

International Economic Policy

- 1. Climate change: economic or political problem?** “I differ with those who identify capitalism as the principal fault line on the landscape of climate change. It seems to me that this landscape is riven by two interconnected but equally important rifts, each of which follows a trajectory of its own: capitalism and empire (the latter being understood as an aspiration to dominance on the part of some of the most important structures of the world’s most powerful states). In short, even if capitalism were to be magically transformed tomorrow, the imperatives of political and military dominance would remain a significant obstacle to progress on mitigatory action.”

“The fact is that we live in a world that has been profoundly shaped by empire and its disparities. Differentials of power between and within nations are probably greater today than they have ever been. These differentials are, in turn, closely related to carbon emissions. The distribution of power in the world therefore lies at the core of the climate crisis.”

- 2. Climate change: who is to bear the adjustment costs?** “The cynicism of the politics of the armed lifeboat is matched, on the other side, by the strategy that the elites of some large developing countries, like India, seem to be tacitly inclining towards: a politics of attrition. The assumption underlying this is that the populations of poor nations, because they are accustomed to hardship, possess the capacity to absorb, even if at great cost, certain shocks and stresses that might cripple rich nations (...). In poor countries, even the middle classes are accustomed to coping with shortages and discomforts of all sorts; in the West, wealth, and habits based upon efficient infrastructures, may have narrowed the threshold of bearable pain to a point where climatic impacts could quickly lead to systemic stress.”

“The geologist David Archer reckons that to reach a genuinely fair solution to the problem of emissions would ‘require cuts in the developed world of about 80 percent. For the United States, Canada and Australia, the cuts would be closer to 90 percent.’”

- 3. Politics of climate change.** “One of the most important factors in the global politics of climate change is the role the Anglosphere plays in today’s world (...) The fact that laissez-faire ideas are still dominant within the Anglosphere is therefore itself central to the climate crisis. In that global warming poses a powerful challenge to the idea that the free pursuit of individual interests always leads to the general good, it also challenges a set of beliefs that underlies a deeply rooted cultural identity, one that has enjoyed unparalleled success over the last two centuries. Much of the resistance to climate science comes exactly from this, which is probably why the rates of climate change denial tend to be unusually high throughout the Anglosphere. Yet it is also true that the Anglosphere, the United States in particular, has produced the overwhelming bulk of climate science, as well as some of the earliest warnings of global warming.”

- 4. 2015 texts on climate change.** “2015 did produce two very important publications on climate change: the first, Pope Francis’s encyclical letter *Laudato Si’*, was published in May; while the second, the Paris Agreement on climate change, appeared in December (...) In *Laudato Si’*, the words *poverty* and *justice* keep close company with each other. Here poverty is not envisaged as a state that can be managed or ameliorated in isolation from other factors; nor are ecological issues seen as problems that can be solved without taking social inequities into account (...) This in turn leads to the blunt assertion that ‘a true “ecological debt” exists, particularly between the global north and south’. Here again the contrast with the Paris Agreement is stark. When poverty finds mention in the Agreement, it is always as a state in itself, to be alleviated through financial and other mechanisms. The word never occurs in connection with *justice*.”

“In the text of the Paris Agreement, by contrast, there is not the slightest acknowledgement that something has gone wrong with our dominant paradigms; it contains no clause or article that could be interpreted as a critique of the practices that are known to have created the situation that the Agreement seeks to address. The current paradigm of perpetual growth is enshrined at the core of the text.”

5. Revolution time. “In January 2015, as the American Economic Association’s annual meeting got under way in Boston’s Sheraton Hotel, students from the Kick It Over movement plastered accusatory posters in the hotel’s corridors, elevators and toilets, projected giant subversive messages on to the conference centre’s street facade, and stunned the incredulous conference-goers by occupying their sedate panel discussions and hijacking question time. ‘The revolution of economics has begun,’ the students’ manifesto declared (...) It’s an extraordinary situation. No other academic discipline has managed to provoke its own students (...) into worldwide revolt. Their rebellion has made one thing clear: the revolution in economics has indeed begun. Its success depends not only on debunking the old ideas but, more importantly, on bringing forth the new. As the ingenious twentieth-century inventor Buckminster Fuller once said, ‘You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.’”

6. Economics and authority. “Economics is the mother tongue of public policy, the language of public life, and the mindset that shapes society (...) Perhaps this is why economists carry an air of authority. They take front-row seats as experts in the international policy arena – from the World Bank to the World Trade Organization – and are rarely far from the ear of power. In the US, for example, the President’s Council of Economic Advisers is by far the most influential, high-profile and long-running of all the White House’s advisory councils, while its sibling councils for environmental quality and science and technology are barely known beyond the Beltway.”

“Humanity’s journey through the twenty-first century will be led by the policymakers, entrepreneurs, teachers, journalists, community organisers, activists and voters who are being educated today. But these citizens of 2050 are being taught an economic mindset that is rooted in the textbooks of 1950, which in turn are rooted in the theories of 1850. Given the fast-changing nature of the twenty-first century, this is shaping up to be a disaster.”

7. The doughnut diagram of doughnut economics. “In essence it is a pair of concentric rings. Below the inner ring – the social foundation – lie critical human deprivations such as hunger and illiteracy. Beyond the outer ring – the ecological ceiling – lies critical planetary degradation such as climate change and biodiversity loss. Between those two rings is the Doughnut itself, the space in which we can meet the needs of all within the means of the planet.”

“The Doughnut provides us with a twenty-first-century compass but what determines whether or not we can actually move into its safe and just space? Five factors certainly play key roles: population, distribution, aspiration, technology and governance. Population matters, and in an obvious way: the more of us there are, the more resources it takes to meet the needs and rights of all, and that is why it is essential for the size of the human population to stabilise. But here’s the good news: although the global population is still growing, since 1971 its growth rate has been falling sharply. What’s more, for the first time in human history, its fall has been due not to famine, disease or war, but to success (...)

If population matters, distribution matters just as much because extremes of inequality push humanity beyond both sides of the Doughnut’s boundaries. Thanks to the scale of global income inequality, responsibility for global greenhouse gas emissions is highly skewed: the top 10% of emitters (...) generate around 45% of global emissions, while the bottom 50% of people contribute only 13%. Food consumption is deeply skewed too. Around 13% of people worldwide are malnourished (...)

A third factor is aspiration: whatever people consider necessary for a good life. And one of the biggest influences on our aspirations is how and where we live. In 2009, humanity went urban, with over half of us living in cities and towns for the first time in history (...)

Governance also plays a pivotal role, from local and city scales to the national, regional and global. Designing governance that is suited to the challenges we face raises deep political issues that confront the

long-standing interests and expectations of countries, corporations and communities alike. The global scale, for example, needs governance structures that can reduce humanity's pressure on planetary boundaries in ways that are equitable with respect to the distribution of their regional and national impacts. At the same time, they must be able to take account of complex interactions such as the inextricable linkages between the food, water and energy sectors. And they must be able to respond far more effectively to unexpected events (...).

All five of these factors – population, distribution, aspiration, technology and governance – will significantly shape humanity's prospects for getting into the Doughnut's safe and just space, which is why they are all at the heart of ongoing policy debates. But they cannot bring about the scale of transformation required unless we also transform the economic thinking that we bring to bear.

8. Planetary boundaries. “The ecological ceiling comprises the nine planetary boundaries proposed by an international group of Earth-system scientists led by Johan Rockström and Will Steffen. These nine critical processes are:

- *Climate change.* When greenhouse gases such as carbon dioxide, methane and nitrous oxide are released into the air, they enter the atmosphere and amplify Earth's natural greenhouse effect, trapping more heat within the atmosphere. This results in global warming, whose effects include rising temperatures, more frequent extremes of weather, and sea level rise.
- *Ocean acidification.* Around one quarter of the carbon dioxide emitted by human activity is eventually dissolved in the oceans, where it forms carbonic acid and decreases the pH of the surface water. This acidity reduces the availability of carbonate ions that are an essential building block used by many marine species for shell and skeleton formation. This missing ingredient makes it hard for organisms such as corals, shellfish and plankton to grow and survive, thus endangering the ocean ecosystem and its food chain.
- *Chemical pollution.* When toxic compounds, such as synthetic organic pollutants and heavy metals, are released into the biosphere they can persist for a very long time, with effects that may be irreversible. And when they accumulate in the tissue of living creatures, including birds and mammals, they reduce fertility and cause genetic damage, endangering ecosystems on land and in the oceans.
- *Nitrogen and phosphorus loading.* Reactive nitrogen and phosphorus are widely used in agricultural fertilisers but only a small proportion of what is applied is actually taken up by crops. Most of the excess runs off into rivers, lakes and oceans, where it causes algae blooms that turn the water green. These blooms can be toxic and they kill off other aquatic life by starving it of oxygen.
- Freshwater withdrawals. Water is essential for life and is widely used by agriculture, industry and households. Excessive withdrawals of water, however, can impair or even dry up lakes, rivers and aquifers, damaging ecosystems and altering the hydrological cycle and climate.
- Land conversion. Converting land for human use – such as turning forests and wetlands into cities, farmland and highways – depletes Earth's carbon sinks, destroys rich wildlife habitats, and undermines the land's role in continually cycling water, nitrogen and phosphorus.
- Biodiversity loss. A decline in the number and variety of living species damages the integrity of ecosystems and accelerates species extinction. In doing so it increases the risk of abrupt and irreversible changes to ecosystems, reducing their resilience and undermining their capacity to provide food, fuel and fibre, and to sustain life.

- Air pollution. Micro-particles, or aerosols, emitted into the air – such as smoke, dust and pollutant gases – can damage living organisms. Furthermore, they interact with water vapour in the air and so affect cloud formation. When emitted in large volumes these aerosols can significantly alter regional rainfall patterns, including shifting the timing and location of monsoon rains in tropical regions.
- Ozone layer depletion. Earth's stratospheric ozone layer filters out ultraviolet radiation from the sun. Some human-made chemical substances, such as chlorofluorocarbons (CFCs) will, if released, enter the stratosphere and deplete the ozone layer, exposing Earth and its inhabitants to the sun's harmful UV rays."

Raworth, Kate (2017): *Doughnut economics: Seven ways to think like a 21st-century economist*, Random House Business Books.

9. New economics needed? "If war is God's way of teaching Americans geography, recession is His way of teaching everyone a little economics (...) The 2008 financial collapse came in the same year as crises in food and oil, and yet we seem unable to see or value our world except through the faulty prism of markets. One thing is clear: The thinking that got us into this mess is unlikely to rescue us."

"At the end of 2008, Greenspan was summoned to the U.S. Congress to testify about the financial crisis. His tenure at the Fed had been long and lauded, and Congress wanted to know what had gone wrong (...) Greenspan's nemesis on the panel, Henry Waxman, pushed him to a deeper conclusion, in this remarkable exchange:

WAXMAN: The question I have for you is, you had an ideology, you had a belief that free, competitive—and this is your statement—"I do have an ideology. My judgment is that free, competitive markets are by far the unrivalled way to organize economies. We have tried regulation, none meaningfully worked." That was your quote. You had the authority to prevent irresponsible lending practices that led to the subprime mortgage crisis. You were advised to do so by many others. And now our whole economy is paying the price. Do you feel that your ideology pushed you to make decisions that you wish you had not made?

GREENSPAN: Well, remember, though, what an ideology is. It's a conceptual framework with [*sic*] the way people deal with reality. Everyone has one. You have to. To exist, you need an ideology. The question is, whether it is accurate or not. What I am saying to you is, yes, I found the flaw, I don't know how significant or permanent it is, but I have been very distressed by that fact.

WAXMAN: You found a flaw?

GREENSPAN: I found a flaw in the model that I perceived is the critical functioning structure that defines how the world works, so to speak.

WAXMAN: In other words, you found that your view of the world, your ideology, was not right, it was not working.

GREENSPAN: Precisely. That is precisely the reason I was shocked, because I had been going for 40 years or more with very considerable evidence that it was working exceptionally well.

(...) the celebrants of the free market are finding themselves, to use the language of the market, corrected."

10. Markets, ideology, politics. "That markets should know best is a relatively recent article of faith, and it took a great deal of ideological and political work to make it part of governments' conventional wisdom. The idea that markets are smart found its apotheosis in the Efficient Markets Hypothesis (...) The hypothesis states that the price of a financial asset reflects everything that a market knows about its current and future prospects. This is different from saying that the price actually *does* reflect its future performance—rather, the price reflects the current state of beliefs about the odds of that performance being good or bad. The price involves a bet. As we now know, the market's eye for odds is dangerously myopic, but the hypothesis explains why economists find the following joke funny:

Q: How many Chicago School economists does it take to change a lightbulb?

A: None. If the lightbulb needed changing, the market would have already done it.

The problem with the Efficient Markets Hypothesis is that it doesn't work. If it were true, then there'd be no incentive to invest in research because the market would, by magic, have beaten you to it (...) Markets can behave irrationally—investors can herd behind a stock, pushing its value up in ways entirely unrelated to the stock being traded. Despite ample economic evidence to suggest it was false, the idea of efficient markets ran riot through governments. Alan Greenspan was not the only person to find the hypothesis a convenient untruth. By pushing regulators to behave as if the hypothesis were true, traders could make their titanic bets. For a while, the money rolled in (...) When the financiers' bets broke the system, the profit that they made from these bad bets remained untouchable: The profit was privatized, but the risk was socialized (...) What this suggests is that the rhetoric of 'free markets' camouflages activities that aren't about markets at all (...)

Anyone concerned with democracy should be worried that the seam between Wall Street and the government is almost invisible. At the very least, it raises serious reasons to doubt that the institutions that facilitated the crisis can clean up their mess. Nassim Taleb points to the absurdity here: 'People who were driving a school bus (blindfolded) and crashed it should never be given a new bus.' The problem is that because both our economy and to a larger extent our politicians aren't really subject to democratic control, the bus drivers are always going to be graduates of the same driving school."

11. Tragedy of the commons and malthusianism: are we parasites of ourselves? "The term 'tragedy of the commons' was coined by microbiologist Garrett Hardin in a 1968 Science article, in which he asks what happens when individuals compete for a scarce resource (...) Hardin argued that when faced with a shared resource, people will be overrun by their own selfish desires to consume it, even if they know that they're destroying it in the process. So, propelled by animal urges of self-satisfaction, in a world of scarcity, people will end up destroying the thing that they depend on for survival (...) Hardin's arguments blame the victim. The question isn't whether we are in dire environmental straits (...) The issue is a question of motive. The logical structure of the tragedy of the commons rests on a foundational model of the world in which people are, for whatever reason, prepared to override their own better judgment in service of their selfish natures. It's a world that resembles the one painted by the first professional economist, Thomas Malthus, in his Essay on the Principle of Population. Malthus argued that any population would, tragically, always exceed the resource base available to feed it. It's not hard to see how the tragedy of the commons could apply here—poor people driven by their urges to procreate (even though they know the consequences) make more babies than there is food to feed them and this, according to the theory, explains why there is hunger in the world (...) For Malthusians, modern and classical, the reason we're headed to hell in a handbasket is that people are rapacious and untamable, creatures of passion and impulse."

"The environmental tragedies from the Dust Bowl to the mass extinctions of rain forest and ocean are the result of the behavior of corporations, of capitalist agriculture and forestry and fishing. The Dust Bowl happened because while individuals knew full well the value of the topsoil, their induction into capitalist agriculture turned them into exploiters of the very land on which their survival depended, transforming their connection to the world around them into one solely of short-term profit. Commoning involves a web of social relations designed to keep our baser urges in check, fostering different ways of valuing our world, and of relating to others. We can see the destructive effects of enclosure not only in the scars left on the natural environment, but also within the most intimate of social relations around gender. When the way society valued work was transformed, the socially acceptable roles for men and women also changed."

12. Back to the commons? "... commons systems aren't being supported in the twenty-first century—they're being dismantled. As they disappear, we lose millennia of accumulated knowledge about how to manage scarce resources sustainably, both in terms of the harvesting technology to keep the resources abundant and also the social systems necessary to ensure that no one takes more than his or her fair share. These systems of knowledge are displaced by the guiding motives of profit-driven markets (...) As British activist

and writer George Monbiot has noted, the European Union's 'transferable quota' system of fishing rights has resulted in millions of tons of fish being thrown away, 88 percent of fisheries being overexploited and the cost to the public being far greater than the value of the catches. The enclosure of the commons has destroyed the rich networks of knowledge that once helped guide the way we valued the world."

Patel, Raj (2009): *The value of nothing: How to reshape market society and redefine democracy*, Portobello.

13. Is more better? "The idea that there is a state called happiness, and that we can dependably figure out what it feels like and how to measure it, is extremely subversive. It would allow economists to start thinking about life in far richer terms, allow them to stop asking 'What did you buy?' and to start asking 'Is your life good?' It won't happen overnight, but it will happen eventually. Because if you can ask someone 'Is your life good?' and count on the answer to mean something, then you'll be able to move to the real heart of the matter, the question haunting our moment on earth: Is more better? In some sense, you could say that the years since world War II in America have been a loosely controlled experiment designed to answer this very question (...) All that material progress (...) seems not to have moved the satisfaction meter an inch. In 1946, the United States was the happiest country among four advanced economies; thirty years later, it was eighth among eleven advanced countries; a decade after that it ranked tenth among twenty-three nations, many of them from the third world (...) All in all, we have more stuff and less happiness. *The experiment we've undertaken has yielded a significant, robust, and largely unexpected result.*"

14. The Laura Ingalls effect. "... on the list of important mistakes we've made as a species, this one seems pretty high up. A single-minded focus on increasing wealth has driven the planet's ecological systems to the brink of failure, without making us happier. How did we screw up? The answer's pretty obvious: we kept doing something past the point where it worked (...) Richard Layard calls it a "cultural lag": 'Market democracies, by the logic of their own success, continue to emphasize the themes that have brought them to their current position'. An object in motion stays in motion; our economy—and the individual expectations that make it up—is a mighty object indeed. You could call it, I think, the Laura Ingalls Wilder effect."

15. Back to local? "[Towards the end of 2006] James Lovelock, the British scientist who built the equipment that allowed us to measure deterioration of the ozone layer, said he believed the 'tipping point' had already passed, and that world and human society face disaster to a worse extent, and on a faster time scale, than almost anybody realizes. "Before this century is over, billions of us will die" (...) These problems (...) are intimately tied to growth (...) Malcom Slessor, has calculated that *about 55 percent of the energy we consume is required by the economic growth process itself (...)*

Local economies can play an important role in reducing these problems. If we grew most of our food close to home, we'd use far less energy in the process, helping alleviate both oil shortages and climate change. But even so, it's becoming increasingly clear that it's too late to ward these crises off altogether. They're coming at us very fast. So here's the punch line: the movement toward more local economies is the same direction we will have to travel to cope with the *effects* of these predicaments, not just to fend them off. The logic is fairly clear: in a world threatened by everhigher energy prices and ever-scarcer fossil fuel, you're better off in a relatively self-sufficient county or state or region. In a world increasingly rocked by wild and threatening weather, durable economies will be more useful than dynamic ones."

McKibben, Bill (2007): *Deep economy: Economics as if the world mattered*, Oneworld.

16. The real tragedy of the commons? "In the belief system called economics, it is an article of faith that commons are inherently tragic. Almost by definition, they are tragic because they are prone to overuse. What belongs to all belongs to none, and only private or state ownership can rescue a commons from the sad fate that will otherwise befall it (...) The real tragedy surrounding the commons has been the invasion by corporate, governmental, and other external forces. Native Americans did not eradicate the buffalo on

the western plains; white hunters and soldiers did. Local Appalachians did not slice the tops off mountains; outside corporations did.” [The same process seems to be currently operating with governments trying to monopolize the oceans to exploit seabeds. Capitalism does not leave a common untouched.]

17. Things change, change then your thinking? “For two centuries, economists have regarded the commons as a medieval relic. Money is what really counts, and progress follows in the train of it. Perhaps this was true for a while. At the start of the industrial age, products were scarce and commons abundant (...) Where once the products of the market were scarce, now it is commons that are scarce, and also most needed. For this reason the commons is not a relic. It is a parallel economy that does real work, a counterpoise to the market that provides antidotes to many pathologies of the modern age. Take quiet, for example. For centuries, noise has been regarded as a byproduct of progress. Today, Americans rate noise as the number-one urban problem. Not crime or trash, but noise.”

18. ‘Commons and markets’, not ‘either commons or markets’. “Why is the commons invisible? (...) The reason, in a word, is money. What is called economics today is the world as seen through the myopic lens of money. If something is transacted through money it has reality; if not, it doesn’t exist. It makes no difference that trees provide shade and neighbors provide comfort. Neither is sold for money, and therefore they don’t count (...) Economists contend that money and price are the truest metrics for what really matters (...) There’s another side of human nature that leads not to markets as the sole realm for economic activity, but to markets and commons in balance. This other side isn’t the self-sacrificing altruist that’s often posited as the alternative to homo economicus. Nor is it the grim utilitarian socialist. Rather, it is the urge within all of us to engage with other people, whether to accomplish a task or just because it is fun (...)

“It would be fatuous to suggest that an entire economy could operate on commons principles. The devotees who contribute to Wikipedia and Linux have the time to do so because they get money from the market somehow. The two realms are symbiotic, not mutually exclusive. What seems clear is that the protected commons needs to be enlarged. It does what the market can’t do, and that is what nowadays most needs to be done. We need, increasingly, clean air and convivial communities. We also need markets and the things they produce, but the balance needs to shift. The movement to resurrect the commons, then, is about more than conserving nature and the equivalents of village trees. Ultimately, it is about resurrecting something in ourselves.”

Rowe, Jonathan (2013): *Our common wealth: The hidden economy that makes everything else work*, Berrett-Koehler, San Francisco.

19. Collapse. “... a NASA-funded group recently created the Human and Nature DYNAMICS (HANDY) program to model the fall of the Roman, Han, Mauryan, and Gupta Empires, and when they pushed the button, it spit out a disquieting forecast: ‘Global industrial civilization could collapse in coming decades due to unsustainable resource exploitation and increasingly unequal wealth distribution.’ (...) In this model, by the way, one of the greatest dangers came from elites who argued against structural change on the grounds that ‘so far’ things were working out. That ‘so far’ is always the problem, as the man who fell off the skyscraper found out (...)

We’ve displaced most everything else: if you weigh the earth’s terrestrial vertebrates, humans account for 30 percent of their total mass, and our farm animals for another 67 percent, meaning wild animals (...) total just 3 percent. In fact, there are half as many wild animals on the planet as there were in 1970, an awesome and mostly unnoticed silencing. And yet nothing slows us down—just the opposite. By most accounts, we’ve used more energy and resources during the last thirty-five years than in all of human history that came before (...) On his way to the theoretically groundbreaking Rio environmental summit in 1992, the first President Bush famously declared, ‘The American way of life is not up for negotiation’ (...)

Why should you take seriously my fear that the game, in fact, may be starting to play itself out? The source of my disquiet can be summed up in a single word, a word that will be repeated regularly in this book: leverage. We're simply so big, and moving so fast, that every decision carries enormous risk.

Rome's collapse was, of course, a large-ish deal. But given that there were vast swaths of the world that didn't even know there *was* a Roman Empire, it wasn't a big deal *everywhere*. Rome fell, and the Mayans didn't tremble, nor the Chinese, nor the Inuit. But an interconnected world is different. It offers a certain kind of stability—everyone in every country can all hear the scientists warning of impending climate change, say—but it removes the defense of distance (...) We are putting the human game at risk, that is, from things going powerfully wrong and powerfully right. As we shall see, humans have now emerged as a destructive geologic force (...) And humans have simultaneously emerged as a massive *creative* force, in ways that threaten the human game not through destruction but through substitution. Robots are not just another technology, and artificial intelligence not just one more improvement like asphalt shingles. They are instead a replacement technology, and the thing's that's going obsolete may well be us (...) The outside leverage is so crucial because, for the first time, we threaten to cut off our own lines of retreat. When Rome fell, something else was there (...) The human game we've been playing has no rules and no end, but it does come with two logical imperatives. The first is to keep it going, and the second is to keep it human."

20. Have we just been simply lucky? Is it time for humanity to pass from childhood to adulthood (from growth to maturity)? "Imagine the last few hundred years of technological progress as a man spending an evening in a casino. He's had a remarkable run, one hot hand after another. There've been some losses along the way, sure, but he's always doubled down and made it back. Now, though, the bets are getting larger and larger, and his luck seems to be ebbing: if he doubles down again, he might lose it all. He sits and thinks a moment, and then, maybe, he takes his chips to the window and cashes them in, leaving with winnings that can secure the rest of his life (...) What if we collected our winnings from the last few hundred years and then decided we'd take a rest, play some lower-stakes hands for a while. Perhaps our job, at this particular point in time, is to slow things down, just as basketball teams do when they're ahead. If we don't screw up the game of being human, it could last for a very long time (...) Our task now should be to somehow maintain the gains of the past (...) Clearly there are plenty of places that need to catch up, whole continents full of people who haven't benefited much from the long, hot streak in the casino."

"Solar energy and nonviolence are technologies less of expansion than of repair, less of growth than of consolidation, less of disruption than of healing. They posit that we've grown powerful enough as a species, and that the job now is to make sure that that power is shared and controlled. They are (...) the technologies of *maturity*."

21. New words for a new world? "People, *alone among creatures*, can decide to put such limits on themselves (...) Let's even tone down the language: *maturity* is perhaps a little stern and parental. Instead, let's add another word to our lexicon: *balance*. After forty years of libertarian dominance in our politics, ever since Ronald Reagan won by insisting that government was the problem and Thatcher by declaring that there was in fact no such thing as society, it's hard for us to see quite how lopsided our politics has become. The percentage of Americans who remember the New Deal grows tinier each day, and even Lyndon Johnson's Great Society seems from a different age (...) Scale is the third and final word that seems crucial to me. If the only things you wanted in the world were efficiency and growth, then you'd scale things up—and we have: large corporations, large nations. But we've reached the point where size hinders as much as it helps, where it reduces the many ways the human game might be played down to just a few (...) *Protectionism* is a vulgar word for economists because it's inefficient, but inefficiency is often just another way of saying that you serve more than one end. Amazon is incredibly efficient—I can have something that I may or may not need at my doorstep tomorrow—but when it puts actual stores out of business, it sacrifices the other services those actual stores provided: 'gossip, help for old people, surveillance of the street.'"

22. Growth externalities and moral hazard. “Let’s say we cross the 50 million miles to Mars—then what? To survive, you’d need to go underground. But to what end? *You can go underground on Earth if you want.* And the multibillion-dollar attempts at building a “biosphere” here on our home planet (where building supplies arrived on a truck) ended in abject failure. Kim Stanley Robinson wrote the greatest novels about the colonization of Mars, a trilogy that dates back a quarter century. Now, says their author, he thinks the whole thing would be a mistake. ‘It creates a moral hazard,’ he says. People imagine that if we mess up the Earth, we can ‘always go to Mars or the stars. It’s pernicious.’ In fact, it’s worse than that. It distracts us from the almost unbearable beauty of the planet we already inhabit.”

McKibben, Bill (2019): *Falter: Has the human game begun to play itself out?*, Henry Holt and Company, New York.

23. UK 2018 green plan. “This 25 Year Environment Plan sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first. The Plan looks forward to delivering a Green Brexit – seizing this once-in-a-lifetime chance to reform our agriculture and fisheries management, how we restore nature, and how we care for our land, our rivers and our seas. Our ambitious proposals will tackle the growing problems of waste and soil degradation – issues that affect our urban areas as well as our countryside. They seek to improve social justice by tackling the pollution suffered by those living in less favourable areas, and by opening up the mental and physical health benefits of the natural world to people from the widest possible range of ages and backgrounds (...) We will champion sustainable development (...) We will also set gold standards in protecting and growing natural capital –leading the world in using this approach as a tool in decision-making.”

UK Government (2018): *A green future: Our 25 year plan to improve the environment*, www.gov.uk/government/publications

24. Values shape history: truth+reason vs geography+greed. “This book takes an approach to history that recognizes the power of the human mind to construct its own reality. It offers a simple thesis: culture shapes values, and those values shape history (...) In today’s world, reeling from global crises and transfixed by the dazzle of technology, it is more important than it has ever been to understand how values have shaped history and, consequently, how they might also shape our future.”

“Why have the Eurasian civilizations been so successful in establishing hegemony over the people of other continents? Diamond [*Guns, Germs, and Steel*, 1997] claims the reasons can be found not in genes or culture but in geography. For example, the broad east-west axis of Eurasia meant that newly domesticated crops could easily spread across zones with similar climates, whereas the north-south axis of the Americas prevented it. Similarly, new infectious diseases that arose in humans from animal domestication spread in waves across Eurasia, leaving survivors with immunity (...) Eurasia, however, includes not just Europe but China, Russia, and India. If geography caused Eurasia’s rise, why was it Europe that eventually established empires throughout the world? (...) Kenneth Pomeranz argues in his acclaimed book *The Great Divergence* that it was England’s easily accessible coal deposits and the proximity of Europe to the New World that gave it the impetus to achieve an industrial revolution and thereby dominate the rest of the globe.”

“The distinctive values and beliefs about human nature that form the bedrock of Western thought are silently assumed to be those that drive people all over the world and throughout history. The underlying values that drove Europeans into these historical pathways are simply taken to be universal human norms, leaving the only remaining question: who got there first? This reductionist approach to history—arguing that all the reasons for the direction of history can ultimately be reduced to material causes—reached a

kind of nadir in a book published in 2010 by Ian Morris entitled *Why the West Rules—For Now*, in which the author offers his own Morris Theorem to summarize the universal cause of social change in history: ‘Change is caused by lazy, greedy, frightened people looking for easier, more profitable, and safer ways to do things.’ To Morris, ‘culture, values, and beliefs were unimportant’ in explaining the great currents of history, and instead we need to look for ‘brute, material forces,’ specifically those arising from geography. This book takes an entirely different approach from historical reductionism. Instead, it offers a cognitive approach to history, arguing that the cognitive frames through which different cultures perceive reality have had a profound effect on their historical direction.”

“When drastic change occurs to a given society, its cognitive structures—and, ultimately, its entire worldview—can change equally drastically within a generation or two. When the Western powers installed their empires throughout the globe, humiliating traditional leaders and undermining established hierarchies, they overwhelmed the old cognitive patterns with new values and measures of success, which people in the conquered societies aspired to achieve. Through this process, I would argue that—especially since the mid-twentieth century—what had once been the Western worldview has now become the dominant worldview of those in positions of wealth and power who drive our global civilization, from Bangkok to Beijing and from Mumbai to Mexico City. For cognitive history, there's an important lesson to learn from this (...): the relationship between cognition and history is not one-way but reciprocal.”

25. Nonlinearities, resilience, sledgehammer and threshold effects. “The one thing we can rely on about humanity's future trajectory is its nonlinearity. That fact presents us with both humanity's greatest peril and our greatest reason for hope. Our peril arises from the fact that we can't just look at the recent decades of prosperity enjoyed by much of the world and assume it will continue indefinitely; at the same time, we can glean hope from the realization that humanity's unsustainable growth in consumption, inexorable as it appears, will not necessarily continue until our global civilization is doomed.”

“Critical transitions can occur for two kinds of reasons: sledgehammer effects and threshold effects. A sledgehammer effect (...) arises when an outside force causes dramatic change in a system (...) A good example of a sledgehammer effect is the asteroid that is believed to have wiped out the dinosaurs about sixty-five million years ago (...). Threshold effects (...) refer to the critical transition that happens when a system changes from within. One example of a threshold effect (...) is how language emerged from a feedback loop between the cultural and biological evolution of humans (...). In complex systems, critical transitions frequently arise from an interplay between threshold and sledgehammer effects (...). The resilience of a system determines whether it can withstand big shocks or is susceptible to collapse from a small disturbance. Resilience can be understood as the capacity of a system to recover from a disturbance.”

26. Change in complex systems: the adaptive cycle model. “This model sees complex systems as passing through four phases of a cycle. The cycle begins with a rapid growth phase, during which innovative strategies can exploit new opportunities. In a capitalist system, this is the period when entrepreneurs thrive, developing new products and targeting new markets. Gradually, the system moves to a more stable conservation phase, when rules and established connections become more important. This phase can last for a long time, during which the future seems quite predictable, but as time goes on, the system becomes increasingly brittle and resistant to change. It becomes less resilient. At a certain point, a small disturbance can cause the entire system to collapse, which is the release phase. This could be the lightning igniting a forest fire or, in financial markets, a sudden loss of confidence leading to panic. Following the system's collapse, a period of chaos ensues, and uncertainty rules. New opportunities emerge for creativity, which is why the final stage in the cycle is called the renewal phase. In this period, small chance events can drastically shape the future. In an ecosystem, new species may emerge that had previously been suppressed (such as the mammals that took over from the dinosaurs). In social systems, this is the time when charismatic individuals might have an inordinate impact on public opinion, either for good or for evil. ‘Early in the renewal phase,’ experts note, ‘the future is up for grabs.’ (...) Which of these four phases best describes our current global system? There's no simple answer, partly because our global system is itself a

network of different systems, each of which might be in a different phase of its own adaptive cycle. Those who focus on technology, for example, might argue we're still in a growth phase, with waves of progress resulting from innovation. On the other hand, the earth's natural systems appear to be entering the late stages of a conservation phase, coming precariously close to tipping points that could destabilize our civilization. Could our global civilization itself be in the late stage of a conservation phase and face imminent collapse? (...) The crucial question is how much resilience is built into our global system. Unfortunately, much of it has been designed with short-term efficiencies in mind, which have tended to reduce resilience rather than increase it. In a resilient system, individual nodes—families or communities—need to be self-sufficient enough to survive in an emergency. In our modern civilization, most of us lack self-sufficiency.”

27. Is the global system going to collapse like the Roman empire did? “It's difficult to consider the collapse of the Roman Empire without drawing parallels to our own civilization. Whereas Rome's primary energy source was conquered nations, the primary energy source of our civilization is fossil fuels. But we're facing the same type of problems the Romans faced. Whereas they encountered increasing costs of administering their empire, we're confronted with the global impact of rising carbon emissions. Where they chose short-term solutions that created insurmountable problems for future generations, we're doing the same by permitting carbon emissions to keep increasing, even when we know it will lead in the future to runaway climate change. Where they were eventually driven to consume their own capital in desperation, squeezing their territories until they destroyed them, our civilization is unsustainably consuming the earth's resources while falsely claiming the results as current income (...) From a larger perspective, one could view the arc of our civilization as just another cycle in the sweep of history. If our civilization eventually succumbs, the logic goes, in time another one will surely arise, which may learn from our mistakes (...) If our current civilization collapses, the human race will continue, but we're most likely condemning our descendants for time immemorial to lives without the benefits we've enjoyed.

28. Bifurcation of humanity? Nothing new? “We've been exploring vastly different scenarios for the human trajectory, from environmental collapse to dramatic possibilities of human transformation. Sometimes the visions are so far apart, it seems as if each group is talking about an entirely different world. But they're not. It's just one earth, containing more than seven billion of us, some working on trailblazing technologies, others (many more) struggling to survive one day at a time (...) The lives of affluent people in developed countries are so vastly different from the experience of billions in less developed regions that it already seems like two separate human systems (...) A member of the team that published *Limits to Growth*, Jorgen Randers, recently offered a view of the near future in a book entitled *2052: A Global Forecast for the Next Forty Years*. In it, he predicts a continuation of the global divide between rich and poor, with a minority securing affluent lives at the expense of the rest. Our current global system, he believes, promising prosperity through continued economic growth, offers false hope to most of the human race. ‘To this day,’ he warns, ‘six billion people are being misled into believing that there are no natural constraints and they can have it all because human ingenuity will come to the rescue. The truth is they simply cannot.’”

29. Global scenarios. “In our current world, two important threshold effects are the exponential progress of technology and the ever-widening global wealth gap. There are also two major sledgehammer effects: climate change and the depletion of the world's natural resources. Under one scenario, the sledgehammer effects overwhelm the threshold effects, and our global civilization collapses (...) In another scenario—let's call it Techno Split—the sledgehammer and threshold effects work together to split apart the human race while maintaining some form of technological civilization. Continued exponential technological progress permits civilization, for the affluent minority, to keep advancing (...) Eventually, they would become—effectively, if not literally—two separate species. One species, genetically and technologically enhanced, exploring entirely new ways of being human; the other species, genetically akin to us, barely surviving within its collapsed infrastructure. Is this what we desire for humanity's future? Those who agree with Kurzweil that humanity's defining feature is the ability to reach beyond the limitations of biology might

believe so and celebrate humanity's ultimate triumph: the unfettered progress of humanity's CONQUEST OF NATURE. But there's another view of humanity that permeates the modern world, one based on the "recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family." These words, from the UN's Universal Declaration of Human Rights, represent a different kind of progress: the progress of humanity's moral scope, which has expanded beyond tribal groupings to encompass the entire human race (...) From this viewpoint, the Techno Split scenario would be a fundamental betrayal of human values. It would be, as one critic said about Singularity visionaries, akin to 'rich people building a lifeboat and getting off the ship.'"

30. The Great Transformation. "A scenario in which humanity remains resilient requires something greater than even the most compelling political and technological solutions to our current crises, such as a global price on carbon and massive investment in green energy. These are undoubtedly necessary to avert disaster, but, even if they're fully effective, they wouldn't be sufficient to avoid the Techno Split scenario. That would require a more fundamental shift in the underlying values that drive our day-to-day decisions about what we purchase, what we eat, how we earn our money, and how we seek fulfillment (...) Many have come to recognize the need for this fundamental change in values. It's been variously called the Great Transformation, the Great Transition, the Great Turning, and humanity's Great Work. Like the two earlier great transitions of human history, it would encompass a transformation of virtually every aspect of the human experience: our values, our goals, and our collective behavior.

There is a major difference, however, between this Great Transformation and the earlier ones. Both agriculture and the Scientific and Industrial Revolutions were the result of generations of people merely acting in ways that made sense to them at the time, without necessarily holding a vision of where their collective actions were leading humanity. It was only long afterward that people could look back and recognize the transformation. This third great transition, by contrast, will only take place if enough people are conscious of its need and prepared to change their own values and behavior to affect humanity's direction. It would be a unique achievement in humanity's history. A Great Transformation would need to be founded on a worldview that could enable humanity to thrive sustainably on the earth into the future."

"What values would arise from this worldview? Three core values emerge. The first is an emphasis on quality of life rather than material possessions (...) Secondly, we would base political, social, and economic choices on a sense of our *shared humanity*, emphasizing fairness and dignity for all rather than maximizing for ourselves and our parochially defined social group. Finally, we would build our civilization's future on the basis of environmental sustainability, with the flourishing of the natural world as a foundational principle for humanity's major decisions."

Lent, Jeremy (2017): *The patterning instinct: A cultural history of humanity's search for meaning*, Prometheus Books.

31. Democratic peace correlation: why do democracies not fight each other? "Perhaps the simplest explanation for where fault lines lie in a political process involves the presence of an 'other.' Difference divides and similarity unites. These similarities and differences can in turn orient and propagate conflict. Yet, similarity and difference are also dynamic, evolving in response to changing population characteristics or a new reference point. We offer a simple explanation for interstate conflict in which the salience of similarity or difference varies with the prevalence or capabilities of groups. We apply our argument in the context of the democratic peace. When democracies are scarce or weak, and autocracies plentiful and powerful, democracies face a common threat. As the democratic community strengthens, however, the threat from autocracies declines and differences among democracies appear more salient. Our findings contrast with standard expectations about how democratization shapes world affairs."

Gartzke, Erik; Weisiger, Alex (2013): "Permanent friends? Dynamic difference and the democratic peace", *International Studies Quarterly* 57(1), 171-185.

Dafoe, Allan; Oneal, John R.; Russett, Bruce (2013): "The democratic peace: Weighing the evidence and cautious inference", *International Studies Quarterly* 57(1), 201-214.

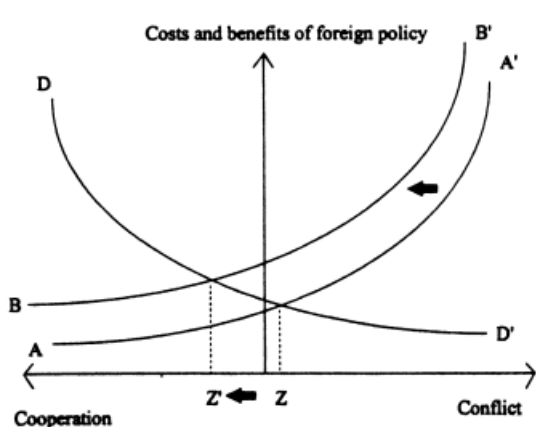
32. Democratic vs economic peace: contract flows within nations may cause both democracy within nations and peace among them. "Recent studies show that the democratic peace correlation is not significant once the potentially confounding variable that can cause both democracy and peace, contract-intensive economy, is considered; this pattern holds in analyses of wars, fatal militarized interstate conflicts, and interstate crises. These studies rescind the primary evidence for democracy being a cause of the democratic peace and indicate that contract-intensive economy is the more likely explanation for it. This article addresses all recent defenses of the democratic peace correlation, reports results using a new measure of contract flows, and extends the investigation to all militarized interstate conflicts. Analyses of most nations from 1961 to 2001 show that there is no correlation of democracy with peace, and contract-intensive economy is one of the most powerful nontrivial variables in international conflict. The era of the democratic peace appears to be at an end, subsumed by an economic peace."

Mousseau, Michael (2013): "The democratic peace unraveled: It's the economy", *International Studies Quarterly* 57(1), 186-197.

33. War and trade. "Liberal theories generally assume that political leaders are deterred from engage conflict when they anticipate that conflict will disrupt or eliminate trade or adversely affect the terms of trade, so the hypothesis that trade deters war rests on the assumption that war impedes trade. Realist theories suggest that the concern over relative gains will lead at least one of the belligerents to terminate trade in order to prevent its adversary from using the gains from trade to increase its relative military power."

Barbieri, Katherine; Jack S. Levy (1999): "Sleeping with the enemy: The impact of war on trade", *Journal of Peace Research* 36(4), 463-479.

Barbieri, K. (1996): "Economic interdependence: A path to peace or a source of interstate conflict?", *Journal of Peace Research* Volume 33(1), 29-49.



Optimal level of conflict

Barbieri, K.; Schneider, G. (1999): "Globalization and peace: Assessing new directions in the study of trade and conflict", *Journal of Peace Research* 36(4), 387-404.

Barbieri, Katherine (2002): *The liberal illusion: Does trade promote peace?*, University of Michigan Press.

34. Why do states ratify international treaties? "Why do states ratify international treaties? While previous research has emphasized domestic political factors, we focus on power politics in situations in which powerful states disagree on the merits of a treaty. We argue that states supporting the status quo should discourage third parties from ratifying the treaty, whereas challenger states should entice them to do so. Based on this theory, we expect third parties' ratification decisions to be influenced by their dependence on the conflicting states. To test the theory, we use data on the conflict between the United States and the European Union over the regulation of trade in genetically modified organisms. The European Union created a new treaty, the Cartagena Protocol, to enhance biosafety regulation and propagate the 'precautionary principle' over the 'sound science principle' defended by the United States. Our quantitative analysis shows that ratification decisions of third parties were influenced by relations to and dependence on the clashing giants."

Schneider, Christina J.; Urpelainen, Johannes (2013): "Distributional conflict between powerful states and international treaty ratification", *International Studies Quarterly* 57(1), 13-27.

35. Does violence backfire? "Implicit in the rationalist literature on bargaining over the last half-century is the political utility of violence. Given our anarchical international system populated with egoistic actors, violence is thought to promote concessions by lending credibility to their threats. From the vantage of bargaining theory, then, empirical research on terrorism poses a puzzle. For nonstate actors, terrorism signals a credible threat in comparison with less extreme tactical alternatives. In recent years, however, a spate of studies across disciplines and methodologies has nonetheless found that neither escalating to terrorism nor with terrorism encourages government concessions. In fact, perpetrating terrorist acts reportedly lowers the likelihood of government compliance, particularly as the civilian casualties rise. The apparent tendency for this extreme form of violence to impede concessions challenges the external validity of bargaining theory, as traditionally understood. In this study, I propose and test an important psychological refinement to the standard rationalist narrative. Via an experiment on a national sample of adults, I find evidence of a newfound cognitive heuristic undermining the coercive logic of escalation enshrined in bargaining theory. Due to this oversight, mainstream bargaining theory overestimates the political utility of violence, particularly as an instrument of coercion."

Abrahms, Max (2013): "The credibility paradox: Violence as a double-edged sword in international politics", *International Studies Quarterly* Volume 57(4), 660-671.

36. Domestic dimension of trade and conflict. "Liberal international relations theory suggests that mutual gains from trade prevent conflict between states (...) This paper examines the influence of economic interests arising from international trade on the policy-making process at the domestic level. If the benefits of trade increase the opportunity cost of conflict, then support for a harmonious foreign policy should be strongest among trade's domestic beneficiaries. Those whose income is diminished by trade have no reason to favor a friendly foreign policy and might even prefer a hostile alternative. We test whether the domestic distributional effects of trade affect support for hostile foreign policies toward China among representatives in the US Congress. An analysis of cosponsorship and roll-call voting suggests that the export orientation and import sensitivity of their districts influences members' positions on measures that criticize Chinese policies or treat the country as a security threat."

Kleinberg, Katja B.; Fordham, Benjamin O. (2013): "The domestic politics of trade and conflict", *International Studies Quarterly* 57(3), 605-619.

37. Preferential trade agreements. "The growing number of preferential trading arrangements (PTAs) since World War II has generated substantial interest in their economic and political effects. It has also prompted interest in the factors that give rise to PTAs, but very little research has been conducted on the growth of extant PTAs. To address this shortcoming, we analyze why some arrangements expand, whereas others do not. We find strong evidence that expansion is most likely when the existing members of a PTA display a high degree of trade openness and when the size distribution of these members is fairly uniform. We also find that PTAs that add new members are likely to do so again in the near future and that, throughout the global system, PTAs tend to expand in clusters. Equally, there is some indication that the market size of a PTA affects its odds of expansion. Finally, we investigate which states join enlarging PTAs. We find that PTAs expand by taking on new members that are economically and politically similar to existing members."

Mansfield, Edward D.; Pevehouse, Jon C.W. (2013): "The expansion of Preferential Trading Arrangements", *International Studies Quarterly* Volume 57(3), 592-604.

38. Balance of power vs hegemony. “Recent work demonstrates that the European state system—which, since the Middle Ages, saw the recurrent formation of balances of power—constitutes a historical exception rather than the rule among anarchic international systems. In this study, I set out to explain why Europe avoided hegemony. I argue that the character of state–society relations at the time of intensified geopolitical competition leads to different systemwide outcomes with respect to balancing and hegemony. Where multiple privileged groups already exist, rulers must negotiate with a range of societal actors to extract revenue and resources for warfare. This further entrenches institutional constraints on rulers and the privileges enjoyed by societal groups, which in turn make it difficult for rulers to convert conquest into further expansion. In the absence of preexisting multiple privileged groups, however, geopolitical competition instead further weakens the ability of societal actors to check their rulers. This dynamic creates a return-to-scale logic that facilitates systemwide conquest. My argument accounts for the diverging trajectories of, on the one hand, medieval and early modern Europe and, on the other hand, ancient China—where the state of Qin eliminated its rivals and established universal domination.”

Møller, Jørgen (2014): “Why Europe avoided hegemony: A historical perspective on the balance of power”, *International Studies Quarterly* 58(4), 660-670.

39. Geopolitical rise of China. “This essay proposes a new theoretical framework for analyzing the rise of China and its impact on Asian security order. While the rise of China is reshaping Asia’s military balance, the region has also witnessed equally important and longer-term changes, especially economic interdependence, multilateral institutions and domestic politics. The implications of these changes are not fully accounted for by the different types of security orders proposed by analysts to describe the implications of China’s rise, such as anarchy, hierarchy, hegemony, concert, and community. This essay presents an alternative conceptualization of Asian security order, termed consociational security order (CSO) that draws from different theoretical lenses: defensive realism, institutionalism, and especially consociational theory in comparative politics. Specifying the conditions that make a CSO stable or unstable, the essay then examines the extent to which these conditions can be found in Asia today. Aside from offering a distinctive framework for analyzing China’s rise, the CSO framework also offers an analytic device for policymakers and analysts in judging trends and directions in Asian security.”

40. Scenarios for Asia’s future. Anarchy: “Asia’s future could be Europe’s past, specifically German expansion and great power competition leading to world wars. Asia is ‘ripe for rivalry’ because it lacks Europe’s conflict-mitigating forces of economic interdependence, multilateral institutions and shared democracy.” Hegemony: “China would impose a ‘Monroe doctrine’ over Asia, excluding the United States”. Hierarchy: “A benign Chinese dominance as prevailed under its tributary system. When China was prosperous and powerful, Asia was stable and peaceful.” Concert/condominium: “A managed balance of power system, either a multilateral concert of major powers, or a Sino-US duopoly (condominium); one such scenario posits China and the United States dominating the Asian heartland and maritime spheres, respectively.” Community: “East Asia moving from a region of nations to a bona fide regional community where collective efforts are made for peace, prosperity and progress.”

Acharya, Amitav (2014): “Power shift or paradigm shift? China's rise and Asia's emerging security order”, *International Studies Quarterly* 58(1), 158-173.

41. Fundamental political dilemma (Barry Weingast). “A government strong enough to protect property rights and enforce contracts is also strong enough to confiscate the wealth of its citizens.”

Weingast, Barry R. (1995): “The economic role of political institutions: Market-preserving federalism and economic development”, *Journal of Law, Economics & Organization* 11(1), 1-31.

Hanson, Jonathan K. (2014): “Forging then taming Leviathan: State capacity, constraints on rulers, and development”, *International Studies Quarterly* Volume 58(2), 380-392.

42. Joining treaties. “The United States often leads in the creation of treaties, but it sometimes never joins those treaties or does so only after considerable delay. This presents an interesting puzzle. Most international relations theory expects states to join treaties as long as the benefits outweigh the costs. Domestic theories modify this with the constraints of institutional veto players. Yet, sometimes neither of these arguments explains the delay or absence of US participation. We supplement these explanations with an opportunity cost theory. We argue that the advice and consent process sometimes slows or stalls because it imposes costs in terms of legislative time and political capital. These costs alter the calculus of key players and may obstruct the process. Statistical analysis supports the argument.”

Kelley, Judith G.; Pevehouse, Jon C.W. (2015): “An opportunity cost theory of US treaty behavior”, *International Studies Quarterly* 59(3), 531-543.

43. World War I, trade and conflict. “The First World War is often cited as proof par excellence of the flaws in the liberal peace argument because the adversaries it engaged had been each other’s major pre-war trading partners. Although commonly assumed to have wreaked havoc on the trade of the states it engaged, the war’s impact on commerce has rarely been rigorously examined. Using an original dataset, this study shows that the Great War triggered substitution processes that reduced its trade-related costs. Although recourse to second-best alternatives always induces efficiency losses, the costs of adjustment were small relative to the other costs that states incurred during the war. The analysis shows that the Great War is not the egregious exception to the theory that conventional wisdom has long assumed it to be. At the same time, it makes clear that the deterrent power of trade varies inversely with belligerents’ ability to access the markets of alternative trading partners.”

Gowa, Joanne; Hicks, Raymond (2015): “Commerce and conflict: New data about the Great War”, *British Journal of Political Science* 1-22.

44. EU crisis: a constitutional culture trilemma. “There are three paths to constitutionalism in the modern world. Under the first, revolutionary outsiders use the constitution to commit their new regime to the principles proclaimed during their previous struggle. India, South Africa, Italy and France have followed this path. Under the second, establishment insiders use the constitution to make strategic concessions to disrupt revolutionary movements before they can gain power. Britain provides paradigmatic examples. Under the third, ordinary citizens remain passive while political and social elites construct a new constitution. Spain, Japan and Germany provide variations on this theme. Different paths generate different legitimation problems, but the EU confronts a special difficulty. Since its members emerge out of three divergent pathways, they disagree about the nature of the union’s constitutional problem, not merely its solution. Thus the EU confronts a cultural, not merely an economic, crisis.”

Ackerman, Bruce (2015): “Three paths to constitutionalism – and the crisis of the European Union”, *British Journal of Political Science* 45(4), 705-714.

45. Cooperation vs non-cooperation. “Some scholars known as *offensive realists* claim that in the uncertainty of world politics, trust and cooperation between states is extremely unlikely. Others, such as *defensive realists*, claim that rational states are capable of finding ways to counteract the complications created by misperceptions and distrust, and to reduce uncertainty to levels where it no longer inhibits cooperation. In this paper, we construct a formal model to show how in some situations cooperation between states is indeed very unlikely: even in the presence of minor misperceptions, states fail to cooperate. We then ask whether diplomacy (modeled as cheap talk) is able to remedy the failure. We show that in many situations, allowing the countries to communicate prior to taking their actions does *not* enable them to cooperate.”

Acharya, Avidit; Kristopher W. Ramsay (2013): “The calculus of the security dilemma”, *Quarterly Journal of Political Science* 8, 183-203.

46. Life cycle of international organizations. “International-relations scholars tend to focus on the formation, design, and effects of international organizations (IOs). However, the vitality of IOs varies tremendously. I argue that IOs end up in one of three situations. They could die off altogether, though this happens infrequently. More commonly, many IOs become ‘zombies.’ They continue to operate, but without any progress toward their mandates. A third category includes IOs that are alive and functioning. I develop a theory to explain an organization’s vitality, hinging on the quality of the bureaucracy. In an environment where IOs with similar goals, and with many overlapping members, compete for bureaucrats, the ability of the secretariats to attract talented staff and to enact policy autonomously are associated with whether organizations truly stay active, simply endure, or die off.”

Gray, Julia (2018): “Life, death, or zombie? The vitality of international organizations”, *International Studies Quarterly* 62(1), 1-13.

47. Global governance vs states. “A central point of disagreement animates global governance research. Some scholars see changing forms of global governance as eroding the power of the state. Others reject this claim, arguing that relative state power remains the most important factor in international affairs. I contend that analytical misconception confounds and misleads this debate. Both sides insist on modeling the state as a unitary actor; further, both neglect the temporal dynamics of international regime formation. I build an analytical framework that focuses on political processes that unfold over time and opens up the unitary state. Probing three decades of innovation in global finance, trade, and environmental governance, I find no evidence of a zero-sum relationship. In fact, experimental forms of transnational governance often empower governmental actors and state agencies. However, I also conclude that relative organizational power grounded in historical processes of regime formation matters more than relative state power in shaping global regulatory change.”

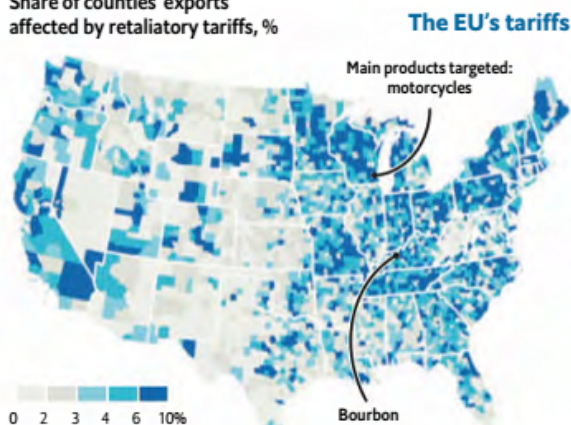
		Type of Authority	
		Political (State-based)	Technocratic (Independent regulators)
Institutional Character	Bureaucratic	A POLITICAL IO e.g., UN Security Council, EU Council, UN Environment Program, World Trade Organization, International Monetary Fund, World Bank	C TECHNOCRATIC IO e.g., International Telecommunication Union, World Health Organization, European Central Bank, European Supervisory Authorities
	Networked	B POLITICAL NETWORK e.g., G-20, Financial Stability Board, Euro Group, Financial Action Task Force	D TECHNOCRATIC NETWORK e.g., International Organization of Securities Commissions, Basel Committee, European Committee for Standardization

Figure 1. Types of supranational regulatory bodies

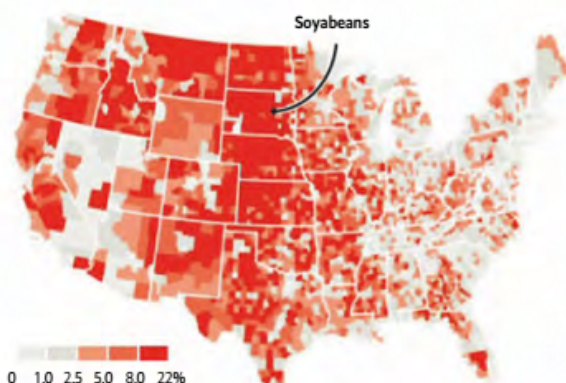
Seddon, Jack (2017): “History matters: How international regimes become entrenched—and why we suffer for it”, *International Studies Quarterly* 61 (2), 455-470.

America’s trading rivals have aimed tariffs at Trump voters: Europe in the Rust Belt, China in the Great Plains

Share of counties’ exports affected by retaliatory tariffs, %



China’s tariffs



The EU tried to minimise the harm of its tariffs to its own economies. China showed no such concern

Trade wars, *The Economist*, 27 April 2019 (Vol 431 No 9140), p. 77

You get what you give

Why you should never start a trade war with an autocracy

ECONOMISTS OFTEN argue that trade wars cannot be won. Yet they will be among the few beneficiaries from America's barrage of tariffs. For decades, rich countries' sound trade policies denied academics cases of tit-for-tat protectionism to study. But new American taxes on many goods from China and metals from everywhere have produced the data set of their dreams.

America's government seems unfazed by the damage its tariffs do to the economy. One study by scholars at the Federal Reserve and Princeton and Columbia Universities found that the new levies have raised costs for consumers by \$1.4bn per month.

However, Donald Trump is devoted to his voters. And his trading rivals have retaliated where it hurts. A paper by Joseph

Parilla and Max Bouchet of the Brookings Institution, a think-tank, estimated that 61% of jobs affected by retaliatory tariffs are in counties that voted for Mr Trump.

Is this a coincidence? If a country's imports from America already come from mostly Republican areas, those regions will bear the brunt of a trade war. However, a new paper by Thiemo Fetzer and Carlo Schwarz of the University of Warwick finds that America's rivals probably did consider politics when crafting their policies.

To test if recent tariffs were politically motivated, the authors needed to compare them with alternatives that were not. They devised this benchmark by creating at random 1,000 hypothetical bundles of targeted goods for each trading partner, all worth the same as the actual trade facing tariffs.

The authors then compared real-world policies with these alternatives. First, they assessed the political impact of each plan, by measuring how closely its targeted areas matched Republican gains when Mr Trump was elected. Next, they estimated how much each policy would harm a retaliating bloc's own economy, by counting the share

of its imports of the chosen goods that come from America. The more a country relies on one supplier, the more switching to a less efficient source is likely to hurt.

The study found that the EU prioritised minimising such damage. Its tariffs deftly protected domestic consumers, causing less disruption than 99% of alternatives. The bloc targeted Trump voters as well—its tariffs matched the election of 2016 more closely than in 87% of simulations—but not at the cost of upsetting its own citizens.

In contrast, China focused on punishing Trump voters. Its tariffs tracked the election better than 99% of alternatives. They also disrupted China's own economy more than in 99% of simulations. Even among plans including soyabeans—one of China's main imports, grown mostly in Republican areas—China's policy was just slightly more politically targeted than similar options, but far worse for its economy.

China's choice of tariffs seems designed to deter escalation at any cost. Only regimes with no voters to satisfy can run that risk. The lesson is clear: if you start a trade war, fight a democracy, not an autocracy. ■

More articles

Mattes, Michaela; Rodríguez, Mariana (2014): "Autocracies and International Cooperation, *International Studies Quarterly* 58(3), 527-538.

Margalit, Yotam (2012): "Lost in globalization: International economic integration and the sources of popular discontent", *International Studies Quarterly* 56(3), 484-500.

Green, Elliott (2012): "On the size and shape of African states", *International Studies Quarterly* 56(2), 1-16.

Greenhill, Brian; Lupu, Yonatan (2017): "Clubs of clubs: Fragmentation in the network of intergovernmental organizations", *International Studies Quarterly* 61(1), 181-195.

Articles with formal models

KUGLER, TADEUSZ; KOOK KANG, KYUNG; KUGLER, JACEK; ARBETMAN-RABIN (2013): "Demographic and economic consequences of conflict", *International Studies Quarterly* 57(1), 1-12.

Shea, Patrick; Teo, Terence K.; Levy, Jack S. (2014): "Opposition politics and international crises: A formal model", *International Studies Quarterly* 58(4), 741-751.

Lamberson, P. J.; Scott E. Page (2012): "Tipping points", *Quarterly Journal of Political Science* 7, 175-208.

Debs, Alexandre; Gretchen Helmke (2010): "Inequality under democracy: Explaining the left decade in Latin America", *Quarterly Journal of Political Science* 5, 209-241.

Ballard-Rosa, Cameron; Carnegie, Allison; Gaikwad, Nikhar (2016): "Economic crises and trade policy competition", *British Journal of Political Science* 1-36.

Meirowitz, Adam; Anne E. Sartori (2008): "Strategic uncertainty as a cause of war", *Quarterly Journal of Political Science* 3, 327-352.

Fang, Songying (2010): "The strategic use of international institutions in dispute settlement", *Quarterly Journal of Political Science* 5, 107-131.

48. Three responses by the world's political leaders to global warming political dilemma. Plan A: business as usual indefinitely, until the Earth becomes hell and civilization extinguishes (the plan currently followed). **Plan B:** the equivalent to a wartime mobilization to cut carbon emissions rapidly and restructure

the world energy economy: “if Plan B is carried out, living in our world will be, while unpleasant, not hell – physicist Joe Romm has called it ‘Planetary Purgatory.’” **Plan C:** “the present political leaders of the United States – along with those of China, the other chief emitter of CO₂– will delay. Thinking that the scientists’ predictions might be wrong, they take a wait-and-see approach.”

“It is possible that, although Plan C would result in a hellish existence, it might allow us, if we are lucky, to avoid extinction. More likely, however, the results would ultimately be no different from those of Plan A. The only rational option, therefore, is Plan B.”

Griffin, David Ray (2015): *Unprecedented: Can civilization survive the CO₂ crisis?*, Clarity Press

Jaen S. Islam, M.R. Islam, Meltem Islam, M.A.H. Mughal (2018): *Economics of sustainable energy*, Wiley.

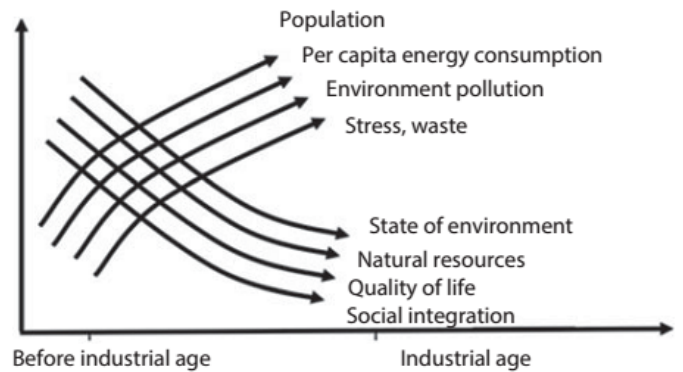


Figure 3.8 Our current epoch is an epic failure of intangible values.

Figure 3. Trend in CO₂ emissions from fossil fuel combustion, 1870-2014

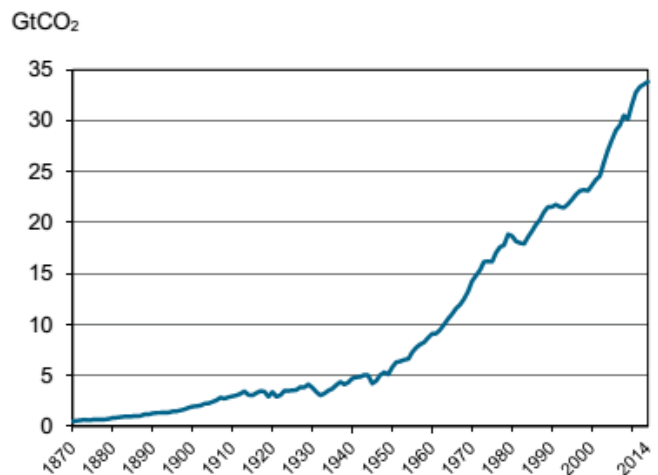


Figure 1. Estimated shares of global anthropogenic GHG, 2014

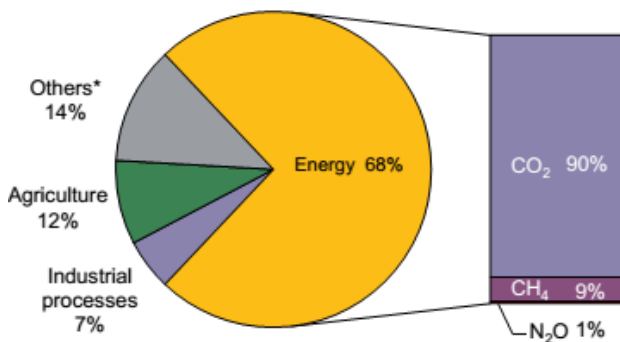


Figure 8. CO₂ emissions by region, 2015

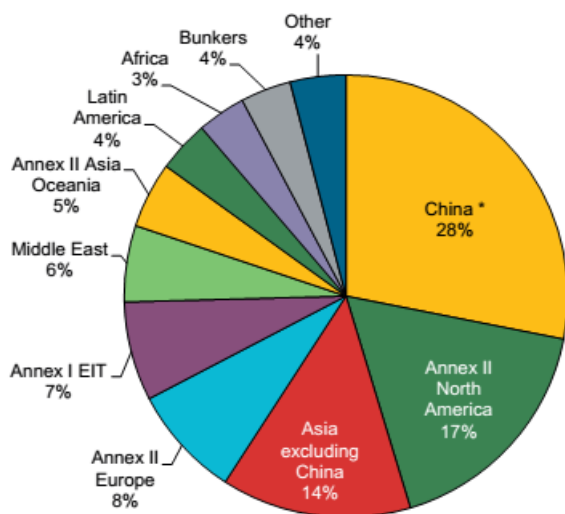


Figure 10. World CO₂ emissions from fuel combustion by sector, 2015

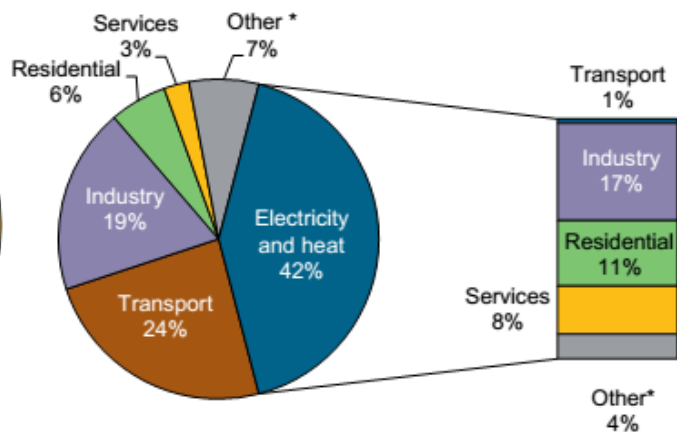


Figure 15. Trends in CO₂ emission intensities for the top five emitting countries*, 1990-2015

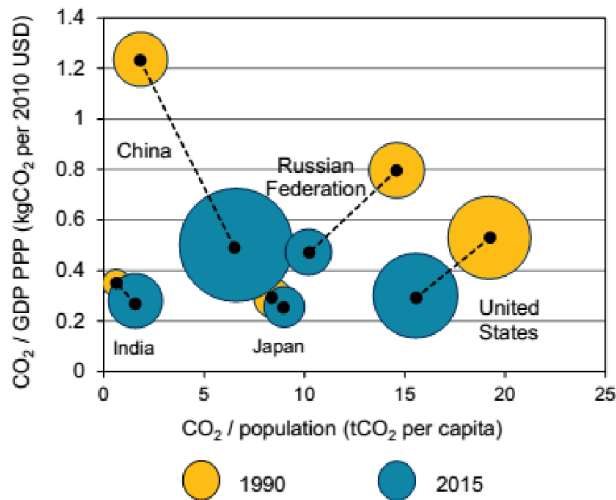
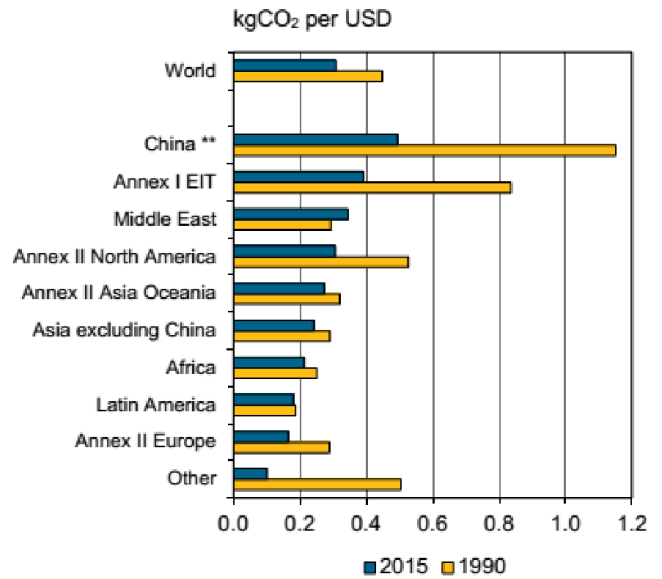
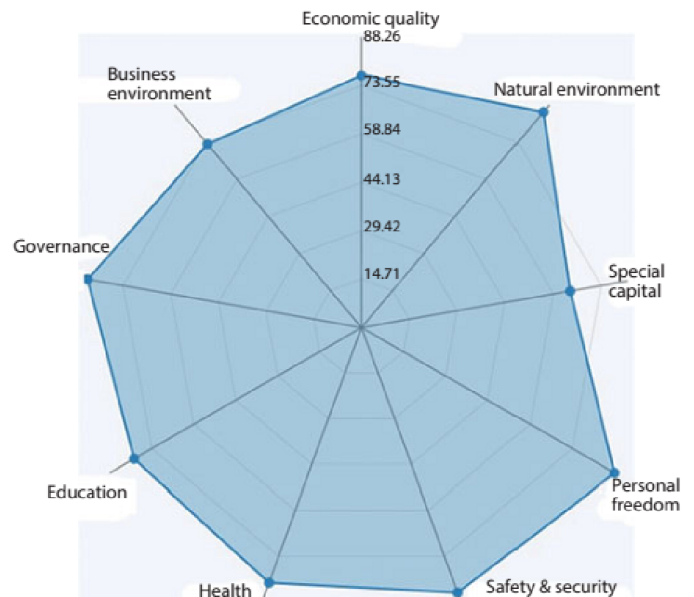
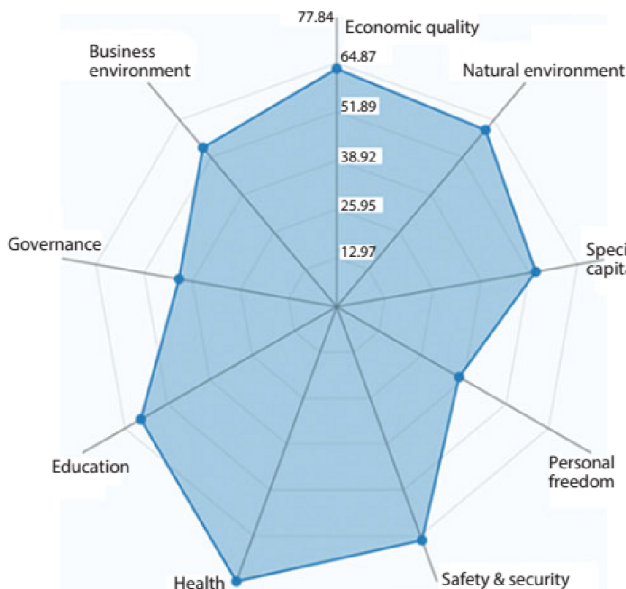
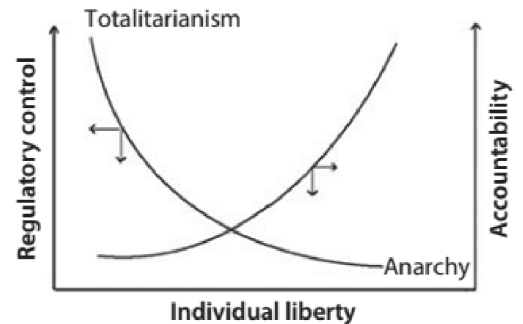


Figure 16. CO₂ emissions per GDP* by major world regions, 1990-2015



OECD/International Energy Agency (2017): *CO₂ emissions from fuel combustion 2017*.

The figure on the right (J.S. Islam et al, 2018, p. 116) “shows how the balance between individual liberty and regulatory control is made (...) If regulatory control is increased, one is not expected to have any accountability, and a test loses its meaning. On the other hand, if individual liberty is excessive, then it leads to anarchy and, at the same time, accountability skyrockets, making it impractical for humans to achieve their full potential.”



Saudia Arabia and Norway’s prosperity index in spider chart form (J.S. Islam et al, 2018, pp. 275-276)

While there are many factors contributing to Europe’s travails, there is one underlying *mistake*: the creation of the single currency, the euro. Or, more precisely, the creation of a single currency without creating a set of institutions that enabled a region of Europe’s diversity to function effectively with a single currency.

The eurozone was flawed at birth. The structure of the eurozone—the rules, regulations, and institutions that govern it—is to blame for the poor performance of the region, including its multiple crises. The diversity of Europe had been its strength. But for a single currency to work over a region with enormous *economic and political* diversity is not easy. A single currency entails a *fixed* exchange rate among the countries and a single interest rate. Even if these are set to reflect the circumstances in the majority of member countries, given the economic diversity, there needs to be an array of institutions that can help those nations for which the policies are not well suited. Europe failed to create these institutions.

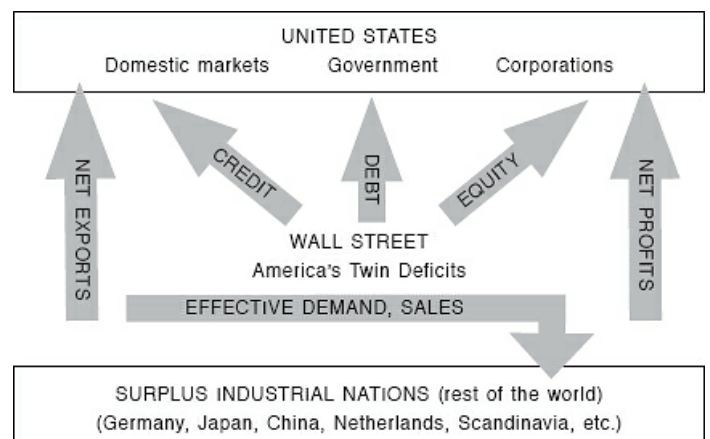
There is a large economic literature asking, what is required for a group of countries to share a common currency and have shared prosperity?²² There was consensus among economists that for the single currency to work, what was required is that there be *sufficient* similarity among the countries.

So much importance was assigned to these fiscal concerns that they came to be called the *convergence criteria*. But the way the euro was designed led to *divergence*: when some country had an adverse “shock,” stronger countries gained at the expense of the weaker. The fiscal constraints imposed as part of the convergence criteria—limits on deficits and debt relative to GDP—themselves contributed to *divergence*.

The adverse effects of a eurozone structure almost inevitably leading to divergence have been compounded by the *policies* that the eurozone has chosen to follow, especially in response to the euro crisis. Even within the strictures of the eurozone, alternative policies could have been pursued. That they were not is no surprise: a central theme of this book is that the same mindset that led to a flawed structure led to flawed policies.

Stiglitz, Joseph E. (2016): *The euro: How a common currency threatens the future of Europe*, W. W. Norton.

49. Varoufakis’s global minotaur hypothesis. “I might have called this book *The Global Vacuum Cleaner*, a term that captures quite well the main feature of the second post-war phase that began in 1971 with an audacious strategic decision by the US authorities: instead of reducing the twin deficits that had been building up in the late 1960s (the budget deficit of the US government and the trade deficit of the American economy), America’s top policy makers decided to increase both deficits liberally and intentionally. And who would pay for the red ink? Simple: the rest of the world! How? By means of a permanent tsunami of capital that rushed ceaselessly across the two great oceans to finance America’s twin deficits. The twin deficits of the US economy thus operated for decades like a giant vacuum cleaner, absorbing other people’s surplus goods and capital (...) it did give rise to something resembling global balance: an international system of rapidly accelerating asymmetrical financial and trade flows capable of creating a semblance of stability and steady growth. Powered by America’s twin deficits, the world’s leading surplus economies (e.g. Germany, Japan and, later, China) kept churning out goods that Americans gobbled up. Almost 70 per cent of the profits made globally by these countries were then



transferred back to the United States, in the form of capital flows to Wall Street. And what did Wall Street do with them? It instantly turned these capital inflows into direct investments, shares, new financial instruments, new and old forms of loans and, last but not least, a ‘nice little earner’ for the bankers themselves. Through this prism, everything seems to make more sense: the rise of financialization, the triumph of greed, the retreat of regulators, the domination of the Anglo-Celtic growth model (...) The role of the beast was played by America’s twin deficits, and the tribute took the form of incoming goods and capital.”

“Central to this global surplus recycling mechanism (GSRM), which I have likened to a Global Minotaur, were the two gargantuan deficits of the United States: the *trade deficit* and the federal government *budget deficit*. Without them, the book argues, the global circular flow of goods and capital (see diagram below) would not have ‘closed’, destabilizing the global economy. This recycling system broke down because Wall Street took advantage of its central position in it to build colossal pyramids of private money on the back of the net profits flowing into the United States from the rest of the world. The process of *private money* minting by Wall Street’s banks, also known as *financialisation*, added much energy to the recycling scheme, as it oozed oodles of new financial vitality, thus fuelling an ever-accelerating level of demand within the United States, in Europe (whose banks soon jumped onto the private money-minting bandwagon) and Asia. Alas, it also brought about its demise.”

“In conclusion, a crystal clear picture is emerging: the Crisis did not alter the deficit position of the United States. The federal budget deficit more or less doubled while America’s trade deficit, after an initial fall, stabilised at the same level. *However, the US deficits are no longer capable of maintaining the mechanism that keeps the global flows of goods and profits balanced at a planetary level.* Whereas until 2008 America was able to draw into the country mountains of net imports of goods, and a similar volume of capital flows (so that the two balanced out), this is no longer happening post-2008. American markets are sucking 24 per cent fewer net imports (thus generating only 66 per cent of the demand that the rest of the world was used to before the Crash) and are attracting into the American private sector 57% less capital than they would have had Wall Street not collapsed in 2008.

In short, of the mighty Global Minotaur, the only reminder that remains is the still accelerating flow of foreign capital into America’s public debt (...), evidence that the world is in disarray and money is desperately seeking safe haven in the bosom of the reserve currency in this age of tumult. But as long as the Rest of the World is reducing its injection of capital into America’s corporate sector and real estate, while America is reducing its imports of their net exports, we can be certain that the beast is dead and nothing has taken its place with a capacity to re-start the essential process of surplus recycling.”

“*Europe is disintegrating because its architecture was simply not sound enough to sustain the shockwaves caused by our Minotaur’s death throes (...)* For two years now, the German public has become convinced that Germany has escaped the worst of the Crisis because of the German people’s virtuous embracing of thriftiness and hard work; in contrast to the spendthrift Southerners, who, like the fickle grasshopper, made no provision for when the winds of finance would turn cold and nasty. This mindset goes hand in hand with a moral righteousness which implants into good people’s hearts and minds a penchant for exacting punishment on the grasshoppers – even if punishing them also punishes themselves (to some extent). It also goes hand in hand with a radical misunderstanding of what kept the eurozone healthy and Germany in surplus prior to 2008: that is, the Global Minotaur whose demand-generation antics were for decades allowing countries like Germany and the Netherlands to remain net exporters of capital and consumer goods within and without the eurozone (while importing US-sourced demand for their goods from the eurozone’s periphery). Interestingly, one of the great secrets of the post-2008 period is that the Minotaur’s death adversely affected aggregate demand in the eurozone’s surplus countries (Germany, the Netherlands, Austria and Finland) *more* than it did the deficit member states (like Italy, Spain, Ireland, Portugal and Greece).”

“To recap, the Minotaur’s surplus recycling was essential to the maintenance of the eurozone’s faulty edifice. Once it vanished from the scene, the European common currency area would either be redesigned

or it would enter a long, painful period of disintegration. An unwillingness by the surplus countries to accept that, in the post-Minotaur world, some other form of surplus recycling is necessary (and that some of their own surpluses must also be subject to such recycling) is the reason why Europe is looking like a case of alchemy-in-reverse: for whereas the alchemist strove to turn lead into gold, Europe's reverse alchemists began with gold (an integration project that was the pride of its elites) but will soon end up with the institutional equivalent of lead."

Varoufakis, Yanis (2015): *The global minotaur: America, Europe and the future of the global economy*, Zed Books.

"It's our currency but it's your problem." (US Treasury Secretary John Connally)

Albertoni, Nicolás (2018): "The new dynamics of the international trading system", Global Policy

Knafo, Samuel (2006): "The gold standard and the origins of the modern international monetary system", Review of International Political Economy 13(1), 78-102

Fragmented system	Fragmented multipolarity	Multi-polarity	Multiple hegemony	Dual hegemony	Single hegemony	Imperial hegemony
North America	Europe	Europe	World	Cold War	Late Roman Republic	Roman Empire
1400	1500	1700	1900	1950	100 B.C.	A.D. 100

Figure 1. The continuum of system fragmentation and consolidation

Kaufman, Stuart J. (1997): "The fragmentation and consolidation of international systems", International Organization 51(2), 173-208.

50. Shortcomings of the present international monetary system. "These are (1) the large volatility of exchange rates, (2) the wide and persistent misalignments of exchange rates and huge trade imbalances, (3) the failure to promote greater coordination of economic policies among the leading economic areas, and (4) the inability to prevent international financial crises or to adequately deal with them when they do arise."

51. Characteristics of the present international monetary system. "The present international monetary system has four main characteristics: (1) There is a wide variety of exchange rate arrangements (...) (2) Countries have almost complete freedom of choice of exchange rate regimes. All that is required by the 1978 Jamaica Accords (which formally recognized prevailing exchange rate arrangements) is that nation's exchange rate actions not be disruptive to trade partners and the world economy. (3) Exchange rate variability has been substantial. This is true for nominal and real, bilateral and effective, short-run and long-run exchange rates. The IMF (2004) estimated that exchange rate variability has been about 5 times larger during the period of flexible (i.e., since 1971) than under the preceding fixed exchange rate or Bretton Woods System. Exchange rate variability of 2-3 percent per day and 20-30 percent per year has been common under the present system (...) (4) Contrary to earlier expectations, official intervention in foreign exchange markets (and therefore the need for international reserves) has not diminished significantly under the present and more flexible exchange rate system as compared with the previous fixed exchange rate system. Nations have intervened in foreign exchange markets not only to smooth out day-to-day movements, but also to resist trends, especially during the 1970s and since the mid-1980s."

Salvatore, Dominick (2012): "Exchange rate misalignments and the present international monetary system", Journal of Policy Modeling 34(4), 594-604.

Salvatore, Dominick (2011): "The future tri-polar international monetary system", Journal of Policy Modeling 33(5), 776-785.

52. International monetary system: reform causing instability? "The monetary system was reshaped in the mid-1940s in the aftermath of the Second World War and again in the early 1970s after the first oil price shock. In both cases, global disruption shook the monetary system and caused prolonged instability. The question now is whether the current system of floating currency blocs with dollar-based trade and reserves

can withstand the strains of the global adjustment ahead. It is time to consider alternatives for the IMS and to address the issue of its governance within the context of the postcrisis world economy. The IMS is where tensions from globalization—and the conflict between domestic policy goals and international obligations—tend to coalesce.”

53. Towards a multi-currency system? “In the US, domestic priorities for growth and employment may lead to an attitude of ‘benign neglect’ vis-à-vis the dollar, which generally results in a weaker dollar. The current strength of the US currency, which reflects global risk aversion, with investors attracted to the dollar because of its role as key reserve currency, undermines this stance. Meanwhile, China—now the world’s largest exporter as well as the largest holder of dollar assets—faces inflationary pressures as a result of keeping its currency anchored to the dollar, yet fears the instability and losses in reserve values that a loosening of the link would entail. China is also creating tensions by keeping its currency undervalued while preparing for its internationalization (...)At the same time, it has clearly shown the euro area’s unwillingness to take the burden—and responsibility—that goes with issuing the world’s second reserve currency. In this context, dialogue and policy cooperation play an important role in helping these countries to coordinate their efforts and rebalance the world economy. Policy cooperation should aim to avoid any protectionist reaction to exchange rate movements. It should also help prepare the ground for a smooth transition to a multi-currency system by fostering the exchange of information among the world’s main trading areas. That the system—or non-system—was no longer adequate, given the complexity of a burgeoning world economy, has been clear for some time.”

“... in today’s larger and more integrated world economy the dependence on the dollar as the basis of both trade flows and financial reserves has clearly become excessive, creating a system that is fundamentally unbalanced (...) The existing IMS needs to evolve into a multicurrency system in which a number of international currencies, ideally representing the main trading areas, have the functions of storing value and providing the unit of measure. A multicurrency system would respond more flexibly to the demand for liquidity and would provide a way to diversify the accumulation of reserve assets. Such a system would be better suited to a multipolar world economy.”

Subacchi, Paola (2010): “Who is in control of the international monetary system?”, *International Affairs* 86(3), 665-680.

54. International monetary system: power redistribution. “Major developments have dramatically shifted the distribution of power in the system. Many have noted that power is now more widely diffused, both among states and between states and societal actors. Finance is no longer dominated by a few national governments at the apex of the global order. Less frequently remarked is the fact that the diffusion of power has been mainly in the dimension of autonomy, rather than influence (...) While more actors have gained a degree of insulation from outside pressures, few as yet are able to exercise greater authority to shape events or outcomes. Leadership in the system thus has been dispersed rather than relocated—a pattern of change in the geopolitics of finance that might be called *leaderless* diffusion. A pattern of leaderless diffusion generates greater ambiguity in prevailing governance structures. Rule-setting in monetary relations increasingly relies not on negotiations among a few powerful states but rather on the evolution of custom and usage among growing numbers of autonomous agents—regular patterns of behaviour that develop from longstanding practice.”

“The diffusion of power, however, has been mainly in the dimension of autonomy, rather than influence—a pattern of leaderless diffusion in financial geopolitics. The days of concentrated power in a largely state-centric system are now over. Three major developments share principal responsibility for this change: (1) the creation of the euro; (2) the widening of global payments imbalances; and (3) the globalization of financial markets.”

“The dynamics of power and governance in global finance today are indeed changing. A leaderless diffusion of power is generating greater uncertainty about the underlying rules of the game. At the state level, governments increasingly question the need for a strictly national currency. At the systemic level,

governance now relies more on custom and usage, rather than intergovernmental negotiation, to define standards of behaviour."

Cohen, Benjamin J. (2008): *The international monetary system: diffusion and ambiguity*, *International Affairs* 84(3), 455-470.

55. International monetary system: status quo prevails. "For quite some time the international monetary system has been incapable of delivering external balances or facilitating smooth adjustments of large imbalances. There is a convergence of interests for the status quo: the United States is keen to preserve the benefits it receives as the key-currency country, while creditor countries continue to accumulate dollar-denominated assets and sterilize increases in the foreign component of the monetary base."

Fratianni, Michele (2012): "The future International Monetary System: Dominant currencies or supranational money? An Introduction", *Open Economies Review* 23(1), 1-12.

56. The collapse of the international monetary system (1973). "The structural causes of the present international monetary crisis remain the same that have been debated interminably, and ineffectually, for more than a decade, i.e. the easy financing of persistent U.S. balance-of-payments deficits by foreign accumulation of U.S. dollars as international reserves, and the consequent suppression of adjustment pressures on the surplus countries as well as on the U.S. This finally exploded in the unprecedented magnitude of such disequilibria and financing over the years 1970-1972."

There was at the time "broad intellectual consensus on two basic, commonplace principles: (1) the need for an effective adjustment mechanism, precluding persistent disequilibria in any country's balance of payments; and (2) the need to adjust, and limit, world reserve creation to the non-inflationary requirements of world economic growth."

Triffin, Robert (1973): "The collapse of the international monetary system: Structural causes and remedies", *De Economist* 121(4), 362-374.

57. A proposal for supranational bank money. "We adapt the basic principles of the Keynes Plan and argue for the creation of a supranational bank money (SBM) that would coexist along side national currencies and for the establishment of a new international clearing union (NICU). These principles remain timely because the fundamental causes of the instability of the international monetary system are as valid today as they were in the early forties. The new supranational money would be created against domestic earning assets of the Fed and the ECB and its quantity would be demand-driven (...) The financial tsunami that hit the world economy in 2007-2008 provides a unique opportunity for a coordinated strategy."

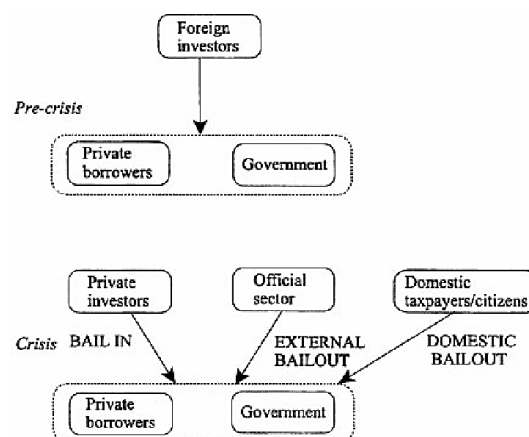
58. Strategies for a future international monetary system. "At this time, there are (at least) two strategies for the future of the IMS, a conservative strategy and an active one. The former aims at preserving the status quo; the underlying assumption (...) is that the IMS, to work well, must be based on a key currency issued by a dominant country with a deep financial market and a range of short-term instruments accessible by nonresidents (...) The trouble with the conservative strategy is that it has no *coherent* method to arrest the deterioration of the dollar standard or to accelerate the replacement of the dollar by another key currency. The euro has grown as the second most important international currency but the incomplete financial and political integration in Euroland prevents the euro from replacing the dollar as the dominant international currency. The second strategy, the active one, is based on two pillars. The first is that there is an alternative to the hegemonic key-currency situation in the form of a cooperative decision-making process (...). The second is that a progressive reduction of the dual role of the dollar as a national and international currency can be obtained by introducing a supranational money, albeit gradually. The Keynes Plan for the postwar international financial system fits into this category."

Alessandrini, Pietro; Michele Fratianni (2009): "Resurrecting Keynes to stabilize the International Monetary System", *Open Economies Review* 20(3), 339-358.

59. Recommendations to avoid financial crises. “Many of the best minds among economists and the financial community have expressed their views on recent international financial crises and the design of a new financial infrastructure. While there is widespread agreement on what happened, there is much less convergence on what should be done about it. Still, we can identify a common core of proposals (...), as well as a number of issues on which economists disagree. Abusing terminology, let us call the former the ‘consensus view’. The seven pillars of the consensus view. Most recommendations concur on a number of desirable steps:

- Elimination of currency mismatches. A high level of indebtedness in foreign currencies makes a country very vulnerable to a depreciation in the exchange rate and to the concomitant liquidity and solvency risk faced by domestic banks and firms. Along with this, the absence of countrywide risk management confronts monetary policy with an unpalatable dilemma. A tight monetary policy, to maintain the exchange rate, runs the risk of a severe recession, while a loose monetary policy leads to depreciation of the currency and possibly the bankruptcy of firms and banks that are highly indebted in foreign currency. A common proposal, therefore, is to eliminate currency mismatches, at least at the level of banks and the government. Furthermore, many suggest that a domestic buildup of international reserves would reassure foreign investors about the value of their investment.
- Elimination of maturity mismatches. To prevent hot money from fleeing the country, many advocate a lengthening in debt maturity, as well as measures encouraging alternatives to short-term debt, such as foreign direct investment (FDI) and investment by foreign bank subsidiaries.
- Better institutional infrastructure. In response to the poor governance that has marred many crisis countries, the consensus view argues that infrastructure-promoting reforms, such as adherence to universal principles for securities market regulation designed by the International Organization of Securities Commission (IOSCO) and those for accounting designed by the International Accounting Standards Committee (IASC), would reassure foreign investors and help prevent crises.
- Better prudential supervision. Most crisis countries’ prudential regulations satisfied the international standards as defined by the Basle Accord (...) Enforcement of the standards in a number of crisis countries has been highly negligent, resulting in low capital adequacy and high values at risk. The consensus view calls for a better enforcement of existing prudential regulations.
- Country-level transparency. Most economists recommend that foreign investors be informed in a uniform and regular manner of the country’s structure of guaranteed debt and off-balance-sheet liabilities.
- Bail-ins. There is widespread agreement on the desirability (although not on the feasibility) of forcing the foreign investors to share the burden in a case of crisis. The argument is that bailing-in the investors will force them to act in a more responsible manner in lending only to countries with good fundamentals.
- Avoid fixed exchange rates. (...) The broad consensus is that fixed exchange rates work poorly under financial deregulation and that countries with open capital account should choose between floating rates and hard pegs.”

60. Moral hazard problems: who bears the burden of a financial crisis? “... there are three possible victims: the domestic taxpayers, the foreign investors whose equity value is depreciated or debt claim is in default or renegotiated, and the ‘official sector’ (which we define here as IFIs [international financial institutions] plus advanced countries’ Treasuries) that can lose money in attempting rescues (...) The burden sometimes falls entirely on domestic taxpayers.”



Tirole, Jean (2002): *Financial crises, liquidity, and the international monetary system*, Princeton UP.

61. Duality in the global economy. “Two major dichotomies have made the international economy increasingly vulnerable to the kind of crisis that the world is currently experiencing. The first one is the contrast between, on the one hand, a ‘rule-based’ international trading system with a strong international organization at the center, and, on the other hand, a purely ‘market-based’ international financial system. The second one is while finance has been fully globalized, monetary policy has remained firmly national (or regional in the case of the Euro-zone) without any set of common mechanisms or rules or objectives at the international level. The origins of today’s economic and financial crisis are as much intellectual as they are political and institutional. The quality and the scope of the debate will determine the success or failure of innovation at institutional and policy levels.”

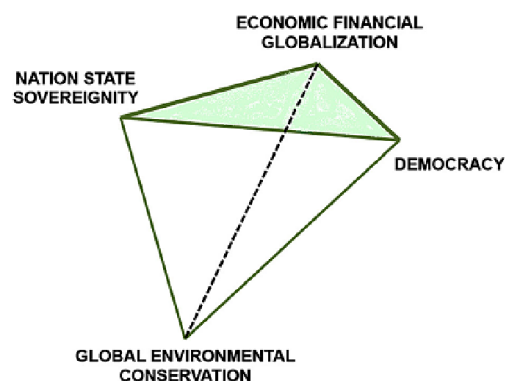
Hieronymi, Otto; ed. (2009): *Globalization and the reform of the International Banking and Monetary System*, Palgrave Macmillan UK.

62. Why the dollar still rules. “The principle [sic] reason why the dollar remains the dominant international currency is that the United States has so far fulfilled three functions in the global monetary system: (1) having open and highly developed financial markets that generate an adequate supply of liquid assets; (2) having a central bank that more or less maintains the value of these assets; (3) running current account deficits that allow it to play the role of global consumer-of-last-resort.”

“There are two reasons to doubt that the ECB’s relatively conservative monetary policy increased the attractiveness of the euro over the dollar. First (...) the ECB’s refusal to buy more sovereign debt securities impaired the liquidity of European financial markets and the ability of the Eurozone to supply safe assets to the global monetary system. If there is one lesson to be drawn from the GFC and the Eurozone crisis for the link between monetary policy and international currency status, it is that sovereign debt can lose its quality as a safe asset when it is not backstopped by the central bank (...). Second, the ECB’s relative conservative monetary policy stance has prevented the Eurozone from playing a greater role in the generation of global demand.”

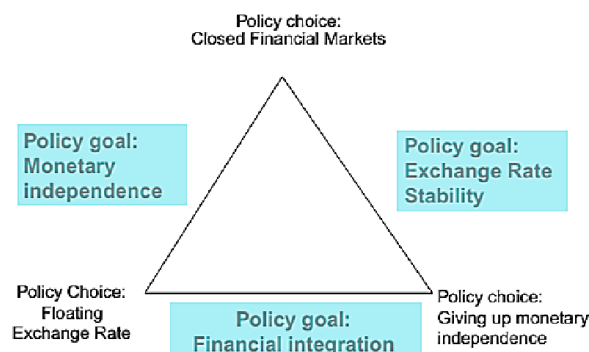
Vermeiren, Mattias (2014): *Power and imbalances in the Global Monetary System: A comparative capitalism perspective*, Palgrave Macmillan UK.

63. Quadrilemma in climate change international negotiations. “Current global climate change negotiations face some contradictions that are not always addressed as they are considered politically incorrect. These include, first, the decoupling of commitments for planetary environmental policies with the actual national strategies. A relevant example is the Bolivian administration, which presents a strong rhetoric for biospheric Mother Earth Rights, but its national development strategies generate more environmental impacts and weaken enforcement at the local level. Second, the core ideas and beliefs that explain development varieties that generate climate change are deeply rooted, so changes in political ideologies, either from traditional ‘left’ or ‘right’, do not determine policies to effectively overcome climate change. Third, accumulation of scientific information is not enough to promote the necessary changes, because these deep roots conditioned perceived and acceptable alternatives. Fourth, this lead to tensions among the pursuit of economic financial globalization, the sovereignty of the nations-states, democracy, and the basement of global environmental conservation. This is a quadrilemma, because if one or two of these objectives are pursued, at least one other is violated. Nevertheless, international negotiations rest on wishful thinking that this is possible. Uncovering these contradictions is politically incorrect for many realms.”



Gudynas, Eduardo (2016): *“Climate change, the quadrilemma of globalization, and other politically incorrect reactions”*, Globalizations, DOI: 10.1080/14747731.2016.1162995

64. A policy quadrilemma. “The policy Trilemma (the ability to accomplish only two policy objectives out of financial integration, exchange rate stability and monetary autonomy) remains a valid macroeconomic framework. [See the picture below] The financial globalization during 1990s–2000s reduced the weighted average of exchange rate stability and monetary autonomy. An unintended consequence of financial globalization is the growing exposure of developing countries to capital flights, and deleveraging crises. The significant costs associated with these crises added financial stability to the Trilemma policy goals, modifying the Trilemma framework into the policy Quadrilemma. Emerging markets frequently coupled their growing financial integration with sizable hoarding of reserves, as means of self-insuring their growing exposure to financial turbulences. The global financial crisis of 2008-2009 illustrated both the usefulness and the limitations of hoarding reserves as a self-insurance mechanism. While modifying the global financial architecture to deal with the challenges of the 21st century remains a work in progress, the extended Trilemma framework keeps providing useful insights about the trade-offs and challenges facing policy makers, investors, and central banks.”



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65. Triffin’s dilemma (Robert Triffin). After World War II, the growth of the global economy needed an increase in international liquidity; that liquidity came from the US foreign deficit; running a persistent foreign deficit tended to erode the confidence in the dollar as an international reserve currency; and that erosion tended to create instability. As a result, the dollar as an international currency could not permanently fulfill two functions: provide liquidity and ensure stability.

66. Collapse of the Bretton Woods system. Triffin’s dilemma offered a theoretical argument for the eventual demise of the Bretton Woods system: the fear of a dollar collapse. The global macroeconomic context in which the demise ultimately took place was characterized by: (i) increase in the international flows of private capital; (ii) large and growing external imbalances; and (iii) undervalued currencies.

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