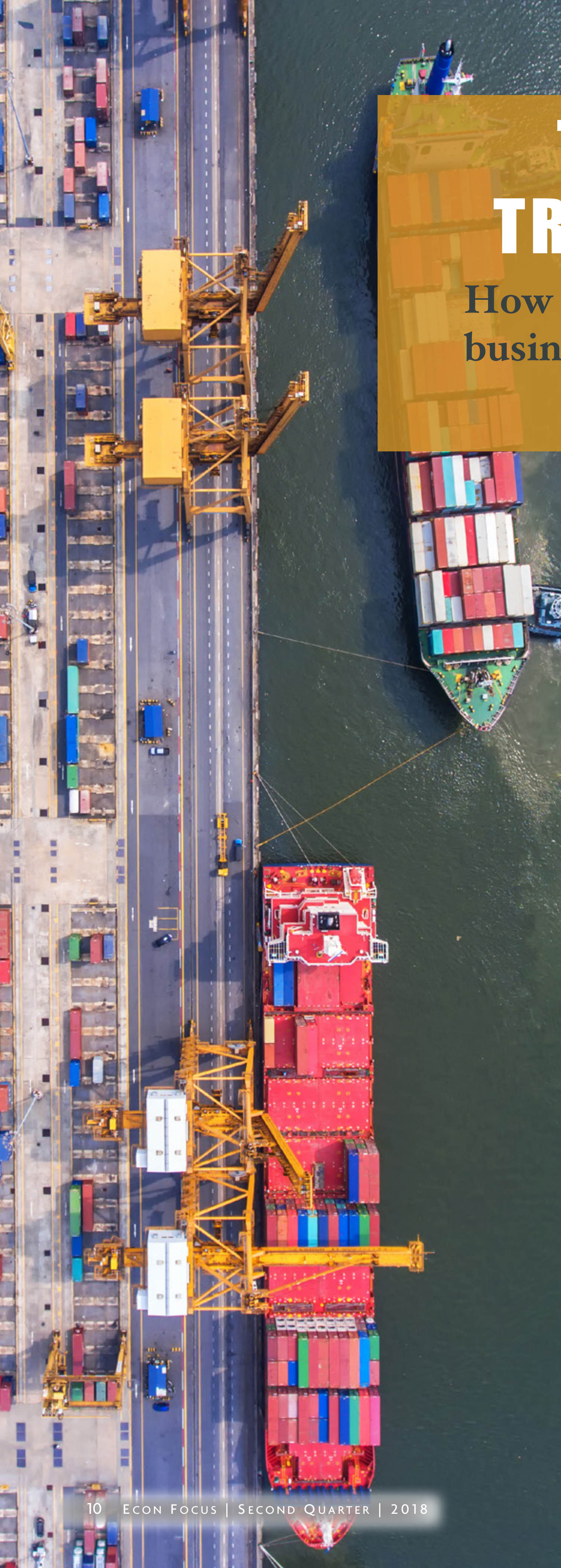


TARIFFS and TRADE DISPUTES

How are recent moves affecting businesses in the Fifth District?

By Tim Sablik

On July 6, 2018, a U.S. cargo ship raced across the Pacific toward the port of Dalian in China. Its mission: make landfall and unload its cargo of soybeans before a 25 percent Chinese tariff went into effect at noon. Unfortunately for the U.S. shippers and the Chinese buyers, the boat arrived a few hours too late.

China's tariffs on nearly $34 billion in U.S. exports — including food products, such as soybeans and pork, and other products, such as cars — were a response to tariffs imposed by the United States on a similar amount of Chinese exports on manufacturing inputs and capital equipment. In late August, the United States raised tariffs on an additional $16 billion of Chinese exports, and China responded in kind.

President Donald Trump has made trade policy a focus of his administration. His first major action this year came in March when he implemented a 25 percent tariff on steel and a 10 percent tariff on aluminum. They are the first significant tariffs on steel imports since President George W. Bush raised tariffs on steel in 2002, later removing them in 2003. In recommending the tariffs to President Trump, the Commerce Department said that the measure was intended to increase domestic steel and aluminum production. Initially, key U.S. trading partners such as Canada, Mexico, and the European Union (EU) were exempt. But the Trump administration ended the exemptions in June, prompting Canada, Mexico, and the EU to respond with tariffs of their own.

This flurry of tariff activity is significant in the modern era. Recent decades have seen most developed nations move toward opening up their markets to foreign trade. According to the World Bank, the weighted average of U.S. tariffs across all imports in 2016 was just 1.6 percent, similar to that of the EU. What is behind the new rise of trade barriers, and how will they affect businesses in the Fifth District?

The Trade Debate

For most of the postwar era, trade grew faster than world GDP. After World War II, Allied leaders were interested in getting the world economy back on track and avoiding the isolation and protectionism that many blamed for the Great Depression. Under the General Agreement on Tariffs and Trade, which later became the World Trade Organization (WTO), member nations agreed to work together to reduce tariffs and other trade barriers. World trade accelerated rapidly in the 1990s and early 2000s with the dissolution of the Soviet Union and the entry of China into the WTO. (See "Goodbye, Globalization?" *Econ Focus*, Fourth Quarter 2015.)

Most economists view this expansion of trade as a good thing. For example, 85 percent of economists responding to a 2012 survey by the University of Chicago's Initiative on Global Markets (IGM) Forum agreed that freer trade allows firms to improve production efficiency and offers consumers better choices. While some industries are harmed by exposure to foreign competition, economists generally agree that in the long run, the overall gains from trade are much larger than the losses for some industries.

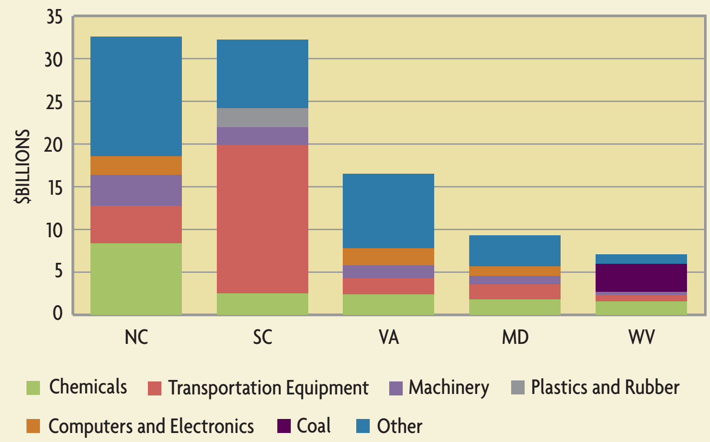
That said, some economists have recently noted that the costs of open trade may be larger and more persistent for affected industries and workers than previously thought. Traditional economic models have assumed that workers in harmed industries could easily transition to businesses that benefit from trade. But in a series of research papers, David Autor of the Massachusetts Institute of Technology, David Dorn of the University of Zurich, and Gordon Hanson of the University of California, San Diego found that this transition process may not work as smoothly as economists hypothesized.

Autor, Dorn, and Hanson found that China's entry into world markets beginning in the 1990s significantly hurt manufacturing workers in southern states, such as North Carolina, Tennessee, and Mississippi. Those regions experienced higher unemployment for a decade after the initial China trade shock, and some workers in impacted industries experienced lower annual earnings relative to workers in regions that were less exposed to trade with China.

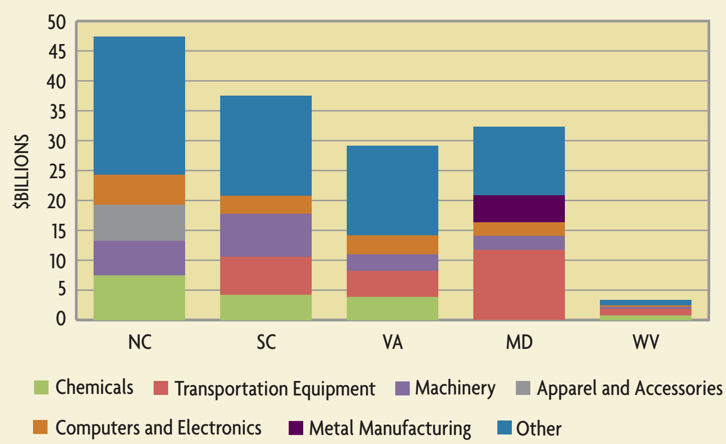
The Trump administration has also emphasized the costs of unrestricted trade. To impose tariffs on China, President Trump invoked the Trade Act of 1974, which empowers the president to take action in response to trade practices by foreign governments that either violate international agreements or are "unjustified" or "unreasonable." The Trump administration has alleged that China has used improper practices to obtain intellectual property from U.S. companies. President Trump has also voiced a desire to reduce the U.S. trade deficit, which he attributes to unfair practices on the part of U.S. trading partners. In imposing the steel and aluminum tariffs, the president cited national security concerns and the need to protect America's metal industry and its workers.

But tariffs entail costs as well. Tariffs imposed by the United States on other countries raise the cost of imports. They may also raise the price of the same goods produced domestically since U.S. producers face less competition from foreign producers subject to the tariffs. Tariffs imposed by other nations on the United States raise the costs domestic exporters face in those markets. What costs will recent tariffs impose on importers and exporters in the Fifth District?

What We Export (2017)



What We Import (2017)



SOURCE: U.S. Census Bureau

Fifth District Manufacturing

South Carolina is one of the biggest exporters in the Fifth District, shipping around $32 billion in goods in 2017, roughly 15 percent of the state's GDP. A significant portion of those exports came from South Carolina's growing manufacturing sector, specifically transportation manufacturing. South Carolina's largest category of exports is transportation equipment, which includes cars, car parts, airplanes, and airplane materials. BMW's plant in Spartanburg, S.C., employs 10,000 people and was the largest U.S. automobile exporter by value in 2017. Workers at Boeing's facility in North Charleston, S.C., assemble and ship the firm's new 787 Dreamliners. All told, transportation equipment accounted for more than half of the value of the state's exports in 2017. (See charts.)

Those industries stand to be directly hit by China's recently adopted tariffs. China was South Carolina's top trading partner for exports in 2017; in July, it raised its tariffs on U.S. vehicles to 40 percent, after previously pledging to reduce its tariffs on all imported cars from 25 percent to 15 percent. All told, the U.S. Chamber of Commerce estimates that China's recent tariffs could affect $2.8 billion of South Carolina's exports. On the import side, U.S. steel and aluminum tariffs may squeeze auto and aerospace manufacturers in the state by increasing the cost of inputs. South Carolina's top two import commodities in 2017 were machinery and transportation equipment.

So far, however, the impact has been minimal, says Scott Baier of Clemson University. Baier has studied trade issues and spoken with local business owners about the effects of the recent tariffs. "Businesses are more concerned about things that may be coming down the road," he says.

In May, the Commerce Department initiated an investigation into imposing tariffs on imported automobiles and parts. Car tariffs have been a point of contention for trade negotiations with the EU, which imposes a 10 percent tariff on U.S. automobiles, compared to the 2.5 percent tariff the United States imposes on European cars. Raising car tariffs would certainly affect South Carolina's auto industry.

West Virginia's largest export is coal, which is on the list of products targeted by China's August tariffs. The state also exported $157 million in aluminum products in 2017. Domestically, metal manufacturers stand to benefit from the aluminum tariffs on foreign competitors, but exporters also face increased costs from retaliatory tariffs on metal. According to the U.S. Chamber of Commerce, West Virginia exports steel and aluminum products to Canada, Mexico, China, and the EU, all of which have imposed tariffs on metals in response to the U.S. tariffs. All told, the U.S. Chamber of Commerce estimates that foreign tariffs may affect $178 million in exports from West Virginia.

The steel and aluminum tariffs also matter for Maryland manufacturers. As a share of total imports, Maryland is the fourth-largest importer of steel and aluminum in the country, according to the Brookings Institution. The tariffs have already begun to impact the prices and supply chains of Maryland firms that rely on those inputs, according to a report from the state Chamber of Commerce. Additionally, the state imported about $11 billion worth of cars in 2017, which would be exposed to any future escalation of auto tariffs.

Farming in the District

Like its southern neighbor, North Carolina is also home to several aerospace manufacturers that exported nearly $3 billion in products and parts combined in 2017. But North Carolina's biggest exposure to tariffs so far is in the agricultural sector. The tariffs China imposed in July included a variety of U.S. agricultural exports, such as pork, soybeans, and tobacco. North Carolina is responsible for about one-tenth of all pork produced in the United States, making it the second-largest pork-producing state in the country.

Andy Curliss, CEO of the North Carolina Pork Council, says that pork exports to China have fallen since April, but producers have shifted some of those exports to South Korea. Mexico also imposed a 20 percent tariff on U.S. pork, which may further disrupt exports.

"It remains to be seen how this will all shake out economically," Curliss says.

Agriculture is also the sector of Virginia trade most directly impacted by the current tariffs. It exported nearly $600 million in soybeans in 2017, making it the state's leading agricultural export and third most valuable exported commodity overall. More than half of those soybeans went to China, making it the largest importer of Virginia's agricultural products. With so much of their sales tied to China, Virginia farmers are approaching the coming harvest season with concern.

"Already this year our exports of soybeans to China have decreased by 50 percent," says Stephanie Agee, director of marketing and development for the Virginia Department of Agriculture and Consumer Services.

In the short run, changes in prices for goods subject to tariffs, such as cars or soybeans, are likely to be the most visible effects of the tariffs. Global soybean prices fell to their lowest in years on the news of the Chinese tariffs, and car manufacturers such as BMW have stated that they will raise the price of cars exported to China to pass along the cost of the country's higher auto tariffs. But in the modern global economy, tariffs may disrupt more than just the prices of the goods they target.

Ripple Effects

Econ 101 students learn that trade allows countries to specialize in goods that they have a comparative advantage in producing. Each country can then trade with other nations for the goods they lack. This simplified model of trade imagines that all goods are wholly produced by domestic firms and then traded in their final form.

In reality, modern multinational firms divide their production processes across many countries based on their comparative advantages, and final goods may be assembled from parts that cross foreign borders many times. These global supply chains have been a big driver of world trade and economic growth. According to a June 2018 article in the *Journal of Economic Literature*, only a small subset of firms export or import, but these firms are larger and more productive than those that stick to purely domestic production. Moreover, the largest and most productive firms export and import a lot, accounting for a substantial share of aggregate trade volume.

"Because of the reliance on global supply chains and interfirm trade now, tariffs are more likely to be disruptive than in the past," says Clemson's Baier. He is hardly the only economist who thinks so. In a recent IGM Forum survey, 77 percent of responding economists agreed that import tariffs are likely to be "substantially more costly" than they would have been a quarter of a century ago because of the importance of global supply chains.

Complex global supply chains also mean that countries targeted by tariffs are unlikely to be the only ones who feel pain. For example, Alonso de Gortari of Princeton University found in a 2017 paper that nearly 75 percent of the foreign inputs used in Mexican vehicles exported to the United States were produced in America. Using this information, de Gortari estimated that when Mexico exports cars to the United States, an average of 38 percent of the value from those cars is actually domestic production returning home. This share is much larger than economists previously thought. If supply chains for other goods follow a similar pattern, it suggests that tariffs on foreign imports may substantially harm domestic firms as well.

Mary Lovely of Syracuse University and Yang Liang of San Diego State University explored whether this might be true of the recent tariffs in a May 2018 article for the Peterson Institute for International Economics. They found that many of the goods targeted by U.S. tariffs on China are produced by multinational firms operating in China rather than domestic Chinese companies. Moreover, many of these products are purchased by American firms as inputs into production processes here at home. Raising the cost of those inputs through tariffs would likely harm American production. In theory, firms can rearrange their supply chains to avoid the added costs of tariffs, perhaps choosing to obtain more inputs from American producers. But this may not be so straightforward in practice.

"It's costly for firms to change their supply chain," says Gary Hufbauer, a nonresident senior fellow at the Peterson Institute for International Economics. "A lot of their supplies have gone through a lengthy regulatory approval process, and it's not easy for firms to find an alternative supplier who meets the same level of quality and specifications."

For example, in late July the EU agreed to buy more U.S. soybeans, which could partially make up for lost sales to China. But Agee of the Virginia Department of Agriculture and Consumer Services says that Europe has different standards for agricultural products than China, which may limit the ability of farmers to shift products originally grown for the Chinese market to Europe unless those differences are addressed.

Firms also face uncertainty about whether to seek new suppliers for imports and new markets for exports or whether to ride out the higher cost of tariffs in the hope that they prove to be temporary.

Uncertain Future

In the July 2018 Fed Beige Book, which summarizes business conditions in each of the 12 Federal Reserve districts, all Reserve Banks reported that businesses were feeling direct effects or facing some uncertainty related to changes in trade policy — compared to three a year ago. Should firms decide to act and seek new suppliers or new exports markets because of tariffs, those decisions could easily outlast the policies that prompted them.

"If China establishes other sources for soybeans that can meet their needs, why would they come back to the United States?" says Agee.

In the simple case, trade disagreements could merely reshuffle trading partners for a while. In the extreme case, an escalating trade war between many countries could call the whole global supply chain model into question.

"We haven't seen very large global tariffs since the 1930s," says Hufbauer. "If that happens, that's going to give a lot of multinational firms pause as they try to figure out where the world economy is headed and how they fit into it. It would be a real shakeup to the order we know."

So far, most firms appear to be taking a wait-and-see approach. Only about 20 percent of national businesses responding to a recent survey by the Atlanta Fed said they were reassessing their capital expenditure plans as a result of the tariffs. The share was slightly higher for manufacturers — about 30 percent — but the authors of the study note that "tariff worries have had only a small negative effect on U.S. business investments to date."

And while most businesses have focused on the potential downside from the tariffs, others have highlighted the potential upside. In a June 2018 survey, the Richmond Fed asked businesses in the Fifth District what they thought the effect of the steel and aluminum tariffs would be on the overall economy. About half of the respondents expected the effect would be negative, but more than a quarter of business owners thought the tariffs could ultimately be positive if they improved domestic production or led to better trade deals in the future.

"There is the promise of more talks with Europe aimed at achieving zero industrial tariffs," says Hufbauer. "If that happens, that would be a big payoff. But right now it is just a promise to talk, not a promise to act." **EF**

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