

The Psychologist Who Convinced Economists that to Err Is Human



Daniel Kahneman, who passed away in March at the age of 90, received the Nobel Prize in Economics despite having never taken an economics course. Nevertheless, his scholarship reshaped and upended the discipline's fundamental assumptions, laying the groundwork for the emergence of behavioral economics.

CAMBRIDGE – The recent passing of psychologist and Nobel laureate Daniel Kahneman is an apt moment to reflect on his invaluable contribution to the field of behavioral economics. While Alexander Pope's famous assertion that "to err is human" dates back to 1711, it was the pioneering work of Kahneman and his late co-author and friend Amos Tversky in the 1970s and early 1980s that finally persuaded economists to recognize that people often make mistakes.

When I received a fellowship at Stanford University's Center for Advanced Study in the Behavioral Sciences (CASBS) four years ago, it was this fundamental breakthrough that motivated

me to choose the office – or “study” (to use CASBS terminology) – that Kahneman occupied during his year at the Center in 1977-78. It seemed like the ideal setting to explore Kahneman’s three major economic contributions, which challenged economic theory’s apocryphal “rational actor” by introducing an element of psychological realism into the discipline.

Kahneman’s first major contribution was his and Tversky’s groundbreaking 1974 study on judgment and uncertainty, which introduced the idea that “biases” and “heuristics,” or rules of thumb, influence our decision-making. Instead of thoroughly analyzing each decision, they found, people tend to rely on mental shortcuts. For example, we may rely on stereotypes (known as the “representativeness heuristic”), be overly influenced by recent experiences (the “availability heuristic”), or use the first piece of information we receive as a reference point (the “anchor effect”).

Second, Kahneman and Tversky’s work on “prospect theory,” which they published in 1979, critiqued expected utility theory as a model of decision-making under risk. Drawing on the “certainty effect,” Kahneman and Tversky argued that humans are psychologically more affected by losses than gains. The perceived loss from misplacing a \$20 note, for example, would outweigh the perceived gain from finding a \$20 note on the sidewalk, leading to “loss aversion.”

This insight is also at the core of the “framing effect.” The theory, developed while Kahneman was a fellow at CASBS and Tversky was a visiting professor at Stanford, posits that the way information is presented – whether as a loss or a gain – significantly influences the decision-making process, even when what is framed as a loss or gain has the same value.

Lastly, there is Kahneman’s popular masterpiece, the bestselling *Thinking, Fast and Slow*. Published in 2011 and offering a lifetime’s worth of insights, the book introduced

the general public to two stylized modes of human decision-making: the “quick,” instinctive, emotional mode that Kahneman called System 1, and the “slower,” deliberative, or logical mode, which he called System 2. Humans, he showed, are prone to abandoning logic in favor of emotional impulses.

Kahneman received the Nobel Prize in Economics in 2002, despite, as he jokingly remarked, having never taken a single economics course. Nevertheless, his scholarship laid the groundwork for an entirely new field of economic research – and it had all begun in Study 6.

In particular, Kahneman’s work had a profound impact on University of Chicago economist Richard Thaler, who went on to become a Nobel laureate himself. As an assistant professor, Thaler managed to “finagle” a visiting appointment at the National Bureau of Economic Research, whose offices were located down the hill from CASBS, enabling him to connect with Kahneman and Tversky.

In 1998, Thaler co-authored a seminal paper with Cass Sunstein and Christine Jolls, introducing the concept of “bounds” on reason, willpower, and self-interest, and highlighting human limitations that rational-actor models had overlooked. By the time he received the Nobel Prize in 2017, Thaler had systematically documented “anomalies” in human behavior that conventional economics struggled to explain and conducted highly influential research (with Sunstein) on “choice architectures,” popularizing the idea that subtle design changes (“nudges”) can influence human behavior.

But as I gazed at the sweeping views of Palo Alto and the San Francisco Peninsula from the office window at CASBS, the birthplace of behavioral economics, I could not help but wonder whether Kahneman, despite his famously gentle nature, had perhaps been too critical of human decision-making. Are all deviations from “pure” economic logic necessarily “irrational”? Is our inability to align with the idealized

model of economic analysis, coupled with our inevitable – albeit predictable – irrationality, really an inherent weakness? And is our tendency to rely on emotions rather than reason a fatal flaw, and if so, could our susceptibility to instinct ultimately lead to our downfall?

I wish I could ask Kahneman these questions. During my time there in 2020-21, Kahneman, affectionately known as “Danny” to all, was not just what CASBS called a “ghost” of the “study” – a former occupant who had been a major influence on my work – but also, happily, a vibrant, living legend who had enthusiastically invited me to discuss these very issues in person. Looking back, I regret my “planning fallacy” in not taking him up on his offer to deepen our conversation sooner – a sentiment shared by both my System 1 and System 2 modes. If “to err is human,” Danny taught me a poignant final lesson in human error.

The Case for a European Public-Goods Fund



Mar 4, 2024 AGE BAKKER, ROEL BEETSMA, and MARCO BUTI

With the European Union's pandemic recovery fund set to end in 2026, there is an urgent need for more durable financial mechanisms to support its long-term objectives. Fortunately, a new investment fund could both enhance the EU's growth potential and ensure compliance with its new fiscal rules and shared values.

AMSTERDAM – Following weeks of intense negotiations, the European Union has agreed to revise its fiscal rules. The new rulebook will replace the Stability and Growth Pact (SGP) – which has been suspended since the start of the COVID-19 pandemic – and modernize the bloc's 25-year-old fiscal framework.

While the SGP featured a one-size-fits-all model that ultimately undermined its credibility, the updated fiscal rules allow for a differentiated approach. The goal is to maintain the existing deficit and public debt limits while still encouraging member states to invest in green and digital technologies. Member states will be granted extended adjustment periods of up to seven years to reduce their debts to sustainable levels, provided they commit to reforms and investments that support this double (green/digital) transition.

But while the EU's efforts to strike a balance between fiscal discipline and growth incentives are commendable, national budgets alone will not be enough to finance the EU's ambitious double transition. The European Commission estimates that an annual investment of roughly €650 billion (\$700 billion) is needed to meet the 2030 targets of producing at least 42.5% of the bloc's energy from renewable sources and reducing greenhouse-gas emissions by 55%.

Under the new fiscal rules, funding for digital and green investments can be sourced from the €800 billion NextGenerationEU fund, which was established in 2020 to help European economies recover from the COVID-19 shock. But since the NGEU is scheduled to end in 2026, there is an urgent need for more durable financial mechanisms to support the EU's long-term objectives.

As matters stand, the NGEU's focus on national investments has left transnational projects such as high-speed railways and hydrogen infrastructure severely underfunded. Moreover, the US Inflation Reduction Act has widened the investment gap between Europe and the United States. To restore its strategic autonomy, European leaders should build on the success of the NGEU.

In a forthcoming paper, we propose the establishment of a \$750 billion EU public-goods fund aimed at bridging funding gaps in crucial areas like renewable energy and digital infrastructure. The primary focus of this fund would be to catalyze cross-border investments and support projects that struggle to secure funding without EU-level financial support. By making access to this fund contingent on compliance with the new fiscal rules, the EU could maintain fiscal discipline among member states.

The public-goods fund, which would cover the 2026-30 period, is intended to align seamlessly with the EU's climate goals. Building on the successful precedents established by previous

EU borrowing initiatives, it would be financed by issuing EU bonds, backed by pooled national guarantees, the EU's budget (bolstered by sufficient revenue streams), or both. Its proposed size represents roughly one-fifth of the bloc's total investment needs through 2030, and the remaining investments would be financed through contributions from member states and the private sector.

By focusing on cross-border investments, the fund would underscore the EU's unified approach to tackling European challenges. At the same time, the requirement to comply with the new fiscal rules would broaden the conditional framework established by the NGEU program, which linked fund access to the rule of law in recipient countries.

Similarly, the proposed conditionality regime would tie access to the new fund to domestic fiscal discipline, thus aligning with the EU's revised fiscal guidelines. Rather than facing penalties for non-compliance, as was the case under the previous SGP, countries would be incentivized to demonstrate fiscal responsibility.

Thus, the conditionality regime would simultaneously boost the EU's growth potential, uphold the integrity of the new fiscal rulebook, and encourage fiscal sustainability among member states. Moreover, increased debt issuance at the European level could be offset by reduced debt issuance at the national level.

Once the fund is established, countries would be encouraged to submit comprehensive investment proposals for transnational projects. The European Investment Bank would determine whether they are eligible to access the fund's resources based on their alignment with the EU's double-transition targets and the potential for positive cross-border spillovers. Meanwhile, the European Commission would ascertain that the countries proposing these projects comply with fiscal rules.

The fund's proposed design aligns with the trend of using EU funds to achieve broader policy objectives. By relying on the successful model of the pandemic recovery fund and the bloc's current conditionality regime, it would empower the EU to meet crucial climate targets while upholding its shared values.

Regional Energy Expert Roudi Baroudi Earns Award from Washington Think Tank



Transatlantic Leadership Network Recognizes Author for Contributions to Peaceful Development in Eastern Mediterranean

WASHINGTON, DC November 9, 2023: Doha-based Lebanese author Roudi Baroudi was one of two people presented with the 2023 Transatlantic Leadership Award at a ceremony in Washington this week.

Although circumstances relating to the conflict in the Gaza Strip prevented Baroudi from attending the event, both he and Joshua Volz – the Deputy Assistant Secretary for Europe, Eurasia, Africa, and the Middle East and the Office of International Affairs at the US Department of Energy – were recognized by the Transatlantic Leadership Network (TLN). Each was cited at a gala dinner on Monday for his “valuable contribution in building a peaceful and prosperous Eastern Mediterranean” as part of the TLN’s 2nd Annual Conference on Freedom of the Media.

“I was deeply honored to be named a recipient of this prestigious award, and I will always be grateful for the many ways in which the TLN has supported my work for several years now,” Baroudi said. “I also look forward to working together in the future so that one day, our descendants can know the benefits of peace and coexistence. It is precisely in difficult and trying times that cooler heads must be able and willing to look at the reasons for current bloodshed and recrimination, then envision pathways to a better future.”

Baroudi, who serves as CEO of independent consultancy Energy and Environment Holding in Doha, is a long-time champion of dialogue, cooperation, and practical solutions to both the global climate crisis and recurrent tensions in the East Med. A regular speaker at regional energy and policy conferences, Baroudi’s insights are also avidly sought by local and international media, as well as governments, major energy companies, and investors.

Having advised both public and private sector actors on a wide variety of energy issues, Baroudi is widely credited with bringing unique perspective to all manner of policy

discussions. He is the author of several books, including “Maritime Disputes in the Eastern Mediterranean: The Way Forward” (2021), and “Climate and Energy in the Mediterranean: What the Blue Economy Means for a Greener Future” (2022). Together with Notre-Dame University – Louaize, Baroudi has also published a study of the US-brokered October 2022 Maritime Boundary Agreement between Lebanon and Israel, and is currently preparing another volume on Lebanon’s prospects for similar deals with Cyprus and Syria.

The TLN describes itself as “a nonpartisan, independent, international network of practitioners, private sector leaders and policy analysts dedicated to strengthening and reorienting transatlantic relations to the rapidly changing dynamics of a globalizing world.”

Monday’s ceremony was attended by a broad cross-section of high-profile figures, including senior officials from the Departments of Energy and State, numerous members of Washington’s extensive diplomatic corps, and representatives of both international organizations and various media outlets.

Transport minister leads team to Tbilisi Belt and Road Forum



Qatar is participating with a delegation headed by HE the Minister of Transport and Communications Jassim Seif Ahmed al-Sulaiti in the Tbilisi Belt and Road Forum, which was inaugurated on Tuesday in Tbilisi, Georgia, under the theme: “Partnership for Global Impact”.

Inaugurated by the Prime Minister of Georgia, Giorgi Gakharia, on Tuesday, the forum saw the attendance of over 2,000 participants from 60 countries, including heads of states, ministers, diplomats and representatives of international and business organisations.

In his opening speech, Gakharia stressed the importance of the new Silk Road in modern economic integration and globalisation, saying that the participation in the initiative is among the top priorities of the Georgian government.

Georgia was one of the first countries applauding the China-proposed Belt and Road Initiative (BRI) to create new trade corridors between Europe and Asia and improve existing ones, he said.

The Tbilisi Silk Road Forum, he said, is “an important opportunity” and a platform on which the countries involved in

the BRI, international organisations and the private sector discuss regional economic challenges and explore ways to overcome the challenges and share experience.

The forum is being held for the third time in Tbilisi.

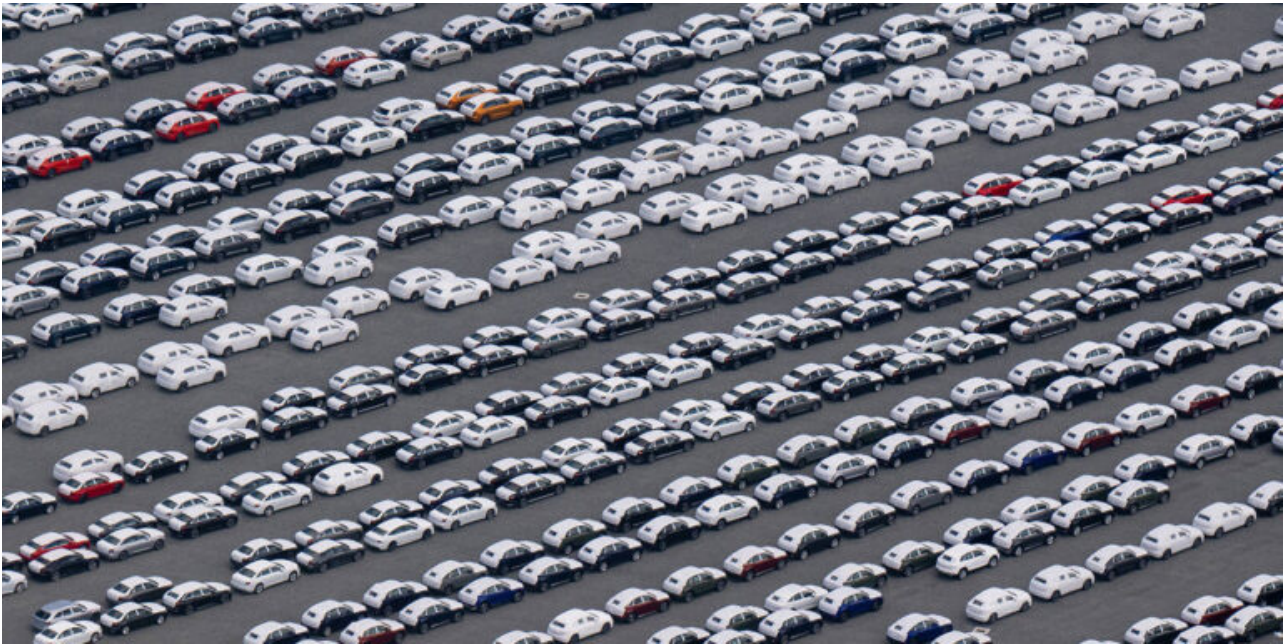
It is opened by the Prime Minister of Georgia and organised by the Georgian ministries of foreign affairs, economy and sustainable development and supported by China and the Asian Development Bank.

The mission of the forum is to serve as an international platform for multilateral high-level dialogue among senior policymakers, businesses and community leaders to discuss important issues on trade and connectivity, examine challenges facing countries along the New Silk Road connecting East and West, and find common solutions that have a positive impact on the region and the global economy.

Day 1 provides opportunities to discuss a full spectrum of issues related to trade, artificial intelligence (AI), transport and energy in separate panel discussions, and Day 2 focuses on the private sector and investment opportunities in Georgia.

Meanwhile, Prime Minister Gakharia met HE al-Sulaiti in Tbilisi on Tuesday. The meeting reviewed bilateral relations between Qatar and Georgia in the fields of transportation, mobility and communications and means of further enhancing them, in addition to discussing a number of topics of common interest.

Will Europe Be the World's Biggest Loser?



Russia's war against Ukraine, the Sino-American rivalry, and the rise of new middle powers is spurring a profound reorganization of the international order that will leave Europe at a distinct disadvantage. To thrive in a world dominated by large states with growing military budgets, Europe has no choice but to become a real power, writes Joschka Fischer, Germany's foreign minister and vice chancellor from 1998 to 2005, was a leader of the German Green Party for almost 20 years.

The post-1945 era of global stability is over and gone. From the bipolar world of the Cold War to the American-dominated unipolar world that replaced it, we have long benefited from a sense of strategic order. Though there were many smaller wars (and even some larger ones), from Korea and Vietnam to the Middle East and Afghanistan, the international system remained generally stable and intact.

Since the beginning of the new millennium, however, this stability has increasingly given way to a renewed rivalry between major powers, chief among them the United States and

China. Moreover, it has long been clear that India, Brazil, Indonesia, South Africa, Saudi Arabia, Iran, and other emerging economies' political and strategic influence will increase, as will their role within the global system. In the context of a deepening conflict between China and the US, these rising powers will have many opportunities to play one of the twenty-first century's two superpowers off against the other. Indeed, many of these opportunities seem too good to miss.

Under President Vladimir Putin, Russian policy has increasingly been aimed at reversing the legacy of the immediate post-Cold War era. But the broader danger for the international system stems not from the war in Ukraine, but from the deterioration of US-China relations...

Some of the biggest losers in this confrontation are likely to be Japan and Europe. Chinese firms have built massive production capacities in the automobile industry – especially in electric vehicles (EVs) – and are now poised to outcompete the European and Japanese automakers that have long been globally dominant.

Making matters worse, America's own response to Chinese competition is to pursue an industrial policy that will come at European and Japanese manufacturers' expense. Recent legislation such as the Inflation Reduction Act, for example, provides large subsidies for cars produced in the US. From the US perspective, such policies kill two birds with one stone: protecting large domestic manufacturers and providing them with incentives to pursue EV development.

Not only must Europe take great pains to preserve its economic model during this reorganization of the global economy. It also must manage high energy costs, the growing digital technology gap vis-à-vis the two superpowers, and the urgent need for increased defense spending to counter the new threat from Russia. All these priorities will grow even more urgent

as the next US presidential election approaches, given the distinct possibility that Donald Trump could return to the White House.

Europe thus finds itself especially disadvantaged. It resides in an increasingly dangerous region, yet it remains a confederation of sovereign nation-states that have never mustered the will to achieve true integration – even after two world wars and the decades-long Cold War. In a world dominated by large states with growing military budgets, Europe still is not a real power.

Whether that remains the case is up to Europeans. The world will not wait for Europe to grow up. If Europe is going to confront today's global reordering, it had better start soon – or, preferably, yesterday.

European goodbye to negative rates – or is it just 'au revoir'?



By Mark John And Dhara Ranasinghe/ London

Europe's decade-long experiment with negative interest rates, which ended on Thursday with the Swiss National Bank's return to positive territory, showed one thing: they can exist beyond the realms of economic science fiction.

Launched to revive economies after the 2007/08 financial crisis, the policy flipped standard money wisdom on its head: banks had to pay a fee to park cash with their central banks; some home-owners found mortgages that paid them interest; and rewards for the act of saving all but vanished.

With the exercise now abandoned in the face of galloping inflation brought on by pandemic and the Ukraine war, doubts linger over its effectiveness and under what circumstances it will ever be used again.

"I think that probably the bar is going to be higher in the future," said Claudio Borio, head of the Monetary and Economic Department of the Basel-based Bank of International Settlements which acts as bank to the world's central banks.

Rarely does monetary policy generate as much sound and fury as did the recourse in the early 2010s to negative rates by four European central banks and the Bank of Japan – now the only monetary authority still sticking with them.

With interest rates back then already close to zero, they had run out of conventional ammunition to ward off the threat of outright deflation they feared would choke off the economic recovery. The only way out, they decided, was to go below zero.

Bank chiefs fumed as the European Central Bank, Swedish Riksbank, Swiss National Bank (SNB) and Denmark's Nationalbank went negative in moves they said undermined the whole banking business model of being able to make a profit out of lending. Local media joined in the criticism, with Swiss newspapers in 2015 calling the moment "Frankenshock" and Germany's Bild labelling the then ECB chief Mario Draghi "Count Draghila" for "sucking our accounts dry".

For sure, those who relied on the return from cash savings clearly suffered during Europe's period of ultra-low to negative rates – even if they could at least take solace from the fact that low inflation was protecting their initial savings.

Other side-effects are harder to pick apart.

Fears of negative rates leading to money-hoarding proved largely unfounded: in Switzerland, for example, the number of 1,000-franc notes in circulation remained the same, suggesting customers were not withdrawing cash to store in a safe at home.

As one Danish bank vaunted the world's first negative rate mortgage, it is likely that cheap borrowing added steam to house price spikes across the region. But prices were often being squeezed higher by local factors including tight supply. While many other elements have been at play, euro area bank stocks have fallen some 45% since 2014 – despite ECB moves to shield them with exemptions from charges on some deposits and access to ultra-cheap borrowing.

Yet a report to European Parliament by the Bruegel think tank last year concluded that overall bank sector profits had not been significantly harmed by negative rates, noting that the downside was being offset by gains in asset investments.

"In the end, they worked the same as normal rate cuts," said

report co-author Gregory Claeys, while acknowledging the impact may have been greater had the experiment gone on for longer.

No future?

The question of whether negative rates actually achieve their goals is harder to answer given the modest extent of the trial – no-one ever went lower than minus 0.75% – and the fact that they have been swept aside by the turmoil of the last two years.

ECB policy-makers point to data showing that lending in the euro zone was shrinking year after year in the 2010s until negative rates helped turn that into growth by 2016 – even though that growth has never attained its pre-2009 heights.

Others point to the fact that the negative rate period coincided with the vast quantitative easing with which the ECB and other central banks around the world also boosted demand with trillions of dollars of asset purchases.

“That was a much bigger deal – much more impactful,” said Brian Coulton, chief economist at Fitch Ratings. “Using your balance sheet aggressively – that is a powerful weapon.”

Some economists argue negative rates create perverse incentives that ultimately do a disservice to the economy – for example by keeping alive “zombie companies” that by rights should fold, or by removing the impetus for governments to push tough reforms.

“What is lacking, in Europe, is the focus on structural reforms. Why didn’t they happen in the last 10 years, why didn’t we strengthen productivity growth?” said Societe Generale senior European economist Anatoli Annenkov.

Burkhard Varnholt, Chief Investment Officer Switzerland, Credit Suisse Switzerland, goes further, saying the message they send about investing in the future was even akin to the nihilism of the No Future refrain of the 1977 Sex Pistols’ punk rock track God Save the Queen.

“It’s the central bankers who have taken interest rates to a level where we attach no value to the future,” he said.

“Today’s punks wear white shirts, grey suits and a blue tie.”
As the negative rate era closes, the global pool of assets with negative yield has shrunk to less than \$2tn from a 2020 peak of some \$18tn.

Despite the misgivings, others say the experiment has at least shown policy-makers that rates can go below zero and so is an option for them: witness the fact the Bank of England for a while considered that path as Covid-19 was ravaging the economy.

Even if the current inflationary bout means it could be a while before Europe’s central bankers need to use negative rates again, it is unlikely they will want to rule them out.

“They will always be spoken of as something that remains in the toolkit,” said Rohan Khanna, strategist at UBS in London. “I am very doubtful anyone here is ready to say never again for negative rates.” – Reuters

**Russian gas cuts will not
kill German economy**



By Daniel Gros/Brussels

Much of the conventional wisdom about Europe's current natural-gas crisis – triggered by reduced deliveries from Russia – rests on two assumptions: that the German economy depends on cheap Russian gas, and that this bet has gone spectacularly wrong. But while German industry is strong, and the country imports a lot of natural gas from Russia, a closer inspection of the numbers and economics involved does not support the prevailing narrative.

For starters, natural gas does not play a large enough role to drive an industrial economy. In 2019, gas imports via pipeline cost Germany \$30 billion, representing only 0.75% of its GDP, and the overall value of the country's gas consumption was below 2% of GDP. These modest ratios are similar across industrialised economies and suggest that cheap gas imports are highly unlikely to be a major growth factor. Moreover, even though gas consumption has stagnated in Germany and most of Western Europe over the past two decades, the economy grew, albeit slowly.

The argument that cheap Russian gas might have favoured Germany more than other countries also is not backed up by the numbers. In 2019, Germany accounted for only about 2.3% of

global natural-gas consumption, but 4.5% of world GDP. Germany's gas intensity per unit of GDP is thus about one-half of the global average, much lower than that of the United States and many other industrialised countries, including Japan and South Korea.

European economies tend to be thriftier in their energy use than the rest of the world. But even within Europe, Germany performs well, with lower gas consumption per unit of GDP than other large European economies, such as Italy and Spain. This is surprising since these two Mediterranean countries have much less need for heating in winter (and air conditioning in summer requires an order of magnitude less power than heating). Only France, with its large nuclear-power sector, is less dependent on gas.

A similar picture emerges from related metrics, such as the value of energy imports as a percentage of GDP, or gas usage for industrial purposes as a share of industrial value added. All these indicators show that the German economy uses energy less intensively than most others.

The idea that German industry gained an advantage from access to cheap Russian gas ignores the reality that there is a European gas market with, up to now, only small differences in wholesale prices across countries. One could of course argue that Russia sold its energy cheaply to Germany to make the country dependent. But the data challenge the common perception that Germany receives cheap gas.

Over the past decade, German industry has paid about 10% more for natural gas than its competitors in other major European economies. Supplies from North Sea fields have enabled British industrial firms to pay even less than their continental peers, but this does not appear to have helped them much.

The implication is that Russia obtained a non-economic benefit (German dependence on its gas supplies) for almost no cost. The inverse of this is that Germany experienced a loss of energy independence without gaining a noticeable economic advantage.

The one large economy that is both energy-intensive and has

cheap natural gas is the United States. The average US citizen uses more than twice as much natural gas as a European – 25 megawatt-hours per year for the US, compared to about 10MWh for European countries. Moreover, US natural-gas prices have been somewhat lower than German or EU prices for most of the past two decades, and are now only a fraction of the European price, as European prices have increased by a factor of five, whereas US prices have changed little. Despite this cost advantage, however, the manufacturing industry of the US – and that of the United Kingdom – has not grown particularly strongly.

Adjusting to a world without Russian gas is of course a major problem for Europe. Yet, although Germany seems more vulnerable because it used to receive a large share of its gas from Russia, this can change quickly. Germany is building new regasification capacity in record time to allow the country to import the quantities of liquefied natural gas needed to fill the gap between lower Russian supplies and domestic demand, which is already falling because of high prices.

Once this import capacity has been constructed, Germany will be in the same situation as its European neighbours, which also have to bid for LNG. Prices are likely to stay high for some time. But with an energy intensity below the EU average, Germany should be able to bear the burden slightly better than Italy, Spain, and some Eastern European countries. France, of course, will be much less affected, at least if its nuclear reactors can resume full production.

We should also not forget the global picture. Bottling up a large percentage of Russian gas (which is what will happen if Europe no longer buys from Russia) increases the global gas price, which affects Asian countries as well, because they compete with Europe on LNG. South Korea and Japan have a higher energy intensity than Europe, and even China imports large quantities of LNG, at a price similar to what European countries pay.

Expensive energy, particularly natural gas, poses a difficult economic and political challenge for all energy-importing

industrialised countries. Only the US and some other smaller energy producers such as Norway, Canada, and Australia benefit from this situation. But the data suggest that Germany is better placed to weather this crisis than most of its main competitors. – Project Syndicate

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No net zero without nature



By Nigel Topping And Mahmoud Mohieldin/ London

Businesses, investors, and governments that are serious about fulfilling net-zero emissions pledges before 2050 should be rushing to protect, conserve, and regenerate the natural resources and ecosystems that support our economic growth, food security, health, and climate. Yet there appear to be worryingly few trailblazers out there.

Worse, we are quickly running out of time. The science makes

clear that to avoid the most catastrophic effects of climate change and to build resilience against the effects that are already inevitable, we must end biodiversity loss before 2030. That means establishing lasting conservation for at least 30% of land and sea areas within eight years, and then charting a course toward living in harmony with nature by 2050.

Though the challenge is massive, ignoring it makes no sense from a business perspective. A World Economic Forum white paper estimates that nature-positive policies “could generate an estimated \$10tn in new annual business value and create 395mn jobs by 2030.” Among other things, such policies would use precision-agriculture technologies to improve crop yields – diversifying diets with more fruit and vegetables in the process – and boost agroforestry and peatland restoration.

A nature-positive approach can also be more cost-effective. For example, the Dasgupta Review (the Final Report of the United Kingdom’s Independent Review on the Economics of Biodiversity) finds that green infrastructure like salt marshes and mangroves are 2-5 times cheaper than grey infrastructure such as breakwaters.

Nonetheless, private-sector action is lagging, including in economic sectors where the health of value chains is closely tied to that of nature. That is one key finding from an analysis just released by the UN Climate Change High-Level Champions, Global Canopy, Rainforest Alliance, and others.

Out of 148 major companies assessed, only nine – or 6% – are making strong progress to end deforestation. Among them are the Brazilian paper and pulp producer Suzano and five of the largest consumer goods companies: Nestlé, PepsiCo, Unilever, Mars, and Colgate-Palmolive.

Unilever, for example, is committed to a deforestation-free supply chain by 2023, and thus is focusing on palm oil, paper and board, tea, soy, and cocoa, as these contribute to more than 65% of its impact on land. Nestlé has now made over 97% of its primary meat, palm oil, pulp and paper, soy, and sugar supply chains deforestation-free. And PepsiCo aims to implement regenerative farming across the equivalent of its

agricultural footprint by 2030, and to end deforestation and development on peat.

These are positive steps, but they represent exceptions, rather than any new normal. Moreover, the financial sector has also been slow to turn nature-positive. Since the COP26 climate-change conference in Glasgow last year, only 35 financial firms have committed to tackle agricultural commodity-driven deforestation by 2025. The hope now is that more firms will join the deforestation commitment by COP27 this November. Under the umbrella of the Glasgow Financial Alliance for Net Zero, 500 financial firms (representing \$135tn in assets) have committed to halving their portfolios' emissions by 2030 and reaching net zero by 2050. And now, the Alliance has issued new net-zero guidance that includes recommended policies for addressing deforestation.

Nature functions as a kind of global capital, and protecting it should be a no-brainer for businesses, investors, and governments. The World Economic Forum finds that "\$44tn of economic value generation – over half the world's total GDP – is moderately or highly dependent on nature and its services." But this profound source of value is increasingly at risk, as demonstrated by the current food crisis, which is driven not just by the war in Ukraine but also by climate-related disasters such as drought and India's extreme heatwave, locust swarms in East Africa, and floods in China.

Businesses increasingly have the tools to start addressing these kinds of problems. Recently, the Science Based Targets initiative released a methodology for targeting emissions related to food, land, and agriculture. Capital for Climate's Nature-Based Solutions Investment platform helps financiers identify opportunities to invest in nature with competitive returns. And the Business for Nature coalition is exploring additional moves the private sector can make.

Governments have also taken steps in the right direction. At COP26, countries accounting for over 90% of the world's forests endorsed a leaders' declaration to halt forest loss and land degradation by 2030. And a dozen countries pledged to

provide \$12bn in public finance for forests by 2025, and to do more to leverage private finance for the same purpose. They can now start meeting those commitments ahead of COP27 in Sharm El-Sheikh, by enacting the necessary policies, establishing the right incentives, and delivering on their financial promises.

Meanwhile, the UN-backed Race to Zero and Race to Resilience campaigns will continue working in parallel, helping businesses, investors, cities, and regions put conservation of nature at the heart of their work to decarbonise and build resilience. The five strong corporate performers on deforestation are in the Race to Zero, and the campaign's recently strengthened criteria will pressure other members to do more to use biodiversity sustainably and align their activities and financing with climate-resilient development. The world is watching to see if the latest promises of climate action are robust and credible. By investing in nature now, governments and companies can show that they are offering more than words. – Project Syndicate

- *Nigel Topping is the United Kingdom's High-Level Climate Champion for COP26 in Glasgow. Mahmoud Mohieldin is Egypt's High-Level Climate Champion for COP27 in Sharm El-Sheikh.*

Absorbing energy transition shock



By Owen Gaffney/ Stockholm

The challenge for politicians is to devise fair policies that protect people from the inevitable shocks

Russia's war on Ukraine has sent shockwaves around the world. Oil prices have skyrocketed and food prices have soared, causing political instability. The last time food prices were this volatile, riots erupted across the Arab world and from Burkina Faso to Bangladesh. This time, the energy and food shock is happening against the backdrop of the Covid-19 pandemic. When will the shocks end?

They won't. So, we can choose either resignation and despair, or a policy agenda to build social and political resilience against future shocks. Those are our options, and we had better start taking them seriously, because the shocks are likely to get worse. On top of geopolitical crises, the climate emergency will bring even greater disruptions, including ferocious floods, mega-droughts, and possibly even a simultaneous crop failure in key grain-producing regions worldwide. It is worth noting that India, the world's second-largest wheat producer, recently banned exports as part of its response to a devastating heatwave this spring.

But here's the thing: reducing vulnerability to shocks, for example, by embarking on energy and food revolutions, will also be disruptive. The energy system is the foundation of industrialised economies, and it needs to be overhauled to phase out fossil fuels within a few decades. Huge industries like coal and oil will have to contract, and then disappear. And agriculture, transportation, and other sectors will need to change radically to become more sustainable and resilient. The challenge for politicians, then, is clear: to devise fair policies that protect people from the inevitable shocks.

One idea with significant potential is a Citizen's Fund, which would follow a straightforward fee-and-dividend equation. Companies that emit greenhouse-gas emissions or extract natural resources would pay fees into the fund, which would then distribute equal payments to all citizens, creating an economic cushion during a period of transformation and beyond. This is not just an idea. In 1976, the Republican governor of Alaska, Jay Hammond, established the Alaska Permanent Fund, which charges companies a fee to extract oil and then disburses the proceeds equally to all the state's citizens. In 2021, each eligible Alaskan received \$1,114 – not as a “welfare payment” but as a dividend from a state commons (in this case, a finite supply of oil). The largest dividend ever paid was during Republican Sarah Palin's governorship in 2008, when every Alaskan enjoyed a windfall of \$3,269.

In 2017, James Baker and George Shultz, two former Republican secretaries of state, proposed a similar plan for the whole United States, estimating that fees on carbon emissions would yield a dividend of \$2,000 per year to every US household. With backing from 3,500 economists, their scheme has broad appeal not just among companies and environmental-advocacy groups but also (and more incredibly) across the political aisle.

The economics is simple. A fee on carbon drives down emissions by driving up the price of polluting. And though companies would pass on these costs to consumers, the wealthiest would be the hardest hit, because they are by far the biggest,

fastest-growing source of emissions. The poorest, meanwhile, would gain the most from the dividend, because \$2,000 means a lot more to a low-income household than it does to a high-income household. In the end, most people would come out ahead.

But given that food- and energy-price shocks tend to hit low-income cohorts the hardest, why make the dividend universal? The reason is that a policy of this scale needs both broad-based and lasting support, and people are far more likely to support a programme or policy if there is at least something in it for them.

Moreover, a Citizen's Fund is not just a way to drive down emissions and provide an economic safety net for the clean-energy transition. It would also foster innovation and creativity, by providing a floor of support for the entrepreneurs and risk-takers we will need to transform our energy and food systems.

A Citizen's Fund could also be expanded to include other global commons, including mining and other extractive industries, plastics, the ocean's resources, and even knowledge, data, and networks. All involve shared commons – owned by all – that are exploited by businesses that should be required to pay for the negative externalities they create.

Of course, a universal basic dividend is not a panacea. It must be part of larger plan to build societies that are more resilient to shocks, including through greater efforts to redistribute wealth by means of progressive taxation and empowerment of workers. To that end, Earth4All, an initiative I co-lead, is developing a suite of novel proposals that we see as the most promising pathways to build cohesive societies that are better able to make long-term decisions for the benefit of the majority.

Our most important finding is perhaps the most obvious, but it is also easy to overlook. Whether we do the bare minimum to address the grand challenges or everything we can to build resilient societies, disruption and shocks are part of our future. Embracing disruption is thus the only option and a

Citizen's Fund becomes an obvious shock absorber. – Project Syndicate

- Owen Gaffney is an analyst at the Stockholm Resilience Centre and the Potsdam Institute for Climate Impact Research.

Double-edged sword: Global hunger and climate goals



Poor or rich, societies across the world are now suffering from an unprecedented food and hunger crisis.

A United Nations gauge of world food prices has jumped more than 70% since mid-2020 and is near a record after Russia's invasion of Ukraine.

Battling hunger has garnered heightened attention this year, as the Ukraine crisis choked exports from one of the world's

biggest crop suppliers, stoking food inflation and potentially leaving millions more undernourished.

The global agriculture sector won't eradicate hunger by the end of the decade or meet climate goals from the Paris Agreement without a major overhaul, key agencies have cautioned.

A UN pledge to eliminate hunger by 2030 appears out of reach, as low-income nations struggle to afford better diets, the Food and Agriculture Organisation said in a joint report with the Organisation for Economic Co-operation and Development.

Greenhouse gas emissions from agriculture are also seen continuing to rise on a business-as-usual path.

The challenges are two of the most vital issues facing the world's food sector.

Reversing current trends to meet both goals would require a 28% increase in agricultural productivity this decade – triple the rate of the last ten years – highlighting the scale of the problem.

The world's hunger problem has already reached its worst in years as the pandemic exacerbates food inequalities, compounding extreme weather and political conflicts.

The prolonged gains across the staple commodities are trickling through to store shelves, with countries from Kenya to Mexico reporting higher food costs.

The pain could be particularly pronounced in some of the poorest import-dependent nations, which have limited purchasing power and social safety net.

Soaring food and fuel costs recently helped send US inflation to a 40-year high. The US Department of Agriculture now expects retail food prices to gain 5% to 6% this year – roughly double its forecast from three months ago.

In Lebanon, poverty rates are sky-rocketing in the population of about 6.5mn, with around 80% of people classed as poor, says the UN agency ESCWA.

Last September, more than half of families had at least one child who skipped a meal, Unicef has said, compared with just over a third in April 2021.

Amid a devastating foreign exchange crisis, Sri Lanka, a country of 22mn people, is unable to pay for essential import of food items, fertiliser, medicines and fuel due to a severe dollar crunch.

Food costs account for 40% of consumer spending in sub-Saharan Africa, compared with 17% in advanced economies.

In 2020, Africa imported \$4bn of agricultural products from Russia.

Across the world, approximately 1.2bn people live in extreme poverty, on less than one dollar per day, according to a 2018 World Health Organisation report.

At least 17mn children suffer from severe acute malnutrition around the world, which is the direct cause of death for 2mn children every year.

Here's the disturbing other side of the lingering tragedy.

One-third of all food produced – around 1.3bn tonnes a year – is lost or wasted, according to the FAO. It costs the global economy close to \$940bn each year.

In the Gulf, between a third and half of the food produced is estimated to go to waste.

Improving food access through social safety nets and distribution programmes, especially for the most vulnerable, is key to reducing global hunger, according to the latest joint FAO-OECD report. Curbing emissions, reducing food waste and limiting calorie intake in rich countries are measures needed to meet climate goals, it said.