

## ANALYSIS

# Down the Rabbit Hole

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### Prepared by

Mark Zandi  
[Mark.Zandi@moodys.com](mailto:Mark.Zandi@moodys.com)  
Chief Economist

### Contact Us

Email  
[help@economy.com](mailto:help@economy.com)

U.S./Canada  
+1.866.275.3266

EMEA  
+44.20.7772.5454 (London)  
+420.224.222.929 (Prague)

Asia/Pacific  
+852.3551.3077

All Others  
+1.610.235.5299

Web  
[www.economy.com](http://www.economy.com)  
[www.moodysanalytics.com](http://www.moodysanalytics.com)

### Introduction

A centerpiece of presidential candidate Trump's economic agenda was to take a hard line on our trading partners, particularly those with which the U.S. runs a trade deficit. China and Mexico were the object of his strongest recriminations, and he argued that large tariffs should be slapped on their exports to the U.S. Trump also labeled the Trans-Pacific Partnership and North American Free Trade Agreement as among as the worst trade deals ever.

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A centerpiece of presidential candidate Trump's economic agenda was to take a hard line on our trading partners, particularly those with which the U.S. runs a trade deficit. China and Mexico were the object of his strongest recriminations, and he argued that large tariffs should be slapped on their exports to the U.S. Trump also labeled the Trans-Pacific Partnership and North American Free Trade Agreement as among as the worst trade deals ever.

President Trump is following through on his campaign promises. Soon after being elected he pulled out of the TPP and reopened NAFTA, which is now approaching its eighth round of negotiations. More recently, he imposed 25% tariffs on U.S. imports of steel from many countries and 10% on aluminum, and his threatened next move is higher tariffs and other penalties on China. The decades-long effort by the U.S. to bring down tariffs and other trade barriers is over. If the tariff hikes announced by the president are fully implemented, the average effective U.S. tariff rate will more than double to over 3% (see Chart 1).

## Steel and aluminum

The president has argued that the steel and aluminum tariffs are necessary for na-

tional security. That is, these metals are so critical for our defense that we must produce more of them at home. The argument is specious. Our military uses very little of the steel and aluminum we currently produce, and the biggest overseas sources are our two strongest allies, Canada and the European Union. South Korea, Mexico and Brazil—hardly enemies of the U.S.—are also key suppliers.

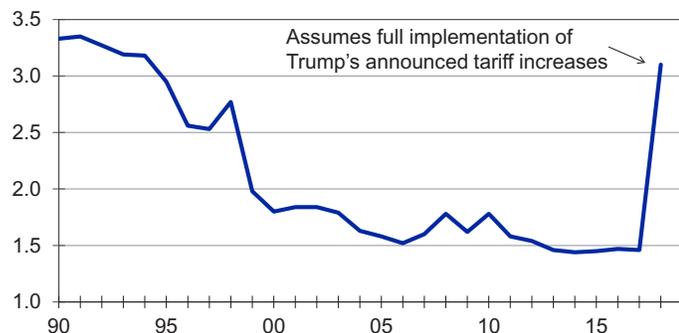
More broadly, the president has justified the tariffs arguing that the U.S. runs a big trade deficit that shows we have let our trading partners cheat us. The U.S. does have a deficit in trade, equal to about 3% of our GDP, but it has gone up and down, and it is no larger today than a decade or two ago (see Chart 2). It is the change in the trade

deficit that matters to near-term growth. The increasing deficit of the late 1990s and 2000s was a drag on the economy. The U.S. economy did struggle to adjust to NAFTA and China's entry into the World Trade Organization, but that adjustment is long over. The more stable U.S. trade deficit of recent years means it has had little impact on growth.

Some years it is bigger, like now, but that is because our economy is strong and we are able to buy more things, including imported goods that we like. Other years it has been smaller, like during the Great Recession, because we could not afford to buy things. A trade deficit is not necessarily a sign of economic weakness. In the U.S. case in recent years, it has been a sign of strength.

## Chart 1: Trumpian Mercantilism

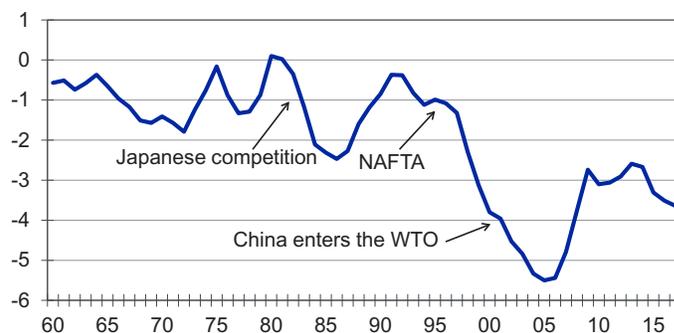
U.S. avg effective tariff rate, %



Sources: World Bank, Moody's Analytics

## Chart 2: Fighting Yesterday's Battle

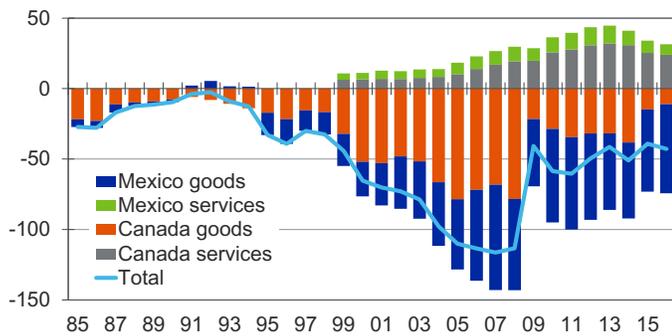
U.S. real trade deficit as a % of GDP



Sources: BEA, Moody's Analytics

### Chart 3: Stable NAFTA Trade Balance

Total trade balance, \$ bil



Sources: Census Bureau, Moody's Analytics

While the U.S. runs a deficit in the trade of goods—mostly consumer products and computer-related equipment—it runs a meaningful and steadily growing surplus in services. This includes everything from financial and educational services to intellectual property. With global demand shifting from goods to services, the U.S. is well-positioned to enjoy even more gains in trade as long as the country remains open to it.

The steel and aluminum industries and their workers have cheered the president's actions, but tariffs are not likely to save them for very long. It is simply cheaper to produce these metals in other places, and those cost advantages will ultimately prevail. The workers will also lose out to more efficient production methods. These industries have been shedding workers for decades, mostly because of inexorable productivity gains. Meanwhile, the tariffs will hurt U.S. industries and workers that use now-costlier steel and aluminum. They will also suffer as global competitors get cheaper steel and aluminum, allowing those competitors to lower their prices and be more competitive.

By themselves, the macroeconomic consequences of the steel and aluminum tariffs will be small. Even assuming that our trading partners respond with in-kind increases in tariffs, the hit to U.S. GDP will be no more than a tenth of a percentage point, ultimately costing several tens of thousands of jobs.

#### NAFTA redo

The success or failure of the NAFTA renegotiations is a much bigger economic

deal. Failure would jeopardize what has been an enormously successful trade pact. Since the deal's inception in the mid-1990s, and the near elimination of tariffs, trade among the U.S., Mexico and Canada has more than tripled, transforming North America into the world's second-largest trade

bloc, with the value of goods and services exchanged annually surpassed only by the European Union. While the early years of the agreement were dominated by trade in final goods, the development of extensive cross-border supply chains has enabled manufacturers to source parts from NAFTA countries at various stages of the production process, leveraging efficiencies and lowering costs. As a result, regional trade in autos, electronics and farm commodities has outpaced total output growth in these same industries, giving rise to a manufacturing and agricultural powerhouse spanning the continent.

It is odd that the president has targeted NAFTA as a bad deal for the U.S. given his focus on trade balances. We currently run a trade surplus with Canada (a deficit in goods that is more than offset by a surplus in services), and while we run a trade deficit with Mexico, it has not changed materially over the past decade, and has thus steadily declined in relevance as the economy has grown (see Chart 3).

It is also unclear what the president hopes to accomplish by reopening NAFTA. What the president wants to change in the agreement—most important being how much of a vehicle is actually produced in the U.S.—will have no discernible macroeconomic impact and is hardly worth the risk of causing the agreement to fall apart. It is especially perplexing that Trump is playing hardball with Canada and Mexico by suggesting that to avoid the steel and aluminum tariffs they must acquiesce to his NAFTA demands.

#### Engaging China

The trade relationship that arguably matters most for the global economy is between the U.S. and China. President Trump's perspective that the U.S. is being cheated by our trading partners is significantly overstated, but there is a case against China, with which the U.S. runs far and away its largest trade deficit, about \$350 billion annually.

The issue is not steel and aluminum imports from China, which are de minimis and set to fade away as China downsizes those industries. China knows steel and aluminum will not be a source of growth and jobs in the future. The real battleground is over intellectual property rights—everything from high technology and financial services to movies and music. The U.S. is the very best in the world at these activities and runs a large trade surplus in them. They are also responsible for many of the nation's jobs, and much of its income and wealth.

The U.S. strategy toward China's misconduct had been to persistently challenge it using the trade laws and processes established by the World Trade Organization—a global institution established at the behest of the U.S. to enforce the rule of law. The TPP free trade deal was also supposed to pressure China to play by the rules since it would not be included in the pact with other Pacific-rim nations unless it did. But leaving the TPP was one of Trump's first actions as president.

Instead, the Trump administration appears set to impose tariffs on Chinese exports to the U.S. His campaign rhetoric called for a 25% tariff on Chinese imports. To date, Trump has threatened 25% tariffs on up to \$150 billion of Chinese exports to the U.S. (see Chart 4). Ever since China was admitted to the WTO in the early 2000s, it was clear that it would be long, frustrating work to get China to play by the rules. But using tariffs, which break the spirit if not the letter of global trade law, precariously flips U.S. trade strategy with China on its head.

#### Different model

President Trump's trade strategy also fails to recognize that exports and imports are not the only way U.S. businesses engage with the rest of the world. Arguably more impor-

### Chart 4: Trump's Tariff Actions Against China

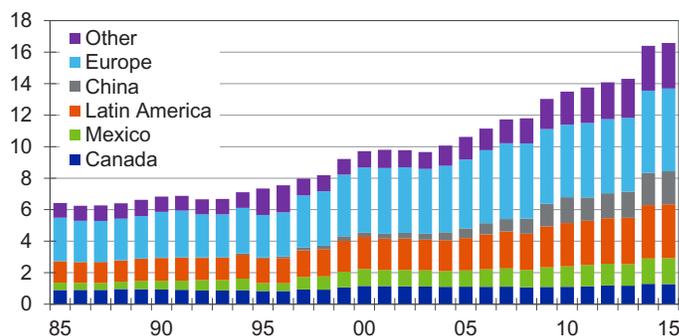
China exports to U.S.

U.S. measures so far	Tariff	Exports (\$ bil)	Share of:			
			Sector exports (%)	Total China goods exports (%)	China GDP (%)	U.S. sector imports (%)
Washing machines	≤50%	0.8	21.8	0.04	0.01	46.6
Solar cells/panels	30%	1.5	13.5	0.07	0.01	18.4
Aluminum products	10%	3.1	14.6	0.15	0.03	16.4
Steel products	25%	9.5	10.0	0.45	0.08	17.0
<b>Proposed tariffs under "Section 301"</b>						
Products related to tech transfer, IP, and innovation	25%	150	--	7.2	1.35	--

Source: Moody's Analytics

### Chart 5: Big U.S. Operations Overseas

Employment at foreign operations of U.S. businesses, mil



Sources: BEA, Moody's Analytics

tant is their direct investment overseas. Historically, U.S. companies have aggressively expanded operations in the countries where they sell their wares. They may export less to these countries, but they hire and produce more in them. U.S. companies have stakes in overseas operations that employ close to 17 million workers, including about 2 million in Canada and Mexico, more than 2 million in China, and about 5 million in Europe (see Chart 5).

This is a different business model than is generally pursued by export powerhouses such as China, Japan and Germany, but it has been highly successful. Not only do U.S. multinationals dominate global commerce, but they have been instrumental in supporting U.S. so-called soft power—spreading American culture and political and economic mores to the rest of the world. Simply focusing on trade as a barometer of success misses, and if it means higher tariffs, it will almost surely undermine this deeper global relationship.

#### Down the rabbit hole

The economic fallout from Trump's trade policies depends on how this all plays out. Will the world simply pay the higher tariffs and not respond? And if countries respond with their own tariffs, what will the president do? A tit-for-tat trade conflict or trade war that costs hundreds of thousands or even millions of jobs seems possible.

To gauge the impact, we ran a number of scenarios (of varying subjective probabilities) through our model of the global economy.

The model includes 64 countries and accounts for linkages between these countries in trade, financial markets, exchange rates and prices, and foreign direct investment

#### Scenario 1—Baseline (40%)

In this most likely scenario, the U.S. increases tariffs by 25% on steel and 10% on aluminum imports (those products identified by the Commerce Department in its National Security report) on a number of countries, but excluding Canada, Mexico, the European Union, and a few other key allies. Despite all the president's bluster, the U.S. does not raise tariffs on Chinese exports to the U.S. There are in-kind increases in tariffs and nontrade barriers by our trading partners affected by the higher U.S. tariffs. The new higher tariffs are assumed to be fully in place by the third quarter of this year, and they remain in place through the end of the decade. Despite the higher U.S. tariffs, China and our other trading partners do not materially change their trading practices.

Under the baseline, the current trade tensions result in no meaningful impact on U.S. economic growth in the baseline. The impact on the global economy is also on the margin. The global economy suffers a bit more, with real GDP reduced by 0.39% by the end of 2019, but quickly bounces back once the tariffs are lifted.

#### Scenario 2—Upside (25%)

The U.S. increases tariffs on exports to the U.S. and on steel and aluminum imports as in the Baseline scenario, but there is little

effective response from our trading partners. The Chinese agree to ease up their technology transfer rules and treat foreign companies operating in China more similar to domestic companies. While this is a more favorable outcome than the Baseline, they are not substantive enough to change the macroeconomic performance of the U.S. or global economy, at least not any time soon.

#### Scenario 3—Trade skirmish (30%)

The U.S. increases tariffs on steel and aluminum as in the Baseline scenario, and also imposes a 25% tariff on \$150 billion in Chinese imports to the U.S. as President Trump has threatened. The Chinese and other impacted U.S. trading partners respond with in-kind increases in tariffs and nontrade barriers. China maintains its current technology transfer rules and puts even greater restrictions on foreign investment in the country.

There are several key channels through which the economy suffers: higher import prices and inflation and thus lower household real incomes, weaker exports due to the higher tariffs on U.S. exports, a somewhat stronger value of the U.S. dollar, weaker stock prices and wider credit spreads in the bond market, and less foreign direct investment

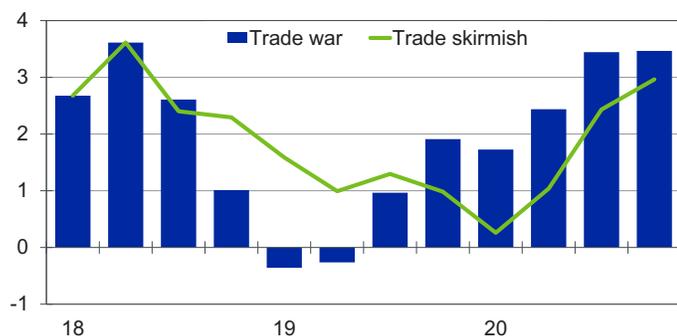
By late 2019, U.S. real GDP is reduced by over 1% and the U.S. economy loses 1.6 million jobs.

#### Scenario 4—Global trade war (5%)

In this dark scenario, the U.S. increases tariffs on steel and aluminum and Chinese imports as in the Trade Skirmish scenario.

## Chart 6: Trade War Puts U.S. in Recession

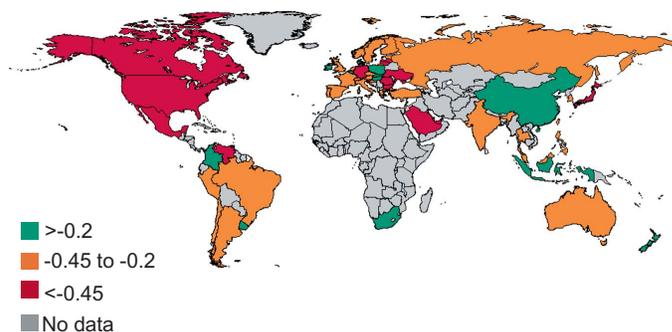
U.S. real GDP growth, annualized % change



Sources: Federal Reserve, Bloomberg, Moody's Analytics

## Chart 7: Who Suffers Most in a Trade War

Real GDP growth 2017-2019, baseline vs. trade war scenario



Source: Moody's Analytics

There are also in-kind increases in tariffs and nontrade barriers by most of our trading partners most affected by higher U.S. tariffs.

Moreover, in this scenario, the increased global tensions cause NAFTA to break down, with the U.S. trade relationship with Mexico reverting to WTO rules, and with Canada back to the former Canadian-U.S. free trade agreement. The heightened tensions engulf much of the rest of the world, with tariffs on all of global trade increasing by approximately 10%.

The Chinese also respond by devaluing the yuan by 10% vis-à-vis the U.S. dollar. This offsets a big part of the impact of the higher U.S. tariffs on Chinese export prices. Other nations with significant trading relationships with China also devalue to maintain their

competitiveness with China. Currently low inflation in many emerging market economies gives central banks in those economies latitude to allow their currencies to depreciate against the dollar.

The economic impact is serious, pushing the U.S. economy into recession during the first half of 2019. At the worst of the downturn, U.S. real GDP falls by almost 2.5% and about 3.5 million jobs are lost (see Chart 6).

Mexico also suffers a sharp recession, given doubts raised over the viability of its export-oriented growth model, which is heavily reliant on trade with the U.S. While Canada's economy is more exposed to global trade, it suffers less than Mexico or the U.S., as it retains comparable market access to the U.S. and trades little with Mexico.

The rest of the global economy is also hit hard, although it is able to avoid an outright recession. At the worst of the fallout from the trade war, global real GDP growth outside of the U.S. is reduced by almost 1.5% (see Chart 7).

All of these scenarios represent a negative supply shock to the U.S. and global economies. That is, in the near term higher tariffs and less trade result in less growth and higher inflation. In the longer run, the reduction in trade will weigh on productivity growth, as the benefits of comparative advantage and global competition are diminished.

President Trump's decision to use tariffs as a negotiating bludgeon against our trading partners threatens to take the U.S. and global economies down the proverbial rabbit hole.

## About the Author

Mark M. 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's broad research interests encompass macroeconomics, financial markets and public policy. His recent research has focused on mortgage finance reform and the determinants of mortgage foreclosure and personal bankruptcy. He has analyzed the economic impact of various tax and government spending policies and assessed the appropriate monetary policy response to bubbles in asset markets.

A trusted adviser to policymakers and an influential source of economic analysis for businesses, journalists and the public, Dr. Zandi frequently testifies before Congress on topics including the economic outlook, the nation's daunting fiscal challenges, the merits of fiscal stimulus, financial regulatory reform, and foreclosure mitigation.

Dr. Zandi conducts regular briefings on the economy for corporate boards, trade associations and policymakers at all levels. He is on the board of directors of MGIC, the nation's largest private mortgage insurance company, and The Reinvestment Fund, a large CDFI that makes investments in disadvantaged neighborhoods. 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 360° 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.

Dr. Zandi earned his BS from the Wharton School at the University of Pennsylvania and his PhD at the University of Pennsylvania. He lives with his wife and three children in the suburbs of Philadelphia.

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