Globalization in crisis
Confronting a new economic reality
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Contents

About the author 4
Foreword 5

1 Introduction 6

2 Is the economy deglobalizing? 8

2.1 Data 9

2.2 Policy environment 10

2.3 Public sentiment 11

3 Causes of the retreat 13

3.1 Phase 1 14

3.2 Phase 2 22

3.3 Phase 3 26

4 Conclusion 33

References 34
ABSTRACT: Recent years have seen significant shifts in global attitudes, policies, and politics related to trade and globalization. This study argues that these shifts unfolded in three phases. The first phase was marked by growing perceptions that competition among countries has become unfair and that rising inequality within advanced economies is potentially linked to globalization. The second phase was precipitated by disruptions to supply chains during the COVID-19 pandemic and concerns that globalization undermines resilience. The third phase began with Russia’s invasion of Ukraine, which has led to dramatic shifts in the policy environment driven by concerns about geopolitical tensions and national security. Taken together, these developments signify a slow but accelerating trend toward deglobalization, with potentially far-reaching implications for the global economy. The study concludes by considering the potential consequences, underscoring that the economic effects of these trends are still largely uncertain.

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Goldberg is an applied microeconomist drawn to policy-relevant questions in trade and development. She has exploited a broad set of methodological approaches—ranging from estimation of structural industry equilibrium models to reduced form techniques—to provide insights into the determinants and effects of trade policies, trade and inequality, intellectual property rights protection in developing countries, exchange rate passthrough, pricing to market, and international price discrimination.

Her most recent research examines the resurgence of protectionism in the US, trade, poverty, and inequality; the interplay between informality and trade liberalization in the presence of labour market frictions; and discrimination against women in developing countries.

GLOBALIZATION MEANS DIFFERENT THINGS to different people—whether they are a politician, an anthropologist, or a food critic. For economists, globalization involves the global movement and exchange of goods and services, labour, data, technology, and capital—with the removal of cross-border trade barriers fostering the formation of complex interdependencies between countries and sectors across the globe. Observers are no doubt aware that recent years have seen major shifts in global attitudes, policies, and politics related to trade and globalization. Looking at the aggregated data there is no obvious deglobalization pattern. Indeed, recent years have seen a slowdown in global trading but there is no clear-cut evidence of a reversal of previous trends. Global trade is increasing, just at a slower pace. From another angle, when analysing public sentiment and trade policies being adopted in some of the world’s largest economies—for example, the US, the UK, and China—it is clear that we are in a new era where globalization appears to be far less popular.

This raises the question: are we witnessing a globalization crisis? This lecture by Penny Goldberg, based on the WIDER Annual Lecture she delivered in Oslo in 2023, explores causes of these shifts and discusses the role of increasing inequalities in advanced economies, labour market pressures arising from imports from low-wage countries, perceptions of unfair trade practices, as well as demands for resilience in response to global shocks, such as the COVID-19 pandemic.

Kunal Sen
Director, UNU-WIDER
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Introduction

**AS ITS TITLE IMPLIES,** this study is about globalization in crisis. Readers are no doubt aware that recent years have seen significant shifts in global attitudes, policies, and politics related to trade and globalization. These shifts are manifest most strikingly in events like Brexit in 2016, and the US–China trade war starting in 2018. But they are also evident in the recent emergence of more protectionist trade policy preferences in the United States and other countries—including industrial policies, efforts to ‘reshore’ and ‘friendshore’ manufacturing, and concerns around supply-chain resilience—that are partly a response to shocks like COVID-19 but are also driven by national security concerns, geopolitics, and the fight against climate change. These factors and forces reflect a distinct and broad backlash to and retreat from globalization, contributing to rising trade tensions and a more closed and unstable global trading system.

But is globalization actually in crisis? The study’s first section will address this question—because in fact, when looking at the aggregate data, there is no clear deglobalization trend. Recent years have seen a slowdown in trade activity, but there is no evidence of an outright reversal of the previous trends: global trade is still increasing, but at a slower pace than before. On the other hand, when analysing public sentiment and the trade policies being adopted in some of the world’s largest economies (e.g., the US, the UK, China), it is clear that we are in a new era—one where globalization is far less popular. These changes are highly significant, since globalization has been a central feature of the global economy for several decades—a period starting after the Second World War often referred to as the ‘age of globalization’, marked by high levels of growth, decreasing levels of inequality between countries, and increasing levels of international cooperation, with the more recent period of rapid globalization since the 1990s frequently called the era of ‘hyper-globalization’. Understanding what caused these shifts, and what they might mean for the future, is thus critically important.

The central section of the study identifies four main causes driving these trends. First, it documents that there is a growing perception that competition among countries is unfair. Second, it shows that, while global inequality has steadily decreased for several decades as noted above, inequality within countries has increased in recent years and this increase has been linked by some to globalization. Third, it describes how effects from the COVID-19 pandemic, particularly the disruptions to global supply chains in recent years, have impacted policies and public perceptions around globalization. Fourth, it notes that the invasion of Ukraine and other shifts in geopolitics have exacerbated these trends. The study concludes by considering the potential consequences of these shifting attitudes, policies, and politics, underscoring that the economic effects of these trends are still largely uncertain.

The publication is based on my UNU-WIDER lecture at the University of Oslo on 10 October 2023. That lecture drew on two recent publications of mine: The Unequal Effects of Globalization (Goldberg 2023), a monograph published by MIT Press, and the paper ‘Is the Global Economy De-globalizing?’ (Goldberg and Reed 2023), which I presented at the Brookings Papers on Economic Activity (BPEA) Conference. Given space constraints for both the lecture and this study, certain details and figures from those publications have been omitted here but are available online. The goal of this publication is to provide a succinct overview of recent developments around globalization and highlight the potential consequences of these trends.
Is the economy deglobalizing?

There are many ways to measure globalization, but the most common is to look at global trade levels—the sum of goods and services exchanged between countries as exports and imports. Figure 1 illustrates the level of world imports over time, using both absolute and relative measures. The solid line shows the total (absolute) volume of world imports, and the dotted line shows the total (relative) imports as a percentage of world GDP. The graph starts in 1989, the year the Berlin Wall fell. This is a moment that many trade economists informally mark as the onset of hyper-globalization because over the next two or three decades trade grew very fast. Both lines in Figure 1 rise sharply during the 1990s, peaking in 2007 before the Global Financial Crisis when trade plummeted. A year later, trade bounced back and started increasing again but it never gained its previous momentum.

This slowdown has prompted speculation by many economists and policymakers that the era of hyper-globalization, and perhaps the age of globalization as well, may be over. But Figure 1 clearly does not support this view. Trade has slowed since 2009, but it has still grown. As far as the data is concerned, globalization is not over—there is a slowdown but not a reversal. Focusing on recent years, trade decreased sharply during 2020, the year that COVID-19 hit the global economy, but by 2021 it was growing again. Rather than telling a stark story about deglobalization, the aggregate data suggests that trade is remarkably resilient over time. However, an entirely different story emerges when one considers shifts in the policy environment and public sentiment.

Figure 1: World import of goods and services

NOTE: Nominal value of goods imports is from COMTRADE, and nominal value of services trade is from the World Trade Organization (WTO), both reported in USD. The sum of nominal trade values is divided by world GDP in USD at market exchange rates (NY.GDP.WRTF.CD GDP in the World Bank Development Indicators). Nominal trade values are converted to 2018 prices using the GDP deflator (NY.GDP.DEFL.ZS) for the United States. Copyright: Brookings Institution; figure reproduced with permission.

SOURCE: author’s calculations based on COMTRADE, WTO, and World Bank data (see Goldberg and Reed 2023).
2.2 Policy environment

In recent years, trade policy has evolved rapidly and dramatically in some of the world’s most important economies. Consider the US and the UK, two large economies that have traditionally been the champions of free and open global trade. Starting in 2016, this decades-old liberalization agenda began to reverse—with Brexit in the UK, then US tariffs on China in 2018 and the ensuing US–China trade war. For years, the US has also blocked the appointment of new appellate judges at the World Trade Organization (WTO), which in 2019 threw that institution into dysfunction and paralysis that continues to this day. Furthermore, the recent resurgence of industrial policy in the US, as well as new US export restrictions that target China’s semiconductor sector—both of which are described further below—are seen by many countries as clear departures from multilateralism.

It is important to note that this backlash against globalization in trade policy is largely limited to a small number of very large economies. In most European countries, for instance, the backlash against globalization manifests primarily in concerns about immigration rather than trade. Likewise, in other parts of the world there is little evidence of any backlash at all. In Asia and Africa, for example, there are many regional and multilateral efforts towards greater trade liberalization—including the Regional Comprehensive Economic Partnership, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, and the African Continental Free Trade Area. Such efforts suggest, once again, that globalization is far from dead—other parts of the world are still trying to integrate. Nevertheless, there is a distinct policy backlash in some of the world’s most important economies.

2.3 Public sentiment

Shifts in the policy environment have tracked similar shifts in public sentiment about trade, which has become much more negative, especially recently. A useful source of information for public opinion on globalization is the annual Pew Global Attitudes Survey, which collects information on people’s attitudes on key issues in many countries across the income spectrum. According to recent research by Dorn and Levell (2021), despite the US-China trade war, most people in most countries believed that trade was beneficial to the economy as a whole as late as 2018 or 2019. Recent decades have seen rising concerns about the effects of trade on jobs and wages, especially in high-income countries, but people across the world still viewed trade as beneficial.

Since then, however, public attitudes about trade have soured considerably. The combined effects of the COVID-19 pandemic, supply disruptions, global economic slowdown, and rising geopolitical tensions have led to a near reversal in public attitudes.

The combined effects of the COVID-19 pandemic, supply disruptions, global economic slowdown, and rising geopolitical tensions have led to a near reversal in public attitudes.
Causes of the retreat

BROADLY, THE DRIVERS OF THESE TRENDS can be divided into three main phases.

The first phase began around 2016, with key events like the aforementioned emergence of Brexit in the UK and the election of President Trump in the US. This period is marked by increasingly negative public sentiments toward globalization as well as the perception that trade had become unfair, particularly trade between the US and China. At the same time, the public was also concerned in general about labour market disruptions due to trade with low-wage countries—which, as discussed below, manifest themselves in many countries as an increase in regional inequality. The consequences of these developments were, as mentioned, Brexit and the US–China trade war. As we will see, however, despite the increased uncertainty associated with the emerging trade tensions, trade remained extremely robust during this period.

The second phase began in 2020 with the outbreak of the COVID-19 pandemic. During this period, completely different concerns emerged. Rather than unfairness or inequality, the prevailing trade concern in 2020 shifted to the resilience of global supply chains. And yet, as with phase one, despite much anxiety about supply chains throughout the pandemic, we will see that trade in fact quickly bounced back, again proving extremely resilient.

The third and current phase began in February 2022 with Russia’s invasion of Ukraine. Yet again, this development brought an entirely new set of trade concerns to the foreground—this time focused on national security. Concerns about global supply chains are still salient, but the focus now is on a different type of resilience: the resilience to geopolitical shocks. As such, I will argue that the consequences of phase three are much more serious than the relatively modest effects seen after phases one and two. Already, the invasion of Ukraine has led Europe to decouple from Russia, and the US has started decoupling from China. These are major developments with potentially important ramifications for trade, globalization, geopolitics, and the global economy.
3.1 Phase 1

The first phase of this evolution is described in more detail in my book, *The Unequal Effects of Globalization* (Goldberg 2023). As suggested by that book’s title, I argue that one of the most important causes of the backlash against globalization during the first phase was a perception that trade had become unfair. In particular, there was a perception in high-income countries that trade disproportionately benefitted lower-income countries—that global inequality was reducing at the expense of workers in advanced economies and higher inequality within countries.

These complaints have become well known in recent years, but they originated more than two decades ago—around the time that the US and Europe began opening their markets to China, India, and other large developing economies. During this period, government and business leaders often complained that developing countries routinely abused their ‘special and differential status’ in the world trading system, including by adopting longer timelines for trade liberalization. There were also many complaints around market access, government subsidies for local firms and state-owned enterprises, and instances of forced technology transfer or outright intellectual property theft. Many of these concerns were primarily targeted towards China following their accession to the WTO.

But did these features of globalization disproportionately benefit low-income countries at the expense of advanced economies? Addressing this question with any certainty is challenging, but there is some compelling evidence that we can consider, such as how globalization affected global inequality.

**Globalization & global inequality**

Figure 2 shows how world imports as a percentage of world GDP were fairly constant in the nineteenth and early twentieth centuries, but began rising after the Second World War. This marks the start of what is often referred to as the ‘age of globalization’, when a combination of factors—including geopolitical stability, technological developments, and multilateral efforts like the General Agreement on Tariffs and Trade—led to the gradual falling of trade barriers and an explosion of global trade volumes. In the late 1990s and early 2000s, a period now known as hyper-globalization, trade accelerated even more dramatically. This period coincided with the emergence of global value chains, the founding of the WTO, and the establishment of the modern trading system. Hyper-globalization refers to these historically unprecedented decades of persistent and fast trade growth and enhanced multilateralism.

Now, let’s consider the link between globalization and global inequality. How did globalization contribute to reducing global inequality? Again, it is difficult to answer this question with certainty, but there is some strongly suggestive evidence. Figure 3, for instance, shows the dramatic decline in global poverty between 1990 and 2020, with forecasted data through 2030. The measure of global poverty reflects the number of people by region earning less than USD 1.90 per day, adjusted for purchasing power parity. Overall, the graph shows that enormous progress has been made in recent decades towards the global goal of eliminating extreme poverty—which, in turn, over time? On this question, there is little debate. There is widespread consensus among economists and economic historians that global inequality has decreased dramatically over the last century, especially in the decades following the Second World War. Notable writings on this topic include the World Bank’s 2006 flagship World Development Report: Equity and Development, Nobel Prize-winning economist Angus Deaton’s 2013 book, *The Great Escape*, and Branko Milanovic’s 2018 book, *Global Inequality*.
contributed to the significant declines in global inequality. Notably, the time period in the graph coincides with the period of hyper-globalization. Moreover, the most dramatic decreases occur in East Asia and the Pacific—a region where many countries, including China, became integrated with the world trading system during this period. Notably, the one region in Figure 3 that has not seen much progress on poverty reduction is sub-Saharan Africa—one of the world’s least integrated regions. Of course, many other factors played a role in reducing global poverty. Globalization is not the only driver. Nonetheless, these striking correlations support a generally positive view of trade’s role in recent economic history.

But this raises the question of whether this dramatic decline of global inequality came at the expense of the populations in initially high-income countries. The most explicit illustration of this dynamic comes from work first developed by Milanovic and Lakner (2016). Analysing national household surveys from around the world, Milanovic and Lakner plotted the income growth rate across the global income distribution between 1988–2008. The resulting graph (called a ‘growth incidence curve’) had a very distinctive elephantine shape, and thus became known as the ‘elephant curve’. The elephant curve showed that, while income growth at the very bottom of the global income distribution (i.e., the elephant’s tail) was low, income growth was very high for people in middle sections (the elephant’s back and head). On the broad spectrum of global income, these middle sections in fact reflect a large number of the world’s poor. The graph also showed that income growth in the 80th to 90th percentiles, reflecting much of the populations of higher-income countries, was low (resembling the drooping midsection of the elephant’s trunk). This shape suggests that the world’s poorer groups did in fact benefit more from economic growth during these decades than wealthier groups in higher-income countries, although everyone benefited.

There is one important exception to this narrative, however. The income growth rate at the very top of the elephant curve is also very high (as if the tip of the elephant’s trunk were raised high). This reflects the fact that the world’s top 1 per cent of earners captured an outsized share of the gains from economic growth. The downside of using survey data to analyse household income is that many people at the highest income levels do not respond—and when they do, their income gets coded as simply ‘very high’. In 2018, a group of researchers updated the elephant curve using tax data from 1980 to 2016 (Alvaredo et al. 2018). Tax data offers a much clearer picture of income at the highest levels than survey data. Their updated curve shows that the top 1 per cent captured an even larger share of growth during this period: nearly a third of total income growth over nearly four decades—lifting the ‘tip’ of the graph so much higher than its middle section that it no longer looks like an elephant. Nonetheless, the broadly similar shape of the updated graph’s lower sections still shows that the world’s poor have benefited tremendously from economic growth, and have done so partly at the expense of certain middle-income earners.

Given these trends, most economists today link decreasing global poverty and global inequality in recent decades to the concurrent trends of increased trade and globalization, particularly the integration of China and East Asia into the modern global trading system. While this link is hard to prove beyond any doubt based on rigorous econometric evidence, the correlations discussed above are strong and highly suggestive. These trends suggest that the world’s poor (and super-wealthy) benefited from trade more than the world’s middle classes—whose incomes also grew in recent decades, but at lower rates. This brings us to the other key question of this first phase. Did globalization lead to higher inequality within countries?

**Inequality within countries**

When studying inequality within countries, a lot depends on what dimension of inequality you are interested in analysing. Trade, in particular, affects inequality within countries through two primary channels: the worker channel (reflecting trade’s effects on the labour market) and the consumer channel (reflecting price effects). As discussed below, recent scholarship suggests that the worker channel has a larger effect on perceptions of inequality within countries than the consumer channel, so let us start with that.

Between the 1970s and 1990s, economists documented that the ‘skill premium’ (or the wage gap between skilled and unskilled workers) was increasing in the US and Europe. Moreover, starting in the 1990s, several economists argued that middle-class workers were seeing their wages decrease and jobs disappear relative to unskilled and high-skilled workers—a phenomenon called labour market polarization.

Economists concluded that trade did not play a large role in these trends. (This is despite the fact that the Heckscher-Ohlin model, economists’ workhorse model of international trade, predicts that increased global trade between high- and low-income countries would generate many of
Rather, the initial consensus was that the increasing skill premium and labour market polarization were driven largely by technological developments, with trade playing only a small role.

A new consensus emerged around the year 2000, however, as economists increasingly saw trade and globalization as playing an important role in labour markets. What caused this change? There are two views here. The first view is that most of the recent labour market inequality in high-income countries has been driven by China’s entry into the world trading system. This view notes that US imports from China surged between 2001 (the year China joined the WTO) and 2004, which coincided with a rapid increase in offshoring by US firms and the precipitous erosion of the US manufacturing sector—which lost approximately 2.9 million jobs during that period and another 2.5 million jobs during the Global Financial Crisis (2007–08). Of course, many other factors contributed to these trends, perhaps most importantly the development of technology, and automation in particular. Nonetheless, rigorous empirical analyses have credibly demonstrated that imports from China caused major disruptions in the US labour market. Economists Justin Pierce and Peter Schott labelled this phenomenon the ‘China shock’ (Pierce and Schott 2016).

The second view, which emerged more recently, is that trade’s effects on labour market inequality are also largely a story about spatial (or regional) inequality. This research finds that the effects of trade on a country’s labour markets can vary widely by region, based on the extent of a given region’s exposure to trade. For instance, a paper by Autor, Dorn, and Hanson (2013) analysed the effects of trade across US ‘commuting zones’ (CZs) between 2000 and 2007, finding that CZs that were more exposed to trade with China experienced sharper declines in manufacturing employment. Surprisingly, these results were largely driven by mobility frictions within the US—in contrast with prior economic thinking, which assumed that labour was highly mobile. The results were also persistent, lasting as long as a decade.

Importantly, this line of research has also analysed trade’s effects beyond the emergence of China as a trade superpower. For instance, a 2021 paper by Choi, Kuziemko, Washington, and Wright (2020) analysed the effects of the 1994 North American Free Trade Agreement (NAFTA), which preceded China’s sharp trade expansion in the early 2000s. Using a local labour market approach similar to that of Autor et al. (2013) highlighted above, the researchers identified US counties that were more vulnerable to increased import competition from Mexico—finding NAFTA’s impacts played a major role in the departure of less-educated white voters from the Democratic Party in those counties.

Similar work has also found evidence of trade’s effects on labour markets and regional inequality in developing countries, including those that were relatively unaffected by the China shock. For instance, a paper by Topalova (2010) measured the impact of trade liberalization on poverty and inequality following India’s sharp trade liberalization in 1991. She found that poverty reduction over the next decade was about 15 per cent slower in rural districts with industries that were more exposed to liberalization, compared to the rest of India. Much like Autor et al.’s work on CZs in the US, Topalova found that India’s extremely limited labour mobility across regions and industries exacerbated these adverse impacts. Likewise, a paper by Din-Carneiro and Kvak (2017) studied the effects of Brazil’s rapid trade liberalization in the 1990s. Compared to regions unaffected by the trade reforms, they found that formal employment and wages in the most exposed regions (i.e., manufacturing zones like São Paulo) sharply declined after liberalization. Notably these effects were very persistent and long-lasting—in the hardest-hit regions, employment and wages remained at significantly lower levels for nearly 20 years, and in many cases wages only recovered when workers left the formal sector and sought informal employment.

Of course, these are just relative effects and, especially for developing countries, openness to trade is associated with many positive economic
benefits as well. However, there is a clear link between trade and regional inequality within countries. Moreover, contrary to the traditional consensus that economies can rapidly adjust to negative shocks, these adverse effects often persist for a very long time. These studies also show that trade's effects are not confined to employment and earnings. For example, Autor et al. (2013) found that affected CZs also saw declining wages outside the manufacturing sector, steep drops in overall average household earnings, and rising overall transfer payments through federal and state income assistance programmes (e.g., unemployment insurance, welfare payments, and other benefits). In another Brazil study, Dux-Carneiro, Soares, and Ulyssea (2018) found that the regions most impacted by import competition saw increased (in relative terms) crime rates. In India, Edmonds, Topalova, and Pavcnik (2009) found that regions liberalized more experienced higher rates of child labour and less schooling (in relative terms), especially for girls.

What about the consumer channel? One of the most important insights about trade is that it benefits consumers in the form of lower prices and access to higher quality products in greater variety. This makes intuitive sense, is well supported by much theoretical work, and has long served as an economic and policy rationale for more free trade. But what does the data tell us?

There is a surprising shortage of direct evidence for trade’s effects on prices, but the evidence that does exist suggests that trade barriers do increase prices—with some important caveats around market power. In 2016, for instance, I co-authored a paper with Jan De Loecker, Amit Khandelwal, and Nina Pavcnik that analysed production data from Indian firms before and after India’s 1991 trade liberalization (De Loecker et al. 2016). We found that liberalization reduced firms’ marginal costs by an average of 31 per cent. While consumer prices also declined, they did so only by 18 per cent on average—much less than would be predicted by most trade models, which assume perfect competition and constant mark-ups. Instead, we found that firms captured most of this value for themselves. Several other studies have documented the rise in mark-ups and firm profits around the world in recent decades. Looking at the evolution of market power in the US between 1950–2016, for example, Loecker, Eeckhout, and Unger (2020) found that firm mark-ups rose steadily after 1980 from 21 per cent (above marginal cost) to 61 per cent in 2016, during which period the average profit rate increased from 1 per cent to 8 per cent. Conducting the same analysis for the global economy, De Loecker and Eeckhout (2018) found that the aggregate global mark-up increased from 1.15 in 1980 to around 1.6 in 2016. This phenomenon suggests the existence of yet another inequality that trade influences: the inequality between consumers and producers.

The other dimension to consider is whether these price effects benefit low-income consumers more than high-income consumers since globalization is perhaps the best method for rapidly increasing the availability of new and cheaper products to poor consumers. On this question, though, the evidence is even more mixed. For example, recent analysis of household data from Mexico by Atkin, Faber, and Gonzalez-Navarro (2018) found that the entry of foreign supermarkets caused large welfare gains for the average household. However, they found that the gains were higher for wealthy consumers perhaps because the foreign stores targeted wealthier demographics or because poor consumers lacked physical access to large retail stores designed for shoppers with cars. On the other hand, another recent paper by Jaravel and Sager (2019) found that US consumer prices fell substantially in recent decades due to increased trade with China—implying that, for every US job displaced, trade with China increased US consumer surplus by about USD 400,000, with price declines disproportionately benefitting low-income consumers. The aforementioned Born and Leveli (2021) work likewise found, using UK data, that the China shock led to large gains for the average British consumer, but that these gains were equally distributed among consumers and thus did not reduce consumer inequality—certainly not to the extent needed to compensate for the adverse impacts on labour markets.

In short, the evidence on how trade affects inequality within countries through the consumer channel is mixed. While it is clear that reducing trade barriers reduces prices for the average consumer, it is less clear that these effects benefit low-income consumers more than high-income consumers. One could expect trade to benefit poorer consumers more as the poor tend to spend a relatively larger share of their income on tradeable goods, but the data does not support this view entirely. In any event, such price effects are clearly less salient than trade’s effects on employment and wages. Much research and evidence make a compelling case that increased trade can have a large and persistent effect on regional inequality through the worker channel. After all, when people lose their jobs, this is a first order effect, whereas the price effects are often less easy to appreciate.

Regardless of what the data and evidence say, however, the negative sentiment among many households in the US and other high-income countries—that trade has increased regional inequality and that they have personally been hurt by globalization—contributed to events like Brexit and the US-China trade war in recent years. Interestingly, though, even these significant policy shifts did not have negative effects on global trade. For example, in our paper Fajgelbaum, Goldberg, Kennedy, Khandelwal, and Taglioni (2021), we found that the US-China trade war did not decrease overall global trade levels for the products most affected by the new tariffs. By the end of 2019, global trade in these products had actually increased. The main reason, we found, is that global exports of these products by “bystander” countries—i.e., countries other than the US and China—increased enough to offset the collapse of trade between the US and China. Some of the largest beneficiaries of these developments were South Korea, Thailand, Vietnam, Turkey, and Romania. Despite the heightened uncertainty, this economic anxiety for many (if not all) countries and undermined confidence in the global trading system, trade itself did not collapse. It was instead reoriented towards countries that took up the slack—not reversing globalization, but simply changing it.

Of course, all of this was before the COVID-19 pandemic, which was a major, unanticipated, and unique shock to the global economy. Which brings us to phase two.
3.2 Phase 2

In 2020, as COVID-19 spread across the world and hit the global economy, trade decreased sharply. But as noted in this study’s introduction, it rebounded and began growing again quickly. That said, the past three years have seen additional dramatic changes in the policy environment and public sentiment around trade and globalization, especially in the US, constituting a new phase in globalization’s ongoing crisis. This section assesses that second phase. Given that these developments occurred quite recently, the existing literature and available evidence are necessarily limited compared to phase one—though more details can be found in Goldberg and Reed (2023).

The second phase is marked by new arguments against trade that emerged during the pandemic, based on increasingly urgent concerns around ‘resilience’. Early in the pandemic, temporary shortages of various items—from paper towels and toilet paper to personal protective equipment (PPE) and ventilators—were attributed to the disruption and fragility of global supply chains. Such concerns intensified in late 2020 and early 2021 amid problems with shipping, delays at ports, and shortages of critical products (i.e., infant formula). These factors led to demands for greater supply chain resilience, namely through increased domestic production of key products, and for ‘reshoring’ economic activity.

These arguments can be summarized by the phrase ‘a chain is only as strong as its weakest link’. Of course, COVID-19 was not the first time that there were widespread concerns about the vulnerability of global supply chains. Following the 2011 earthquake in Japan, for instance, studies by Boehm, Flaass, and Pandalai-Nayar (2019) and Carvalho, Sato, and Tahbaz-Salehi (2021) showed how the local shock affected firms in other countries. More broadly, Barrot and Sauvagnat (2016) studied how natural disasters affect both companies nearby and those companies’ customers who are located far away from the shock itself. However, the shocks experienced during COVID-19 led to a far more pronounced and sustained criticism of global supply chains and globalization, leading to far more strenuous calls for efforts to strengthen resilience.

The evidence, however, strongly contradicts these criticisms and arguments. As noted, despite the supply chain challenges experienced during 2020–21, global trade grew fast following the pandemic and has remained remarkably robust in recent years. What, then, is meant by resilience? In his book, The Resilient Society, Markus Brunnermeier argues that being resilient means to ‘bend but not break’ in response to a shock (Brunnermeier 2021). He compares a reed with an oak tree: the reed, much more robust, but in a strong wind, it can break in half. The reed, by contrast, is not robust but is highly resilient. Even during the biggest storms, it bends but does not break.

How can such an illuminating comparison be operationalized in economics? Importantly, economists lack a well-defined benchmark for resilience, a concept that can mean different things to different people depending on the shock and on many other factors, including the level of aggregation (e.g., household, firm, industry, economy-wide); the nature and magnitude of the shock (e.g., idiosyncratic or systemic, sector-/country-specific or global, supply or demand); and the time horizon (e.g., short-, medium-, long-term). Consider, for example, a demand-side shock due to loss of domestic employment and income during a public health crisis mandated lockdown (as happened with COVID-19); in this case, concerns about supply chain diversification will matter little for resilience to the shock. Strengthening resilience during a supply-side shock, on the other hand, depends entirely on the locations of both the shock and the supply chain. ’Reshoring’ supply chains, for example, would only make an economy more resilient to shocks that originate from outside the country’s borders, while making the economy less resilient to domestic shocks.

Likewise, the level of aggregation is a relevant factor in evaluating resilience. For instance, the global economy as a whole was not much affected by the 2011 earthquake in Japan, but the shock caused severe disruptions in the global automobile industry that lasted for several months.

The COVID-19 pandemic was both a supply and a demand shock, representing perhaps the largest and most complex shock the global economy has faced since the Second World War. It caused
production and commerce to cease in most countries and led to lockdowns and a sharp rise in unemployment, but not at the same time in all countries. It affected nearly all sectors, but was particularly devastating for certain ones (e.g., hospitality services). It caused delays and shortages in a wide range of important product categories (e.g., automobiles, semiconductor chips), and resolving these delays and shortages was incredibly urgent for certain product categories (i.e., food and life-saving medical products).

How, then, should we judge the resilience of global supply chains during COVID-19? While most headlines in the media asserted the existence of severe and prolonged supply chain disruptions, we can look at the data to consider the evidence. As noted, the aggregate global trade data shows a drop in 2020, followed by a full recovery in 2021. Likewise, looking at trade as a share of global GDP, its rebound surpassed most economists’ expectations. In May 2022, for instance, the IMF noted that the value of global imports as a share of global GDP had recovered from the pandemic more quickly than all the IMF’s own projections and revised projections in January 2020, April 2020, and October 2021 (Mishra and Spilimbergo 2022). Goldberg and Reed (2023) go into much more detail on this topic. For example, our analysis found that while import volumes initially declined during the pandemic, firm-to-firm import relationships were not disrupted, which supported a swift recovery. In other words, COVID-19 certainly led to disruptions in global trade, but given the magnitude of the shock, the world economy proved remarkably resilient. Global trade bent, but it did not break.

Moreover, the data suggests that trade made important contributions to resilience during the pandemic. There are many examples, but the most striking is the historically rapid development and distribution of COVID-19 vaccines. Distribution of vaccines obviously relies on the global trade system, but so do the supply chains needed for their development. According to Pfizer CEO Albert Bourla, for example, producing the BioNTech/Pfizer COVID-19 vaccine required 280 different components produced by a large number of suppliers located across 19 different countries—reflecting an incredible case of international cooperation (Bourla 2021). Without trade, it’s difficult to imagine how much worse global health and economic outcomes would have been during the pandemic.

Another useful example of trade’s contributions to global resilience during the COVID-19 pandemic is PPE, namely face masks. Early in 2020, the shortage of face masks in the US and other countries was a major news story. Domestic face mask producers were unable to meet the massive surge in domestic demand, but since COVID-19 outbreaks were not synchronized across countries, imported face masks were able to alleviate the bottlenecks. Panel A of Figure 4 shows that global imports of face masks increased sharply in 2020, largely reflecting the major role played by Chinese and Korean face mask producers in meeting other countries’ demand spikes. Yet again, the prevailing narrative that supply chains failed the global economy during the pandemic is simply not accurate in this case—without imports, face mask shortages would have been much worse. The same is true about other products. Indeed, the pandemic saw a large reallocation of demand across products, as households increased their purchases of durables and health-related goods in anticipation of prolonged lockdowns. Panel B of Figure 4 shows that while global imports of products like penicillin, infant formula, and crude oil declined slightly between 2020-21, imports of electric car batteries and semiconductor chips increased considerably.

In short, contrary to widespread popular claims, the evidence to date provides no support for the view that global supply chains were not resilient during the pandemic—or that the global economy would have been more resilient if the world were less reliant on international trade. Nonetheless, pessimism about supply chains during the pandemic further undermined public sentiment around trade and globalization. It is possible that this negative rhetoric might have faded over time as the severity of COVID-19 gradually improved. In fact, the many positive examples of international cooperation during the pandemic might have even produced positive sentiments about trade and globalization. Of course, that did not happen. Instead, phase two further contributed to the notion that globalization has harmful economic effects—which prepared the ground for phase three.

Figure 4: Import resilience during COVID-19

NOTE: World imports of goods are identified with six-digit Harmonized System (HS) codes: face masks (HS0970), penicillin (HS0901), infant formula (HS0902), crude oil (HS2709), electric car batteries (HS8526), and semiconductor chips (HS8542). Nominal values from COMTRADE are converted to 2018 prices using import price indices from the Bureau of Labor Statistics. Some indices match nominal values exactly at the four-digit HS code: crude oil (EUPR0520), penicillin (EUPR0524), and semiconductor chips (EUPR0542). Where such matches are not available in 2018, goods are matched to price indices at higher levels of aggregation: face masks are matched to instruments and appliances used in medical, surgical, dental, or veterinary sciences (EUPR0318), electric car batteries are matched to vehicles other than railway or tramway rolling stock, and parts and accessories thereof (EUPR0977), and infant formula matched to food, beverages, and tobacco preparations (EUPR041V). Values for all goods are deflated by the US GDP deflator as in figure 1. Copyright: Brookings Institution; figure reproduced with permission.

in Taiwan, for instance, produces most of the world’s advanced-logic semiconductor chips—which, since the onset of Russia’s invasion of Ukraine, has prompted many in the US and other countries to ask: what would happen to technology supply chains, and global production in general, if China invaded Taiwan?

These developments have led to a sea change in the debate over trade and globalization, focused on the quest for a specific type of resilience—not to economic shocks or natural disasters, but to geopolitical turmoil in general. The national security argument, of course, reflects valid concerns that are difficult to refute. They are also not new. The Trump Administration, for instance, used national security as its rationale for imposing aluminium and steel tariffs, which were subsequently endorsed by the Biden Administration. In general, the effects of national security concerns on trade can be difficult to measure since researchers often have very little insight into confidential national security matters. But since Russia’s invasion these concerns have become much more explicit, and they have inspired more general demands to ‘decouple’ or ‘de-risk’ from any country deemed ‘unfriendly’. Beyond national security, of course, there are many other potential justifications for sourcing products from countries that you like, including countries’ labour standards, human rights records, and environmental standards. Broadly, a new term has entered the trade lexicon: ‘friendshoring’, or efforts to trade only with (or predominantly with) a country’s ‘friends’.

These shifts raise an important question: what share of global trade already occurs between friendly nations? In Goldberg and Reed (2023), for instance, we evaluated whether the US is already friendshoring by comparing its 2022 import partners to survey data of Americans’ beliefs about whether a given country is friendly, unfriendly, an ally, or a foe. We found that, for many US trading partners, more than 50 per cent of Americans believe the country is friendly (YouGov 2017; US Census Bureau 2022). There is, in fact, a positive and statistically significant association between a country’s friendliness and that country’s share of US imports. In this sense, China, the US’s largest trading partner, is an outlier with only 35 per cent of Americans believing that it is friendly.

While indicating that countries like the US are already friendshoring, the survey data also reveal the limits of friendship as an organizing principle for trade. Many Americans, for instance, express uncertainty over how to categorize certain countries, and in several cases the majority of respondents categorize strategically important US allies and trading partners as unfriendly (e.g., Indonesia, Malaysia, Vietnam). Likewise, there is a pro-European bias in the data, with countries like Japan ranking below Germany despite their nearly identical US import shares. This underscores that there is a strong cultural bias to country friendliness, and that friendliness is a volatile concept. Of the US friends just mentioned, for example, Japan and Germany were US enemies during the Second World War, and Vietnam was an enemy even more recently.

Even if most global trade does occur between friendly countries, the aggregate data can only assess all traded goods together—whereas recent concerns about national security and geopolitical resilience are primarily focused on specific critical products, as with Russian gas in Europe. The US, for example, has recently taken steps to proactively slow the efforts by unfriendly countries (namely China) to develop military capabilities by restricting trade in ‘dual-use goods’ which have both

3.3 Phase 3

The third phase of globalization’s crisis began in February 2022 with Russia’s invasion of Ukraine. This was the catalyst for another series of new developments and the emergence of one of the strongest arguments to date: that free trade and globalization pose risks for national security. Much like during COVID-19, these concerns centre on global supply chains, but the focus has shifted to supply chains’ exposure to geopolitical risk. The primary example was Europe’s dependence on a single country (Russia) for most of its natural gas, which threatened a major energy crisis. More broadly, it exposed the fragility of a global supply system based on hyper-specialization. A single company
A complete list of dual-use goods can be found in Singapore’s Strategic Goods (Control) Act, including aluminium and titanium ingots, machine tools, semiconductor chips, and machine tools.

NOTE: Countries are classified as unfriendly if less than 50% of Americans believe the country is a friend or ally. Imports are identified with six-digit Harmonized System (HS) codes: face masks (630790), penicillin (300410), infant formula (190110), crude oil (270900), electric car batteries (850760), and semiconductor chips (854231). Copyright: Brookings Institution; figure reproduced with permission.

SOURCE: YouGov (2017), US Census Bureau (2022); see Goldberg and Reed (2023).
gain advantage over competitors like China. Some of the most notable examples of this shift include the CHIPS and Science Act of 2022, which provides billions in government support to develop the domestic semiconductor industry; several discriminatory provisions in the Inflation Reduction Act that favour Mexico and Canada; and the US decision to distance itself from recent regional trade agreements, namely in Asia, in favour of more limited economic agreements that explicitly exclude mention of US market access.

US trade tactics have also become more aggressive, with increasing efforts to coerce other countries into adopting their approach. One of the most aggressive recent US moves, for example, was its sweeping export restrictions in the semiconductor sector. The restrictions target China, but also require third-country chip manufacturers to obtain US export licenses before supplying their own chips to China. (While most semiconductor chips are manufactured outside the US, nearly all are produced using US technology; as such, the restriction effectively covers the entire global semiconductor industry.) This approach exploits the very interconnectedness of the global economy; chip manufacturers must now choose between applying for a US license (with the risk of being denied and losing their customers in China) or foregoing US technology. By forcing other countries to go along with its policies, such US moves have been described as ‘weaponizing interdependence’ (Farrell and Newman 2019). Indeed, the restrictions were justified in the name of national security, given China’s fusion of its military and civilian sectors as well as the increasing significance of dual-use goods. While semiconductors are an integral component of various consumer products, they also have several national security applications (e.g., military aircraft, supercomputing, artificial intelligence).

These developments have important ramifications for the future of globalization. The US restrictions amount to a declaration of economic war on China; their stated goal is to prevent China from advancing technologically in sectors that are crucial to national security. Trade is the primary weapon used thus far, but it is not the only weapon. For example, the US recently barred its citizens from working with Chinese semiconductor chip producers without explicit government approval. Importantly, these policies are not market-driven or the result of lobbying from the US technology sector; they reflect top-down, government-led actions and policies that have found bipartisan support. If China retaliates, there is potential on both sides for broad, sweeping restrictions across several sectors—especially since dual-use goods can be interpreted very liberally, including clothing, medicines, and other consumer goods used by the military.

More broadly, an alternative interpretation of the US restrictions is that they aim to contain China’s economic development in general—if this is the case, they could augur the end of the globalism era as we know it, as well as the onset of another Cold War.

What are the likely consequences of these developments? Given how new these trends are—and the fact that deglobalization is not yet showing in the aggregate data, as described above—any assessment of their medium- or long-term implications is inevitably speculative. But considering the preliminary evidence alongside the economic literature, one can reflect on a range of possible effects. Goldberg and Reed (2023), for instance, consider the possible effects of increased geopolitical tension and deglobalization across several key outcomes: global trade, resilience, growth and productivity, inflation, and inequality (both within-country and global). We can summarize each of these consequences in turn.

To begin with, deglobalization will certainly affect global trade. The current trends are likely to usher in an entirely new international system that relies heavily on trade agreements brokered bilaterally, regionally, and among ‘friends’—though such changes are unlikely to dramatically effect aggregate trade levels, which are likely to remain extremely high by historical standards. The effects on resilience are much harder to predict since resilience cannot be judged without reference to specific shocks. As noted, the evidence suggests that international trade typically contributes to resilience, rather than compromises it—unless a sector is highly dependent on a single import source, as was the case with Europe’s energy dependence on Russia. The future of global economic growth and productivity is likewise highly uncertain in this changing landscape. However, given that many features of modern trade and globalization were important drivers of growth, productivity, and technological progress in recent decades, it is plausible that deglobalization will slow these processes down in the future and threaten the pace of innovation. Inflation is another highly complex topic, but deglobalization is likely to increase upward pressures on the price of labour and goods—given that one of the main presumed benefits of open trade is its effects on lowering prices. Reducing within-country inequality is one of the stated goals of recent US policy shifts; but inequality is an enormously complex phenomenon, and it is difficult to predict how easy it will be to achieve these goals in the current environment.

The effects on global inequality, by contrast, are perhaps easier to foresee. Large developing countries like India might find growth opportunities in a deglobalizing world, but smaller low-income countries (seeking growth, poverty reduction, and development) will likely face worse prospects if their access to foreign markets becomes constrained. For additional detail on these potential consequences, see Goldberg and Reed (2023).

The one consequence not considered above is the effects of deglobalization on peace. After all, a key motivation for free trade has traditionally been the belief that it promotes global peace and geopolitical stability. The recent economic literature is mixed on this topic, but there are good reasons to be alarmed. There are many parallels, for instance, between our current era and what economic historians call the ‘pre-belligerency’ period leading up to the Second World War. In the 1930s, there were sharp declines in multilateral trade in favour of trade within empires and other spheres of influence, and several observers have argued that these shifts exacerbated geopolitical tensions (De Bromhead, Fernhough, Lampe, and O’Rourke 2019). Of course, it is too early to tell what direction current trends will take, and one can only hope that such ominous speculations will never come to pass. Wars, whether hot or cold, never contribute to prosperity.
Conclusion

As of yet, there is no data clearly showing that globalization is in retreat. Yet recent years have seen profound changes in the policy environment, politics, and general attitudes about trade. The future is highly uncertain, but one thing is clear: the era of market-driven hyper-globalization is over. At the very least, a new form of globalization seems to be taking shape. In the worst case, we may be experiencing the beginning of a new Cold War where trade and other economic tools are used as weapons. Russia’s invasion of Ukraine appears to have been the primary catalyst of this particular shift, but as noted, supply-chain issues during the COVID-19 pandemic and earlier perceptions that trade was unfair, especially for low-skilled workers in advanced economies, were important contributors to this evolution.

Looking ahead, no matter what the future holds, analysing the ongoing crisis offers several lessons about globalization. First, regardless of what form globalization takes in the future, great care must be taken to address its potential effects on within-country inequality—a longstanding challenge still awaiting effective solutions. Second, more work is needed by researchers and policymakers to conceptualize resilience and specify the diverse nature of shocks for which resilience is needed. Third, while national security concerns are vital and cannot be ignored, the effects of ‘reshoring’ and ‘friendshoring’ on domestic and global economic outcomes, inequities, and resilience (in its many possible forms), must be taken seriously.
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