

What is a trade war, and are we in one?

Multi-asset implications

July 2018

IN BRIEF

- Among investors' key concerns at the moment is whether U.S. policy changes will start a full-blown trade war or, indeed, if we are already in one. Notwithstanding near-term policy uncertainty, several slow-moving developments will likely keep the peace in the medium term; deeper trade integration and longer supply-chains, regional trade blocs, widespread use of dispute-resolution mechanisms and the threat of tariff reciprocity have all raised the costs of a broad trade war.
- Our research documents that significant inertia in trade policy makes it so a broad trade war, as occurred in the 1930s, is unlikely to erupt. We analyze a comprehensive data set of global tariffs over recent decades and find tariff changes generally small and episodic across products and countries. The battle lines in trade wars have shifted to more frequent but narrower conflicts.
- Multi-asset investors care about trade policy to the extent that it factors into the macroeconomic outlook, firms' bottom lines and market risk sentiment. We recognize that when policymakers take steps toward a trade war—something happening more frequently—it poses significant headline risk to sentiment. However, we remain some distance from the point at which trade policy poses a significant threat to medium-term fundamentals.
- A risk to our view is the possibility that past tariff outcomes may underestimate the breadth of modern disputes whose new features—for example, intellectual property rights—may have deeper, more persistent economic and market implications.
- Trade wars are less about directional market views than about volatility. Recent experience suggests that trade policy can be investible on a tactical basis, as markets cycle through the sticker shock of trade dispute escalation and subsequent normalization.

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IN MEETINGS WITH A WIDE ARRAY OF INVESTORS, A COMMON THREAD IS THEIR CONCERN OVER ESCALATING TRADE TENSIONS BETWEEN THE U.S. AND ITS TRADING PARTNERS. Many observers already perceive the U.S. to be in a full-blown trade war. Here, we pause to consider: What would a trade war look like? Are the necessary conditions in place for one to occur? Do prior disputes offer relevant guidance to today's trade situation? And what would be the impact of a trade war on multi-asset portfolios?

These questions are of first-order importance insofar as the threat of a trade war has become firmly ingrained in market narratives of downside risk and higher volatility. However, from the perspective of the long history of globalization, the possibility of a broad trade conflict has actually grown increasingly remote. To be sure, if the U.S. were to unilaterally pull out of its existing trade arrangements and/or apply broad tariffs outside the scope of the World Trade Organization (WTO), it would cause damage to long-run growth and require a highly disruptive near-term adjustment as the distributional effects of international trade were unwound.

This report argues that a policy lurch in the protectionist direction is unlikely to go all the way to its limit. A more connected world implies a higher incidence of trade disputes and a broadening of international economic tensions to include matters of national security and intellectual property (IP). However, we argue that the same forces broadening the scope of trade disputes will restrain international economic diplomacy from arriving at a “mutually assured destruction” scenario in the medium term. Trade issues will likely continue to generate headlines throughout the next several years given trade’s economic importance and a shift in voter attitudes towards a more protectionist stance. Yet, moderate, negotiated solutions are still our base-case outcomes for the North American Free Trade Agreement (NAFTA) and China trade disputes, driven by the political economy of trade’s distributional effects, supply-chain issues and credible retaliation threats. Early rounds of talks between Chinese and American policymakers displayed several areas of common interest, but this has not prevented the dispute from growing increasingly contentious in recent weeks.

Looking back at U.S. trade disputes with Japan and Germany in the mid-1980s—the Plaza Accord to intervene in currency markets to weaken the U.S. dollar; mild trade restrictions on Japanese imports; and a push for increased market access to U.S. exports—all of them led to more or less amicable denouements, though negotiations were acrimonious at times. One exception in applying this sanguine expectation to today is Europe. It lacks an overarching bilateral negotiating framework with the U.S. (like NAFTA or longstanding China-U.S. economic forums) and may well end up subject to tariffs on steel and autos until those disputes are settled by the WTO.

The effect on market volatility may end up being more sustained. Given the current status of U.S. trade disputes with China, Europe and its NAFTA partners, we are likely to remain in a period of elevated trade policy uncertainty. It is not just a matter of the escalating tensions with China or the invocation of national security concerns when the U.S. applied steel and aluminum tariffs at the beginning of June. It is also the uncertainty surrounding NAFTA negotiations and the possibility that the U.S. will impose additional tariffs on auto imports.

This paper begins by using detailed global tariff data to document the nonexistence of broad trade conflicts over the past two decades. We then discuss the factors that brought about such a high level of inertia. Over 20 years, instances of large tariff increases were rare, narrow, typically offset by tariff declines for other products and generally transient in nature. These outcomes were the result of numerous forces pushing

against substantial tariff increases. We highlight the: (1) welfare cost of protectionism; (2) vertical integration of global supply-chains; (3) threat of reciprocity; and (4) developments in international trade institutions. Using the tariff data, we provide empirical evidence that all of these factors were at play.

We then discuss a modern definition of a trade war and how current trade policy disputes display elements of both traditional and modern trade wars. The two major initiatives being pursued by the U.S.—NAFTA renegotiations and the rebalancing of trade with China—are prime examples. In broad strokes, the process of settling the NAFTA update has proceeded largely within the confines of the global trading system, propelled forward by the factors we discuss in the following pages.

The ongoing restructuring of U.S.-China trade, on the other hand, seems more novel. While the U.S. has deployed relatively conventional weapons to date, applying tariffs on a targeted list of imported goods—the question remains open as to whether these tools will be adequate to address the issues at hand. As the global economy has evolved, economic activity has become less dependent on physical goods’ movement across borders and more reliant on underlying intangibles, such as intellectual property. How trade disputes adapt to this reality remains to be seen. We conclude with a discussion of specific trade policy implications for multi-asset investors.

WHAT IS A TRADE WAR?

How do we construct a workable, empirical definition of a trade war? This task is surprisingly difficult when our reference period, the past few decades, was a time when tariffs fell by, on average, over 5 percentage points (ppt) globally. As such, we will use a somewhat loose definition, based on the length and breadth of tariff increases, without taking a hard stand on parameterization. Conceptually, at least, a trade war lies at the intersection of high frequency and broad tariff innovations. Using high frequency excludes the low frequency trends in tariffs, those driven by policy that are permanent features of specific trading relationships, to focus on deviations from those long-term trends. Looking at broad changes serves to exclude idiosyncratic innovations in tariffs. After these exclusions, what remains is a concept of trade war that entails dramatic and broad escalations in trade barriers.

Another reason it is difficult to define a trade war is that for most observers in the U.S., a mental model of a trade war hearkens back almost 100 years. Successive waves of tariffs in 1922 (the Fordney-McCumber Tariff) and 1930 (the Smoot-Hawley

Tariff Act) raised the average U.S. tariff by import value to a peak of 19.8% in 1933. For the product categories to which tariffs were applied, the average peak rate was 59.1% in 1932.

In recent decades, increases of that size in applied tariffs were not only unusual for the U.S. but quite rare in all of global trade. The closest today, in size terms, are confined to specific agricultural products or are targeted, WTO-sanctioned responses to dumping or other unfair trade practices. For instance, U.S. anti-dumping tariff margins on Chinese flat-rolled steel are currently more than 250% and for corrosion-resistant steel products are about 200%. The same forces that keep most countries from erecting trade barriers in the first place are effective at keeping the proliferation of such large applied tariffs in check. As we show in the following section, the end result is a set of guardrails on tariff outcomes.

IN SEARCH OF TRADE WARS

Broad tariff escalations—pretty much anywhere in the world—are quite rare. Rather, changes in applied tariffs in recent decades have been generally small, episodic and narrow across products and trading partners. This is not to say that large tariffs do not exist for some products or firms—as evidenced by U.S. countervailing duties on Canadian lumber or anti-dumping duties on Chinese steel that have been in effect for several years. But the basic nonexistence of broad conflagrations underscores the inertial nature of the global trading system and the resulting high hurdles that would have to be cleared for a trade war to emerge.¹

¹ An important limitation of focusing on tariffs is that, in doing so, we ignore the broad array of non-tariff instruments (e.g., subsidies, logistical constraints, regulatory burden, exchange rate manipulation) that might be in active use to affect a country's trade flows. Indeed, the declining level

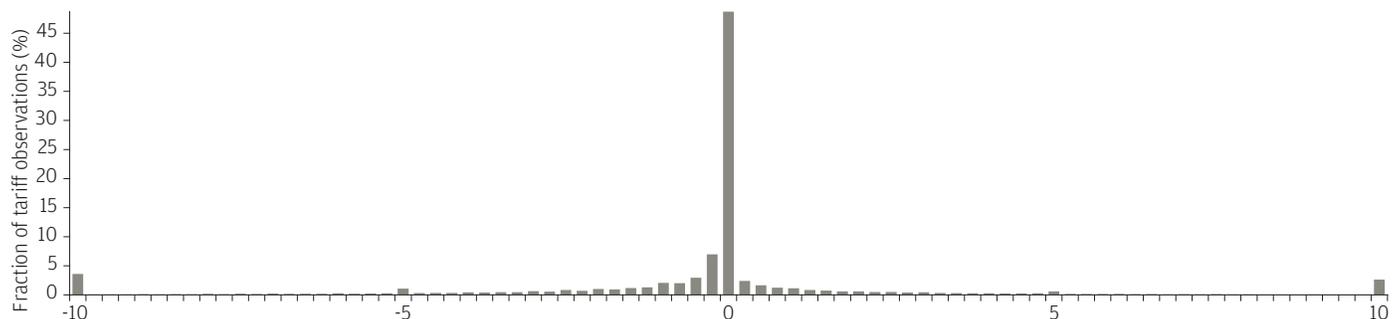
Our assertion that tariffs are highly inertial begins from an empirical starting point: Sharp and broad tariff increases are extremely rare. To make this case, we use data from the United Nations Conference on Trade and Development (UNCTAD) Trade Analysis Information System, or TRAINS System (TRAINS), panel of global applied tariff rates.² All told, across about 200 reporting countries, 96 product groups and 20 years (1995–2014), the panel encompasses just over 7.6 million bilateral tariff observations. We focus our attention primarily on the annual changes in tariff rates, of which the database contains 5.4 million observations. The sample period coincided with a period of robust globalization driven (at least in part) by more liberal trade policy. Consistent with that idea, the average tariff change in the data set was -26 basis points (bps). Put another way, over the entire 20 years the simple average of global applied tariffs declined by 5.2ppt.

The most remarkable feature of the tariff changes is their inertia. Not only is the median change zero, but zero or near-zero tariff changes account for the bulk of observations. As illustrated by the histogram in **EXHIBIT 1**, about 50% of annual

of tariffs over time may simply imply a corresponding rise in the share of trade policy carried out by non-tariff instruments. Cutting against this trend is the proliferation of bilateral and regional trade agreements, which have broadened in recent decades to include all manner of economic phenomena in addition to trade in goods and services. Inclusions in such agreements of chapters on intellectual property, investor protections, labor and environmental issues, and other regulatory issues, as well as dispute resolution, appear to mitigate, at least in part, the risk of a conflagration due to non-tariff barriers. While outside the scope of the current study, non-tariff barriers would surely be included in a more holistic definition of trade war.
² Since we are interested in the incidence of broad-based tariffs rather than detailed, line-item-specific duties, our unit of measure is the weighted average ad valorem tariff at the Harmonized System 2-digit (HS2) chapter level, rather than the more disaggregate HS 10-digit product categories. These duties are reported annually for each of the 96 HS2 chapters for all combinations of reporting importer (“reporter”) and export trade partner (“partner”) for which there is a positive nominal trade flow in the TRAINS database.

The most remarkable feature of tariff changes is their inertia

EXHIBIT 1: DISTRIBUTION OF ANNUAL TARIFF CHANGES, 1995–2014 (FRACTION OF BILATERAL PRODUCT-LEVEL TARIFF OBSERVATIONS)



Source: UNCTAD TRAINS, J.P. Morgan Asset Management; data as of July 2018.

tariff changes range between zero and 25bps, with most of the remaining probability mass less than 5ppt. To be exact, 88% of tariff changes are in the range of -5ppt to 5ppt; 3.5% are less than -10ppt; and only 2.5% are 10ppt or greater.

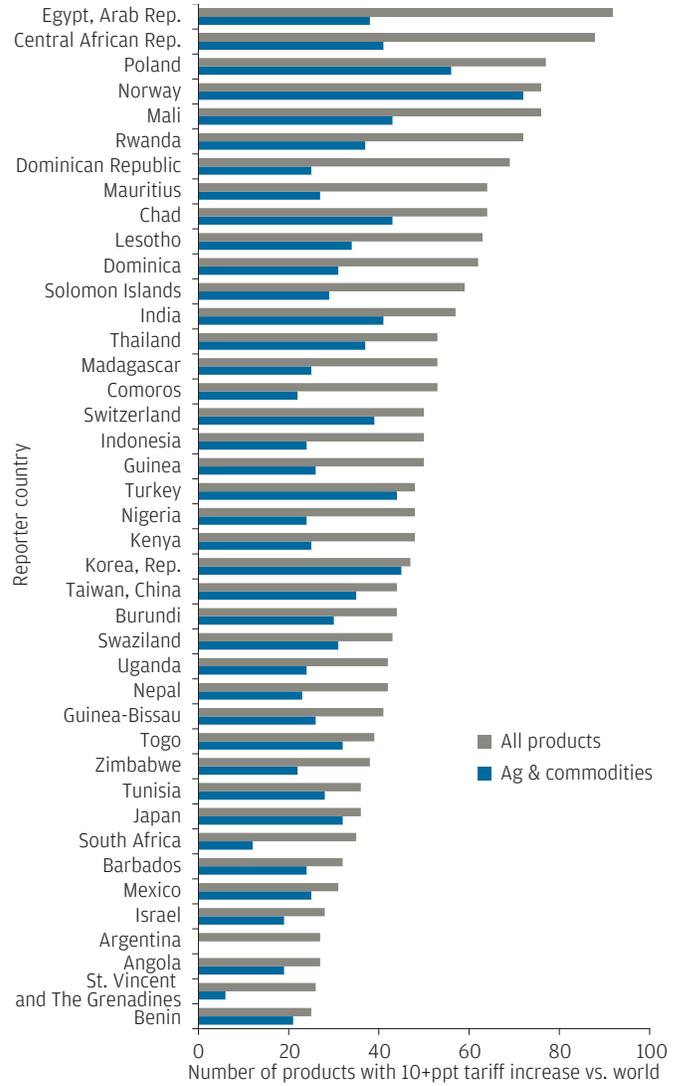
A direct implication of the general inertia in tariffs is that broad increases in tariffs—across trading partners, products or time—are extremely rare. The number of zeros in the database is itself, instructive. Even though individual line-item tariffs and tariff changes can be high, 100 ppt or greater in some instances, they generally are not broad enough across detailed tariff lines to have a noticeable effect at the broader product level. The observation that large increases in applied tariff rates are rare offers prima facie evidence that a broad trade war simply has not happened in recent decades.

Focusing on the 3,000 specific cases of large tariff rises and their concentration in specific importing countries makes this point even clearer. **EXHIBIT 2** shows how many products for each importer experienced annual average tariff increases of at least 10ppt. It addresses the question: What is the incidence of blanket tariffs for specific importing countries? The data here point to large tariff changes as being fairly concentrated in low trade volume, mostly emerging, economies. Of the 40 importers with the most blanket tariff rises, only eight are Organisation for Economic Co-operation and Development (OECD) members. Moreover, for those economies, 84% of the products, on average, were commodities-related.

For instance, Egypt topped the list, with the most broad product categories to which large tariff increases have been applied over the past 20 years; roughly half those product groups were in agriculture or other commodities. Interestingly, in cases where a developed market economy raised tariffs substantially on a large number of products—as has been the case in Norway and Korea, for example—the vast majority of those products were commodities. This concentration in commodities, for which tariffs are generally higher and more volatile as a matter of course, makes these large tariffs less indicative of the broad and persistent tariff moves one would expect as part of a trade war.

Large tariff changes appeared mostly in EM countries and commodities sectors

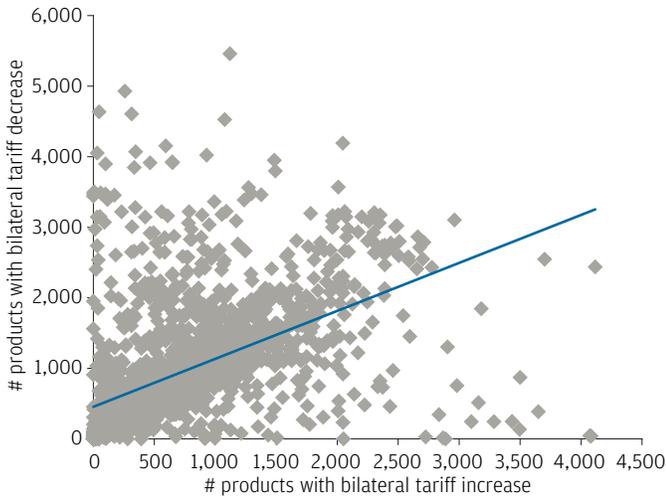
EXHIBIT 2: LARGE TARIFF INCREASES BY IMPORTING COUNTRY



Source: UNCTAD TRAINS, J.P. Morgan Asset Management; data as of July 2018.

On average, a country has twice as many tariff decreases as increases, with a given partner

EXHIBIT 3: NUMBER OF TARIFF INCREASES AND DECREASES FOR EACH IMPORTER-YEAR PAIR



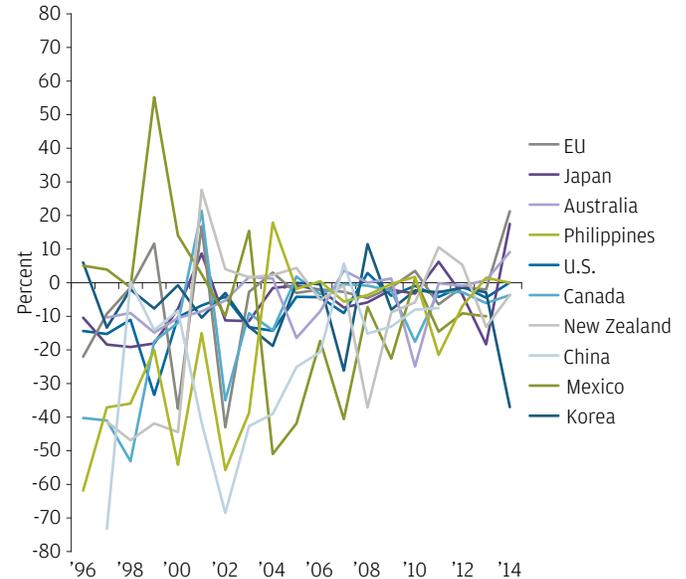
Source: UNCTAD TRAINS, J.P. Morgan Asset Management; data as of July 2018.

A related point is that countries more prone to raising tariffs also tend to be countries more prone to decreasing tariffs. That is, big tariff increases may simply reflect that some countries are more active users of tariffs in a given period, pushing tariffs in both directions. As **EXHIBIT 3** illustrates, there is a clear positive relationship between the number of tariff increases and decreases for a given country in a given year. The average country has roughly twice as many product-partner tariff decreases as increases.

Finally, when the number of tariff increases and decreases is out of balance, the deviations tend to be short-lived. We construct a diffusion index for each importing country by taking the number of tariff increases, subtracting the number of decreases and dividing by the total number of observations. In **EXHIBIT 4**, the downward trajectory of overall tariff rates is illustrated by the fact that there are far more lines below than above zero (i.e., indicating more tariff declines than rises). Over the past 20 years, a typical country spent most of its time at or near zero, with occasional deviations. When the net share of tariff increases is well below zero, it means that the country is undergoing or underwent a liberalization episode.

When tariffs increase (above zero) or decrease (below zero), the deviations are short-lived and tariff volatility is much lower than in the late 1990s and early 2000s

EXHIBIT 4: DIFFUSION INDEX OF TARIFF CHANGES



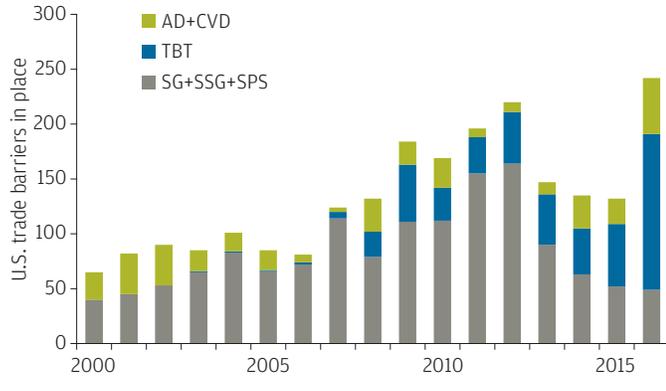
Source: UNCTAD TRAINS, J.P. Morgan Asset Management; data as of July 2018.

Indeed, most countries with a complete complement of data spent multiple years with a deeply negative diffusion index over the two decades we considered. In contrast, periods with a net share high above zero (i.e., indicating more tariff rises than declines) were fewer and tended to last only a single year. We also used a more formal treatment of the evolution of tariff changes to quantify their mean-reverting nature. For a 1ppt increase in the tariff rate at time zero, we found that 75bps is reversed, on average, over the subsequent two years. Also implied in **EXHIBIT 4** is the empirical notion that, despite the large economic shock of the global financial crisis, the incidence of global protectionist trade policy through tariffs did not increase notably in its wake. We note this as additional evidence of the inertia in international trade policy, which worked against the historical tendency of policymakers to pursue “beggar thy neighbor” policies in response to severe economic hardship.

All in all, the trade policy environment has been increasingly characterized by two countervailing trends: one, the liberalization trend in tariffs, with very occasional broad rises in tariffs (as discussed already); and two, its accompaniment by a steady rise in frequency of smaller, more targeted measures. As a case in point, even as the average U.S. applied tariff rate has

Trade barriers have become increasingly numerous and targeted

EXHIBIT 5: U.S. TRADE BARRIERS OVER TIME



Note: AD+CVD=anti-dumping and countervailing duties, TBT=technical barriers to trade, SG+SSG+SPS=safeguard, special safeguard, sanitary and phytosanitary measures.

Source: WTO Integrated Trade Intelligence Portal, J.P. Morgan Asset Management; data as of July 2018.

fallen since 2000, the number of U.S. trade barriers has roughly doubled over that period (EXHIBIT 5). Anti-dumping and countervailing duties have cycled around just 20 in force at any given time. Despite their prominence in the public discourse on trade, they did not meaningfully contribute to the overall upward trend. Rather, the general rise in trade barriers was driven by successive waves of technical barriers to trade, special safeguards, and sanitary and/or phytosanitary measures.³ These measures are narrower in scope by construction.

PEACEKEEPERS OF THE GLOBAL TRADING SYSTEM

The portrait that emerges from the foregoing summary of importers’ tariff changes generally does not align with conventional definitions of trade wars. Why is that, and what is keeping the peace? Several long-term developments: Deeper trade integration, longer supply-chains, the formation of regional trade blocs, the development of dispute resolution mechanisms and the ever-present threat of tariff reciprocity all suggest the higher costs of, and more available alternatives to, a trade war scenario.

³ Technical barriers to trade and sanitary measures are regulatory in nature, having to do with the standards and procedures embedded in foreign export content. They are generally applied at the level of specific import product categories and firms. Special safeguards, which account for the vast majority of the safeguards and special safeguards category, are targeted measures to protect against injury to domestic firms within the context of existing trade agreements.

Welfare gains from trade

What are the economic benefits of trade? Using trade theory as a starting point, the first-order effect of raising trade barriers is to reduce welfare gains relative to a free-trade outcome. While the precise margins of welfare gains from trade might be difficult to parse very finely, it seems clear from an empirical perspective that overall global welfare gains from trade took a significant step up starting in the early 2000s.

For a back-of-the-envelope estimate of the size of these gains, one can use the statistic emphasized by several academic articles on international trade, which characterizes welfare changes in a broad class of theoretical trade models. That statistic is the change in the share of expenditure on domestic goods, raised to the power of $1/\epsilon$, where ϵ is the elasticity of imports with respect to variable trade costs. According to International Monetary Fund data, the ratio of global imports to global GDP increased from 20.4% in 1997 to 34.5% in 2016, implying a gross decline in the share of domestic expenditure of 18% and a corresponding welfare increase on the order of 2.6%-7.0% of global GDP. In other words, were one to roll back the gains from trade over that period, it would be tantamount to erasing roughly one to two years of global GDP growth.

In addition to this measure of welfare, which captures the effect of rising terms of trade amid liberalization, welfare gains come from other sources, as well. Some stem from the increasing availability of new product varieties and from domestic firms’ diminished monopoly pricing power. An array of research on these two margins suggests that they are associated, in fact, with quite significant welfare gains. In the TRAINS data, the average country had 17% more varieties (defined crudely as the number of product-partner trade links) in 2014 relative to 2005. The research on the pro-competitive effects of U.S. trade attributes a cumulative drop between 1992 and 2005 of about 3% in merchandise prices and of about 50bps in overall consumer prices to lower pricing power related to trade liberalization.

Global supply-chain (vertical) integration

A specific innovation that has contributed to rising global trade intensity—and likely gives rise to higher degrees of inertia in tariffs—is the lengthening of global supply-chains, a trend also known as offshoring. The extent of offshoring, or the foreign value-added in an economy's exports, has been rising steadily at a global level, by about 10ppt worldwide over the past four decades.

There are two interrelated reasons why more vertical integration would lead to lower tariff volatility. The first is that the effect of a tariff on trade is magnified in a production process in which goods cross more than one border. The same logic helps to explain why countries exhibit a home bias in trade (consumers tend to consume more domestically produced than international products), since the multiple layers of tariffs across a global production process compound trade frictions at any tariff level. Since trade responds disproportionately to tariffs under vertical specialization, the disruption from large tariffs has increased over time.⁴

The second reason vertical integration matters is that the increasing interdependence of upstream and downstream industries enlarges the cost of raising tariffs and curtailing trade. It could be argued that the sunk costs of forging these international links may have persistent effects. Namely, to the extent that the fixed costs associated with outsourcing have been rising—which would be the case especially for more complex production processes—longer international value chains would exacerbate the real effects of international relative price changes. In sum, greater trade and supply-chain integration over time increase the costs of applying large tariffs, and may be contributing to higher tariff inertia.

Tariff reciprocity

It is widely believed that in addition to their welfare costs, unilateral tariffs simply invite retaliation by other trading partners, making these tariffs either self-defeating or likely to move both parties rapidly toward a trade war. That is, mutually assured destruction acts as a disincentive to enter into trade disputes. Indeed, contemporary instances of tariffs have often

involved one party's capitulation in the face of mounting retaliatory threats. A notorious example is the safeguard tariff on steel products applied by the U.S. in 2002, which was scheduled to be in place through 2005 but was withdrawn two years early in response to the threat of USD 2 billion in sanctions by the European Union (EU).

While there is little reason to believe that the retaliatory motive for tariff inertia has changed dramatically in recent decades, there are a few influences on its strength worth mentioning. For one, size may matter in tariff reciprocity dynamics. When countries are sufficiently different in size, the gains to the larger country applying a tariff may outweigh the negative effects of the small country's retaliation. Viewed through this lens, the formation of regional trade blocs like NAFTA, the EU, Mercosur⁵ and others has had several joint effects. These blocs have (1) virtually eliminated intra-bloc tariffs; (2) put downward pressure on external tariffs; and (3) reduced the incentives for other economies to enter into a dispute with the larger bloc.

On some level, the formation of these blocs in the first place may reflect the desire of their individual economies to obtain scale and greater pricing power in a global marketplace characterized by imperfect competition. Indeed, one of the results of greater trade integration over time is the concentration of trading activity in larger firms. That implies a trend toward larger players in international transactions and more heft behind threats of retaliation in response to tariffs.

International dispute forums

Embedded within regional trade agreements are international trade policy institutions and a legal infrastructure providing forums where trade disputes can be aired before they devolve into broader tariff escalations. The broadest such forum is the WTO Dispute Settlement Body, which has seen over 500 disputes since 1995 and issued more than 350 rulings in those cases. Multilateral forums for international investment disputes have also been on the rise. Since the late 1980s, almost 700 investor-state dispute-settlement cases have been heard, with the number roughly doubling in the 2010-15 period relative to 2000-10, and the majority of these cases entering into arbitration through the International Centre for Settlement of Investment Disputes. Those international dispute mechanisms

⁴ The implication of these findings for the incidence of trade wars is somewhat ambiguous. On the one hand, the higher costs per unit of tariff change act as a disincentive to use tariffs aggressively. On the other, since each unit of tariff increase packs more punch, it also takes less of any given tariff increase to affect a trade dispute.

⁵ Mercado Común del Sur, or the Southern Common Market, comprises Argentina, Brazil, Paraguay, Uruguay and Venezuela.

are complemented by the more specific dispute-resolution systems embedded in regional or bilateral trade and investment agreements. For example, over NAFTA's 20-year history, 119 processes were initiated under its dispute-settlement procedure, with fairly continual procedural innovations streamlining the process over time.

Taken together, these lower frequency trends are consistent with the general decline in average tariff levels in the TRAINS data since 1995. Moreover, they form guardrails around international trade policy outcomes, pushing trade actions to become narrower in scope and more precise in their targets. The four factors described above remain powerful forces on the side of minimizing the fallout from trade disputes. In the section below, we consider areas where current trade policies fit this description neatly, and others where the landscape appears to be shifting.

WHERE THESE FACTORS CREATE INERTIA IN POLICY OUTCOMES: NAFTA

The renegotiation of NAFTA currently underway is a timely illustration of how the sources of trade policy inertia, discussed in the previous section, are maintaining the status quo. NAFTA emerged as a key issue in the 2016 U.S. presidential campaign and has escalated into a significant source of global policy uncertainty since the U.S. entered into formal renegotiation proceedings in 2017. The 2018 elections in Mexico (presidential earlier this July) and the U.S. (congressional in November) have removed any urgency in signing a deal this year. Yet one can point to two forces—deep North American integrated supply-chains and the continued modernization of dispute-resolution mechanisms—that are moving the talks toward a successful conclusion. In other words, the same forces causing tariffs to be inertial are also lessening the odds of a trade agreement's dissolution.

It is by no means unusual for NAFTA to come under scrutiny in U.S. election campaigns. One candidate, for example, predicted of NAFTA, "There will be a giant sucking sound going south" (Ross Perot, in the 1992 presidential debate); another vowed, "I will say we will opt out of NAFTA unless we renegotiate it and we renegotiate on terms that are favorable to all of America"

(Hillary Clinton, in the 2008 Democratic debate). "I will make sure that we renegotiate, in the same way that Senator Clinton talked about," former U.S. President Barack Obama said in the same 2008 debate. That rhetoric resembled the current administration's stance: "We will either renegotiate it or we will break it, because you know every agreement has an end," U.S. President Donald Trump said (in a 2015 *60 Minutes* interview). Setting aside political rhetoric, at various points, all parties to NAFTA have suggested that the agreement should be updated to better account for the modern nature and composition of international trade.

The difference today is that anti-NAFTA rhetoric poses the first existential threat to the agreement in its two-decade history. This began in May 2017, when U.S. Trade Representative (USTR) Robert Lighthizer submitted notice to Congress of intent to renegotiate NAFTA, triggering a 90-day consultation period. The first round of official renegotiation talks was held in August 2017, followed by seven subsequent rounds of high level talks so far. While much of the low-hanging fruit in negotiations has been harvested successfully—with renegotiation of about 10 of NAFTA's 32 chapters concluded to date—several sticking points remain. Thomas Donohue, the president of the U.S. Chamber of Commerce, called these the "poison pills" of NAFTA renegotiations, each running the risk of blowing up the pact. They are:

- (1) U.S. demands to increase the North American (and, specifically, U.S.) content in the goods and services that fall under the agreement's **rules of origin**.
- (2) A U.S. preference to shift to locally domiciled **dispute settlement**.
- (3) The U.S. suggestion that the agreement include a **sunset clause** exposing the deal to renegotiation every so often.

Below, we address each in turn.

Rules of origin

Global supply-chain (vertical) integration is both a reason that this issue is so hotly contested and a factor pushing for resolution. Under current NAFTA rules, products have to meet a certain minimum North American content threshold to be traded duty-free within the bloc. For example, automobiles—

the production with the most deeply integrated North American supply-chain must be made up of at least 62.5% North American content. This would preclude, for instance, the import of a finished automobile from Asia into Mexico and its subsequent duty-free export to the United States. The auto sector is a linchpin for broader rules-of-origin issues in NAFTA, given the depth of its intraregional supply-chains in the automobile production process.⁶

In our view, the direction of travel toward compromise and more flexible stances on rules of origin is, at least in part, a tacit acknowledgment that unwinding deeply intertwined North American supply-chains would be highly disruptive. This notion has been corroborated as hyperbolic threats of withdrawal from NAFTA have given to tinkering around the edges of, arguably, the most deeply integrated North American supply-chain—automobiles, and its regional content requirements. Moreover, proposals to bring U.S. research and intellectual property into the value-added calculation would be consistent with common desires to modernize the agreement.

Dispute settlement

Although international dispute settlement systems have been streamlined over the years, the rise in their usage as the default option in international trade agreements is a contentious issue, not least because it hinges on entrenched sovereignty claims by the agreements' stakeholders.⁷ The U.S. argument turns on the idea that dispute settlement is not effective, as currently implemented and, at least implicitly, that it would be preferable to face foreign investor and state

claims in the U.S. court system.⁸ More broadly, the U.S. argues that international dispute forums have an anti-U.S. bias. USTR Robert Lighthizer has argued the WTO engenders this because more complaints have been brought against the U.S. than any other country and it has lost most of those cases.

The empirical evidence on dispute outcomes and bias is nuanced. For one, the U.S. generally wins trade and investment disputes under those mechanisms, particularly when it is the complainant.⁹ Under former U.S. President Barack Obama, the U.S. brought more cases to the WTO than any other country during that time, including 16 against China. It won all that have been decided. The U.S. desire to remand dispute resolution back to domestic courts challenges one of the main institutional pillars of the global trade enforcement regime (notwithstanding the specific merits of the NAFTA panels, from the perspective of U.S. interests). Locally domiciling dispute settlement also undercuts the potential for the future improvement of multilateral dispute resolution.

Indeed, remanding to domestic courts calls into question one of the sources of stability and inertia in trade policy, as we discussed earlier. The threat of tariff reciprocity provides a clear and direct reason to maintain multilateral NAFTA panels. If there was no location deemed neutral for Canada and Mexico to dispute what they claim to be unfair U.S. antidumping or countervailing duties, then they would be more likely to retaliate with offsetting duties of their own on U.S. exports.

A sunset clause

U.S. trade negotiators have suggested a finite term, a sunset clause, under which NAFTA would expire every five years unless reauthorized by each of the three countries. Businesses in all three countries are vocally opposed to this provision, which would add a perpetual source of uncertainty to their operational decision making. The general cooling effect of this

⁶ In an initial proposal, the U.S. suggested increasing this threshold to 85%, divided into a 50% U.S. content minimum and 35% or greater of the content coming from Canada and Mexico. The key element of opposition from Canada and Mexico centered on the idea that quantitative restrictions on intra-regional rules of origin run counter to the spirit of the initial agreement and the flexibility in production that it promoted. The U.S. dropped its 50% U.S. content request in March, replacing it with a proposal that only wages with equal to or above USD 16/hour count as costs from the perspective of calculating NAFTA-related cost content. There are also proposals on the table to differentiate NAFTA content requirements by product, and an innovative idea from Canada to include research and development expenses in the calculations. Canada has proposed including the technology and design component, such as operating software, of automobile production in order to increase the U.S.-produced content of NAFTA automobile value. The design and software creation process is typically done at the U.S.-located home base of one of the manufacturers selling under NAFTA rules.

⁷ Currently, trade disputes under NAFTA are governed by the state-state dispute resolution procedure outlined in Chapter 19 of the agreement. Investor-state disputes are governed by arbitration clauses outlined in Chapter 11 of the agreement. The U.S. would like to move these disputes to U.S. courts, and have specifically proposed the removal of Chapter 19, which Mexico and Canada oppose.

⁸ In March 2017, the acting U.S. Trade Representative (USTR) sent a draft notice to the Senate Finance and Ways and Means Committees describing the administration's objectives for the renegotiation of NAFTA. The notice had as one of its main objectives the elimination of Chapter 19, stating "[Chapter 19] panels have ignored the appropriate standard of review and applicable law, and... aberrant panel decisions have not been effectively reviewed and corrected."

⁹ According to the Canadian Centre for Policy Alternatives, Canada has been challenged under NAFTA's investor-state dispute mechanism a total of 41 times, more than either Mexico or the U.S. It has lost eight and won nine of these challenges, paying out more than USD 219 million in damages and settlements, and USD 95 million in legal costs. The U.S. has never lost. At the WTO, complainant countries, including the United States, usually win cases they bring to the WTO because they tend to bring only the strongest cases.

uncertainty on operations could reduce welfare gains associated with NAFTA trade. And, moreover, if a reauthorization failed, all countries would snap back to their previously applied tariff rates on goods from one another. The sunset clause, more generally, is a means of reducing inertia in trade policy, which we have argued is fairly well entrenched.

In our view, NAFTA after modernization will likely keep in place the same general boundaries. As such, North American trade remains unlikely to devolve into a trade war. While encouraging, we discuss below whether this same reasoning will hold for other sorts of emerging disputes that the global trading system has not dealt with before. We also note the possibility that tariffs under Section 232 of U.S. trade law, proposed ostensibly to protect U.S. national security, would need to be resolved in the context of NAFTA renegotiation. Current tariffs on steel and aluminum, and tariffs on autos under consideration, may pose an even greater threat to the political economy of negotiations than any of the issues discussed above.

NEW BATTLE LINES: MODERN RATIONALES FOR PROTECTIONISM

Next, we examine how to square the traditional forces that have kept trade wars at bay with the more modern facets of the global economy. The nature of modern trade disputes suggests protectionist strategies will likely broaden. The U.S. Commerce Department investigated China to determine whether it has abused U.S. intellectual property in ways that are “unreasonable or discriminatory and burden or restrict U.S. commerce” under Section 301 of U.S. trade law. This illuminating case study highlights some of the modern issues being incorporated into trade disputes, their rationale and the strategies the U.S. could utilize to resolve its complaints.¹⁰ It also raises the possibility that the catalysts for broad trade wars are multiplying.

¹⁰ Section 301 of the U.S. Trade Act of 1974 gives the U.S. president the power to take action to protect companies or industries subject to unfair practices by a foreign government, “that burden or restrict U.S. commerce.” In the 301 action against China, the U.S. Trade Representative instigated an investigation to, “determine whether acts, policies, and practices of the Government of China related to technology transfer, intellectual property, and innovation are unreasonable or discriminatory and burden or restrict U.S. commerce.”

The U.S. has used Section 301 to challenge China’s business practices five times before, most recently in 2010, when the Obama administration used a 301 investigation to support a successful WTO case against Chinese subsidies of domestic clean energy technologies. Notably, each of the four prior 301 actions against China involved intellectual property, in a wider effort to protect the IP embedded in U.S. exports.¹¹

The latest grievance, which estimates damages to U.S. interests of roughly USD 60 billion annually, represents a significant departure from previous trade disputes because of the ameliorative action—unilateral compensatory duties—the U.S. government has proposed. Section 301 allows for such a unilateral action in some instances, but also stipulates that violations falling under WTO members’ obligations must be challenged through the WTO dispute settlement system. Whether or not IP is governed by WTO member obligations is a gray area, bringing the legality of U.S. tariff actions into question. Absent a negotiated bilateral settlement, such an action would also significantly raise the possibility of Chinese retaliation. With these constraints in mind, U.S.-imposed tariffs as a result of the Section 301 tariff have so far seen a direct one-for-one response from China. This situation is still developing and we can expect each side’s policy choices to stretch beyond the application of tariffs.

The scope of this dispute is broader in the following key areas:

- **Intellectual property is a sensitive aspect of national industrial policy for both countries.** The U.S. wants to protect its place in the vanguard of global technology as the incumbent producer of higher-value-added products within the global supply-chain. One can think about value-added—the amount of labor and capital services a country adds to a good in its stage of the production process—as being subject to significant competition. In this case, after successful integration into global supply-chains over the last 20 years, China is now vying for market share in increasingly higher-value-added production processes. Viewed through this lens, the 301 trade dispute is less about practices deemed unfair and more about protecting pockets of economic specialization. As such, even retaliatory tariffs might not compensate for perceived losses in national competitiveness.

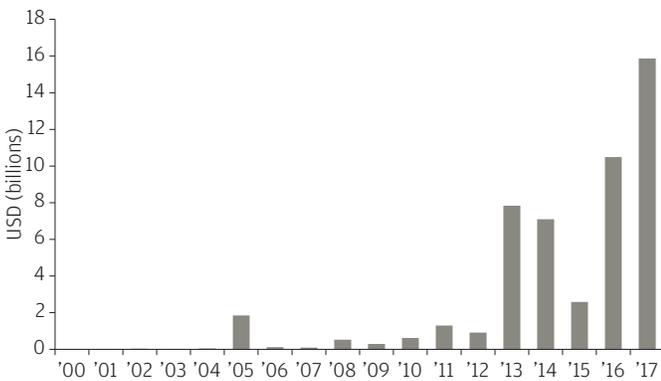
¹¹ The USTR prepares an annual Special 301 Report identifying trade barriers to U.S. companies and products due to the copyright, patent and trademark laws in other countries. It also highlights the issue in an annual report to Congress on China’s WTO compliance. Additional supporting evidence of these claims is provided by the Commission on the Theft of American Intellectual Property.

- **Intangibles like IP introduce new types of collateral in trade disputes.** The four factors discussed earlier that keep trade disputes relatively tame apply to a trading system revolving around goods and services; it's less clear how these norms will constrain protectionism when trade disputes circumscribe a larger set of intangibles, like IP. Embedded IP appears to be increasing as a share of Chinese exports. As an illustration, of the USD 107 billion in tech products the U.S. imported from China in 2014, 75% of the value added occurred during production in China. That share has been rising as China has grown richer and has moved farther up the value chain.

A key mechanism for mobility along the value chain is outward investment. Tech-related Chinese investments in the U.S. have ballooned in recent years (**EXHIBIT 6**), and the transfer out of U.S. technology, as a result of Chinese acquisitions of U.S. companies or joint-venture partnerships, has come under scrutiny in the 301 investigation.

China continues to invest heavily in target industries

EXHIBIT 6: CHINESE INVESTMENT IN U.S. COMPANIES IN TARGET INDUSTRIES, USD BILLIONS

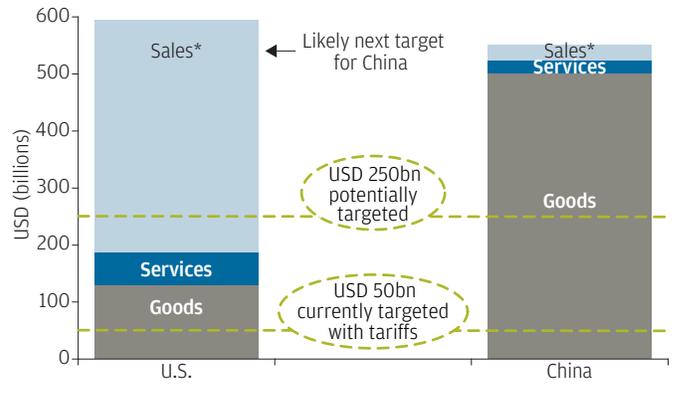


Source: Rhodium Group, J.P. Morgan Asset Management; data as of July 2018. Target industries are those linked to the Made in China 2025 initiative. Data counts new greenfield investments or acquisition.

Investments like these will face greater scrutiny under a revamped Committee on Foreign Investment in the United States (CFIUS). The administration and lawmakers are working on changes to CFIUS to allow for greater leeway in rejecting or modifying foreign investment deals, and one would expect a revamped-CFIUS to use this authority to prevent Chinese buyouts of American companies.

China relies on exports; the U.S. draws more revenue from sales abroad

EXHIBIT 7: COMPONENTS OF U.S. AND CHINA ECONOMIC REVENUE USD BILLIONS, 2017*



Source: U.S. Bureau of Economic Analysis, U.S. Census Bureau, J.P. Morgan Asset Management; data as of July 2018.

*Sales data are as of 2015, the most recent year for which sales of multinational firms are available.

An analogous transfer mechanism is via American companies operating in China. Again, the scale of such cross-border operations is impressive (**EXHIBIT 7**). Sales of the subsidiaries of U.S. companies operating in China dwarf total U.S. exports of goods and services to China. In the context of the 301 investigation, a chief U.S. complaint is that the knowledge that Chinese companies gain from partnerships with foreign companies seeking to operate in China feeds back into Chinese exports, which then compete with U.S. firms in their home market.

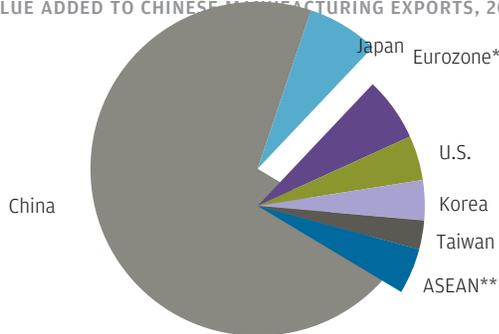
- **The Section 301 case may interact negatively with Chinese domestic industrial policy.** China's development model relies on state support for industries identified as national champions. U.S. complaints about unfair trading practices and IP theft have significant overlap with the industries China has included in its Made in China 2025 initiative. Made in China 2025 aims to make China the global leader in 10 strategic industries, ranging from railway engines to artificial intelligence. They are industries that are generally capital- and IP-intensive.
- **IP enforcement is at the core of the dispute, yet this underlying issue is not being addressed.** A valid argument holds that the Chinese government crafts domestic policy and interprets foreign IP regulations to benefit its domestic enterprises. In addition, activities running further afield of the law—such as corporate cyberespionage—have been a

persistent problem for firms operating in China.¹² Trade protection measures being considered under Section 301 appear to fall short of addressing this underlying issue. A negotiated agreement stands a better chance of making headway.

- **Foreign value-added in Chinese exports will likely be collateral damage.** Actions against China will likely refract among U.S. allies, creating an even more difficult environment in which to apply protectionist measures to Chinese technology imports. This matter is above and beyond China’s technology transfer requirements. In the case of IP protections, the importers most likely to be affected are Japan, the eurozone, Korea, Taiwan and the U.S. itself. **(EXHIBIT 8).**

China adds more value than before, but its exports are still a global affair

EXHIBIT 8: SOURCES OF VALUE IN CHINESE EXPORTS
% OF VALUE ADDED TO CHINESE MANUFACTURING EXPORTS, 2014



Source: OECD, J.P. Morgan Asset Management; data reflect most recently available as of July 2018.

*Eurozone is the OECD’s 18-country euro area aggregate.

**ASEAN is the Association of Southeast Asian Nations.

Given the broader profile of the China IP dispute, its resolution will likely begin to chart a course for future modern trade wars to follow. The legal authority to apply protectionist measures will come under scrutiny; whether it leads to a retaliatory tariff escalation remains to be seen. Other channels for IP rights enforcement may emerge, and regulatory/CFIUS actions are parallel fronts.

We can also look to history as a guide. There are similarities between the China IP issue and U.S. efforts to counterbalance

Japanese industrial policy in the 1980s and 1990s pertaining to the auto and semiconductor industries, respectively. The Section 301 auto investigations in the 1980s led to a protracted and acrimonious negotiation and eventual Japanese concessions on market access and quantitative restrictions on exports to the U.S. And while negotiated outcomes are in some sense the least damaging, these had unintended consequences. Restricted Japanese auto exports were an important instigation for quality upgrades and, at least indirectly, the subsequent long-term expansion of Japanese market share in the U.S.

IMPLICATIONS FOR MULTI-ASSET INVESTORS

This paper starts by asking: What is a trade war? We conclude by acknowledging that one would be hard-pressed to define one based on recent trends in global protectionism. While idiosyncratic tariff tightening by the U.S. has, in fact, been broadening, there are several trends in global trade that appear to cut in the opposite direction. Deeper trade integration, longer supply-chains, the formation of regional trade blocs and the development of dispute-resolution mechanisms all suggest the higher costs of a trade war and weigh in favor of alternative strategies for resolution. This medium-term view anchors our thinking around trade policy outcomes over the coming year. As a result, for a macro investor the upshot of more frequent trade disputes is less about directional asset allocation views than it is about volatility.

Key inputs into one’s calibration of tariff effects on markets are the non-linear effects of trade disputes on near-term growth and inflation in the size and breadth of the tariffs. For small or narrow increases in tariffs, the macroeconomic effects are generally small. Indeed, the U.S. already imposes triple-digit tariffs on an array of products imported from China, implemented under WTO-compliant anti-dumping laws, but those tariffs have had minuscule effects on overall trade flows and import prices. The non-linearities kick in once trade barriers begin to affect economic sentiment or the structure of supply-chains, or if the distributional effects of the tariffs become systemic.¹³

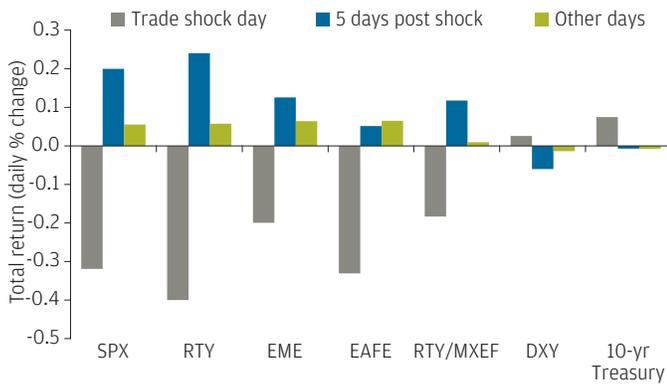
¹³ Beyond direct tariff impacts, trade disputes could have negative knock-on effects by damaging corporate confidence, leading companies to pull back on investment or hiring decisions amid heightened uncertainty. Household sentiment might also falter as consumer prices rise. The offshoring trend of the past two decades means that most U.S. imports embed components made by several companies and, in all likelihood, countries. This makes the interaction of trade and corporate performance more complex than aggregate trade or equity market sales exposure suggests. And, finally, the nature of a country’s economic specialization when it opens to international trade creates winners (generally associated with export industries) and losers (in import-competing industries). Unwinding trade thus disproportionately punishes exporters and the consumers of imports.

¹² Testimony by Jan Weedon, Hearing on Commercial Cyber Espionage and Barriers to Digital Trade in China, U.S.-China Economic and Security Review Commission, June 15, 2015. <https://www.uscc.gov/sites/default/files/Weedon%20Testimony.pdf>

Given the non-linearity of tariff effects on the economy, recent episodes of trade-related market volatility can be interpreted as a repricing of the likelihood that extreme outcomes arise, although we are not at those extreme outcomes quite yet. This interpretation is supported by the fact that markets have cycled through trade policy episodes relatively quickly. By our estimation, a “typical” announcement effect over the past 18 months has corresponded to a 30bps fall in the S&P 500’s total return on the day of the announcement, followed by a 1ppt cumulative recovery over the subsequent five trading days (EXHIBIT 9). As might be expected, the effects have been more pronounced in the more trade-exposed markets of Asia and Europe than in the relatively closed U.S. The fact that U.S. assets also generally do relatively better in any risk-off situation is likely another contributing factor.

U.S. trade announcements have led to sharp declines in equities, followed by sharp bounces

EXHIBIT 9: MARKET REACTIONS TO TRADE POLICY



Source: Bloomberg, J.P. Morgan Asset Management; data as of July 2, 2018.

Even in cases where there has been a significant prospect of a less liberal trade environment, the market response has been short-lived. Recent experience appears to be consistent with this view. For example, Brexit threats to the UK-EU trade relationship, and fears of wholesale changes to NAFTA, struck sterling and the peso, respectively, quite dramatically on impact. However, their effects waned after the initial shocks, as more benign expectations for policy outcomes emerged. These experiences suggest that trade policy can be investible on a tactical basis, as markets cycle through the sticker shock of trade posturing and subsequent normalization. They also suggest limited pass-through to directional bets over a 12-month horizon.

While causing negative reactions for equities on impact, trade war headlines are also temporarily dollar positive, which is challenging for emerging market assets and supportive of inflation breakevens. A pro-risk directional stance in a portfolio requires some balance for near-term trade risks, and the associated dollar risks (e.g., pairing emerging market with U.S. equities). For emerging market equities, in particular, we are cognizant of the disproportionately higher volatility in response to trade disputes. In terms of portfolio construction, duration acts as a moderate hedge for trade shocks, with stock-bond correlations modestly more negative during recent trade risk episodes.

NEXT STEPS

For more information, contact your J.P. Morgan representative.

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