the economy as a muffled shock.

The coronavirus lockdown directly affects services—retail, real estate, education, entertainment, restaurants—where 80 percent of Americans work today. Thus the result is immediate and catastrophic. In sectors like retail, which has recently come under fierce pressure from online competition, the temporary lockdown may prove to be terminal. In many cases, the stores that shut down in early March will not reopen. The jobs will be permanently lost. Millions of Americans and their families are facing catastrophe.

The shock is not confined to the United States. Many European economies cushion the effects of a downturn by subsidizing short-time working. This will moderate the surge in unemployment. But the collapse in economic activity cannot be disguised. The north of Italy is not just a luxurious tourist destination. It accounts for 50 percent of Italian GDP. Germany's GDP is predicted to fall by more than that of the United States, dragged down by its dependence on exports. The latest set of forecasts from the Organization for Economic Cooperation and Development are apocalyptic across the board. Hardest hit of all may be Japan, even though the virus has had a moderate impact there.

In rich countries, we can at least attempt to make estimates of the damage. China was the first to initiate shutdowns on Jan. 23. The latest official figures show China's unemployment at 6.2 percent, the highest number since records began in the 1990s, when the Chinese

Communist Party reluctantly admitted joblessness was not a problem confined to the capitalist world. But that figure is clearly a gross understatement of the crisis in China. Unofficially, perhaps as many as 205 million migrant workers were furloughed, more than a quarter of the Chinese workforce. How one goes about counting the damage to the Indian economy from Prime Minister Narendra Modi's abrupt 21-day shutdown is anyone's guess. Of India's workforce of 471 million, only 19 percent are covered by social security, two-thirds have no formal employment contract, and at least 100 million are migrant workers. Many of them have been sent in headlong flight back to their villages. There has been nothing like it since partition in 1947.

The economic fallout from these immense human dramas defies calculation. We are left with the humdrum but no less remarkable statistic that this year, for the first time since reasonably reliable records of GDP began to be computed after World War II, the emerging market economies will contract. An entire model of global economic development has been brought skidding to a halt.An entire model of global economic development has been brought skidding to a halt.

This collapse is not the result of a financial crisis. It is not even the direct result of the pandemic. The collapse is the result of a deliberate policy choice, which is itself a radical novelty. It is easier, it turns out, to stop an economy than it is to stimulate it. But the efforts that are being made to cushion the effects are themselves historically unprecedented. In the United States, the congressional stimulus package agreed within days of the shutdown is by far the largest in U.S. peacetime history. Across the world, there has been a move to open the purse strings. Fiscally conservative Germany has declared an emergency and removed its limits on public debt. Altogether, we are witnessing the largest combined fiscal effort launched since World War II. Its effects will make themselves felt in weeks and months to come. It is already clear that the first round may not be enough.

An even more urgent task is to prevent the slowdown from turning into an immense financial crisis. It is commonly said that the U.S. Federal Reserve under Chairman Jerome Powell is following the 2008 playbook. This is true. Day by day, it spawns new programs to support every corner of the financial market. But what is different is the scale of the Fed's interventions. To counter the epic shock of the shutdown, it has mobilized an immense wave of liquidity. In late March, the Fed was buying assets at a rate of $90 billion per day. This is more per day than Ben Bernanke's Fed purchased most months. Every single second, the Fed was swapping almost a million dollars' worth of Treasurys and mortgage-backed securities for cash. On the morning of April 9, at the same moment that the latest horrifying unemployment number was released, the Fed announced that it was launching an additional $2.3 trillion in asset purchases.

This huge and immediate counterbalancing action has so far prevented an immediate global financial meltdown, but we now face a protracted period in which falling consumption and investment drive further contraction. Seventy-three percent of American households report having suffered a loss of income in March. For many, that loss is catastrophic, tipping them into acute need, default, and bankruptcy. Delinquencies on consumer debt will no doubt surge, leading to sustained damage to the financial system. Discretionary expenditure will be deferred. Petrol consumption in Europe has fallen by 88 percent. The market for automobiles is stone dead. Auto manufacturers across Europe and Asia are sitting on giant lots of unsold vehicles.

The longer we sustain the lockdown, the deeper the scarring to the economy and the slower the recovery. In China, regular economic activity is inching back. But given the risk of second- and third-wave outbreaks, no one has any idea how far and fast the resumption of normal life can safely go. It seems likely, barring a dramatic medical breakthrough, that movement restrictions will need to stay in place to manage the unevenness of containment. A protracted and halting recovery seems far more likely at this point than a vigorous V-shaped bounce back.

And even once current production and employment have restarted, we will be dealing with the financial hangover for years to come. The argument over fiscal policy is rarely engaged in the heat of the moment. In a crisis, it is easy to agree to spend money. But that fight is coming. We are engaged in the largest-ever surge in public debt in peacetime. Right now we are parking that debt on the balance sheet of central banks. Those central banks can also hold the interest rate low, which means that the debt service will not be exorbitant. But that defers the question of what to do with them. To the conventional mind debt must be eventually repaid through surpluses generated through tax increases or spending cuts.

History suggests, however, there are also more radical alternatives. One would be a burst of inflation, though how that would be engineered given prevailing economic conditions is not obvious. Another would be a debt jubilee, a polite name for a public default (which would not be as drastic as it sounds if it affects the debts held on the account of the central bank). Some have suggested it would be simpler for the central banks to cut out the business of buying debt issued by the government and instead simply to credit governments with a gigantic cash balance.

And on 9 April that is exactly what the Bank of England announced it would be doing. For all intents and purposes, this means the central bank is simply printing money. That this is even being considered, and under a conservative government, is a measure of how extreme the situation is. It is also symptomatic that, rather than howls of outrage and immediate panic selling, the Bank of England's decision has so far produced little more than a shrug from financial markets. They are under few illusions about the acrobatics that all the central banks are performing.

This resigned attitude is helpful from the point of view of crisis-fighting. But do not expect the calm to last. When the lid comes off, politics will resume and so will the arguments about "debt burdens" and "sustainability."When the lid comes off, politics will resume and so will the arguments about "debt burdens" and "sustainability." And given the scale of the liabilities that have already been accumulated, we should expect it to get ugly.

What we thought we knew about the economy and finance has been radically disturbed. Since the shock of the 2008 financial crisis, there has been a lot of talk about the need to reckon with radical uncertainty—the kind of risk to which you cannot attach a mathematical probability. Indeed, attaching a specific probability may even encourage complacency and a false sense of omniscience.

After the shocks of Brexit and Donald Trump's election, there was a lot of talk about the unpredictable politics of populism. Trump's aggressive trade policy and the escalation into geopolitical rivalry with China shook conventional assumptions about the future of globalization. By 2019, that uncertainty had mounted to the point at which it was affecting investment and risking a recession. Central banks, which had thought they were on a path to normalization and unwinding the dramatic interventions that followed 2008, were forced to reverse course and resume a policy of ultra-low interest rates. That, in turn, engendered hand-wringing about a new era of dependence on central banks. Would we ever return to "normal" times, with markets broken of their addiction to monetary stimulus and business and trade unmolested by unpredictable elections?

After the coronavirus pandemic, such pleas can only seem quaint. We now know what truly radical uncertainty looks like. A huge part of the world's population has had the basic functioning of its life radically disrupted. None of us can confidently predict when we will be able to return to our pre-coronavirus lives. We may hope that things will "return to normal." But how will we tell? After all, things seemed normal in January, just weeks before the world stopped. If radical uncertainty was a concern before, it will now be an ever present reality. Every flu season will be anxiously watched. To mix medical metaphors, how long will it be before we can declare ourselves in remission?

It is possible that in the aftermath of the lockdown there may be some rebound in expenditure. But is that likely to be sustained? The most obvious reaction to a shock like the one we are experiencing is to retract. One of the striking developments since 2008 has been the deleveraging of households in the United States. The American consumer, the single largest source of demand in the world economy, has become distinctly more sober. Business investment has been slack, as has productivity growth. The slowdown was not confined to the West. The emerging markets, too, had slowed. We called it secular stagnation.

If the response by business and households to the unprecedented coronavirus shock is a flight to safety, it will compound the forces of stagnation. If the public response to the debts accumulated by the crisis is austerity, that will make matters worse. It makes sense to call instead for a more active, more visionary government to lead the way out of the crisis. But the question, of course, is what form that will take and which political forces will control it.

Piece 10
Should we be scared of the coronavirus debt mountain?
Guardian April 27

We do not know how the corona crisis ends. We do know that whenever it does we will be poorer as a result. GDP is plunging around the world.
We also know that there will be an overhang of IOUs left from bills that we have run up but not settled during the crisis. Government debts are being issued on a huge scale to raise money to fund the crisis response. When the crisis is over we will have to figure out how to repay them or whether to repay them at all. That question will decide the complexion of our politics, the quality of our public infrastructure and services for years to come.
The scale of the challenge is huge. Cases like Italy grab the headlines. Its debt currently stands at 135 percent of GDP. As a result of the crisis it will likely rise to 155 percent. But Italy is no longer an extreme outlier. According to the IMF the debt ratio of the average advanced economy will exceed 120 percent next year. Historic benchmarks are being surpassed. In the United States the debt to GDP ratio may soon exceed that at the end of World War II.
These numbers are impressive, daunting even. They offer an open door to conservative scaremongering. The first move in that tradition of debt politics is to invoke the household analogy. Debts are a burden, a moral obligation that must be honored on pain of national bankruptcy and ruin.
There are circumstances in which this analogy is apt, specifically when you are an impoverished and desperate country dependent on foreign creditors who will lend to you only in a currency they, not you, control. Many poorer countries are in this position. Few rich countries are. Indeed, one of the definitions of being an advanced economy is that you are not.
Advanced economies borrow in their own currency and overwhelmingly from their own citizens. For them the household analogy is profoundly misleading. To rebut the misconceptions of the household analogy it is sometimes said that we in fact owe government debts to ourselves.
That is a liberating thought. It makes clear that we are not in the position of a subordinate debtor. But it has a dizzying circularity to it. If we are our own creditors, are we not also our own debtors - master and slave at the same time? Can we really owe money to ourselves? Ultimately, it is a bon mot that relies on treating the economic nation as a unit. That may be liberating, but it achieves that liberation by removing the politics. It obscures the reason why all too often national debts even if they are not owed to foreigners are often treated as though they are – class politics.
It is true that there are very few people who are owners of government debt, and thus creditors to the public, that are not tax-payers. But the reverse does not apply. Not everyone who pays taxes has a meaningful stake in the national debt. The proportions are all important - who owns how much debt and whw pays how much tax.
Historically, government debts were assets owned by the middle and upper classes, the famous rentiers. And taxes were overwhelmingly indirect and thus fell disproportionately on lower incomes.

Today the richest still own most of government debt. But the liabilities of the government are today widely distributed. They are staple investments for pension funds and insurers. Government debt is not simply a burden. It is a highly useful asset, offering modest interest rates in exchange for safety. They are all the more useful for the fact that the government lives forever and will generate revenue forever through taxation. So, they enable very long-term planning.

The tax base today is much broader than it was a century ago. But who pays taxes and who does not of course remains one of the most urgent questions of the moment. If COVID-19 debts are repaid in part by a global crackdown on corporate tax evasion that will be a very different world from one in which benefits are slashed and VAT is raised. And there is always the possibility that debt service will be taken out of other spending, whether that be schools, pensions or national defense.

As the great Austrian economist Joseph Schumpeter remarked in the aftermath of World War I, in the way in which a state organizes its budget you see the truest reflection of the distribution of power and influence in society.

It is a distributional issue. But not only that. Debts may also impact the size of the cake itself. As we know only too well a regime of austerity that keeps taxes high and government spending low, is not conducive to rapid economic growth. And yet for debt to be sustainable what we need is growth in gdp. To be precise what we need is growth in nominal GDP, the combination of real economic growth and inflation. Inflation matters because it acts as a tax on debts that are owed in money that is progressively losing its value. Historically, in the aftermath of great wars, inflation has been one of the ways of burning off the debt.

This is the awesome dilemma which we will face in the aftermath of COVID-19. This is the battle for which we must brace.

The moment for that battle is not now. At the moment of crisis the priority of spending is clear. But once we have gained control of the virus and begun to restore normal economic activity the moment of reckoning will come. After the financial crisis of 2007/8, it was in 2010 that the push for economies began. It will begin with euphemisms like consolidation. It will invoke virtues like long-run financial sustainability. Like revenge, austerity is a dish best served cold.

Progressive politics cannot, of course, shrink from a battle about budgetary priorities. But it should resist fighting on the terms set by austerians. It should resist fighting on the terms set by a fear-mongering about debt. In our circumstances debt fear is false. And how false is being demonstrated by the crisis itself.

There is one mechanism through which we can ensure that we truly owe the debts to ourselves. That mechanism is the central bank. Its principal job is to manage public debt and at a moment of crisis central banks do what they must. They buy government debts, or what amounts to the same thing, they open overdraft accounts for the government.

That has two effects which effectively negate debt as an issue. Central bank intervention lowers the interest rate which determines how much the government has to pay its creditors. If interest rates are held down debt service need not be an onerous burden. At the same time the central bank removes a portion of public debt from private portfolios and places it on the balance sheet of the central bank. There it literally becomes a claim by the public upon itself. It is thus effectively neutralized both as a pressure on financial markets and as a political issue.

When the central bank buys the debt it does so by creating money. Under ordinary circumstances one might worry about that causing inflation. But given the recession that we face there is little prospect of that and if it a modest inflation were to begin, it would in fact help us in eroding away the huge outstanding IOUs built up due to the successive shocks of 2008 and 2020.

All too often the politics of debt are the politics of wealth defense cloaked in the politics of fear. We should resist that blackmail. We have the institutions and techniques we need to neutralize this problem. We owe it to ourselves to do so.

Piece 11
Time to expose the reality of 'debt market discipline'
Social Europe May 25

As another sovereign-debt crisis looms, the mistake of the last—delegating to anonymised 'markets' accountable political choices—must not be repeated.

We are headed into a high-debt future. The recent Franco-German proposal for a European Recovery Fund shifts the burden somewhat off national balance sheets. If it comes to pass, €500 billion for a common fund will be significant. But by 2021 Italy's debt will likely end up above 150 per cent of gross domestic product. France will find itself with debts running to over 120 per cent.

Will this turn out to be a source of instability and danger? The toxic legacy of the eurozone crisis might suggest so. Between 2010 and 2015 the normal operation of European politics was repeatedly disrupted and the economy of much of Europe plunged into prolonged recession, in a desperate struggle to stave off a sovereign-debt crisis.

One conclusion one might draw from that traumatic experience is that debt is best avoided. If this is coupled with a call to raise income tax progressively, tax wealth more and crack down on tax evasion, there is something to be said for that position. But it is not just unrealistic—it is disabling. Properly managed, sovereign debt has been an indispensable tool of modern government. Rather than avoiding them, Europe should face its debt demons.

Not preordained

The eurozone bond crisis was not preordained by tensions between democracy and capitalism, citizens and markets, national taxpayers and footloose financial cosmopolitans. The euro area made its own, very peculiar, sovereign-debt crisis. It now has the power not only to unmake the conditions of that earlier crisis, but to found a new financial and monetary order—not just with regard to fiscal policy and the constitution of the European Central Bank but the structure of the bond market itself.

In general, since 2008 global bond markets have been tame beasts. Since the subprime-mortgage crisis, shell-shocked investors have been only too happy to lend to relatively safe sovereigns. Even the United Kingdom, embroiled in its shambolic 'Brexit', has been able to borrow on favourable terms. Preferred borrowers in the eurozone, such as Germany, have seen their interest rates slide into negative territory. In the face of the Covid-19 shock, the trend has continued: as debts rise, interest rates fall. Creditors appear to have virtually no leverage.

That bond markets were so dominant with regard to weaker members of the eurozone at the height of the crisis in 2010-12 was anomalous. No doubt the financial situation of Greece was hopeless and that of Spain, Ireland and Italy difficult. But the pressure was massively amplified by self-imposed institutional constraints, strategic inaction by key European states, notably Germany, and a dangerous cat-and-mouse game played by the conservative leadership of the ECB under Jean-Claude Trichet.

The bond markets did, indeed, act as enforcers, but in doing so they performed the role less of freebooting market vigilantes than of paramilitary hit-squads operating with the connivance of the authorities. The weak structure of collective fiscal discipline was supplement by the threat of bond market terror.

Perverse results

Whose interest did this peculiarly dysfunctional European management of the sovereign-debt problem serve? At the moment of speculative attack, buying and selling is driven by profit-seeking and a flight to safety. It is tempting to conclude that investors and financial markets rule the roost. But it is anything but obvious that the shambles of the eurozone crisis was in the interests of financial capital in general. The results were often perverse. If you look at the miserable fortunes of Europe's banks since 2008 it would be hard to conclude the crisis was managed for their benefit.

The dysfunction resulted from political failure and, specifically, the tendency to substitute 'market discipline' for politics in Europe's incomplete monetary union. Relying on markets was a way to avoid hammering out and enforcing collective decisions. Among the many efforts to disencumber politics pursued under the sign of 'neoliberalism', this was among the more dangerous: in a crisis, what markets inflict is not so much rational and sustained discipline, but panic. Far from depoliticising fiscal and monetary policy, the result was to stoke resentment on all sides.

The veiling and unveiling of the 'invisible hand'—the sense that hidden forces are at work—encourages animosity and rumour. In 2010 French and German bankers accused each other of having violated the standstill agreement with regard to Greece. In 2011 those around the Italian prime minister, Silvio Berlusconi, were convinced Deutsche Bank was selling Italian debt on the prompting of the German finance ministry.

Meanwhile, the economist Hans-Werner Sinn has made a career out of scaring the German public about TARGET2 balances. Italians see the same numbers as a record of capital flight and Germany's exorbitant privilege. Almost a decade later, the eurozone's bailout fund, the European Stability Mechanism, is still too toxic to touch.

The ironic outcome of this failed strategy of depoliticisation was that, at the height of the crisis, investors themselves were calling for more politics, not less. What they wanted was a sovereign commitment to back the euro and that is what the 'whatever it takes' affirmation by the then ECB president, Mario Draghi, delivered. It was from that moment in 2012 that the bank derived its expanded mandate to intervene, on which we are still relying in facing the Covid-19 crisis. But this being the EU, the logic of 'whatever it takes' has to be reconciled with the restricted mandate of the ECB. This requires some nimble economic and legal argument.

Exemplary clarity

The economic argument is laid out with exemplary clarity in the commentary on the ECB's Pandemic Emergency Purchasing Programme of 2020 by Olivier Blanchard and Jean Pisani-Ferry. The basic justification for ECB intervention, they argue, is that markets are not always functional: 'Markets everywhere can become dysfunctional. Some investors have to sell to get liquidity. Others may not have the liquidity to take the other side.'

Furthermore, the market equilibrium is not determinate and cannot be assumed to be optimal. Markets have multiple equilibria. Some are good equilibria, in which investor confidence supports low interests and the eurozone's debts are supportable. But there also bad equilibria 'in which investors get worried, ask for a higher premium, increase debt service, and in so doing make their worries self-fulfilling and make debt unsustainable … Multiple equilibria can emerge nearly at any time, but they are more likely in the current circumstances when investors are edgy.' If investors are effectively pricing in the end of the world, then the ECB has a mandate to protect the euro.

The argument offered by Blanchard and Pissani-Ferry is designed to navigate two reefs: the conventions of mainstream economics on the one hand, the mandate of the ECB on the other. They define the precise circumstances which justify intervention, not so much as the right and proper thing for a central bank to do, but as an exceptional intervention with regard to anomalous market conditions.

But as Blanchard and Pisani-ferry admit, what they are doing is perpetuating a makeshift solution. They do not lay out a future path. Indeed, as they remark, given the nervousness of markets about the huge scale of eurozone sovereign debts and the possibility of inflation or debt restructuring, 'remaining silent about what will be done in the future may indeed be the best policy [for the ECB to pursue] today'. This is realistic but also a deeply disillusioned conclusion: Europe will continue in a balance precariously maintained by more or less contorted makeshifts.

This leaves it vulnerable to unanticipated shocks and dependent on *ad hoc* judgements. As Blanchard and Pisani-Ferry themselves note, relying on the ECB to manage the market continually is not a strategy without risks: 'Distinguishing between the emergence of a bad equilibrium, and a justified increase in the rate in the good equilibrium is not easy, and the central bank may find itself taking credit risk.' Were the ECB to suffer major losses on its asset purchases, political and legal fallout would no doubt follow.

This is cogent. But it should not be mistaken for a continuation of Draghi's logic. Draghi's 'whatever it takes' was not framed by a refusal to talk about the future. His move was justified by the expectation that Europe would move towards ever greater coherence of fiscal and monetary policy—precisely the issues Blanchard and Pisani-Ferry hold in abeyance.

Three pillars

Conditions today are not those of 2012. The coronavirus crisis and its aftermath, the green energy transition and the ageing of Europe's population, pose radical challenges. Europe may be able to meet those challenges with improvisation. In the best case we dare to imagine that Europe undergoes a Hamiltonian moment and evolves towards something more like a coherent "united states". But what if we were just a bit bolder and envisioned, even if only as a thought experiment, a more radical reconstruction of its financial, financial and monetary constitution, a reconstruction that disentangled the haphazard mixture of political and financial discipline that have marred its development to date.

Clearly, this would start with building a real fiscal pillar, in which common borrowing is linked to robust and uniform revenue-raising. This is where the Franco-German proposal, if it wins the support of the rest of the EU, might lead us.

The second plank should be a modified mandate for the ECB, which widens it to cover adequately the central bank's actual responsibilities.[30] The German constitutional court itself has insisted that price stability is no longer enough—it must be balanced with other economic and social interests. Rather than the savers at the top of the judges' minds, however, the mandate should include a commitment to maximum employment and environmental sustainability, with priority given to the goal of decarbonisation by 2050.

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30 https://foreignpolicy.com/2020/05/13/european-central-bank-myth-monetary-policy-german-court-ruling/

Unlike the Hamiltonian progression in fiscal policy, this redefinition of the central bank's role would be a break not just with Europe's history but with the conventions of economic policy worldwide since the 1980s. Dropping the monolithic focus on inflation might spook the bond market. They might conclude that an ECB required to consider, the employment opportunities for Europe's young people needed to be disciplined by higher rates. Given the debt levels we are heading towards, such bond market blackmail would be ruinous. Which is why a radical vision of a new financial constitution for Europe should involve a third leg, a reconstitution of the sovereign-debt market.

Strikingly vague

In conventional debates about sovereign debt strikingly vague terms are used. Blanchard and Pisani-Ferry speak of 'markets' and 'investors' being 'worried' and 'edgy'. But these markets are actually made up of a discrete group of more or less important actors, linked through particular networks of information and exchange.

Insiders know how to navigate the actually-existing sovereign-debt market. But they don't talk to outsiders or habitually lay out in intelligible terms what they do. Teams of expert investigators have embarked on major research projects to map the basic structure of these markets. Since 2014 the ECB has been collecting immensely detailed Securities Holding Statistics. But these are made available only in aggregated and anonymized form. Information on the ultimate recipients of bond coupon payments is held by private firms like Clearstream not by public debt management agencies.

We talk *ad nauseam* about debt-to-GDP ratios and make complicated calculations of sustainability. But we know shockingly little about to whom we are indebted and where our interest payments actually go.

As Tobias Arbogast has demonstrated in a recent working paper, an outline can however be sketched. He has traced out the tangled skeins not just of primary ownership but also the ultimate beneficiaries of the funds that manage Italian public debt. There is no single unified bond-owning class of *rentiers* living off Italian bonds, but an entire network of domestic and foreign banks, insurance funds and global investors. And still there are that gaps, including a large category of extra-European investors, not banks, which seem to hold over €230 billion of Italy's public debt.

When we talk about anxieties destabilizing the 'markets', whose confidence are we in fact talking about? We gesture towards broader categories – 'investors', 'fund-managers'. But who are they and what are their motivations? What specific pressures are they acting under? The ECB and market regulators no doubt have ways of answering these questions. Following the alarming bond market instability in March 2020, economists at the BIS were, within days, able to identify the destabilizing impact of certain hedge fund strategies.[31] But it was not their job to name names. The analysis of the BIS is just that, analysis. Not political. Not, at least in the first instance, regulatory.

Characteristically, China has a more direct approach to such questions. When the market becomes unsettled and there is a whiff of panic in Shanghai, the authorities call on the 'national team'. This group of policy banks and investment funds is charged, on behalf of the People's Bank of China, with intervening, making loans and engaging in strategic buying of assets to

31 https://www.bis.org/publ/bisbull02.htm

sustain market confidence. They are not so much bond vigilantes as cheerleaders. It doesn't always work but it indicates a concerted tactical approach.
Once upon a time, Europe had national teams. The relationship between the French Treasury and Paribas is the stuff of legend. Indeed, a useful way of describing the unresolved constitution of the eurozone is that we are caught in an uncomfortable historical transition, between a fiscal and financial regime based on national teams of banks, central banks and treasuries and a new, more open, regime of sovereign-debt markets which lacks a definite shape in economic and political terms.
Tight entanglements remain, notably between Italian banks and their national treasury. But large quantities of eurozone sovereign debt are now held across borders. And, as Arbogast's data show, a substantial amount is held by international private investors, not sovereign-wealth funds as in the US. It was not by accident that Draghi delivered his 'whatever it takes' speech in London in to a gathering of sceptical global hedge fund managers. He was daring them to do their worst and warning them against doing so.

Who owns what

One constructive proposal touted last year by the German finance ministry was to tweak regulations so that all European banks would hold similarly balanced portfolios of national sovereign debts. Rather than Italian banks holding Italian debt, everyone would be induced to hold a balanced portfolio of all the sovereign debt of the eurozone. This would in effect create a 'European team', binding European banks collectively to the eurozone's sovereign debtors as a group.
This points a way forward because it speaks to the actual under-girdings of the sovereign debt market. It addresses the question of who owns what debt. Posed in this form the question of eurozone banking regulation becomes a matter of the fiscal and financial constitution.
Whichever direction we move in, we should demand transparency. Who holds what? Who is buying sovereign debt? Who is selling? Which firms? Names and addresses please. And we need to know who exercises control and who are the real beneficiaries. It is the balance between the interest payments to the ultimate beneficiaries and the revenue flows to the tax system that decides in which direction debt finance redistributes income.
We need a comprehensive map of the hybrid network of public-private power which defines the circulation and ownership of sovereign debt. This network involves complicated legal and technical arrangements. It involves computer systems and financial engineering. But it also involves people.
Who are the men and women engaged in this buying and selling? We know there is a revolving door between public and private finance. How does it operate? If someone moves from a national treasury or a central bank to a lucrative position in the private sector, or the other way around, we as taxpayers ought to be entitled to know.
Furthermore, we need to know the wider field: the strategists, the 'quants', the bond-market intellectuals, the rating agencies and their lawyers. The ECB has made its purchases of bonds conditional on decisions by the agencies. They, therefore, fall squarely within this new politics of transparency. And the lawyers are crucial. Debts are legally coded; they can be uncoded and recoded. Who has the expertise and how, if necessary, does one mobilise counter-expertise?
If you deal in sovereign debt you are not trading in any old IOUs: you are dealing in the 'IOUs' of sovereign states. The fact that we must pay our taxes makes the interest payments on those

debts particularly safe. If we have enshrined price stability as one of the objectives of the central bank we have made a further concession to bondholders. In return, the least we can ask is to know precisely to whom we owe what obligations and how the terms of the debt are shaped, down to the nitty gritty.

Redefining the boundary

Clearly, this call for radical transparency would imply a redefinition of the boundary between public and private, between financial markets, politics and state. Might it deter investors? Would it subject them to unacceptable scrutiny? Well, it would involve a power shift. The aim of the game is to prevent the reverse, the humiliating subjection of politics and the state to private financial power. But in so doing the point is not to demonise bondholders and fund managers. The aim is to clarify the politics of public debt, to replace fearmongering and bullying with information and serious scrutiny. Given the high debt world we are heading into we are going to need to overcome the muddle we are currently in.

And if naming and shaming is involved, it is not just investors who should feel uncomfortable. After all, the fund managers and ratings analysts are simply doing their job. The true embarrassment lies elsewhere—in Europe's collective willingness to rely on 'market discipline' as a substitute for political and constitutional agreement. It is the abdication of politics that has made eurozone sovereign debt unsafe.

In 2010-12 that abdication did disastrous damage. Faced with the financial legacy of the Covid-19 crisis, we cannot afford a repeat performance. The purpose of a radical new transparency with regard to sovereign debt should be to block any further evasion—by exposing the actual workings of what we call the market, to summon politics to its responsibilities.

Piece 12
The Death of the Central Bank Myth Foreign Policy
May 13

In Europe, a ruling by the German Constitutional Court that the European Central Bank (ECB) failed to adequately justify a program of asset purchases it began in 2015 is convulsing the political and financial scene. Some suggest it could lead to the unraveling of the euro. It may be difficult at first glance to understand why. Yes, the purchases were huge—more than 2 trillion euros of government debt. But they were made years ago. And the points made by the court are arcane. So how could a matter like this assume such importance?

The legal clash in Europe matters not only because the ECB is the second-most important central bank in the world and not only because global financial stability hinges on the stability of the eurozone. It also brings to the surface what ought to be a basic question of modern government: What is the proper role of central banks? What is the political basis for their actions? Who, if anyone, should oversee central banks?

As the COVID-19 financial shock has reaffirmed, central banks are the first responders of economic policy. They hold the reins of the global economy. But unlike national Treasuries that act from above by way of taxing and government spending, the central banks are in the market. Whereas the Treasuries have budgets limited by parliamentary or congressional vote, the firepower of the central bank is essentially limitless. Money created by central banks only shows up on their balance sheets, not in the debt of the state. Central banks don't need to raise taxes or find buyers of their debt. This gives them huge power.

How this power is wielded and under what regime of justification defines the limits of economic policy. The paradigm of modern central banking that is being debated in the spartan court room in the German town of Karlsruhe was set half a century ago amid the turbulence of inflation and political instability of the 1970s. In recent years, it has come under increasing stress. The role of central banks has massively expanded.

In much of the world, notably in the United States, this has engendered remarkably little public debate. Though the litigation in Germany is in many ways obscure, it has the merit of putting a spotlight on this fundamental question of modern governance. Faced with the hubris of the German court, it may be tempting to retreat into a defense of the status quo. That would be a mistake. Though it is flawed in many ways, the court's judgment does expose a real gap between the reality of 21st-century central banking and the conventional understanding of its mission inherited from the 20th century. What we need is a new monetary constitution.

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The proud badge worn by modern central bankers is that of independence. But what does that mean? As the idea emerged in the 20th century, central bank independence meant above all freedom from direction by the short-term concerns of politicians. Instead, central bankers would be allowed to set monetary policy as they saw fit, usually with a view not only to bringing down inflation but to permanently installing a regime of confidence in monetary stability—what economists call anchoring price expectations.

The analogy, ironically, was to judges who, in performing the difficult duty of dispensing justice, were given independence from the executive and legislative branches in the classic tripartite division. With money's value unhooked from gold after the collapse of the Bretton Woods system in the early 1970s, independent central banks became the guardians of the collective good of price stability.

The basic idea was that there was a trade-off between inflation and unemployment. Left to their own devices, voters and politicians would opt for low unemployment at the price of higher inflation. But, as the experience of the 1970s showed, that choice was shortsighted. Inflation would not remain steady. It would progressively accelerate so that what at first looked like a reasonable trade-off would soon deteriorate into dangerous instability and increasing economic dislocation. Financial markets would react by dumping assets. The foreign value of the currency would plunge leading to a spiral of crisis.

Under the looming shadow of this disaster scenario, the idea of central bank independence emerged. The bank was to act as a countermajoritarian institution. It was charged with doing whatever it took to achieve just one objective: hold inflation low. Giving the central bank a quasi-constitutional position would deter reckless politicians from attempting expansive policies. Politicians would know in advance that the central bank would be duty bound to respond with draconian interest rates. At the same time as deterring politicians, this would send a reassuring signal to financial markets. Establishing credibility with that constituency might be painful, but the payoff in due course would be that interest rates could be lower. Price stability could thus be achieved with a less painful level of unemployment. You couldn't escape the trade-off, but you could improve the terms by reassuring the most powerful investors that their interest in low inflation would be prioritized.

It was a model that rested on a series of assumptions about the economy (there was a trade-off between inflation and unemployment), global financial markets (they had the power to punish), politics (overspending was the preferred vote-getting strategy), and society at large (there were substantial social forces pushing for high employment regardless of inflation). The model was also based on a jaundiced vision of modern history and more or less explicitly at odds with democratic politics: first in the sense that it made cynical assumptions about the motivations of voters and politicians but also in the more general sense that in the place of debate, collective agreement, and choice, it favored technocratic calculation, institutional independence, and nondiscretionary rules.

This conservative vision legitimated itself by reference to moments of historical trauma. The German Bundesbank founded after World War II in the wake of two bouts of hyperinflation—during the Weimar Republic and the aftermath of Germany's catastrophic defeat in 1945—was the progenitor. The U.S. Federal Reserve made its conversion to anti-inflationary orthodoxy in 1979 under Paul Volcker's stewardship. The mood music was provided by President Jimmy Carter's famous speech on the American malaise compounded by global anxiety about the weakness of the dollar after repeated attempts by the Nixon, Ford, and Carter administrations to stabilize prices through government-ordered price regulations and bargains with trade unions and businesses. Democratic politics had failed. It was time for the central bankers to act using sky-high interest rates. That ending inflation in this way would mean abandoning any commitment to full employment, plunging America's industrial heartland into crisis, and permanently weakening organized labor was not lost on Volcker. There was, in that famous phrase of the era, no alternative.

By the 1990s, an inflation-fighting, independent central bank had become a global model rolled out in post-communist Eastern Europe and what were now dubbed the "emerging markets." Along with independent constitutional courts and adherence to global human rights law, independent central banks were part of the armature that constrained popular sovereignty in Samuel Huntington's "third wave of democracy." If the freedom of capital movement was the belt, then central bank independence was the buckle on the free-market Washington Consensus of the 1990s.

For the community of independent central bankers, those were the golden days. But as in so many other respects, that golden age is long gone. In recent decades, central banks have become more powerful than ever. But with the expansion of their role (and their balance sheets) has gone a loss of clarity of purpose. The giant increase in power and responsibility that has accrued to the Fed and its counterparts around the world in reaction to COVID-19 merely confirms this development. Formal mandates have rarely been adjusted, but there has clearly been a huge expansion in reach. In the American case, where the extension has been most dramatic, it amounts to a hidden transformation of the state, indeed of the U.S. Constitution, that has taken place in an ad-hoc way under the pressure of crisis with precious little opportunity for serious debate or argument.

Conservative economists watch in horror as the paradigm of the 1990s has come apart. Won't a central bank that intervenes as deeply as modern central banks now do distort prices and twist economic incentives? Does it not pursue social redistribution by the back door? Will it not undermine the competitive discipline of credit markets? Will a central bank whose balance sheet is loaded with emergency bond purchases not fall into a vicious circle of dependence on the stressed borrowers whose debts it buys?

These concerns are at the root of the drama in Germany's constitutional court. But to know how to respond to them, we need to start by doing what neither the German court nor the ECB's defenders have so far done, namely to account for how the familiar model of central bank independence has come apart since the 1990s.

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The assumptions about politics and economics that anchored the model of the independent central bank in 1980s and 1990s were never more than a partial interpretation of the reality of late 20th-century political economy. In truth, the alarmist vision they conjured was not so much a description of reality as a means to advance the push for market discipline, away from both elected politicians and organized labor. In the third decade of the 21st century, however, the underlying political and economic assumptions have become entirely obsolete—as much because of the success of the market vision as its failures.

First and foremost, the fight against inflation was won. Indeed, it was won so decisively that economists now ask themselves whether the basic organizing idea of a trade-off between inflation and unemployment any longer obtains. For 30 years, the advanced economies have now been living in a regime of low inflation. Central banks that once steeled themselves for the fight against inflation now struggle to avoid deflation. By convention, the safe minimal level of inflation is 2 percent. The Bank of Japan, the Fed, and the ECB have all systematically failed to hold inflation up to that target. It was the desperate efforts of the ECB to ensure that the eurozone did not slide into deflation in 2015 that led to the drama in the German courtroom last week. The ECB's giant bond purchases were designed to flush the credit system with liquidity in the hope of stimulating demand.

Long before the lawyers starting arguing, the economics profession has been scratching its head over this situation. The most obvious drivers of so-called lowflation are the spectacular efficiency gains achieved through globalization, the vast reservoir of new workers who were attached to the world economy through the integration of China and other Asian export economies, and the dramatic weakening of trade unions, to which the anti-inflation campaigns, deindustrialization, and high unemployment of the 1970s and 1980s powerfully contributed. The breaking of organized labor has undercut the ability of workers to demand wage increases. This lack of inflationary pressure has left modern central banks unconcerned about even the most gigantic monetary expansion. However much you increase the stock of money, it never seems to show up in price increases.

Nor is it just the economics that are haywire. Whereas the classic model assumed that politicians were fiscally irresponsible and thus needed independent central banks to bring them into line, it turns out that a critical mass of elected officials drank the 1990s Kool-Aid. In recent decades, we have seen not a relentless increase in debt but repeated efforts to balance the books, most notably in the eurozone under German leadership. Contrary to its reputation, Italy has been a devoted follower of austerity, leading the way in fiscal discipline. But also in the United States, at least under Democratic administrations. Politicians campaigned for fiscal consolidation and debt reduction instead of promises of investment and employment. In the agonizingly slow recovery from the 2008 crisis, the problem for the central bankers was not overspending but the failure of governments to provide adequate fiscal stimulus.

Rather than obstreperous trade unions and feckless politicians, what central bankers have found themselves preoccupied with is financial instability. Again and again, the financial markets that were assumed to be the disciplinarians have demonstrated their irresponsibility ("irrational exuberance"), their tendency to panic, and their inclination to profound instability. They are prone to bubbles, booms, and busts. But rather than seeking to tame those gyrations, central banks, with the Fed leading the way, have taken it on themselves to act as a comprehensive backstop to the financial system—first in 1987 following the global stock market crash, then after the dot-com crash of the 1990s, even more dramatically in 2008, and now on a truly unprecedented scale in response to COVID-19. Liquidity provision is the slogan under which central banks now backstop the entire financial system on a near-permanent basis.

To the horror of conservatives everywhere, the arena in which central banks perform this balancing act, is the market for government debt. Government IOUs are not just obligations of the tax payer. For the govenrment's creditors, they are the safe assets on which pyramids of private credit are built. This janus-faced quality of debt creates a basic tension. Whereas conservative economists anathematize central banks swapping swap government debt for cash as the slippery slope to hyperinflation. The reality of modern market-based finance is that it is based precisely on this transaction - the exchange of bonds for cash, mediated if necessary by the central bank.

One of the side effects of massive central bank intervention in bond markets is that interest rates are very low, in many cases close to zero, and at times even negative. When central banks take assets off private balance sheets, they drive prices up and yields down. As a result, far from being the fearsome monster it once was, the bond market has become a lap dog. In Japan, once one of the engines of financial speculation, the control of the Bank of Japan is now so absolute that trading of bonds takes place only sporadically at prices effectively set by the central bank. Rather than fearing bond vigilantes, the mantra among bond traders is "Don't fight the Fed."

Central bank intervention helps to tame the risks of the financial system, but it does not stem its growth, nor does it create a level playing-field. While high-powered fund managers and their favored clients hunt for better returns in stock markets and exotic and exclusive investment channels like private equity and hedge funds, thus taking on more risk, more cautious investors find themselves on the losing side. Low interest rates hurt savers, they hurt pension funds, and they hurt life insurance funds that need to lock in safe long-term returns on their portfolios. It was precisely that constituency that was the mainstay of the litigation in front of the German constitutional court.

The plaintiffs and their lawyers blame the central bank for pushing interest rates down, benefiting feckless borrowers at the expense of thrifty savers. What they ignore are the deeper economic pressures to which the central bank itself is responding. If there is a glut of savings, if rates of investment are low, if governments, notably the German government, are not taking up new loans but repaying debt, this is bound to depress interest rates.

The result of this combination of economic, political, and financial forces is an economic landscape that, by the standards of the late 20th century, can only seem topsy-turvy. Central bank balance sheets are grotesquely inflated, yet prices (except for financial assets) slide toward deflation. Before the COVID-19 lockdown, record low unemployment no longer translated into wage increases. With long-term interest rates near zero, politicians nonetheless refused to borrow money for public investments. The response of central bankers, desperate to prevent a slide into self-sustaining deflation, is to reach again and again for stimulus.

In the United States, at least in this respect, the election of Donald Trump as president helped restore a degree of normality, if with a perverse edge. Egged on by Republicans in Congress, his administration has shown no inhibition about huge deficits to finance regressive tax cuts. Apart from anti-immigrant rhetoric, Trump's winning card in 2020 would be an economy running hot. In 2019, the Fed seemed to be headed into the familiar territory of weighing when to raise interest rates to avoid overheating. Chair Jerome Powell certainly did not appreciate the president's bullying against rate hikes, but at least the Fed was not lost in the crazy house of low growth, low inflation, low interest rates, and low government spending that the Bank of Japan and the ECB had to contend with.

Since the 1990s, the Bank of Japan has engaged in one monetary policy experiment after another. And driven by the profound crisis in the eurozone under the leadership of Mario Draghi, the ECB embarked on its own experiments. These efforts proved effective in delivering a measure of financial stability. They made central bankers into heroes. But they also fundamentally altered the meaning of independence. In the paradigm that emerged from the crises of the 1970s, independence meant restraint and respect for the boundaries of delegated authority. In the new era, it had more to do with independence of action and initiative. More often than not, it meant the central bank single-handedly saving the day.

Whereas in most of the world this was accepted in a pragmatic spirit—it was reassuring to think that someone, at least, was in charge—in the eurozone it was never going to be so easy. The way that Chancellor Helmut Kohl's government sold German voters on the abandonment of the Deutsche mark was the promise that the ECB would resemble the Bundesbank as closely as possible. It was barred from directly financing deficits, and, in the hope of limiting undue national influence, it had limited political accountability. Its narrow mandate was simply to ensure price stability.

This was always a gamble, which depended on the willingness of the Italians and French, who also had a voice in the euro system, to go along. Their financial elites pushed for a common currency in part because they were looking for a restraint on their own undisciplined political class—but also because they were gambling that as members of the eurozone they would have a better chance of bending European monetary policy in their direction than they would if their national central banks were forced to follow the Bundesbank by the pressure of bond markets. In the early years of the euro, the compromise worked to mutual satisfaction. But it was always fragile. Once the financial crisis of 2008 forced a dramatic expansion of the ECB's activity, buying both government and corporate bonds, intervening to cap the interest rates paid by the weakest eurozone member states, pushing bank lending by complex manipulation of interest rates, conflict was predictable. This tension exploded in the German Constitutional Court last week.

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For the majority of financial opinion, the ECB's growing activism is broadly to be welcomed. It is the one part of the complex European constitution that actually functions with real authority and clout as a federal institution. Though grudging in her public support, Chancellor Angela Merkel has rested her European policy on a tacit agreement to let the ECB do what was necessary. Allowing the ECB to manage spreads – the interest rate margin paid by weaker borrowers – was easier than actually addressing the question of how to make Italy's debt-level manageable. But a recalcitrant body of opinion in Germany has never reconciled itself to this reality. For them, the ECB serves as a lightning rod for their grievances about the changing political economy of the last decade. They blame it for victimizing savers with its low interest policy. They blame it for encouraging the debts of their Southern European neighbors. Exponents of the old religion of German free market economics regard cheap credit as subversive of market discipline. All in all, they suspect the ECB of engaging in a policy of redistributive Keynesianism in monetary disguise, everything that Germany's national model of the social market economy was supposed to have ruled out. For these Germans, the ECB is an opaque technocratic agency arrogating to itself powers that properly belong to national parliaments, barreling down the slippery slope to a European superstate. And, for them, it is anything but accidental of course that it is all the creation of a Machiavellian Italian with trans-Atlantic business connections, Mario Draghi.

For the body of opinion that had always been suspicious of the euro, Draghi's commitment to do "whatever it takes" in 2012 was the final straw. The Alternative for Germany (AfD) emerged in 2013 not originally as an anti-immigrant party but as a right-wing economic alternative to Berlin's connivance with the antics of the ECB. As the AfD has consolidated its position as the anti-establishment party of right-wing protest above all in eastern Germany, its agenda has shifted. But Bernd Lucke, one of the founders of the AfD who has since left the party, was among the plaintiffs whose case the German constitutional court decided last week.

Meanwhile, Germany's influential tabloid *Bild* pursued a campaign amounting to a vendetta against Draghi, picturing him last September as a vampire sucking the blood of German savers. And even the Bundesbank leadership, both current and emeritus figures, has not been shy about associating itself with public opposition to the expansive course of the ECB. Defending the strength of the euro against the spendthrift, inflationary ways of Southern Europe played well with the patriotic gallery. But so long as Merkel preferred to cooperate with the ECB's leadership, that opposition remained marginalized. What has thrown a spanner in the works are the well-developed checks and balance of the German Constitution guarded by the Constitutional Court.

The German Constitutional Court, based in modest digs in the sleepy town of Karlsruhe, has an activist understanding of its role within the German polity, presenting itself as "the citizens' court" unafraid of upending the political agenda on issues from the provision of child care or means-tested welfare benefits to the future development of the European project. Since the 1990s, the court has been a vigilant check on unfettered expansion of European power. It makes the argument on the basis of defending democratic national sovereignty, insisting on its right to constantly review European institutions for their conformity to the basic norms of the German Constitution.

Each progressive expansion of ECB activism has thus stirred a new round of legal activism. Announced in 2012, Draghi's instrument of Outright Monetary Transactions, an unlimited bond-buying backstop for troubled eurozone sovereign debtors, was challenged by a coalition of both left-wing and right-wing German plaintiffs. It was not until the summer of 2015 that the court finally and grudgingly ruled it acceptable.

When Draghi finally launched the ECB into large-scale bond buying in 2015, of the type that both the Fed and Bank of Japan had embarked on years before, it too immediately triggered a new round of litigation. In 2017, the court gave a preliminary ruling but referred the case to the European Court of Justice (ECJ). In December 2018, the ECJ declared the program to be in conformity of the European treaties. But the German constitutional judges were not satisfied with the reasoning of the ECJ and held hearings in 2019. After months of deliberation, Karlsruhe was supposed to issue its judgment on March 24, but that was postponed a week beforehand due to the coronavirus pandemic.

That turned out to be opportune because financial markets in March were in crisis. Between March 12 and 18, as the ECB failed to calm the waters, the interest paid by Italy for state borrowing surged. Thanks to massive intervention by the ECB, they have since cooled. Christine Lagarde's ECB has promised to make an additional round of purchases in excess of 700 billion euros, with more to come if necessary. To calm the markets, what was needed was discretion and largesse—precisely what the German critics of the ECB feared most and had criticized so incessantly in the 2015 bond-buying program.

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This made the judgment from Karlsruhe on the 2015 program even more significant. What might the ruling on Draghi's quantitative easing (QE) signal for possible action against Lagarde's crisis program? How might the court influence the course of debate in Germany? The initial hearings in 2019 had not sounded favorable to the ECB. The selection of expert testimony by the court was conservative and biased. The court had given full vent to the protests of smaller German banks about the low interest rates that ECB policy permitted them to offer savers. It was as though the court had summoned oil companies, and oil companies only, to give evidence on the question of carbon taxes.

For all the anticipation, the judgment has come as a shock. The question that has ultimately proved decisive is a seemingly conceptual one concerning the distinction between monetary policy and economic policy. The German Constitutional Court declared that the ECB, in pursuing its efforts to push inflation up to 2 percent, had overstepped the bounds of its proper domain—monetary policy—and strayed into the area of economic policy, which the European treaties reserve for national governments.

This is by no means an obvious distinction. It was originally built into the treaties both to protect national prerogatives and to ensure that the ECB's focus on price stability was shielded against any improper meddling by parties that might prioritize concerns like unemployment or growth. Making this distinction is one of the central dogmas of the German school of economics known as ordoliberalism. But once monetary policy reaches any substantial scale, it in fact becomes meaningless.

The ECJ in Luxembourg reasonably took the view that the ECB has fulfilled its obligation to respect the boundary by justifying its policy with regard to the price objective and following a policy mix typical of modern central banks. It is this casual approach on the part of the ECJ to which Karlsruhe objects. The ECJ waived the case through without assessing the proportionality of the underlying trade-off, the German Constitutional Court thundered. In doing so, it had failed in its duty and acted *ultra vires*—beyond its authority. It was thus up to the German court to adjudicate the issue, and it duly found that the ECB had not to its satisfaction answered the economic concerns raised by the court's witnesses. The ECB too was therefore found to have overstepped its mandate.

Since the German court does not actually have jurisdiction over the ECB, the ruling was delivered against the German government, which was found to have failed in its duty to protect the plaintiffs against the overreaching policy of the ECB. As Karlsruhe emphasized, its judgment would not come into immediate effect. The ECB would have a three-month grace period in which to provide satisfactory evidence that it had indeed balanced the broader economic impact of its policies against their intended effects. Barring that, the Bundesbank would be required to cease any cooperation with asset purchasing under the 2015 scheme.

The judgment was delivered to a court room observing strict social distancing, though the judges did not wear face masks. Chief Justice Andreas Voßkuhle, whose 12-year term at the court ends this month, noted that the ruling might be interpreted as a challenge to the solidarity necessary to meet the COVID-19 crisis. So he added by way of reassurance that the ruling applied only to the 2015 scheme. There is no need, therefore, for any immediate change of policy. The markets have so far taken the intervention in stride. But the Karlsruhe decision is, nevertheless, shocking.

It is a spectacular challenge to European court hierarchy. Instead of merely assessing the conformity of the ECB's policies with the German Constitution, the German court arrogated to itself the right to evaluate the conformity of the ECB actions with European treaty law, an area explicitly left to the ECJ. This will surely play into the hands of those in Poland and Hungary who are determined to challenge the common norms of the European Union. It did not take long for Poland's deputy justice minister to signal his enthusiastic support for the Karlsruhe decision. This may end up being the case's most lasting effect.

But it is spectacular also for another reason. In challenging the ECB to justify its QE policy, the German court has put in question not just a specific policy but the entire rationale for central bank independence. What is more, it has done so not only formally but substantively. It has exposed the political and material basis that lies behind the norm of independence.

The claim that the ECB overstepped the bound between monetary and economic policy is, as an abstract proposition, not so much a scandal as a tautology. Only in an ordoliberal fantasy world could one imagine monetary policy working purely by way of signaling without it having an impact on the real economy. Indeed, to affect real economic activity by lowering the cost of borrowing is precisely the point of monetary policy. Far from failing to consider the economic impact of its monetary policies, this is precisely what the ECB spends its entire time doing.

Nevertheless, by harping on this seemingly absurd distinction the court has in fact registered a significant historic shift. The shift is not from monetary to economic policy but from a central bank whose job is to restrain inflation to one whose job is to prevent deflation—and from a central bank with a delegated narrow policy objective to one acting as a dealer of last resort to provide a backstop to the entire financial system. The German court is right to detect a sleight of hand when the ECB justifies an entirely new set of policies with regard to the same old mandate of the pursuit of price stability. But what the German court fails to register is that this is not a matter of choice on the part of the ECB but forced on it by historical circumstances.

Cutting through the legalese and abstruse arguments, the complaint brought to the court by the plaintiffs is that the world has changed. Europe's central bank was supposed to be their friend in upholding an order in which excessive government spending was curbed, wage demands and inflation were disciplined, and thrifty savers were rewarded with solid returns. The reality they have confronted for the last 10 years is very different. They suspect foul play, and they blame the newfangled policies of the ECB and its Italian leadership. Rather than taking the high ground, recognizing the historical significance of this crisis and calling for a general reevaluation of the role of central banks in relation to a radically different economic situation, the German Constitutional Court has made itself into the mouthpiece of the plaintiffs' specific grievances, linked those to an expression of fundamental democratic rights, and mounted a challenge to the foundation of the European legal order.

Its willingness to assume this role no doubt reflects its resentment at the usurpation of its supremacy by the ECJ. The decision reflects in this sense a concern to defend German national sovereignty. But it also reflects the cognitive shock of failing to come to terms with the role of central banks in a radically changed world. What this starkly reveals is the limits of existing modes of central bank legitimacy—including the narrative of central bank independence—at the precise moment at which we have become more dependent than ever on the decisive actions of central banks.

To see the head-turning effect of this ruling, imagine an alternative history. Imagine a citizen's court like that in Karlsruhe convening sometime in the mid-1980s in the United States to evaluate whether or not Volcker's Fed had adequately weighed the economic impact of its savage interest rate hikes on the steelworkers of the Rust Belt. Or, only slightly more plausibly, imagine a hearing in the Spanish or the Italian constitutional court on the question of whether or not their governments were remiss in not demanding to see the reasoning that justified the ECB's decision in 2008 or 2011 to raise interest rates just as the European economy was sliding into first one and then a second recession. Were German concerns about inflation at those critical moments weighed against the damage that would be done to the employment opportunities of millions of their fellow citizens in the eurozone? Would Karlsruhe have heard a case brought on those grounds by an unfortunate German citizen who lost his or her job as a result of those disastrously misjudged monetary policy moves?

Of course those decisions were criticized at the time. But that kind of criticism was not considered worthy of constitutional consideration. That was merely politics, and it was the duty of the central bank, and a measure of its independence, to override and ignore such objections.

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The political impact of the court ruling has been revealing. On the German side, the business council of Merkel's Christian Democratic Union immediately expressed its support for the court. So too did a spokesperson for the AfD. Friedrich Merz, a possible right-wing successor to

Merkel, let it be known that he now considers the German government bound to exercise a precautionary check on any further expansion of the ECB's range of action.

The reaction of the European Commission and the ECB was no less immediate. They closed ranks around the ECJ. The clear message they sent was that they are bound by Europe's common law and institutions. After a few days of deliberation, the ECB declared with supreme understatement that it takes note of the judgment from Karlsruhe but intends to ignore it since the ECB answers to the European Parliament and the European court, not the German Constitutional Court. The ECJ ruled in December 2018 on the asset purchase program at the request of the German court. There are no do-overs. The case is closed.

This leaves the German government and the Bundesbank in a tight spot. The German government, for its part, often goes for years without fully implementing the Constitutional Court's most ambitious judgments. The Social Democrat-led Finance Ministry in Berlin, which cultivates its image as an advocate of pro-European policies, has played down the decision. The neuralgic point will be the Bundesbank. It is both a German agency, answerable to the Constitutional Court, and a member of the euro system—and thus bound by the statutes of the ECB.

An open and irresolvable conflict between the Bundesbank and the Constitutional Court on the one side and the ECB on the other would compound the tensions already being felt within the eurozone over the issue of the funding of the emergency response to the COVID-19 crisis. Resentment in Italy and Spain toward Germany is already at a high pitch. One might take the German court's call to limit and balance the ECB's expansion as a call to, instead, expand the reach of European fiscal policy. The ECB has made precisely that argument itself. But unfortunately the same political forces in Germany that brought the case to the Constitutional Court also stand in the way of a major move toward fiscal federalism.

Given the economic conservatism and hubris of the German court and the prospect of a string of challenges from across the EU by even more unfriendly forces, a strong stance from the European side is to be welcomed. But it would be regrettable if the ECB responded to the quixotic German onslaught against the realities of 21st-century central banking by itself retreating into a defensive bunker.

If it was not already evident, the COVID-19 shock has made clear beyond a shadow of a doubt that both the political and economic circumstances out of which the original model of central bank independence emerged have changed, not just in Germany or Europe but around the world. This renders the classic paradigm of inflation-fighting independence obsolete and has thrown into doubt models of narrow delegation. To address the new circumstances in which the real problems are the threat of deflation, the stability of the financial system, and the passivity of fiscal policy, the ECB, like all its counterparts, has indeed been pursuing a policy that goes well beyond price stability conventionally understood. In fact, in Europe the ECB is the only agency engaged in economic policy worthy of the name. Given the limitations of its mandate, this does indeed involve a degree of obfuscation. Despite itself groping in the dark, the Karlsruhe decision has helpfully put a spotlight on the ECB charade.

To respond by doubling down on a defense of independence may be inevitable in the short run. But this too will run its course. The more constructive response would be to advocate for a wider mandate to ensure that the central bank does indeed balance price stability with other concerns; the bank's second objective should surely be employment and not the interests of German savers. But an open debate about the range of the ECB's mandate would be a step forward for European politics. The politics of treaty adjustment are not easy, of course. It will take political courage. But the demand itself should not be presented and dismissed as outlandish. After all the Fed has a dual mandate. Alongside price stability, it is enjoined by the Humphrey-Hawkins Act to aim for the maximum rate of employment possible. As the history of the Fed attests, this is far from being a binding commitment. But since 2008 it has provided the Fed with the latitude necessary to expand its range of activities.

That expansion of activity has in large part been a matter of technocratic discretion. The point of pushing for a discussion of a widening of the ECB's mandate should be the opposite. The aim should be to encourage a wide-ranging discussion about the wider purpose of central banks. Again, the U.S. example may be an inspiration. The Fed's dual mandate is, somewhat surprisingly, a legacy of progressive struggles fought in the 1960s and 1970s—specifically, by the civil rights movement under Coretta Scott King's leadership—to force social equity to the top of the macroeconomic policy agenda. This may seem far-fetched, but progressives cannot shrink from the challenge. They should not allow themselves to be held prisoner to the 1990s mystique of central bank independence.

Two new issues make this pivotal in the current moment. One is the financial legacy of the COVID-19 crisis, which will burden us with gigantic debts. The balance sheet of the central bank is a pivotal mechanism for managing those debts. The other issue is the green energy transition and the need to make our societies resilient to environmental shocks to come. That will require government spending but also a reorientation of private credit toward sustainable investments. In that process, the central bank also has a key role. The current mandates require those concerns to be shoehorned in by way of arguments about financial stability. It is time for a more direct and openly political approach.

The independence model emerged from the collapse of the Bretton Woods system and the need to anchor inflation during the Great Inflation of the 1970s. The huge range of interventions currently being pursued by global central banks have emerged out of the crises of a globally integrated financial system. They have been enabled by the absence of inflationary risk. They have succeeded in staving off catastrophe for now. But they lack a positive purpose and updated democratic grounding.

We value price stability, but for better and for worse the forces that once made it an urgent problem are no longer pressing. That objective alone is no longer sufficient to define the mandate of the most important economic policy-making agency. Financial stability is essential, but the current incestuous relationship between central banks and financial system tends, if anything, to underwrite and encourage dangerous speculation by a self-enriching elite. Meanwhile, slow growth, inequality and unemployment are at the root both of many of our social ills, and by the same token the problem of the debt burden – how we manage government debt depends crucially on how rapidly the economy is growing. Finally, we can no longer deny that we confront fundamental environmental issues that pose a dramatic generational challenge for investment.

These are the policy challenges of the third decade of the 21st century. Money and finance must play a key role in addressing all of them. And the central bank must therefore be at the heart of policy making. To pretend otherwise is to deny both the logic of economics and the actual developments in central banking of recent decades. We should acknowledge also however that this expansion stands in tension with the current political construction of central banks, and particularly the ECB. Defining their position in terms of independence, strictly delimited mandates and rules limits their democratic accountability. That was the explicit intention of the conservative reaction to the turmoil of the 1970s.

If Europe wants to escape the impasse created by the German court ruling, in which one counter majoritarian institution checks another at the behest of a resentful and self-interested minority, we need to step out from this historical shadow. Doing so is no doubt hedged with risks. But so too is attempting to patch and mend our anachronistic status quo. Half a century on from the collapse of Bretton Woods and the emergence of a fiat money world, 20 years since the beginning of the euro, it is time to give our financial and monetary system a new constitutional purpose. In so doing Europe would not only be laying to rest its own inner demons. It would offer a model for the rest of the world.

Piece 13

The death of globalisation has been announced many times. But this is a perfect storm

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Over the last half-century the world has been transformed by huge flows of trade and investment. The source of our food and the manufacture of everything from trainers to mobile phones has been revolutionised. Bank inquiries in Newcastle are handled in Bangalore. Secure industrial jobs have evaporated in Europe and North America and reappeared on the other side of the world. Exports, which amounted to less than 10% of global GDP in the 1970s, now stand at 25%.

Globalisation has been a massive social and economic transformation. It has, by the same token, been hotly contentious, creating losers as well as winners. And this raised the question: would it be brought to an end by eruption of opposition? Again and again – after the 1999 Seattle WTO protests, September 11, the financial crisis of 2008 and the election of Donald Trump – there have been predictions of globalisation's terminal crisis. In the background lurks the memory of the 1930s and the Great Depression, when trade and capital flows contracted, not to recover for the best part of half a century.

But the Covid-19 shock has raised globalisation angst to a new pitch. The World Trade Organization (WTO) is predicting that trade may fall by a record 32%. The lockdowns were disruptive enough. But as the economic crisis deepens, 2020 is beginning to look like something worse: a perfect disruptive storm.

To see why, consider the range of factors that shape the international division of labour. Start with politics.

The pursuit of profit extends across national borders and lines of political conflict. But if you are going to set aside politics and diplomacy, you need to agree to differ. It helps if you have an arbiter, a global hegemon. It is no coincidence that the surge in global trade and investment coincided with what seemed like decisive American victory in the cold war.

In addition to politics, the flow of goods is driven by technology. The Industrial Revolution of the late 18th century centred on cotton. A quarter of a millennium later the garment supply chain still spans the world, from the cotton farms of Australia to sweatshops in Bangladesh and big box malls in American suburbs, now empty of customers. Twenty-first century smartphones are produced by a hyper-sophisticated network linking labs and software coders in the west with chip foundries in South Korea and Vietnam and assembly lines in China and Vietnam. The greatest single driver of globalisation in recent years has been containerisation, which slashed the cost of shipping.

Apart from politics and technology, who makes what, and where, is decided by the terms of trade, which depend on the balance of costs and prices and the matrix of exchange rates. Sudden movements in currencies shift costs, disrupting existing patterns of demand and supply.

Finally, whether we have the appetite to buy goods – made at home or abroad – depends on the overall state of the economy, on what economists call “aggregate demand”, the sum of consumption, investment and government spending.

Add together technology, price effects, macroeconomics and geopolitics and it becomes clear why, in 2020, we face a perfect storm.

On the technological front, containerisation and the revolution in outsourcing have run their course. The car industry, which operates the most complex supply chains, is undergoing a technological revolution. The advent of electric cars (or what the industry calls “e-mobility”) will simplify and shrink production, cutting millions of jobs. Consultants like McKinsey’s reckon that it will only be a matter of time before the armies of female factory workers currently employed in cutting and sewing clothes will be replaced by robots.

Meanwhile, the Covid-19 recession has slashed consumption and investment. The US is by far the largest importer, and its demand has been hammered. The current strength of the dollar will go some way towards offsetting the fall in American consumption. A more valuable dollar makes it more attractive to export to the US. But it may also trigger new trade wars.

Particularly aggravating to the White House will be the fall in the Brazilian currency, the real. Trump may regard the Brazilian president Jair Bolsonaro as a kindred spirit, but he will not like the huge surge in Brazilian exports as China’s pig farmers opt for the cheapest source of animal feed.

The promise of increased agricultural exports from the US to China was key to the so-called phase one trade deal, solemnised in January. At least for a few weeks early this year Trump stuck to the phase one script. But that restraint has not lasted. Since April there has been a truly spectacular escalation in rhetoric between Washington and Beijing.

Trump’s nationalist bluster plays to his gallery. China makes a good stick with which to beat Joe Biden, who is reputed to favour a more cooperative line. Altogether more serious is the systematic reorientation in US strategy towards China that had already begun under Barack Obama, with the “pivot to Asia” in 2011, and culminated in May 2020 with the release by the Trump administration of a comprehensive new strategy document.

The document ends any further discussion in Washington of the possible convergence of China with the western model. Instead, all branches of American government are sworn in on a posture of great power competition. Nor is this merely rhetoric. It goes hand in hand with a further round of sanctions against China’s telecoms champion, Huawei. By refusing to allow chips for Huawei, even chips of Huawei’s own design, to be manufactured on ultra hi-tech equipment that Taiwanese chip foundries source from the US, the Trump administration has effectively declared a technological war.

Meanwhile, the UK has announced its decision to exclude Huawei from its 5G network within three years. Australia and China are embroiled in a mini-trade war over barley and beef. Huawei executive Meng Wanzhou awaits her fate under house arrest in Canada. If she is extradited to the US, expect a storm to break loose.

Of course, there are countervailing forces. Business, including American business, remains deeply committed to foreign investment and trade. Europe is reluctant to choose between the US and China. Angela Merkel has announced that she will make relations with China one of the priorities of Germany's presidency of the European council.

But, deal-making apart, the broader vision of the flat world of globalisation is dead. The institution that most clearly embodied that "end of history" vision, the WTO, was launched in January 1995. Today, the WTO is in tatters. Its dispute-processing procedures have been paralysed by deliberate American obstruction and its head, Brazilian Roberto Azevêdo, has announced that he is resigning a year ahead of time, which leaves the WTO leaderless in the face of the greatest shock to world trade since 1945.

Comparisons with the 1930s should not be taken too far. We don't live under the shadow of total war, and there are good reasons to welcome the end of 1990s-style hyper-globalisation. But we should not underestimate the break with the recent past or kid ourselves that there is any obvious alternative on offer.

Piece 14
Politics for the end of the world
New Statesman, April 2020

History right now shifts with dizzying speed. Anatol Lieven's new book is about climate change and the nation state. Lieven wants us to think about the kind of politics that should accompany a comprehensive approach to the climate crisis. In particular he addresses himself to the idea of a Green New Deal that held so much currency on both sides of the Atlantic in 2019. Like the Green New Dealers, Lieven is convinced that fighting the climate crisis will require a comprehensive reconstruction of politics and society.

But what is the political future of the Green New Deal? In the British general election of December 2019, Jeremy Corbyn's Labour was badly defeated. This does not mean an end to climate politics, but it will not take the form that Britain's Green New Dealers once imagined. In climate politics, time really matters. The clock ticks towards the upper limit of the carbon budget. The option for a UK Green New Deal, as envisioned last year, was thus permanently foreclosed. In the US, Bernie Sanders, the chosen candidate of the Green New Dealers, is still in the race for the Democratic nomination. But he faces an uphill battle. And Sanders barely figures in Lieven's book. Joe Biden not at all.

The progressive that Lieven is most drawn to is Elizabeth Warren. But her campaign for the Democratic Party nomination fizzled out on Super Tuesday. And now, our lives have been turned upside down by the unprecedented emergency of the coronavirus pandemic.

Does that render Lieven's book irrelevant? It might, if you took the title too literally and read it first and foremost as a book about climate change. But to do so would be to misunderstand Lieven's intent.

Lieven's métier is as a thinker of politics and international relations. He has a wide-ranging vision. As he tells us in several places in the book, he has reported from across post-Soviet Russia, Washington, DC, Pakistan and the Middle East. He is clearly stirred by the climate emergency. But this book is not really about global warming. Nor is it about energy policy, though Lieven does have strong opinions on the nuclear question. For Lieven the climate crisis serves as a diagnostic test. It poses the question of who we are in political terms. It exposes the antiquated strategic thinking that prioritises a new cold war over the very survival of states in their current form. It reveals the unsustainability of rampant market capitalism. The willingness of economists to discount the future of our progeny is for Lieven the mark of nothing less than the degeneracy of our culture.

The coming distributional struggles compound our political and social divisions. Will we sacrifice our ideological hobby-horses for the sake of doing whatever it takes to prevent climate catastrophe? The sheer bleakness of the future challenges our capacity for realism. The climate crisis is a test of our character. And Lieven does not like what it reveals.

Lieven strikes a pose beloved of self-proclaimed realists, placing himself between the do-nothing, know-nothing right and the radicals of the climate left. Lieven's sympathy is with the left, which he thinks grasps the seriousness of the emergency. He agrees that there needs to be a social transformation. But to Lieven's mind the transformation they envision is unrealistic and their politics are self-defeating. The priority they give to the interest of a rainbow coalition of minorities antagonises the white, male working class. Their support for open borders is an empty cosmopolitanism that is both off-putting and unrealistic in practice.

Lieven is disarmingly frank about his own historical role models. He draws inspiration from those who at the turn of the 19th century already sought to straddle the divide between socialism and conservatism, the likes of George Bernard Shaw, Lord Milner, John Buchan, Harold Mackinder and Rudyard Kipling. For Lieven the task is to "develop a new version of social imperialism, without the imperialism, racism, eugenics and militarism". What this social imperialism will involve is a deliberate effort to rebuild solidarity from the top down, a solidarity founded ultimately on an idea of the nation, not a nation limited by race, but a strong concept of chosen collective solidarity. Lieven's ideal, as he tells us, is a Democratic Party platform featuring Theodore Roosevelt in rough rider regalia and Eisenhower as the commander of the D-Day landings.

The centrepiece of this militant platform would be the restoration of the nation state. The years he spent in Pakistan taught Lieven hard lessons about how difficult it is for a society to flourish without a strong nation state. He has striking things to say about the intercommunal tensions that afflict the Asian subcontinent. On the national question he thinks that the West has lessons to learn from the imperial notion of citizenship fostered by Vladimir Putin's Russia – all ethnicities and religions are welcome, so long as they swear loyalty to Russia. And, in the same spirit, he has no time for the ideologues of the new cold war who preach conflict with Putin and Xi Jinping.

All of this is pitched as a social (imperialist) version of the Green New Deal. The state has the authority and the tools necessary to direct the change. Furthermore, it is the nation state through which we primarily understand our intergenerational responsibilities. In the name of the nation we must sacrifice ourselves as consumers for the higher good of climate mitigation.

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This isn't a book about pandemics. But if Lieven had seen Covid-19 coming, one imagines he could have written much the same book about our current crisis. The politics of pandemics seem tailor-made for him.

The struggle with the virus has been declared a war. In that war we need allies. The last thing the West can afford at present is a clash with Beijing, which seems to have brought its crisis under some kind of control. By contrast, the inability of the US to muster a national response of any degree of coherence is lamentable. Once we have come through the crisis there clearly must be a re-evaluation of state capacity.

Of course, one would wish this to be tied to the reassertion of basic social democratic virtues. In the meantime, paramilitary formations such as the National Guard have been mobilised to cordon off New York suburbs. The US Army Corps of Engineers, for which Lieven has a soft spot, will most likely be mobilised for a rash of emergency hospital-building. In Britain the lamentably underequipped NHS will most likely have to draw on the military too.

You might imagine that this rather butch version of progressivism was the sole reserve of tweedy professors of international relations. But, in fact, one of the odder features of Alexandria Ocasio-Cortez's Brooklyn radicals is their enthusiasm for the economic history of the Second World War. One of their favourite examples for the productive capacity of state power is Franklin D Roosevelt's drive in the 1940s to build a giant fleet of bombers with which to lay waste to the cities of Nazi Germany and Imperial Japan.

Returning to the 21st century and to the grounds of reality, we know how the Democratic Speaker of the House of Representatives Nancy Pelosi reacted to the Green New Deal. She dismissed it as an ill-formed wish list, and there was more to Pelosi's shrug than mere cynicism. She knows the long path between an enthusiastic campaign platform and the passage of a bill not just through Congress but any legislature.

Ocasio-Cortez and her cohorts can legitimately respond that that is not their purpose. They want to act as gadflies, to do for the left what the Tea Party did for the right. And they deserve credit for having transformed the debate in the Democratic Party. But exercising leverage from the margins of politics is not Lieven's game. His book offers a blueprint for an epochal social and political transformation. For that you need big majorities won repeatedly. The inspiration here is as much Ronald Reagan as Roosevelt. But that raises the question: what is the relationship between Lieven's neo-Edwardian vision of social imperialism and the actual business of politics in the 21st century?

Lieven scorns what he sees as the identity politics favoured by some parts of the American left. But he never addresses the heterogeneity of the working class today. Giving voice to women, migrants and people of colour is not an abstract indulgence of identity politics, but a realistic reflection of the low-wage workforce. It is certainly far closer to reality than Lieven's fantasies of a nation organised around a draft. Conscription is an idea that has enjoyed a vogue recently among the authoritarian Gulf states, where Lieven currently teaches. Qatar and the United Arab Emirates rival each other in their well-upholstered visions of national mobilisation. But what is the relevance of that politics to the generation of Western youths whose attitude towards the nation is resolutely post-heroic?

Lieven mocks the European Greens for the knee-jerk cosmopolitanism of their party manifestos. He fears that their refusal to emphatically embrace the nation undermines the popularity and efficacy of their environmental politics. But as someone who claims to be a realist, would he not be better off asking what relationship such pronouncements have to the conduct of actually existing climate politics? The UN climate change conferences, which are the real drivers of global climate politics, are anything but exercises in altruistic cosmopolitanism. And the result, as one would expect, has been a painful deadlock.

When it comes to nuclear power, Lieven pillories “the greens” for their dogmatic opposition. In some cases this is no doubt fuelled by anti-modernism. And the overriding priority of the climate emergency certainly does throw new light on the nuclear issue. But anyone who believes that nuclear power can be defended in terms of realism adheres to a strange view of history.

In fact, the technology has been driven by a series of ludicrously exaggerated and unrealistic visions, among the most far-fetched of which is the promise of fusion, to which Lieven seems attached. What has kept nuclear energy alive has not been realpolitik, let alone the cost-benefit calculus of the market. It has been sustained by the entrenched interests of technocrats and a small cabal of engineering firms and power utilities, garnished with technological wishful thinking. There may be a case for continuing nuclear research and development as part of our response to the climate crisis. But if you are remotely realistic you make that argument on the speculative grounds that we have to keep all our technological options open.

The deepest irony of Lievin’s pastiche of realism becomes clear when we turn to international relations. One can certainly agree with him that in the face of the climate crisis and the current pandemic, a new cold war with China and Russia would be ruinous. But to argue, as he suggests, that the urgency and generality of the climate crisis render all considerations of geopolitics and ideological difference irrelevant is to make life too easy for ourselves. Lieven may well be right that China’s artificial islands in the South China Sea will soon be submerged by the rising tides. But that is why the geopolitics of climate change are concentrated not on the South China Sea but on the Arctic, where the melting ice caps are clearing the waters for a new Great Game.

The irony of Lieven’s position is that in treating climate change as a threat to all states, by concluding with regard to climate policy that, in the words of Reinhold Niebuhr, “All have sinned and have fallen short of the glory of God”, he espouses not so much realism as an inverted version of 19th-century liberalism. In this vision all nations were imagined unfolding their inner destiny, peacefully side by side. Unfortunately, the reality of our situation is more difficult than that.