

## More trade

Free trade receives a much colder welcome in many quarters than it would have a few decades ago. In developed nations, particularly, political thinkers scattered across the political spectrum increasingly highlight the downsides of opening trade, emphasizing the losses for domestic and foreign workers alike. They're right that there are real costs that should be considered seriously, but that's only part of the picture. The peer-reviewed research on which this chapter is based conducts groundbreaking analysis that finds that even accounting for these costs, trade still offers a good deal for the most affected, rich countries. And for poorer nations, it's an incredible one.

### Real costs to trade

In the late 1990s and early 2000s, there was great enthusiasm globally to allow China into the World Trade Organization, with the expectation that it would become the factory for the world. Chinese workers would be enriched, and everyone else would benefit from cheaper products.

Indeed, based on some measures, this move did work: It drove incredible economies of scale and allowed consumers everywhere to buy cheap and often fairly well-made products from huge box stores, stretching our budgets further and improving our welfare. It is estimated that middle-class Americans, on average, gained [29% of their purchasing power](#) from foreign trade. In other words, the average middle-class American could buy nearly one-third more for each dollar because the USA traded. The effect is even more significant—62%—for the poorest tenth of American consumers.

However, this transition in the world economy came with actual costs. As manufacturing moved to cheaper countries, typically rich country workers lost jobs. As cheaper, overseas products increasingly conquered the world, less-competitive industries struggled, and workers suffered pay cuts. In places like the American Rust Belt, people struggled to find new work as entire towns and regions saw their main sources of employment close down and leave.

This dark side of freer trade should be faced up to, but it's not clear that the solution is to erect protectionist barriers. Take one [study for the USA](#), for instance, that found overall gains from trade but that these gains were unequally distributed. Some groups lost out to the point where it eroded 20% of the economic gains from trade. That's a substantial problem, but it doesn't necessarily call for reductions in trade. Instead, a more moderate fix would focus on providing support and job training to those hurt by freer trade. Even with a 20% cost for some groups, 80% of the benefits still stand.

In many other regions, outside of the rich world, the benefits compared to the costs are much larger, particularly for the poorer and more vulnerable across the world.

### Trade makes us richer

More trade through the past century has made everyone richer. In 1919, global exports made up [just over 10%](#) of the global GDP or about \$600 billion in 2015 US dollars. A century later, just before COVID hit, trade had grown 76-fold to \$48 trillion, or more than half of global GDP, as shown in Figure 13.1.

Over that time, trade significantly improved incomes across the world and lifted millions of people out of poverty in poorer nations. While many people object to expanded free trade today,

the fundamental principles that allowed for increased prosperity have not changed. Three basic facts about trade make it a good deal.



Source: <https://ourworldindata.org/grapher/world-trade-exports-constant-prices> and <https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS>

*Figure 13.1 Global trade 1920–2021*

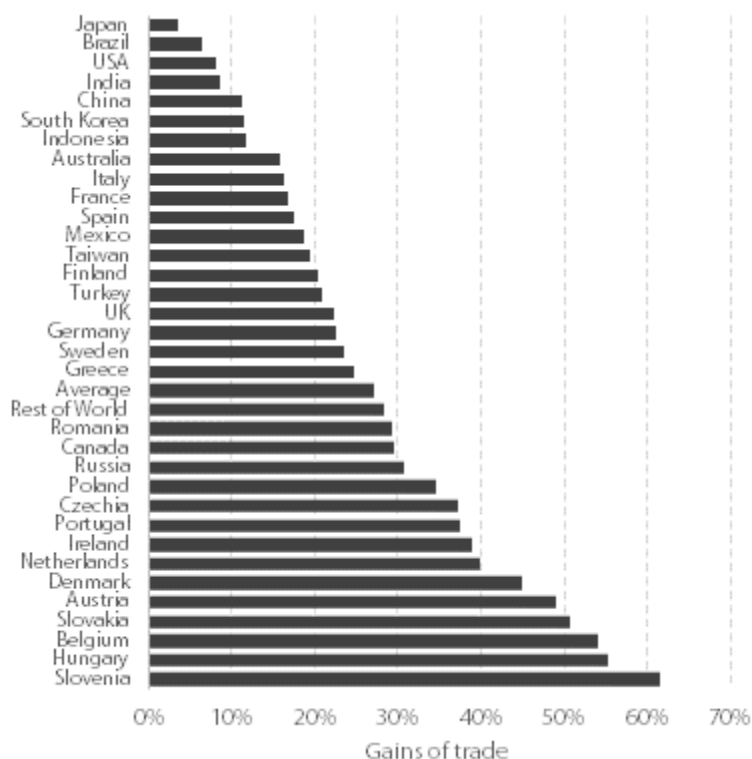
First, trade drives down prices. The more farmers that are competing for your business, the lower the price. As each tries to get you to put their apples in your grocery basket, they will seek to constantly underbid the other producers.

This effect is bolstered by the second fact: Trade allows more producers to tap into economies of scale, lowering costs by sharing fixed costs more widely. This is true for apple-producers but even more so for, say, software companies that primarily have up-front development costs but essentially zero costs for additional copies. If the software company is limited to selling in one small country, each buyer will pay a large fraction of the development costs. If the company can sell to the whole world, costs drop.

Third, more trade spurs companies to greater innovation and, therefore, better products. In a closed economy, a business with little competition has little motivation to improve. Even if the company begins with good intentions, no external push for innovation means the organization will more than likely ossify.

In an open economy, if consumers are dissatisfied, they have far more options. Companies have to keep innovating better and cheaper products or risk being beaten out by the competition. They also learn more ideas and have breakthroughs as they interact with businesses and thinkers from further afield. A recent study in [Egypt](#) found that randomly selected rug-manufacturing firms greatly improved in quality after receiving export orders. Simply having to compete in a larger market and learning from new competitors leads to better products.

This is why economic models consistently show that countries are much better off with trade. Figure 13.2 shows one of the most common estimates, the so-called gains of trade. This approach models how much richer a country becomes when it moves from total self-sufficiency to some sort of trade with other nations.



Source: <http://dx.doi.org/10.1016/B978-0-444-54314-1.00004-5>, using perfect competition.

*Figure 13.2 Gains of trade for different nations: Increases in real income, when moving the nation from total self-sufficiency to free trade.*

There is quite a bit of variation in how much a nation benefits based, in large part, on size and population. The smaller the nation and fewer its people, the more benefits from trade. So, for the USA, which is populous, large, and diverse, the benefit is perhaps an 8% boost to GDP. Things are very different for a country like Denmark. Being a small nation with relatively few and fairly homogenous inhabitants, cutting off trade would mean losing out on a 45% rise in GDP.

But regardless of size, trade comes with quantifiably impressive gains—on average, it grows a nation's GDP by 27%.

### **A particular help for the poor**

Critics will [contend](#), however, that just because trade boosts GDP, it doesn't necessarily mean it helps the world's poorest. They worry that economic growth only or mostly increases the incomes of the richest, leaving everyone else behind. Here again, most of the evidence seems to suggest trade really is beneficial, also for the poorest. Intuitively, this would make [sense](#): As trade increases the GDP, it also increases incomes, which lifts more people over the poverty threshold, thus reducing the fraction of the world that is poor.

We see this when looking at [China and India](#), for example. As China [reduced its tariffs](#) from an average of 32% in 1992 to 2.5% in 2020, the country has seen its trade and GDP soar. Over the same period, the average Chinese income rose [seven-fold](#), and the proportion of the population in extreme poverty [declined](#) from 28% to near zero today. India has experienced a similar, and only

somewhat less spectacular, trajectory. [Tariffs](#) have fallen from a stifling 56% in 1990 to a mere 6% in 2020. In that time, average incomes have risen almost [four-fold](#), and the portion of the population in extreme poverty [declined](#) from 22% to 1.8%.

This hasn't only been the pattern in these two countries. In a wide-ranging study of trade, Princeton economics Professor Douglas Irwin [finds](#) that rising trade and declining trade barriers have been a feature of virtually all rapid-growth developing countries' experiences in the past half-century, leading to falling poverty. For example, look to South Korea, Chile, and Vietnam.

These are still only examples, but systematic research also supports the finding that higher average GDP means rising incomes for the poorest. One important [study](#) shows that over the past four decades of economic growth, the bottom 20% and the bottom 40% of the income distribution generally rise in the same proportion as the mean economic growth in a country. As the whole economy grows, the poor become better off. Prosperity really is shared.

Moreover, a recent [study](#) actually demonstrates that more trade and fewer tariffs directly lead to less poverty. It finds that over the past decades, a seven percentage-point increase in trade will likely reduce poverty by more than one percentage point. Even more impressive, a reduction in tariffs of just 2.5 percentage points will reduce poverty by one percentage point. This suggests that China's increased trade alone was responsible for reducing its poverty by eight percentage points.

Thus, trade not only raises average incomes but also raises the lowest incomes and helps the world's poor. However, the question remains whether those upsides lead to a *net benefit*, given the clear downsides of trade.

## Trade SDGs held at a standstill

The Sustainable Development Goals mention more trade multiple times. Under its goal of strengthening global efforts toward sustainable development, the SDGs list [Target 17.10](#):

Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda.

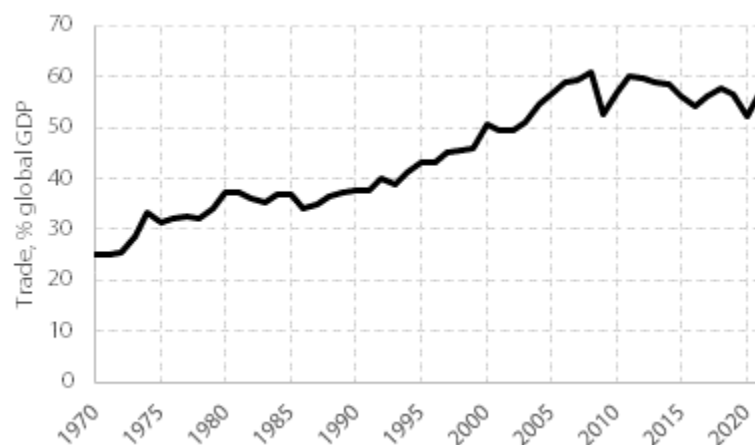
For food security, the SDG agenda also promises to prevent trade restrictions in agricultural markets. [Target 2.b](#) reads:

Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.

Unfortunately, there has been very little movement toward more multilateral trade freedom since the SDGs were signed. It's not an agenda that attracts media attention or celebrity campaigners, and it is often derided as hurting low- and middle-class workers in richer countries by giving their jobs to foreigners. Across the world, there is little political momentum to increase global trade.

Indeed, while Figure 13.1 shows that total global trade has kept increasing, that is at least partly due to the global economy's growth. As Figure 13.3 shows, if you remove the effect of growth

by looking at global trade as a percentage of the entire global economy, we see that its growth plateaued or even started decreasing slightly after the 2008 Great Financial Crisis.



Source: <https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS>

*Figure 13.3 Global trade in percent of global GDP 1970–2021.*

The concerns raised about free trade are fair ones that should be carefully considered by any policymaker or political thinker. Yet when this chapter’s peer-reviewed paper did just that and explored the benefit-cost ratio of increasing trade, the researchers found that it was still a good policy even for the rich world and a phenomenal policy for the poorer parts of the world.

### **Calculating costs and benefits**

The research paper for this chapter breaks new ground in its exploration of both costs and benefits of more trade, particularly how the costs and benefits vary across rich and poorer countries. It allows us to investigate how much benefits outweigh costs—if at all—and how they vary from high- to low-income countries.

Specifically, the authors explore what will happen if global trade increases by 5% in value. This could be achieved in a variety of ways depending on political preferences. It could happen through a decrease in trade constraints, a decrease in global tariffs, or a deepening of existing trade agreements. It could also be the consequence of an improvement in transportation technology, such as shipping becoming cheaper.

As noted above, the losses of trade can be significant. They essentially come in three forms. First, some workers suffer wage cuts as their employers—typically manufacturers—struggle to keep up with competition overseas. Second, people lose their jobs altogether as production moves to other nations that are less expensive in terms of production. Third, these effects can cause more people to leave the workforce altogether and give up on finding *any* new employment. It’s empirically hard to separate these three different impacts for workers, so when this chapter’s paper sums up the likely costs across all three areas, it likely inflates them.

Note that not every worker is at risk. Workers will be at risk if they work in industries that become import-exposed, such as rich world workers sewing T-shirts or welding ships—these things can likely be done more cheaply elsewhere. But workers are not at risk at all in many

other parts of the economy, such as lawyers and hairdressers, where imports are unlikely to threaten their jobs.

Based on an extensive review of empirical studies, the researchers conclude that losses depend on how many workers are exposed to imports and how much they are exposed. This is measured in additional imports per worker.

For every \$1000 of increased import per exposed worker, these workers will see their wages drop by 0.09%. Similarly, they will see more unemployment. Some will be unemployed and lose 100% of their wages, and many will stay on and lose nothing. For every \$1000 of imports per worker, the resulting unemployment will be equivalent to an average loss of 0.38%. Retirement, it turns out, leads to an average reduction of 0.31%. As a worst-case analysis, the researchers add all these effects on top of each other, and thus in total, expect that for each \$1000 of additional imports per exposed worker, the negative impacts are equivalent to a wage loss of 0.78%.

Let's put this in more concrete terms. Say that an import-exposed sector in a country that employs 1000 workers sees \$1 million of additional imports because of the 5% increase in trade. That means there will be an additional \$1000 of imports for each worker in the sector. If each worker makes \$40,000 per year, they will each lose on average 0.78% of their pay, or \$312 a year—either because they take a pay cut, go unemployed, or leave the workforce altogether.

Of course, if trade goes up by 5%, many sectors will be unaffected by additional imports. The economists use a standard trade model that identifies which imports affect which segments of workers.

The research finds that the total cost—counting all import-exposed workers identified across the entire world—comes to about \$121 billion. Importantly, 92% of these costs occur in rich countries. This is partly because the rich world has more established manufacturing sectors and partly because that's where wages are the highest.

It's also important to note that this is the cost in the first year of increased trade. Over time, these negative impacts will mitigate. As years go by, more displaced workers will find new employment where they regain some or most of their former wages. As they age, more and more will also retire. In both cases, wage losses dissipate. Many studies find that it typically takes one or two decades for the costs of increased trade to disappear. The researchers for this chapter's paper estimate that the negative impacts of a 5% increase in trade would last 15 years and would total almost \$1.3 trillion across the coming decades, as seen in Table 13.1.

The benefits from trade will also increase as time passes. In the first year, the world will gain a total of \$800 billion, 62% of which goes to the rich world. This is because most of the global economy is still based in locations with advanced economies. Increasing access to better and cheaper imported goods will have a bigger total dollar effect in better-off countries.

Over the following years, as the world grows richer, the gains will also slowly increase. Summed over the next half-century and discounted until today (making the far-off future gains count less), the total benefit is almost \$15 trillion.

Globally, this comes to a very respectable benefit-cost ratio of \$11 for each dollar of cost, but low- and lower-middle-income countries get the best deal. While the rich world takes about 62% of the benefits, it incurs more than 90% of the costs. That means the high-income countries still take home a healthy \$8.4 trillion, but with a high cost of more than 1 trillion dollars, leaving them with a BCR of just \$7.



Low- and lower-middle-income countries gain much less in total in absolute terms because their economies are much smaller, but their benefits are relatively much larger, and the costs are much lower, as can be seen in Table 13.1. The result is an astounding BCR of 95.

*Table 13.1 Costs and benefits from 5% more trade from 2023–2072.*

|                                    | Costs | Benefits | BCR |
|------------------------------------|-------|----------|-----|
| <b>Low and lower-middle Income</b> | 18    | 1,729    | 95  |
| <b>Upper-middle income</b>         | 101   | 4,515    | 45  |
| <b>High-income</b>                 | 1,155 | 8,397    | 7   |
| <b>World</b>                       | 1,274 | 14,641   | 11  |

*Note:* Future costs and benefits are discounted at 8%.

If anything, these benefit-cost estimates are likely too small. First, the researchers likely overestimate the costs of trade. Second, they mostly draw their estimates of the negative impact of trade from the recent resurgence of China. The authors did this because that's where most trade studies have been done, but the literature suggests that China may be somewhat of an outlier in terms of the costs it imposed on importing countries. Imports from other countries in Asia and those in other regions, such as Eastern Europe, caused much lower negative impacts from imports. Again, this indicates that this chapter's paper may have overestimated the costs of trade.

Third, the analysis may be too pessimistic in its assessment of costs. It's likely that workers in highly import-exposed industries might lose, say, 2% of their incomes from more trade. However, just like everyone else, they also experience gains from increased trade: Greater availability of cheaper and better products and the benefits from higher economic growth. These benefits might be several times higher than the costs, to the tune of perhaps an 8% higher income. Taking these two effects together, even the workers who incur costs from increased trade actually obtain a 6% rise in income. This won't be true for everyone. Some people will lose their jobs for a long time or even be pushed out of the workforce altogether. But this complexity adds another reason to think that the study for this chapter might overstate the costs of trade and understate the benefits.

## Conclusion

Economists have pointed out for a long time that more trade is good in the aggregate. However, in recent decades, the downsides of trade have been an increasing concern.

This study is the first to show that taking these costs into consideration, they are still outweighed by the benefits, even in rich countries. Yet it's easy to see why the free trade agenda has stalled. While wealthy countries do stand to gain, they benefit the least and carry the highest costs. This research points to the importance of considering who will be impacted by trade reforms and focusing far more support on the communities that will be most negatively affected.

Importantly, for the world's poorer half, the costs are absolutely dwarfed by the benefits, and these benefits, in terms of higher GDP, as we saw, are likely to be widely shared even with the poorest.

The data and texts in this manuscript are not finalized. Intended use is for finding references, links and sources for the finalized text of the book Best Things First.

Whatever way we achieve it, increasing trade is not just globally good, but it is especially good for low- and lower-middle-income countries. Open trade benefits every nation, but as a development policy, it's an incredible investment.

Despite its costs, more trade provides one of the greatest opportunities to improve human welfare and development over the second half of the SDGs.

The academic paper is entitled “Benefit-cost analysis of increased trade: An order-of-magnitude estimate of the benefit-cost ratio.” It is authored by

James Feyrer, Dartmouth

Vladimir Tyazhelnikov, University of Sydney

Benjamin Alemán Castilla, IPADE

Brad Wong, Copenhagen Consensus Center

Reviewers and advisors include

Thomas Sampson, London School of Economics, UK

Reshad Ahsan, University of Melbourne, Australia

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