

An Analysis of the Desirability of Cross-Border Barriers to Trade

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Two of the best examples of cross-border barriers to trade are relatively recent. The trade war between the United States and China has led to increased barriers to trade, especially when it comes to agriculture and both countries' huge tech industries. Another is the new trade relationship between the United Kingdom and the European Union. This paper discusses the types of cross-border barriers to trade that exist in the two aforementioned example cases, and how they affect the growth, income, and welfare of the countries involved. It also discusses the barriers to trade that exist in trade between developing countries, or a developing country and a developed country. It argues that the desirability of cross-border barriers to trade depends on the cases in question, but as will be illustrated in the aforementioned two cases, generally does more harm than good. The effectiveness of cross-border trade barriers in benefiting the national economy through growth or improvement of some economic health quantifier (such as deficits) is highly dependent on whether said country has suitable substitutes or necessary internal policies and market characteristics. Otherwise, it can lead to (depending on the case, again) a variety of market inefficiencies and economic losses in productivity, wages, prices, and so on.

The United States and China's trade war that started in 2018-19 has been quite politically charged, as is the case between most cases of cross-border trade. It was started by the Trump administration in response to China's "unfair trade practices." However, more specific reasons could include a reduction of the U.S.' bilateral trade deficit, and on a more political front, to combat the increasing influence of China's manufacturing and tech industries globally, the latter of which directly threatens the American tech industry in Silicon Valley. As a result of the trade war, "American tariffs on Chinese imports soared from 3% to 19%, while average Chinese tariffs on American imports went from 8% to 21%" (The Economist 2022). Those are quite major

increases – 6-fold and almost 3-fold respectively. The majority of the goods that were hit with tariffs were intermediate or capital goods, which resulted in an increase in prices of the final goods. In the short run, producers in the U.S. mostly absorbed upto 90% of the costs of the tariffs and resultant price increases, which meant reduced profits (and on a more macro scale, reduced GDP), although a few years later, in 2022, we can certainly see the much more pronounced effects of the tariffs in the form of rising inflation in the U.S., which has led to a decrease in real wages (we must keep in mind, though, that some of those increased prices are due to the increased energy prices caused, themselves a result of the current Russian invasion of Ukraine). On the Chinese side, this led to a 2.5% contraction in GDP per capita in export-intensive sectors and areas. Being an export-intensive economy, it will suffer in billions of dollars in lost revenue as U.S. importers and final goods manufacturers substitute Chinese goods for ones produced elsewhere such as Vietnam and Taiwan. Some estimates pointed towards a loss of \$15 billion in Chinese export revenue for 2018 (Jain 2018).

It is true that the American bilateral trade deficit with China reduced, from \$418 billion in 2018 to \$353 billion in 2021, however the overall trade deficit in 2021 was still the highest on record (US Census Bureau 2021). Therefore, the political motivations for the trade barriers were satisfied, but the economic ones were not. A reduction in a bilateral trade deficit means little when the overall deficit increases. If a country must introduce tariff or non-tariff barriers in bilateral trade, it should either have reasonable alternative trading partners for the products that are taxed highest, so that the country as a whole is left in a better position economically, and the citizens of the country see price reductions, or at the very least, constant prices. If the goods being imported from China were replaced with countries that were able to produce them at a

higher efficiency and comparative advantage (assuming that the goods are perfect substitutes), it would have been a much more sound decision to impose tariffs.

The dream of getting manufacturing back to America, as Trump desired, would only be fulfilled if protectionism is executed well and in tandem with other policies that aid in the growth of manufacturing. As stated earlier, reductions or price increases in the import of raw materials or intermediate goods will have a clear negative impact on domestic production, which will lead to increase in cost of production and (at least initially) a decrease in supply, leading to much higher costs overall (assuming inelastic demand). The Great Lakes region of the U.S., where manufacturing was supposed to experience a boost, suffered from major factory closures as China grew to become the world's manufacturing hub in the late 20th and early 21st century (Hanson 2020). The lack of physical capital further reduced the possibility of an immediately noticeable increase in manufacturing jobs and output, since the needs of today and the future would require new physical capital to be built, and new human capital too, in the form of training or updated vocational education. Obviously the U.S. cannot substitute domestically produced clothes for Chinese ones, since it possesses neither the economies of scale nor cheap labor. This is due to the fact that advances in transport and communication have allowed a much more global view of supply chains (and of non-physical products, cross-border transfers are even easier) so countries are able to buy goods and services at the lowest possible cost from anywhere. Thus, in addition to pro-growth policies that work in tandem with protectionism, a country also needs the necessary comparative advantage and specialization to make the trade barriers work positively for itself, and neither of those prerequisites can be implemented as easily as tariffs can be.

A great case of no cross-border barriers to trade is the European Union, which allows the free movement of goods and services, money and capital, and people (in the European Single Market, Eurozone, and Schengen area respectively). We will discuss the benefits of such a politico-economic arrangement with a focus on UK-EU trade before and after Brexit. While many closely-trading partner countries have comprehensive and mutually beneficial free trade agreements (FTAs) that eliminate tariffs on a large number and category of imports, many non-tariff barriers (NTBs) often remain. This is where the European single market wins, because the lack of NTBs significantly reduces the non-tariff costs of cross-border trade. The EU further has FTAs with 55 countries around the world.

The cost of Brexit, as predicted by Boulanger and Philippidis (in 2015, interestingly, before nationwide referendum) can be calculated as the difference between the gains from the regulatory, legal, and fiscal obligations of the EU and the costs of reduced access to the single market (the UK was never part of the Eurozone or Schengen area, so they are irrelevant in the loss-of-access discussion). Using a computable general equilibrium (CGE) methodology, they conclude that under a UK-EU FTA,

the UK could, at best, make a small real income gain, although this quickly disappears under conditions of higher assumed trade facilitation costs arising from the loss of single market access, with the UK recording an upper bound loss of 0.67% of UK per capita real income (Boulanger and Philippidis 2015).

It is hardly surprising that the freedom from common EU regulations across products and industries would lead to inefficiencies as manufacturers either adapt products and packaging to

work in both markets or, in particularly bad cases, create different products and/or packaging for each market which would lead to both increased production costs and reduced cross-border transfer of goods. We can see that despite a FTA (which currently does not impose any duties on cross-border transfer of goods), the resultant NTBs that arise from the very freedom that the UK desired is causing, and will cause, a decrease in trade with one of its biggest trading partners. Delays in customs clearance and extra paperwork has led EU businesses to reduce exports to the UK or increase costs. Therefore, time and again we see how NTBs introduce operational inefficiencies that ultimately lead to increased costs both for the producers and consumers. This affects both the people in the UK and in the EU, however it would be one country's goods competing with those of 27 others, so the UK's exports would suffer more as the EU finds alternatives within. Productivity gains have stagnated as the loss of EU workers has led to an employment gap in key enterprises such as the National Health Service (NHS), as the mismatch of skills does not allow easy re-allocation of the labor force in sectors that need them. This, and increasing inflation have led to a decline in real wages across the UK. In the EU, however, it has had the opposite effect, and as Dan Ben-David (1993) describes his analysis of trade liberalization, has led to convergence of higher levels of GDP per capita (of course, this does not take into account the effects of current energy price shocks and other externalities).

The quantitative model developed by Rodriguez and Rodrik (2000) echoes the same ideas laid out above. Lack of necessary infrastructure and labor at competitive costs and low productivity mean that NTBs that increase the effective cost of goods (notwithstanding whether those costs are directly reflected in consumer prices in the short-to-mid run) do not lead to major changes in domestic supply and instead lead to welfare loss and a negative effect on growth. This

similarly affects any exports of goods, especially when they use imported intermediate goods. Another important factor to consider is the exchange rate, which also affects the domestic producers' cost of production and what price they would be willing to sell it for in foreign markets, especially those with a lower overall price index or weaker exchange rate. Apart from its lower labor costs and specialization, this is something that sets China apart, for example, due to its weak currency, the renminbi (RMB). A country's exchange rate and policies relating to it, such as the monetary policy of its central bank, can have a sizable say in whether barriers to trade, especially in the manufacturing or physical goods sectors, work in its favor or not.

There are a number of other domestic factors that we have not discussed as they are outside the scope of this paper, such as black market premiums and a plethora of other NTBs. Nevertheless, the analysis of these two recent cases of increased barriers to trade has shown that they do not fare well for both parties (though it may hurt one party more than the other either as a whole or in particular sectors) unless there are significant domestic incentives and policies to make reduced bilateral access beneficial. It should be noted that a completely closed off economy (i.e., no international trade occurs between the country and any other country), the effects discussed above can certainly be exacerbated. Even centuries ago when long-haul transportation was slow and global integration was low, countries managed to trade since it benefitted all. Therefore, considering those times to the present as the long-haul, one cannot help but wonder if cross-border barriers were indeed largely beneficial, the equilibrium and correctional effects that we see so often in economics must have led to collective action in reducing trade. However, there were no such actions then and we see no such actions now. The close relationship between politics and economics often manipulates the state of the latter, but

from a purely economic perspective, there do not seem to be widely applicable reasons for cross-border barriers to trade.

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