

ANALYSIS

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Trade War Chicken: The Tariffs and the Damage Done

The trade war between the U.S. and China has entered a dangerous new phase. As of September 1, Presidents Trump and Xi Jinping have imposed duties on more than half of the two countries' trade in goods, with additional tariff measures to take effect by the end of the year. Based on simulations of the Moody's Analytics model of the global economy, this paper examines the consequences for the U.S. and global economies in different scenarios regarding how the trade war between the U.S. and China will unfold.

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BY MARK ZANDI, JESSE ROGERS AND MARIA COSMA

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Trump has escalated the trade war with China, and nearly everyone has been wrong-footed by the move. As late as July, expectations were strong that an agreement ending the war, or at least putting it on hold, would be reached. However, economic and political pressures have raised the stakes for both leaders, and there is little sign either side will stand down.

The trade war has already done meaningful economic damage to the U.S. and global economies. Since it began in earnest just over a year ago, the trade war with China has cost an estimated 0.3 percentage point in U.S. real GDP and almost 300,000 jobs. Tariffs on Chinese goods have made a notable dent in bilateral trade: Imports of Chinese goods subject to tariffs have contracted at a double-digit rate (see Chart 1). The hit to the global economy has been even more substantial, particularly to more open economies in Southeast Asia and in Europe.

While the brewing trade conflict has mostly spared consumers, the latest tranche of Chinese imports to be hit with tariffs consists largely of consumer goods (see Chart 2). Around \$125 billion of Chinese imports were slapped with tariffs in September, and the remaining \$175 billion will face tariffs on December 15. The brunt of these duties will

fall on consumers. Additionally, tariffs on the first \$250 billion in Chinese imports will rise from 25% to 30% in October. In turn, China has said it will raise tariffs on \$75 billion of U.S. exports, reinstate tariffs on U.S. auto exports, and curtail purchases of U.S. agricultural goods.

With these volleys, Trump and Xi have embarked on a dangerous game of economic chicken. Both claim that their economies are strong enough to withstand the trade turbulence, but they are pursuing policy stimulus to offset the costs of the war. In the U.S., Trump has called on the Federal Reserve to lower interest rates; with a divided Congress

Chart 1: Tariffs' Impact Is Discernible

U.S. goods imports from China, % change yr ago

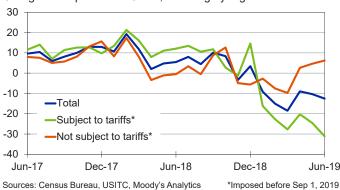


Chart 2: Consumers at Risk

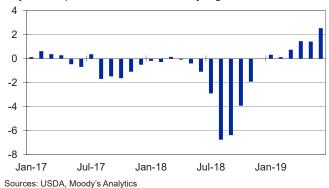
Tariffed imported goods from China by type, value % of total 90 80 70 60 50 40 30 Consumer 20 Intermediate 10 ■ Capital Threatened Implemented Implemented Implemented \$50 bil \$200 bil 9/1/19* 12/15/19*

Sources: Census Bureau, USTR, USITC, Moody's Analytics

*Total value is \$300 bil

Chart 3: Farmers' Relief Will Be Fleeting

Soybean exports to China, difference yr ago, metric tons mil



and the presidential election in 2020, chances for meaningful fiscal stimulus are low. The president has touted a relief package for farmers, but payments may be too little, too late (see Chart 3).

China is relying more on fiscal stimulus in the form of loosened lending standards, tax cuts, and infrastructure spending, but leaders may also pursue more aggressive monetary stimulus if trade war cuts deepen.

A game of chicken typically ends one of two ways: Either one party gives way, or both get hurt. At some point it becomes too late for anyone to duck out, and both sides are doomed to mutual destruction. As the tariff volleys intensify, the odds are rising that the U.S. and China are pulled into an economic downturn that takes the rest of the world with them. At some point, a trade deal will not be enough to avert a global recession.

Using the Moody's Analytics model of the global economy—which includes 73 countries linked by trade flows, direct investment and financial markets—we assess the economic damage from an even broader escalation in the trade war. And although less likely, a scenario in which the trade war winds down is also considered.

Baseline: Trade War Standoff (50% probability)

With Trump and Xi digging in, the baseline assumes that the existing tariffs will remain in effect through the end of Trump's presidential term, and that the October hike in tariff rates and the additional December tariffs will take effect. By the end of the year, U.S. tariffs on \$250 billion of Chinese imports will rise from 25% to 30%, and tariffs of 15% will be placed on the remaining goods.

China is hardly the only U.S. trade partner to come into the crosshairs. There are ongoing tariffs

on steel and aluminum with a range of countries, as well as tariffs on solar panels, washing machines, and Canadian softwood lumber. The president continues to threaten 25% tariffs on almost \$300 billion in auto imports into the U.S., which he will need to decide on later in the year. And then there are the negotiations with the EU and Japan, and the new NAFTA deal with Mexico and Canada that has yet to be ratified by any nation.

Although these threats are credible, we assume that they remain in the background as Trump cranks up the pressure on China. This is consistent with past actions—a facesaving deal with Mexico on trade and immigration, the postponement of a decision on auto tariffs, and delays in pursuing bilateral trade agreements with Japan and a broad trade deal with the EU.

These measures alone are insufficient to drag the U.S. and global economies into recession, but the economic damage will be evident. Real U.S. GDP is almost 1% lower by the end of 2020 than it would be without tariffs on China, and job growth slows to the point that unemployment rises. The Fed lowers rates by 50 basis points by the start of 2020 to support U.S. growth, stock prices stabilize, and long-term rates gradually normalize (see Table 1).

The global economy also suffers. Global real GDP outside of the U.S. is 0.5% smaller by the end of 2020 due to the trade war. Cushioning the blow is substantial additional monetary and fiscal stimulus in China.

Trade War Escalation (35% probability)

Given the high-stakes game of chicken, it is not difficult to imagine a darker scenario in which tariffs on all U.S.-China trade rise further and additional nontariff barriers are imposed. In this scenario, we assume that tariffs on all U.S.-China trade rise to 30% and that a series of nontariff barriers take effect. These include Chinese bans on U.S. technology exports, voluntary boycotts of U.S. brands, revoked market licenses for U.S. firms, a sharp devaluation of the yuan, and a threat to sell China's vast holdings of U.S. Treasuries.

Nontariff barriers are imposed by the U.S. as well. The Trump administration bans Chinese firms from participating in the technology sector and forbids exports of hightech goods such as microchips and advanced machinery. U.S. tech firms are prohibited from doing business with Chinese tech giants such as Huawei. The Trump administration also accuses China of predatory lending through the Belt and Road Initiative and announces actions against financial institutions that are funding BRI projects.

The Trump administration does not impose tariffs on Southeast Asian countries that incorporate Chinese content in their exports, but tariffs on U.S.-China trade raise the cost of critical inputs across the region, contributing to a global manufacturing slump.

Additionally, we assume the Trump administration imposes 25% tariffs on vehicle imports beginning in 2020. Given the intensification of the trade war, a divided Congress refuses to consider passage of the U.S.-Mexico-Canada Agreement, the successor pact to NAFTA. Although NAFTA remains in force, the failure to pass a new deal clouds the outlook for manufacturing and energy investment in North America.

The impact of nontariff barriers is particularly difficult to quantify, and the economic consequences go well beyond the dollars and cents captured by the global model. However, the trade war has already hit global business sentiment hard and business investment in most major economies has flatlined or contracted outright (see

Chart 4: Businesses Lose Faith

Business sentiment diffusion index, net % positive

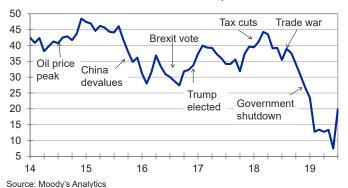


Chart 5: Escalation a Self-Inflicted Wound

Real GDP, % change yr ago, Trade War Escalation scenario

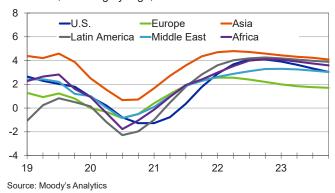


Chart 4). To approximate the fallout of a technology cold war between the U.S. and China, we shock sentiment and growth expectations across countries. The result is a large pullback in investment that, along with price increases and ruffled consumers, causes U.S. and global GDP to contract sharply.

Although the Fed quickly lowers the federal funds rate to the zero lower bound and both major and developing economies adopt monetary stimulus, the blow to global demand overwhelms efforts to ease financial conditions. The U.S. dollar appreciates as capital flight intensifies and emerging market currencies depreciate sharply. However, external accounts worsen because of the sharp contraction in global trade. All told, real global GDP contracts by 0.3% from peak to trough, with deep recessions in the U.S., Europe, and most emerging markets. Growth in China slows substantially and falls just short of recession (see Chart 5).

Trade War De-Escalation (15% probability)

There is still a chance that all could end well, but time for de-escalation is running short. If Trump were to strike some kind of face-saving arrangement with Xi to wind down existing tariffs, global growth would reaccelerate, dispelling concerns of an end to the global expansion.

In this scenario, Trump backs away from the trade war before the end of 2019 as the U.S. economy weakens and threatens his re-election bid. China quickly stands down in response. No new tariffs are imposed on Chinese imports or on vehicles, and existing tariffs are gradually wound down over the course of the next year. Eager to put its own stamp on the rebound in growth, Congress approves the USMCA and it goes into effect in 2020.

With the U.S. economy revving back up, the Fed cuts rates just once more. Monetary

and fiscal stimulus in China is less substantial, and developed and emerging market central banks scale back plans for further interest rate cuts. With the acceleration in global growth well underway, stock markets rally and long-term bond yields normalize. Global trade volumes rebound and commodity prices firm, buoying emerging markets.

A face-saving agreement similar to Trump's deal with Mexico and Canada is still possible, but timing is critical. Trump's escalation of the trade war and the Chinese response have undermined global investor confidence, and the U.S. and global economies will grow below potential as long as existing tariffs remain in place. With a single tweet, Trump could undo his latest tariff threat and its ominous implications for the global economy. However, given mounting political pressures on the U.S. and Chinese fronts, a broad de-escalation of the trade war seems unlikely.

Table 1: U.S. Economic Impact of Trump's Trade Policy

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2019	2020	2021
Real GDP (2012\$ bil)												
Baseline	19206.9	19296.9	19380.1	19416.4	19455.0	19552.8	19709.5	19877.6	20043.3	19067.6	19387.1	19795.8
Escalation	19121.3	19106.5	19063.1	18962.4	18878.6	18864.6	18916.9	19031.7	19214.0	19046.3	19002.6	19006.8
Diff with baseline (%)	-0.4	-1.0	-1.6	-2.3	-3.0	-3.5	-4.0	-4.3	-4.1	-0.1	-2.0	-4.0
De-escalation	19226.9	19369.4	19498.9	19588.9	19627.6	19662.3	19762.6	19902.4	20051.2	19072.6	19521.2	19844.7
Diff with baseline (%)	0.1	0.4	0.6	0.9	0.9	0.6	0.3	0.1	0.0	0.0	0.7	0.2
Nonfarm employment (mil)												
Baseline	152	152	153	153	153	152	153	153	153	151	153	153
Escalation	152	151	151	150	149	148	147	147	147	151	150	147
Diff with baseline (ths)	-42.7	-117.8	-207.2	-305.0	-388.2	-458.7	-530.7	-565.4	-559.5	-10.7	-254.6	-528.6
De-escalation	152	153	154	154	154	154	154	154	154	151	154	154
Diff with baseline (ths)	19.3	64.7	100.3	142.4	165.3	171.1	134.9	111.9	88.9	4.8	118.2	126.7
Unemployment rate (%)												
Baseline	3.5	3.6	3.6	3.7	3.8	4.1	4.2	4.3	4.4	3.6	3.7	4.2
Escalation	3.8	4.2	4.7	5.3	5.9	6.5	7.0	7.3	7.2	3.7	5.0	7.0
Diff with baseline (%)	0.2	0.6	1.1	1.7	2.1	2.5	2.8	2.9	2.8	0.1	1.4	2.7
De-escalation	3.3	3.1	2.9	2.8	2.9	3.1	3.5	3.7	3.9	3.6	2.9	3.6
Diff with baseline (%)	-0.2	-0.4	-0.6	-0.9	-0.9	-0.9	-0.7	-0.6	-0.5	-0.1	-0.7	-0.7
Income per household (\$ ths)												
Baseline	148561	149734	150914	151923	152917	153839	154936	156153	157492	146773.0	151371.9	155605.1
Escalation	148242	148745	149076	149135	149278	149508	150025	150968	152350	146693.3	149058.6	150712.8
Diff with baseline (\$)	-319	-989	-1838	-2788	-3639	-4331	-4912	-5185	-5142	-80	-2313	-4892
De-escalation	148702	150285	151849	153260	154452	155381	156286	157339	158503	146808.3	152461.3	156877.3
Diff with baseline (\$)	141	551	935	1337	1535	1542	1350	1186	1012	35	1089	1272
Federal funds rate (%)												
Baseline	1.9	1.7	1.6	1.7	1.7	1.7	1.7	2.0	2.1	2.2	1.7	1.9
Escalation	1.7	1.2	0.7	0.3	0.1	0.1	0.5	0.9	1.4	2.2	0.6	0.7
Diff with baseline (bps)	-0.2	-0.5	-0.9	-1.4	-1.6	-1.5	-1.2	-1.1	-0.7	-0.1	-1.1	-1.2
De-escalation	2.5	2.5	2.7	2.7	2.7	2.7	2.7	2.7	2.9	2.4	2.6	2.8
Diff with baseline (bps)	0.6	0.8	1.1	1.1	1.0	1.0	1.0	0.7	0.8	0.2	1.0	0.9
S&P 500 Index												
Baseline	2948.3	2855.0	2688.3	2687.6	2746.8	2802.8	2872.2	2923.0	2977.5	2876.7	2744.4	2893.9
Escalation	2656.3	2331.0	2151.9	1967.5	1853.7	1863.5	2016.0	2282.1	2526.7	2803.7	2076.0	2172.1
Diff with baseline (%)	-9.9	-18.4	-20.0	-26.8	-32.5	-33.5	-29.8	-21.9	-15.1	-2.5	-24.4	-24.9
De-escalation	3059.2	3231.9	3236.9	3226.3	3149.4	3116.7	3101.1	3099.0	3103.6	2904.4	3211.1	3105.1
Diff with baseline (%)	3.8	13.2	20.4	20.0	14.7	11.2	8.0	6.0	4.2	1.0	17.0	7.3

Source: Moody's Analytics

About the Authors

Mark Zandi is chief economist of Moody's Analytics, where he directs economic research. Moody's Analytics, a subsidiary of Moody's Corp., is a leading provider of economic research, data and analytical tools. Dr. Zandi is a cofounder of Economy.com, which Moody's purchased in 2005.

Dr. Zandi is on the board of directors of MGIC, the nation's largest private mortgage insurance company, and is the lead director of Reinvestment Fund, one of the nation's largest community development financial institutions, which makes investments in underserved communities.

He is a trusted adviser to policymakers and an influential source of economic analysis for businesses, journalists and the public. Dr. Zandi frequently testifies before Congress and conducts regular briefings on the economy for corporate boards, trade associations, and policymakers at all levels. He is often quoted in national and global publications and interviewed by major news media outlets, and is a frequent guest on CNBC, NPR, Meet the Press, CNN, and various other national networks and news programs.

Dr. Zandi is the author of Paying the Price: Ending the Great Recession and Beginning a New American Century, which provides an assessment of the monetary and fiscal policy response to the Great Recession. His other book, Financial Shock: A 360º Look at the Subprime Mortgage Implosion, and How to Avoid the Next Financial Crisis, is described by the New York Times as the "clearest guide" to the financial crisis.

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