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NOTE FROM THE GUEST EDITOR

It has been two years since the trade tensions erupted and not only captured policymakers' but also the research community's attention. Research has quickly zoomed in on understanding trade war rhetoric, tariff implementation, and economic impacts. The first article in the December 2019 issue sheds light on the consequences of the recent trade barriers.

Yet developments in other parts of the world have charted very different trade trajectories, revealing various bright spots in the midst of trade war paralysis elsewhere. IMF researchers have tracked these paths and posed highly interesting research questions. They have led to Africa, where machine learning and threshold models are employed to understand the existing barriers to fully reaping the benefits offered by a newly created free trade area; to Asia, where data on Vietnamese companies reveal insights on building networks for local producers to export globally—providing lessons on export intermediaries that can be applied worldwide; and finally to cargo vessels that travel across the world and turn into big data suppliers for constructing a global trade index.

This journey into trade research will not be the last, as researchers continue to follow the various trajectories.

~CHRISTINA KOLERUS

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TARIFFS IN A GLOBALIZED WORLD:

A GAMBLE WHERE EVERYBODY LOSES

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Economists are renowned for disagreeing about many things—so much so that economics is jokingly said to be the only field in which two people can get a Nobel Prize for saying the exact opposite thing. But if there is one question economists of almost all stripes would answer in a similar way, it is whether trade barriers are a good idea.

Adam Smith argued that countries should export the goods they produce with a relative advantage, hence at a lower cost, to achieve mutual benefits through free trade. David Ricardo further developed Smith's vision. He pointed out that the basis of trade between two countries is the comparative advantage in productivity. As long as productivity in two countries is different, mutual trade will make them better-off. And barriers limiting such trade hurt both parties.

Policymakers may instead treat international trade as a zero-sum game. If so, they may be tempted to embrace protectionist policies and impose tariffs to support certain domestic industries or extract gains from beggar-thy-neighbor policies. Yet, particularly in a world as globalized as ours, tariffs jeopardize global production chains, generate unintended fluctuations in exchange rates, and can lead to retaliation by other countries. Both the short- and long-term impact of tariffs can therefore, be detrimental.

For example, when a country imposes tariffs on electronic goods imports, domestic laptop prices increase. On one hand, imported laptops cost more because of the higher tariffs. On the other hand, domestically assembled laptops are more expensive because of tariffs imposed on the electronic components (such as chips, screens, and keyboards). No matter which one you choose, your wallet will be hurt. What's worse is that the increase in the cost of production could reduce not only domestic sales but also the volume of sales in international markets.

THAT'S THE THEORY. SO WHAT IS THE IMPACT OF THE CURRENT INCREASES IN TARIFFS?

Recent IMF research compares results from three state-of-the-art models to evaluate the macroeconomic effects of tariffs on China, the United States, and third countries. The models simulate a hypothetical and illustrative scenario in which tariffs on all US-China trade increase by 25 percentage points. Results show that both the United States and China suffer the largest losses. This result is broadly robust across models, all of which feature a general equilibrium framework but different ingredients in terms of rigidities and sectoral production details. For example, US-China trade volume decreases 25 to 30 percent in the short term (according to the IMF's Global Integrated Monetary and Fiscal [GIMF] model) and 30 to 70 percent over the long term (based on GIMF and two trade-focused models).

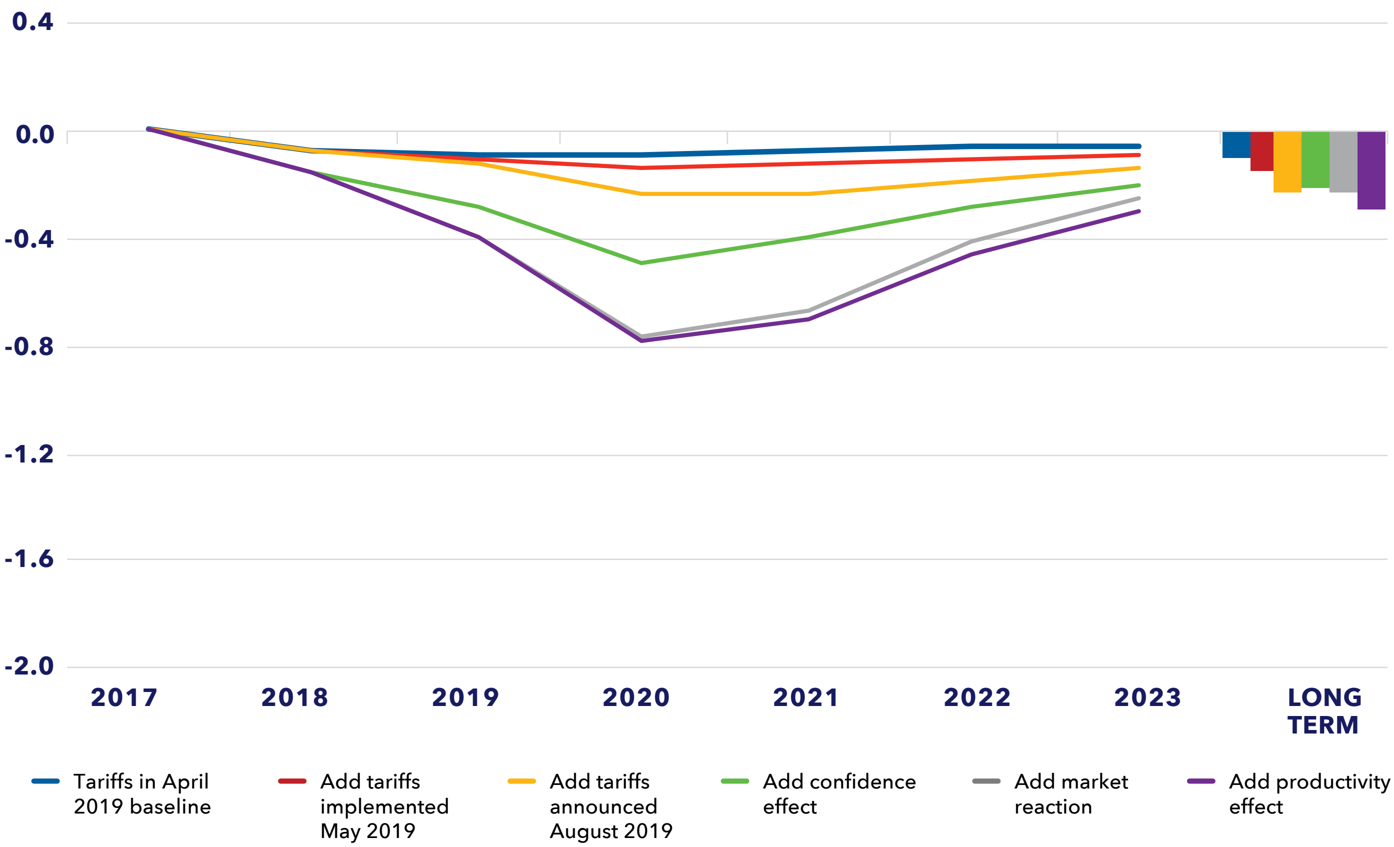
In the GIMF model—a dynamic stochastic general equilibrium model—high rigidity in terms of the capacity to adjust import volumes slows quantity and price adjustments and leads to a strong short-term negative impact. Invoicing imports in the currency of destination markets could also mean rigidity and amplify negative shocks. The two trade models, which emphasize sectoral production, tend to deliver more negative results in the long run as factors of production are reallocated inefficiently and trade volume is disrupted by higher tariffs. This effect is particularly pronounced in the model that features increasing returns to scale as a result of firms' entry and exit costs. Independent of the particular ingredients of different frameworks, however, higher tariffs would hurt global growth in the short and medium term.

Simulations using a refined version of the IMF's GIMF model (in the October 2019 *World Economic Outlook*) also stress trade tensions' harm to global growth. The tariffs imposed between China and the United States in 2018 and 2019 may reduce—through confidence effects, market reaction, and productivity effects—both countries' GDP by up to 2 and 0.6 percent, respectively, and global GDP by up to 0.8 percent in 2020 (see figure).

Recent empirical work at the IMF complements the models and provides evidence that US-China trade tensions have negatively affected consumers as well as many producers in both countries. The tariffs have reduced trade between the United States and China, but the bilateral trade deficit remains broadly unchanged. While the impact on global growth is relatively modest at this time, the latest escalation could make a significant dent in business and financial market sentiment, disrupt global supply chains, and jeopardize the projected recovery in global growth in 2019.

Economists are not always right and, indeed, have gotten it wrong in the past. The evidence so far, however, suggests that the one thing many economists agree on may actually be happening.

World Real GDP
(Percent deviation from control)



Source: IMF staff estimates.