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A Legal and Economic Critique of President Trump's China Trade Policies

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A LEGAL AND ECONOMIC CRITIQUE OF PRESIDENT TRUMP'S CHINA TRADE POLICIES

Daniel C.K. Chow,^{*} William McGuire,^{**} Ian Sheldon^{***}

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The administration of President Donald J. Trump has warned that it supports an aggressive across the board tariff of 45% on all imports from China to neutralize the effects of China's currency manipulation. However, such a tariff cannot withstand an economic and legal analysis. Fundamental economic principles indicate that China's alleged currency devaluation cannot create a real long-term trade advantage and that the effects of currency devaluation have no real effect on the U.S.-China trade balance. Not only is currency manipulation not a cause of the U.S. trade deficit with China but the proposed remedy of a draconian 45% tariff will only create a grievous self-inflicted wound on the U.S. and global economy. From a legal perspective, a 45% tariff cannot be justified under the legal regime of the World Trade Organization as such a tariff runs afoul of the tightly regulated regime of authorized trade sanctions. As the proposed tariff cannot be justified from a legal or economic perspective it is not an advisable or appropriate response to China's trade practices.

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I.
INTRODUCTION

President Donald J. Trump has stirred much concern and controversy in the global economy by threatening to adopt harsh trade policies against China and other countries.¹ Although Trump's aggressive stance towards a number of countries has raised concerns, it is his singling out of China for harsh treatment that is especially concerning due to the size of China's economy, the second largest in the world behind the United States, and the impact that trade sanctions against China may have for the rest of the world.² Trump believes that China routinely engages in unfair trade practices that harm the U.S. and has vowed to take tough measures against China, including the imposition of trade sanctions in the form of higher tariffs on imports from China.³ During his 2016 presidential campaign, Trump warned that, "If China does not stop its illegal activities . . . I will use every lawful presidential power to remedy trade disputes, including the application of tariffs"⁴

Consistent with his campaign promises of taking a tough stance against China, the President has selected key personnel for his new administration who have also voiced bellicose views against China. Professor Peter Navarro, Trump's new head of the White House National Trade Council, is an economist and well-known extreme China critic.⁵ While Professor Navarro's new role is not entirely clear, it seems that he will serve as a senior advisor to Trump on trade issues.⁶ Navarro shares views on China with Trump, but Navarro goes further to argue that China and its illegal trade practices form the *central* problem of the modern world economy.⁷ Navarro has warned, "unless the [China] trade issue is fixed, there can be no

¹ Benjamin Applebaum, Experts Warn of Backlash in Donald Trump's China Trade Policies, NY Times (May 2, 2016) available at <https://www.nytimes.com/2016/05/03/us/politics/donald-trump-trade-policy-china.html> (characterizing Trump's trade approach towards China and other targeted nations as "punitive").

² Dominic Rushe & Benjamin Hass, Could Trump's Chest-Thumping Over China Trigger a Trade War?, THE GUARDIAN (Dec. 10, 2016, 5:00 PM), <https://www.theguardian.com/business/2016/dec/10/china-trade-war-trump-tariffs-exports>.

³ Charles Wallace, China's Abusive Trade Practices Likely to Focus Trump's Wrath, FORBES (Feb. 8, 2017), <https://www.forbes.com/sites/charleswallace1/2017/02/08/chinas-abusive-trade-practices-likely-to-focus-trumps-wrath/#541a81eb6fdc>.

⁴ Tessa Berenson, Donald Trump Details Plan to Rewrite Global Trade Rules, TIME (June 28, 2016, 5:32 PM), <http://time.com/4385989/donald-trump-trade-china-speech/>.

⁵ See Peter Navarro is About to Become One of the World's Most Powerful Economists, THE ECONOMIST (Jan. 21, 2017) <http://www.economist.com/news/briefing/21715017-there-are-reasons-be-worried-about-head-donald-trumps-new-national-trade-council-peter> (describing Navarro as a "China bashing eccentric").

⁶ See Id.

⁷ See Adam Davidson, Trump's Must on US Trade with China, NEW YORKER (Oct. 12, 2016), <http://newyorker.com/business/currency/trumps-muse-on-u-s-trade-with-china>.

prosperity in the global economy.”⁸ Navarro has also stated that China is “brutal, amoral, ruthless, [and] cheating” in its trade with the United States.⁹

Trump has also named Robert Lighthizer, another well-known China critic, to serve as the United States Trade Representative, the senior U.S. official on all trade matters.¹⁰ As USTR, Lighthizer has overall responsibility for concluding new U.S. trade deals, for bringing complaints against China in the World Trade Organization, and for initiating federal trade remedies against China.¹¹ In 2010, Lighthizer testified before Congress that optimistic forecasts in 2001 that China’s entry into the WTO would curb its illegal trade practices have not been borne out in practice.¹² In the same congressional testimony, Lighthizer stated that the United States needed to be more aggressive in dealings with China.¹³ More controversially, Lighthizer, a lawyer by profession, argued that the United States should unilaterally impose tariff sanctions on China even if this meant a “derogation” of U.S. commitments under the World Trade Organization and “heightened tensions” with China.¹⁴ In other words, Lighthizer has indicated before Congress that he might support trade sanctions against China that are unlawful under the WTO and could lead to a trade war with China.

One of the main arguments by China critics (including President Trump) is that China obtains an unfair advantage over the United States by devaluing its currency.¹⁵ Many China critics agree with Trump that China’s manipulation of its currency contributes to the massive \$347 billion trade U.S.-China deficit.¹⁶ According to Trump and other China critics, China devalues its currency by manipulating the exchange rate of the renminbi (RMB), the Chinese currency (translated as the “people’s money”), to U.S. dollars so that the exchange rate is

⁸ See *Id.*

⁹ Tom Philips, ‘Brutal, Amoral, Ruthless, Cheating’: How Trump’s New Trade Tsar Sees China, *THE GUARDIAN* (Dec. 22, 2016), <https://www.theguardian.com/world/2016/dec/22/brutal-amoral-ruthless-cheating-trumps-trade-industrial-peter-navarro-views-on-china>.

¹⁰ David Lawder, Trump Names China Critic Lighthizer as U.S. Trade Representative, *Reuters* (Jan. 3, 2017, 12:36 PM), <http://www.reuters.com/article/us-usa-trump-trade-idUSKBN14N0YA>.

¹¹ See Daniel C.K. Chow and Thomas J. Schoenbaum, *International Trade Law: Problems, Cases, and Materials* 117 (3d ed. 2017) (hereinafter “Chow and Schoenbaum, *International Trade Law*”) (discussing the role of the USTR “as the chief official of the Executive Branch with respect to international trade”).

¹² See *Evaluating China’s Past and Future Role in the World Trade Organization: Hearing Before the U.S.-China Economic and Security Review Commission*, 111th Cong. (2010), (statement by Robert Lighthizer).

¹³ See *Id.*

¹⁴ See Robert Lighthizer, *Testimony Before the U.S.-China Economic and Security Review Commission: Evaluating China’s Role in the World Trade Organization Over the Past Decade*, 35 (2010), <https://www.uscc.gov/sites/default/files/6.9.10Lighthizer.pdf>

¹⁵ Sen. Sherrod Brown, *Currency Manipulation Gives Chinese an Unfair Advantage*, *THE HILL* (July 11, 2012, 10:51 PM), <http://thehill.com/blogs/congress-blog/economy-a-budget/237423-currency-manipulation-gives-chinese-an-unfair-advantage>.

¹⁶ See U.S. Census Bureau, *Foreign Trade: Trade in Goods with China* available at <https://www.census.gov/foreign-trade/balance/c5700.html>.

significantly lower than what would prevail under a free foreign exchange market.¹⁷ When currencies are allowed to “float” against one another, exchange rates are determined by supply and demand.¹⁸ This is true of most major international currencies, such as the euro, U.S. dollar, and the Japanese yen.¹⁹ Higher demand for U.S. goods and services abroad translates into higher demand for the U.S. dollar to pay for them. This would result in the appreciation of the dollar against the RMB and other world currencies;²⁰ conversely, lower demand would result in the depreciation of the dollar.²¹

However, China does not allow its currency to float. Instead, China has established a system of “conditional convertibility,” whereby the government actively intervenes in foreign exchange transactions to influence the exchange rate.²² Today, all foreign exchange transactions in China must be done through officially designated bank or non-bank financial institutions that participate in a state-run inter-bank market. When an individual or a firm needs to exchange foreign currency for RMB, the foreign currency is remitted to the central bank, where it is held as part of the country’s foreign exchange reserves.²³ The central bank then prints as much RMB as is required to exchange for these dollars at the prevailing exchange rate.²⁴ The critical role of government in these transactions allows China to influence the exchange rate of the RMB by increasing or decreasing its supply.²⁵ If the government wants the currency to depreciate, they can announce a new rate and then print sufficient RMB to satisfy the demand at this lower rate.²⁶ China had previously used this power to maintain a strict peg of 8.3 RMB per U.S. dollar, but has recently allowed the currency to float within narrowly defined bands against a basket of national currencies.²⁷

Some anti-China critics believe that using a pegged rate allows China to engage in currency manipulation to gain an unfair advantage in trade.²⁸ For example, the current exchange

¹⁷ C. Fred Bergsten, *The Need for a Robust Response to Chinese Currency Manipulation- Policy Options for the Obama Administration Including Countervailing Currency Intervention*, 10 *J. Int’l Bus. & L.* 269, 273-274 (2011).

¹⁸ Bhabatosh Banerjee, *Financial Policy and Management*, 959 (8th ed., 2010).

¹⁹ See IMF, *Annual Report on Exchange Arrangement and Exchange Restrictions* (Oct. 2014).

²⁰ *The Macroeconomy and Exchange Rates*, University of Colorado, <http://www.colorado.edu/economics/courses/econ2020/section13/section13-main.html> (last visited Mar. 15, 2017).

²¹ *Id.*

²² See People’s Bank of China, *China: The Evolution of Foreign Exchange Controls and the Consequences of Capital Flows*, p. 143. Available at <http://www.bis.org/publ/bppdf/bispap44h.pdf>

²³ See Matt Phillips, *How China Manages its Currency: An Explanation for Humans* (June 21, 2010, 2:47 PM), <http://blogs.wsj.com/marketbeat/2010/06/21/how-china-manages-its-currency-an-explanation-for-humans/>

²⁴ See *Id.*

²⁵ See *Id.*

²⁶ See *Id.*

²⁷ See Jeffrey A. Frankel & Shang-Jin Wei, *Assessing China’s Exchange Rate Regime*, 22 *Economic Policy* 575, 582-583 (2007).

²⁸ Bruce McCain, *Will China’s Currency Devaluation Spark an International Trade War?*, *FORBES* (Aug. 25, 2015, 9:35 AM), <https://www.forbes.com/sites/brucemccain/2015/08/25/will-chinas-currency-devaluation-spark-an-international-trade-war/#1f4cdc594d32>.

rate is about \$1 USD to 7 RMB.²⁹ Trump believes that this exchange rate is 45% below a market exchange, i.e. about \$1 USD to 3.85 RMB.³⁰ Under the current exchange rate, an imported product from China priced at 700 RMB would cost the U.S. buyer \$100 (700/7). Under the hypothetical free market rate, the product would cost the U.S. buyer \$182 (700/3.85). By intervening in foreign exchange transactions, China allegedly makes imports cheaper to the U.S. consumer.³¹ Conversely, U.S. products become more expensive to the Chinese consumer.³² For example, a U.S. import priced at \$100 would cost the Chinese consumer 700 RMB (100 x 7) using the current exchange rate, whereas the same U.S. import would cost the Chinese consumer 385 RMB at the hypothetical free market exchange rate. This leads U.S. consumers to buy greater amounts of cheap imports from China and Chinese consumers buy fewer, more expensive, imports from the United States, causing an increase of the U.S.-China trade deficit.³³ The current massive U.S.-China trade deficit of \$347 billion³⁴ potentially has many negative impacts on the United States, such as the closing of U.S. businesses and the loss of jobs in manufacturing.³⁵

Anti-China critics argue that China's currency manipulation creates the equivalent of an export subsidy to Chinese manufacturers.³⁶ By artificially making Chinese goods cheaper, China is providing an economic benefit to Chinese manufacturers who will enjoy a lower price to U.S. consumers and therefore higher sales for their goods than they would otherwise enjoy under market conditions. In response to this unfair practice by China, Trump has called for a tariff of 45% in order to offset the effect of China's currency manipulation.³⁷ A 45% tariff is a tax that increases the price of the import by 45% to the consumer and thus completely offsets or negates the price advantage caused by the currency devaluation.³⁸ During his 2016 Presidential campaign, Trump promised to have China labeled as a currency manipulator by the U.S.

²⁹ Bloomberg, Bloomberg Markets, <https://www.bloomberg.com/quote/USDCNY:CUR> (last visited Mar. 13, 2017).

³⁰ Peter Navarro, Trump's 45% Tariff on Chinese Goods is Perfectly Calculated, LOS ANGELES TIMES (July, 21, 2016, 5:00 AM), <http://www.latimes.com/opinion/op-ed/la-oe-navarro-trump-trade-china-tariffs-20160721-snap-story.html>.

³¹ See Jeff Muhlenkamp, Effects of Currency Manipulation, 113 Muhlenkamp Methods 1, 2 (2015), http://library.muhlenkamp.com/wp-content/uploads/sites/3/2015/01/Memo_113.pdf.

³² See Id.

³³ See Kimberly Amadeo, Why is America's Trade Deficit with China so High?, THE BALANCE (Feb. 27, 2017), <https://www.thebalance.com/u-s-china-trade-deficit-causes-effects-and-solutions-3306277>.

³⁴ See U.S. Census Bureau, *supra* note 16.

³⁵ See Daniel C.K. Chow, How the United States Uses the Trans-Pacific Partnership to Contain China in International Trade, 17 Chicago J. Int'l L. 370, 387-89 (2017).

³⁶ C. Fred Bergsten, Currency Manipulation: Why Something Must be Done, FORBES (Feb. 25, 2015, 2:43 PM), <https://www.forbes.com/sites/realspin/2015/02/25/currency-manipulation-why-something-must-be-done/#b210a7077621>.

³⁷ See What it Means if Trump Names China a Currency Manipulator, CNBC (Dec. 29, 2016, 7:07 PM), <http://www.cnbc.com/2016/12/29/what-it-means-if-trump-names-china-a-currency-manipulator.html>.

³⁸ See Navarro, *supra* note 30.

Secretary of the Treasury³⁹ and to use all available trade remedies against China.⁴⁰ One such remedy under federal law would be the imposition of additional tariffs known as countervailing duties on imports from China to offset or countervail the effect of the subsidy.⁴¹ As Trump believes that the effect of China's currency manipulation is to create a 45% subsidy, Trump has threatened to impose an across the border additional tariff of 45% on *all* Chinese products entering the United States.⁴² Navarro has stated that "Trump's suggestion of a 45% tariff on Chinese imports would, by my calculations, be an appropriate level."⁴³ In his 2010 congressional testimony, Lighthizer suggested that such punitive tariffs are legally justified under the WTO.⁴⁴ These statements from Trump and his key trade officials indicate that such a tariff may be forthcoming.

If the Trump administration imposes a tariff of 45% on all Chinese goods, the result could be a trade war with China that could create repercussions around the world.⁴⁵ China could retaliate by imposing similar tariffs against imports from the U.S. in a tit-for-tat response. In addition, if the U.S. imposes a 45% tariff on Chinese imports, other countries could immediately adopt similar tariffs because Chinese goods diverted from the U.S. due to the new tariff will seek other markets and could flood their economies causing them serious economic problems.⁴⁶ The entire global economy could be plunged into economic chaos by a trade war between the world's two largest economies.⁴⁷ These severe consequences raise the issue of whether the ameliorative effects of such a tariff on the U.S. economy justify the potential harms from this measure.

This article examines the justification of the proposed tariff from both an economic and legal perspective. Part II of this article examines the economic rationale of the currency manipulation argument used to justify the imposition of additional tariffs on Chinese imports. This Part argues

³⁹ Doug Palmer & Ben Schreckinger, *Trump Vows to Declare China a Currency Manipulator on Day One*, POLITICO (Nov. 10, 2015, 12:51 PM), <http://www.politico.com/story/2015/11/donald-trump-china-currency-manipulation-215679>. See also, Omnibus Foreign Trade and Competitiveness Act, 22 U.S.C. § 5304(b) (1998) (stating the procedure for determining whether a country manipulates its currency); Trade Facilitation and Trade Enforcement Act of 2015, Pub. L. No. 114-125, §701(b)(1), 130 Stat. 122 (2016) (requiring the USTR to engage in bilateral negotiations if they violate they are determined to be currency manipulators).

⁴⁰ See Berenson, *supra* note 4.

⁴¹ See Tariff Act of 1930, 19 U.S.C. § 1671(a) (2012).

⁴² See Marcus Noland, Gary Clyde Hufbauer, Sherman Robinson, & Tyler Moran, *Assessing Trade Agendas in the US Presidential Campaign*, Peterson Institute for International Economics Briefing 16-6, 5 (2016), <https://piie.com/system/files/documents/piieb16-6.pdf>.

⁴³ See Navarro, *supra* note 30.

⁴⁴ See *Evaluating China's Past*, *supra* note 12, at 67.

⁴⁵ Minxin Pei, *A Trade War with China is Likely Under Donald Trump*, FORTUNE (Nov. 10, 2016), <http://fortune.com/2016/11/10/donald-trump-china-trade/>.

⁴⁶ In 2002, the US imposed additional tariffs in the form of safeguards on all steel imports. Many countries immediately raised their own tariffs in anticipation that steel would be diverted from the US to their markets. See Chow and Schoenbaum, *International Trade Law*, *supra* note 11, at 416. If the US imposes high tariffs on all Chinese imports, other nations could react in a similar manner.

⁴⁷ John Follain, Jeff Black, & Scott Hamilton, *Specter of Global Trade War Rises as Trump Puts 'America First'*, BLOOMBERG (Feb. 1, 2017, 6:18 AM), <https://www.bloomberg.com/news/articles/2017-02-01/specter-of-global-trade-war-rises-as-trump-puts-america-first>.

that under an economic analysis, the argument that currency manipulation is the cause of the current U.S.-China trade deficit is dubious and that any additional tariffs to offset currency manipulation would not result in decreasing the U.S.-China trade deficit or in ameliorating any of the harmful effects of the trade deficit, such as the loss of U.S. jobs.⁴⁸ Rather, such tariffs will become a serious self-inflicted wound on the U.S. economy. Next, Part III of this article examines the legal justification for the additional tariff and concludes that such a tariff is inconsistent with the commitments of the United States under the WTO. Thus, the countervailing duty cannot pass muster under either an economic or legal analysis. Part IV concludes with some final observations about the path forward at what could be a pivotal turning point in U.S.-China relations for the remainder of the twenty-first century.

II.

THE ECONOMICS OF INTERNATIONAL TRADE AND CURRENCY POLICY

The basic premise of the economic arguments underlying President Trump's proposed China policies is that China's currency manipulation contributes to an increase in the U.S. trade deficit with China leading to the loss of U.S. manufacturing jobs and other negative consequences. The appropriate remedy, according to President Trump, is to impose an across the board tariff of 45% that will neutralize the effect of the currency devaluation and restore the economic relationship between the U.S. and China to an even playing field. The discussion below examines the validity of these economic arguments.

A. The Gains From Free Trade

At the root of skepticism about globalization is the "mercantilist"⁴⁹ notion that imports are bad for the economy (especially those from emerging countries abundant in unskilled labor), while exports are good.⁵⁰ In the U.S. context, this is often measured in terms of employment in manufacturing.⁵¹ The skeptical position is that imports lead to the loss of manufacturing jobs because U.S. goods cannot compete with low price imports from countries with cheap unskilled labor, such as China. Counter to this, international economists have consistently argued trade makes countries better off *as a whole*.⁵² Trade allocates a country's relatively abundant resources (e.g. skilled labor, capital, and land) to those sectors that intensively use such resources.⁵³ Imports may cause job losses in the manufacturing sector but these losses are more than offset by gains in other sectors, such as skilled labor.⁵⁴ Shifts in resources caused by trade maximize the

⁴⁸ See *infra* Part II.

⁴⁹ See THOMAS A. PUGEL, *INTERNATIONAL ECONOMICS*, 33 (13th ed. 2007).

⁵⁰ See *Id.*

⁵¹ See Daron Acemoglu, David Autor, David Dorn, Gordon H. Hanson, & Brendan Price, *Import Competition & the Great US Employment Sag of the 2000s*, 34 *J. Lab. Econ.* S141, S142-S143 (2016).

⁵² See David H. Autor, David Dorn, & Gordon H. Hanson, *The China Shock: Learning from Labor-Market Adjustment to Large Changes in Trade*, 8 *Ann. Rev. Econ.* 205, 205 (2016).

⁵³ See RONALD W. JONES & J. PETER NEARY, *HANDBOOK OF INTERNATIONAL ECONOMICS* 15 (Ronald W. Jones & Peter B. Kene, 1st ed. 1984).

⁵⁴ See Jonathan Haskel, Robert Z. Lawrence, Edward E. Leamer, & Matthew J. Slaughter, *Globalization and US Wages: Modifying Classic Theory to Explain Recent Facts*, 26 *J. Econ. Persp.* 119, 128-131 (2012).

value of the importing nation's Gross Domestic Product (GDP) and raises the purchasing power of its consumers.⁵⁵ This is formally known as the Heckscher-Ohlin theorem,⁵⁶ familiar to all students of international economics.

The corollary of the Heckscher-Ohlin theorem is that resources used intensively in export-competing sectors benefit from trade, while resources used intensively in import-competing sectors are made worse off. In the U.S., we might expect trade to benefit a skilled worker like a researcher at a pharmaceutical firm, while unskilled U.S. manufacturing workers would be worse off. This result, originally proposed by Stolper and Samuelson, implies that international trade can have a significant impact on the distribution of income.⁵⁷ However, the orthodox view is that benefits to winners (skilled workers and consumers) will outweigh costs to losers (unskilled workers). Openness to trade therefore passes the benefit-cost test: the winners can in principle compensate the losers and still be better off. Whether or not such compensation in fact takes place is a matter of domestic policy

Prior to the 1990s, the flow of trade in goods was mostly between developed countries (the "North" versus developing countries, the "South").⁵⁸ High-income countries accounted for 80 percent of world trade in 1985.⁵⁹ Specifically, countries with similar GDP/capita produced goods such as automobiles, constrained by economies of scale and the size of their own market, and then traded those goods with other high-income countries in a larger integrated market for similar but differentiated goods.⁶⁰ The view among economists is that trade within these industries with an expanded international market not only resulted in consumers benefiting from a greater variety of goods, but that it also helped minimize the costs to "losers," as it is easier to reallocate resources within industries than to reallocate from one industry to another.⁶¹ This reduced the impact of trade on the distribution of income.⁶²

With growth in trade accelerating after the Second World War, concerns were expressed in the 1980s about growing income inequality in the U.S., reflected in the increasing gap between skilled and unskilled wages.⁶³ Globalization skeptics put part of the blame on growing imports from low-wage developing countries in the global South.⁶⁴ However, empirical analysis published in the early to mid-1990s concluded that the effects of North-South trade on U.S.

⁵⁵ See JAMES, R. MARKUSEN, JAMES R. MELVIN, WILLIAM H. KAEMPFER, & KEITH E. MASKUS, *INTERNATIONAL TRADE: THEORY AND EVIDENCE* 63-66 (1st ed. 1995).

⁵⁶ See Jones & Neary, *supra* note 53, at 14-21.

⁵⁷ See Tariffs and Wages: An Inconvenient Iota of Truth, *THE ECONOMIST* (Aug. 6, 2016), <http://www.economist.com/news/economics-brief/21703350-third-our-series-looks-stolper-samuelson-theorem-inconvenient-iota>.

⁵⁸ See Gordon H. Hanson, The Rise of Middle Kingdoms: Emerging Economies in Global Trade, 26 *J. Econ. Persp.* 41, 42 (2012).

⁵⁹ See *Id.*

⁶⁰ See *Id.* at 48.

⁶¹ See Paul R. Krugman, Intra-Industry Specialization and the Gains from Trade, 89 *J. Pol. Econ.* 959, 970 (1981).

⁶² See *Id.* at 971.

⁶³ See Paul R. Krugman, Trade and Wages, Reconsidered, in *BROOKINGS PAPERS ON ECONOMIC ACTIVITY* 103, 104 (2008).

⁶⁴ See *Id.*

income inequality were very modest.⁶⁵ By the start of the 2000s, the consensus among trade economists was that trade was not a key contributing factor in either declining employment in the U.S. manufacturing sector or rising income inequality.⁶⁶ Economists argued that observed changes in the U.S. labor market were mainly due to technological change in the manufacturing sector, which complemented skilled workers, thereby driving up skilled relative to unskilled wages.⁶⁷ For example, technological change through automation has reduced demand for unskilled assembly jobs in manufacturing, at the same time raising productivity and wages of skilled labor.⁶⁸

B. Trade with Chinese Characteristics

At the same time that economists reached a consensus that technological change was the main factor causing loss of U.S. manufacturing jobs, exports from “factory China” exploded.⁶⁹ Chinese exports gave skeptics a reason to question whether technological change or sharply rising exports from China was the cause of negative impacts on unskilled labor.⁷⁰ Between 2000 and 2007, U.S. import penetration by low-wage countries grew from 15 to 28 percent, China’s share of this growth being 89 percent.⁷¹ The value of U.S. imports from China rose by 171 percent between 2000 and 2007, compared to growth in U.S. exports to China of 150 percent.⁷² U.S. manufacturing faced a significant increase in Chinese import competition without an offsetting increase in exports – a pattern shared by virtually all industrial sectors.⁷³ China exploited its abundance of unskilled labor to produce labor-intensive goods such as apparel, shoes and electrical appliances.⁷⁴ This was accomplished through a huge expansion of its industrial workforce due to the rural-to-urban migration of 250 million workers⁷⁵ in combination with the benefits of WTO accession in 2001⁷⁶, and annual productivity growth of 8 percent over the period 1998 to 2007.⁷⁷ Over the same period, the share of the U.S. working population employed in manufacturing fell from 11.0 to 8.4 percent.⁷⁸ These developments fueled an

⁶⁵ See *Id.*

⁶⁶ See Autor, Dorn, & Hanson, *supra* note 52, at 207.

⁶⁷ See Eli Berman, John Bound, & Stephen Machin, *Implications of Skill-Biased Technological Change: International Evidence*, 113 *Q. J. Econ.* 1245, 1246-1247 (1998).

⁶⁸ See David Rothman, *How Technology is Destroying Jobs*, MIT Technology Review (June 12, 2013), <https://www.technologyreview.com/s/515926/how-technology-is-destroying-jobs/>.

⁶⁹ See Autor, Dorn, & Hanson, *supra* note 52, at 208.

⁷⁰ See *Id.*

⁷¹ See David H. Autor, David Dorn, & Gordon H. Hanson, *The China Syndrome: Local Labor Market Effects of Import Competition in the United States*, 103 *Am. Econ. Rev.* 2121, 2122 (2013).

⁷² See *Id.* at 2131.

⁷³ See Autor, Dorn, & Hanson, *supra* note 52, at 212.

⁷⁴ See Autor, Dorn, & Hanson, *supra* note 71, at 2123.

⁷⁵ See Hongbin Li, Lei Li, Binzhen Wu, & Yanyan Xiong, *The End of Cheap Chinese Labor*, 26 *J. Econ. Persp.* 57, 66 (2012).

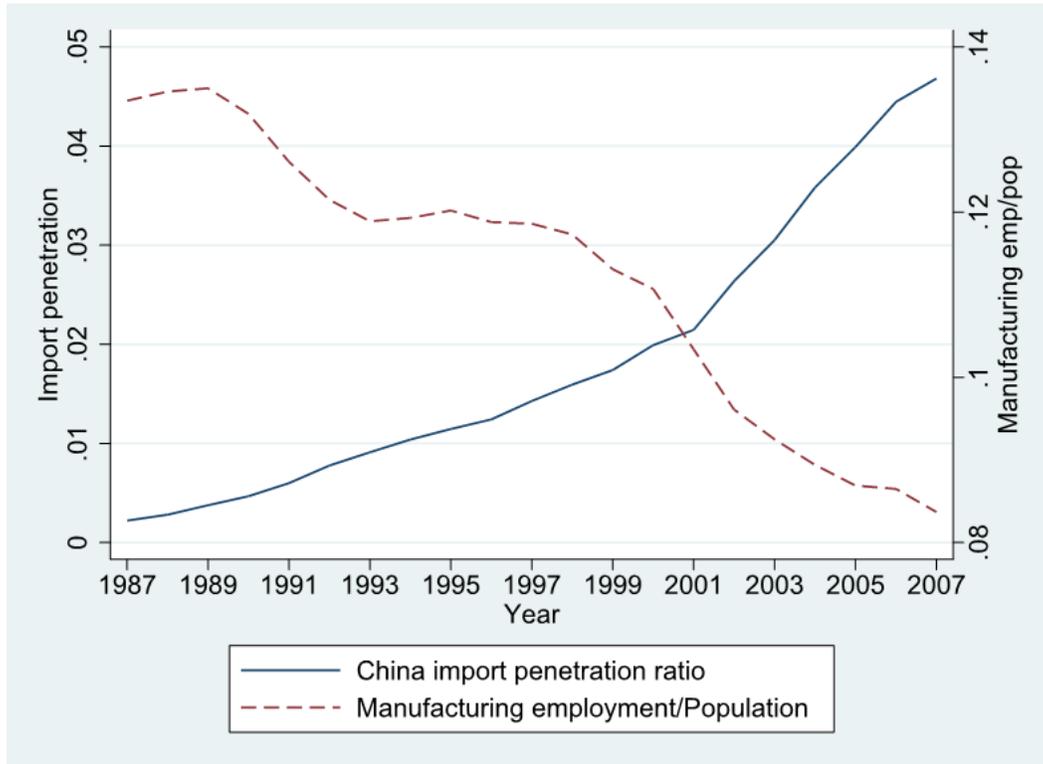
⁷⁶ See Lee Branstetter & Nicholas Lardy, *China’s Embrace of Globalization 20* (Nat’l Bureau Econ. Res., Working Paper No. 12373, 2012).

⁷⁷ See Loren Brandt, Johannes Van Biesebroeck, & Yifan Zhang, *Creative Accounting or Creative Destruction? Firm-Level Productivity Growth in Chinese Manufacturing*, 97 *J. Dev. Econ.* 339, 340 (2012).

⁷⁸ See Autor, Dorn, & Hanson, *supra* note 52, at 207.

argument by skeptics that China, not technological change, was the main cause of U.S. job losses for unskilled labor.⁷⁹

Figure 1
Penetration Ratio for U.S. Imports from China (left scale) versus Share of U.S. Working Age Population Employed in Manufacturing (right scale)⁸⁰



Source: David H. Autor, David Dorn, and Gordon H. Hanson, The China Syndrome: Local Labor Market Effects of Import Competition in the United States, 103 *Am. Econ. Rev.* 2121, 2122 (2013).

In response to these developments, recent economics research has focused on evaluating the impact of China’s explosive export growth on employment and wages of unskilled labor in the U.S. manufacturing sector.⁸¹ Some statistics, such as those contained in Figure 1 above, seem to support the anti-China argument. For example, employment in U.S. manufacturing fell slightly as a share of the population during the 1990s, but over the period 2000 to 2007 it declined by almost 19 percent, with 5.8 million jobs being lost by 2011.⁸² In terms of public debate, the key issue here is the proportion of manufacturing job losses that were due to Chinese import competition over the same period, with published estimates suggesting that between 1999 and 2011, 985,000 jobs were lost in manufacturing industries directly and indirectly exposed to

⁷⁹ See *Id.* at 208.

⁸⁰ See Acemoglu, Autor, Dorn, Hanson & Prince, *supra* note 51, at S142.

⁸¹ See *Id.* at S144.

⁸² See *Id.* at S145.

Chinese imports.⁸³ This amounts to 17 percent of the total loss in manufacturing jobs. Over the same period, it has been estimated that Chinese import competition resulted in another 994,000 jobs being lost in the non-manufacturing sector due to linkages with manufacturing, generating a total of 1.98 million jobs lost.⁸⁴ While not focused on China specifically, another study by Hicks and Deveraj found that over the period 2000 to 2010, 750,000 jobs were lost in the manufacturing sector (13 percent of all U.S. manufacturing jobs lost), with an additional 950,000 jobs lost due to linkages to the manufacturing sector.⁸⁵ In summary, available estimates suggest that 13 to 17 percent of U.S. manufacturing jobs lost in the decade prior to the Global Financial Crisis starting in 2008 were due to the direct effect of import competition.

More sharply felt than the effects on national unemployment are the regional employment effects. The costs of trade with China fall disproportionately on unskilled workers in certain parts of the U.S. such as the Midwest and Southeast.⁸⁶ Autor *et al* studied this phenomenon using data for commuting zones (CZs), which they defined as clusters of counties with strong-within cluster and weak between-cluster commuting ties; over the period 1990 to 2007, they find CZs that were more exposed to Chinese import competition had larger reductions in manufacturing employment, job losses not being offset by re-employment either locally or elsewhere.⁸⁷ This suggests unskilled labor in the U.S. is less able to find work in other sectors than previously thought.⁸⁸ At the same time, workers in more trade-exposed CZs suffer larger reductions in average weekly wages, and also receive larger transfers in the form of unemployment and other benefits, including payments from the federal Trade Adjustment Assistance Scheme (TAA).⁸⁹ Surprisingly, while the TAA was explicitly designed to help workers who lose their jobs because of import competition, it actually accounts for the smallest portion of social transfers per capita to those affected.

C. The Role of China's Currency Policy

In light of these recent results, it is unsurprising that Donald Trump was able to win the Presidential election, partly on the strength of his appeal to voters in states where manufacturing employment has been hurt by Chinese import competition. President Trump spoke frequently on the campaign trail about trade with China, and specifically targeted China's currency policy as an "unfair" trade practice that allowed their imports to penetrate U.S. markets while making U.S. exports uncompetitive in the Chinese market.⁹⁰ In a campaign speech titled "Declaring American

⁸³ See *Id.*

⁸⁴ See MICHAEL J. HICKS & SRIKANT DEVERAJ, BALL STATE UNIVERSITY'S CENTER FOR BUSINESS AND ECONOMIC RESEARCH, *THE MYTH AND THE REALITY OF MANUFACTURING IN AMERICA* 6 (2015).

⁸⁵ See *Id.*

⁸⁶ See Autor, Dorn, & Hanson, *supra* note 52, at 223.

⁸⁷ See *Id.* at 224.

⁸⁸ See Autor, Dorn, & Hanson, *supra* note 71, at 2159.

⁸⁹ Trade Act of 1974, 19 U.S.C. § 2291 (2015); see also 19 U.S.C. § 2295-2296 (2016).

⁹⁰ See Fred Imbert, *Trump Calls China a 'Currency Manipulator,' but He's Wrong*, CNBC (Dec. 7, 2016, 2:23 PM), <http://www.cnbc.com/2016/12/07/donald-trump-is-wrong-china-is-not-a-currency-manipulator.html>.

Economic Independence,”⁹¹ he attacked former Secretary of State Hillary Clinton by saying she “...stood idly by while China cheated on its currency, added another trillion dollars to our trade deficits, and stole hundreds of billions of dollars in our intellectual property.”⁹²

The basic argument is that, *ceteris paribus*, driving down the value of the RMB in international markets makes Chinese exports cheaper to the U.S. consumer and raises the price of imported goods from the U.S. in China, making them more expensive to the Chinese consumer.⁹³ Under certain assumptions, devaluation is equivalent to a combination of an export subsidy and import tariff implemented at the same time, also known as a tariff-cum-subsidy.⁹⁴ The devaluation of the RMB acts as an export subsidy by making the exported good less expensive to the U.S. consumer, who has to exchange fewer U.S. dollars for the same amount of the devalued RMB. At the same time, because the devaluation of the RMB makes imports more expensive to the Chinese consumer, it also acts like an import tariff, i.e. a tax on imports by raising the price paid by consumers in the importing country.

President Trump, along with many conservative commentators, asserts that China’s devaluation of the RMB is responsible for its large current account surplus, i.e. trade surplus in goods with the United States. Devaluation allows China to maximize exports while minimizing imports. One preliminary test of this claim is to simply compare the evolution of China’s exchange rate and its current account balance (i.e. its trade surplus) – roughly equal to the value exports minus the value of imports. If the claim is true, then we should expect to see a rising current account surplus as the value of the currency falls, and vice-versa. Figure 2 shows China’s effective exchange rate (a trade-weighted average of its exchange rate with major trading partners) and its current account balance.

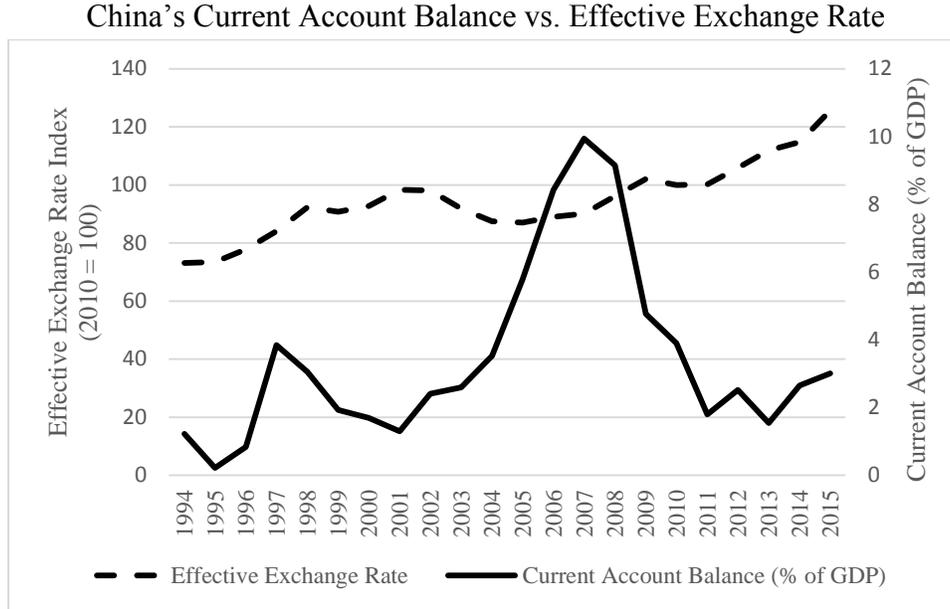
⁹¹ See President Donald J. Trump, Speech given to Alumisource Factory: Declaring American Economic Independence (June 28, 2016) (transcript available at https://assets.donaldjtrump.com/DJT_DeclaringAmericanEconomicIndependence.pdf).

⁹² See *Id.* at 10-11.

⁹³ See Robert W. Staiger & Alan O. Sykes, ‘Currency Manipulation’ and World Trade, 9 *World Trade Rev.* 583, 583-585 (2010).

⁹⁴ See John J. Mullin, The Equivalence Of Tariffs-Cum-Subsidies and Official Exchange Rate Devaluations Under Dual Exchange Markets, 34 *J. Int’l Econ.* 325, 333-334 (1993).

Figure 2



Source: The World Bank (2016) and the Bank for International Settlements (2016).

The data set forth above show that China's effective exchange rate depreciated about 11% between 2001 and 2005. During that same period, China's current account surplus rose from approximately 1.3% of GDP to 5.8% of GDP. This seems consistent with the President's claim that China's currency devaluation increases its trade surplus with the U.S. and, correspondingly, the U.S. trade deficit with China. However, it is much more difficult to fit data from more recent years into the Trump administration's simple narrative. In 2005, China relaxed its strict peg against the U.S. dollar, and China's effective exchange rate has appreciated fairly steadily while its current account balance has been much more volatile. The current account balance reached its peak share of GDP in 2007, following two years of slow appreciation of the effective exchange rate. The current account balance then fell dramatically (following the Global Financial Crisis) and has fluctuated between two and three percent of GDP, all while the RMB has continued to appreciate. Under Trump's view, a steady appreciation of the RMB should lead to a decrease in China's current account balance; but this has not been borne out in practice. This does not disprove the existence of a link between the trade balance and the exchange rate, but it does suggest that there are other factors at work that must be considered.

E. Nominal vs. Real Exchange Rates in the Long Term

To explain the relationship between trade and currency policy, it is important to recognize the difference between a country's *nominal* exchange rate and its *real* exchange rate. The nominal exchange rate is simply the rate at which one currency can be traded for another, typically in foreign exchange markets.⁹⁵ The real exchange rate is a way of comparing the value of goods in

⁹⁵ See Luis A.V. Catão, Why Real Exchange Rates?, IMF (Sept. 2007), <http://www.imf.org/external/pubs/ft/fandd/2007/09/basics.htm>.

one country compared to another, at a given nominal exchange rate.⁹⁶ A simple example of a real exchange rate is the Big Mac Index published by *The Economist*.⁹⁷ Assuming the Big Mac is identical in China and the U.S., we can get a sense of whether the RMB is undervalued or overvalued in “real” terms if we compare the number of dollars needed to buy a Big Mac in the U.S. vs. the number of dollars needed to buy a Big Mac in China, if dollars were exchanged for RMB at the current nominal exchange rate. According to *The Economist*, the average price of a Big Mac in the U.S. was \$5.06 in January of 2017.⁹⁸ During the same period, trading dollars for RMB and then paying the average RMB price of a Big Mac in China would cost \$2.83.⁹⁹ If Big Macs were easily tradable, this would make Chinese Big Macs more competitive in world markets. Looking at this comparison of the prices for Big Macs suggests that the RMB is undervalued versus the U.S. dollar and that China is manipulating its currency.

The Economist is quick to point out, however, that its index does not prove the RMB is being manipulated.¹⁰⁰ Prices (including hamburgers) are generally lower in China simply because labor is cheaper.¹⁰¹ However, it does demonstrate that we must consider domestic prices when trying to link currency policy to actual trade flows. Recall that a devaluation can be thought of as the equivalent of imposing a tariff-cum-subsidy in China.¹⁰² The export subsidy alone would raise the exported good’s price and start to expand the size of China’s export sector.¹⁰³ Exporting firms will start bidding up the prices of inputs (e.g. labor, capital, materials) in order to attract them into the exporting sector and out of the import-competing sector.¹⁰⁴ If we also impose an import tariff, this will have the opposite effect.¹⁰⁵ Goods prices will rise in the import-competing sector because it is now sheltered from international competition.¹⁰⁶ Firms in the import-competing will bid up the prices of inputs (e.g. labor, capital, materials) in order to attract them into the import-competing sector and out of the exporting sector.¹⁰⁷ If the tariff and subsidy are equivalent, prices will rise as the export and import-competing sectors compete over the same scarce resources within China, but nothing will change in real terms. This result is also an implication of the well-known Lerner symmetry theorem.¹⁰⁸

Over the long run, we should expect the same thing to happen in the case of a devaluation. If the Chinese government tries to devalue the currency by selling RMB, this amounts to an increase in the money supply. Over the long run, this increases the general price level of all goods (including exports) in RMB (due to the excess money supply), eliminating any temporary advantage exports gained through the devaluation. Similarly, the price in the Chinese

⁹⁶ See Id.

⁹⁷ See The Big Max Index, *The Economist* (Jan. 12, 2017), <http://www.economist.com/content/big-mac-index>.

⁹⁸ See Id.

⁹⁹ See Id.

¹⁰⁰ See Id.

¹⁰¹ See Id.

¹⁰² See Mullin, *supra* note 94, at 333-334.

¹⁰³ See Staiger & Sykes, *supra* note 93, at 597-598.

¹⁰⁴ See Id.

¹⁰⁵ See Id.

¹⁰⁶ See Id.

¹⁰⁷ See Id.

¹⁰⁸ See Id. at 619.

market for the imported good will rise, eliminating any effective penalty that had been imposed on imported goods. This is another application of the “long-run neutrality of money,” the proposition that the quantity of money cannot change real variables in the economy. The devaluation of the nominal exchange rate will increase domestic prices such that the real exchange rate will be unchanged.

Since devaluation began over 35 years ago, it seems reasonable to expect that we are in the “long run” regarding Chinese devaluation as explained above. In fact, the IMF, referring to China, declared as much in 2015, stating “...our assessment now is that the substantial real effective appreciation over the past year has brought the exchange rate to a level that is no longer undervalued.”¹⁰⁹ Here, the IMF cites the appreciation of the *real* effective exchange rate in China, which accounts for the nominal exchange rate as well as differences in price levels across countries.¹¹⁰ The real exchange rate may rise if the currency appreciates, or if prices rise in the country.¹¹¹ In China’s case, they have experienced both. This makes it very unlikely that China’s currency policy could explain its current account surplus today. More nuanced analyses of the U.S.-China trade imbalance suggest that the root cause is that China spends too little and saves too much, while the U.S. spends too much and saves too little.¹¹²

F. Effect on Trade of Currency Policy in the Short Run

Although devaluations have no effect on the trade balance over the long run, we know that devaluations can have real effects over the short run. Economists describe the short run as a period of time over which prices are “sticky,” or before agents have fully adjusted to the new policy.¹¹³ It is likely that China’s exchange rate policy had some short run effects, but these effects are somewhat complex, and depend on how firms price their goods.¹¹⁴ These complexities also make it difficult equate a devaluation to a trade policy that would violate China’s WTO obligations.¹¹⁵

The most common assumption is that producers price goods in their own currency.¹¹⁶ This means that Chinese firms set prices in RMB and U.S. firms set prices in U.S. dollars. Consider the short-run effect of a devaluation in this environment. If the RMB is depreciated, the prices U.S. and Chinese producers receive for their goods has not changed. Instead, U.S. consumers can pay lower prices for Chinese goods (since the dollar is relatively “strong”), while Chinese consumers must pay higher prices for U.S. goods (since the RMB is relatively “weak”). The devaluation in this case is similar to a tariff-cum-subsidy, though it is not clear that it makes

¹⁰⁹ See Press Release No. 15/237, IMF, IMF Staff Completes the 2015 Article IV Mission to China (May 26, 2015). <http://www.imf.org/external/np/sec/pr/2015/pr15237.htm>.

¹¹⁰ See Catão, *supra* note 95.

¹¹¹ See *Id.*

¹¹² Dennis Yang, Aggregate Savings and External Imbalances in China, 26 *J. Econ. Persp.* 125, 125-126 (2012). Yang, D. 2012.

¹¹³ See Liang Wang, Are Prices Sticky and Does it Matter?, FEDERAL RESERVE BANK OF MINNEAPOLIS (Jan. 26, 2016), <https://www.minneapolisfed.org/research/economic-policy-papers/are-prices-sticky-and-does-it-matter>.

¹¹⁴ See Staiger & Sykes, *supra* note 93, at 599.

¹¹⁵ For an evaluation of how China’s currency policies square with its WTO obligations, see Part III *infra*.

¹¹⁶ See Staiger & Sykes, *supra* note 93, at 599.

China “better off.” China has raised the price of its imports while reducing the price of its exports, otherwise known as worsening its terms of trade.¹¹⁷

Alternatively, we might assume producers price goods in the currency of the country where they are sold.¹¹⁸ In this case, Chinese producers set prices in dollars and U.S. producers set prices in RMB. Now if the RMB is depreciated, the policy will only affect producers. Chinese producers receive the same number of dollars for their exports, but can now purchase more RMB with this same quantity of dollars. They are better off. U.S. producers receive the same number of RMB for their exports, but can now buy fewer dollars. They are worse off. The devaluation is now similar to a Chinese import tariff, but because consumers are unaffected, there is no change in the volume of trade. Again, it is not clear that this would violate China’s WTO commitments.¹¹⁹

Finally, we might assume that both Chinese and U.S. producers set their prices in dollars. This means U.S. producers price goods in their own currency, while Chinese producers price in the currency of their export market, the United States. If the currency is devalued, Chinese consumers will face higher prices for U.S. goods, and Chinese producers will earn more RMB from their sales. U.S. consumers and producers, however, experience no changes. This is again similar to a Chinese import tariff, except that there are no costs imposed on the U.S. It would be difficult to argue that a trade policy that has no impact on competitive conditions in the U.S. violates WTO rules.¹²⁰

G. How Should the U.S. Respond?

It is difficult to argue that China’s currency policy has given it an unfair trade advantage over the U.S. Nonetheless, the Trump administration has talked openly of a retaliatory across-the-board 45% tariff on Chinese goods, in order to “level the playing field”.¹²¹ However, this proposal is a very blunt policy instrument: across-the-board protectionism will result overall in net costs to the U.S. economy, even without retaliation by China. Levying tariffs on imports from China can be expected to have the following effects at the economy-wide level. First, resources will be inefficiently employed in sectors where the U.S. has a comparative disadvantage. Without the tariff, these resources would flow from these sectors to more efficient sectors that are less sensitive to import competition from China. This acts as a tax on efficient resource-use in sectors where the U.S. has a comparative advantage, which would reduce U.S. GDP, resulting in less economic growth. Second, the relative increase in the price of imported goods will reduce the purchasing power of U.S. consumers, thereby lowering their real income. Any additional tariff imposed by the Trump administration will be passed on to the consumer as increase in the price of the import, so it is the consumer who ultimately pays the tariff. These

¹¹⁷ See *Id.* at 601.

¹¹⁸ See *Id.* at 603.

¹¹⁹ See Part III *infra*.

¹²⁰ See Report of the Panel, *US-Taxes on Petroleum and Certain Imported Substances*, ¶ 5.1.0, L/6175 (June 17, 1987), GATT BISD (34th Supp.) (1987) (stating a change of competitive conditions must be found to support a finding of a nullification or impairment of a GATT benefit).

¹²¹ Peter Morici, *The 45 Percent Tariff*, *The Washington Times* (Jan. 22, 2017), <http://www.washingtontimes.com/news/2017/jan/22/donald-trumps-45-percent-tariff-on-china/>

costs will necessarily be greater if China retaliates with an across-the-board tariff of its own to match the U.S.

Empirical research published by the highly respected Peterson Institute for International Economics during the Presidential campaign provides clear support for the first effect.¹²² Based on a scenario where the U.S. imposes 45 and 35 percent tariffs against imports from China and Mexico with the latter countries responding by imposing a similar retaliatory tariff, the Peterson Institute study forecasts that this would amount to a tax on trade, reducing both exports and imports, and causing a long-term decline in economic efficiency as firms reduce productivity-enhancing investments.¹²³ Restriction of trade also results in an increase in the rate of inflation, to which the Federal Reserve would respond by raising interest rates, which would negatively affect investment.¹²⁴ As a result, the Peterson Institute study forecasts that the U.S. economy would be pushed into recession within three years, generating a loss of 4.8 million jobs – a 4 percent decline in private sector employment, with a significant number of U.S. states suffering a similar percentage decline in employment.¹²⁵ Interestingly, this study also forecasts that while the U.S. manufacturing sector will clearly be hurt by such protectionism, especially in the capital-goods sector, the majority of jobs will be lost by low-wage/unskilled workers in sectors such as wholesaling and retailing,¹²⁶ part of the very segment of the voting population that President Trump has promised to help.

H. The Role of Global Supply Chains

A key issue ignored by Peterson Institute study is the fact that 80 percent of international trade now occurs within global supply chains.¹²⁷ The effect of global supply chains is to amplify the negative impacts of tariffs.¹²⁸ Global supply (value) chains first appeared in the early-1990s, rapidly developing across many industrial sectors.¹²⁹ The global supply chain for a specific good can be defined as the value added of all activities required to produce that good for final consumption.¹³⁰ A key feature of such chains is, unlike the pattern of vertically integrated production characterizing much of the manufacturing sector in the post-WWII era, manufacturing has become increasingly fragmented across many countries as production process has been “unbundled,” i.e., stages of production once performed in close proximity have been

¹²² See Noland, Hufbauer, Robinson, & Moran, *supra* note 42, at 27.

¹²³ See *Id.*

¹²⁴ See *Id.* at 30.

¹²⁵ See *Id.* at 31

¹²⁶ See *Id.* at 30.

¹²⁷ See UNCTAD, *Global Value Chains and Development: Investment and Value Added Trade in the Global Economy*, 16 (2013), unctad.org/en/PublicationsLibrary/diae2013d1_en.pdf.

¹²⁸ See Emily J. Blanchard, Chad P. Bown, & R.C. Johnson, *Global Supply Chains and Trade Policy 1* (Nat'l Bureau Econ. Res., Working Paper 21883, 2016).

¹²⁹ See Robert C. Feenstra, *Integration of Trade and Disintegration of Production in the Global Economy*, 12 *J. Econ. Persp.* 31, 32 (1998).

¹³⁰ See Marcel P. Timmer, Abdul Azeez Erumban, Bart Los, Robert Stehrer, & Gaaitzen J. de Vries, *Slicing up Global Value Chains*, 28 *J. Econ. Persp.* 99, 100 (2014)

dispersed geographically,¹³¹ with trade in intermediate goods accounting for 56 percent of trade by 2005.¹³²

The canonical example is production of Apple's iPod, assembled in China using multiple components sourced globally, e.g., the display and hard drive being produced in Japan by Toshiba.¹³³ Using its supply chain, Apple captures 36 percent of the retail price of an iPod compared to 2 percent of the price for assembly in China.¹³⁴ This fragmentation has largely been the beneficial result of a rapid decline in the costs of coordinating vertical production – specifically, the information and communications technology (ICT) revolution has reduced the complexity of coordinating supply chains at a distance, while the availability of low-wage unskilled labor in emerging economies such as China has made fragmentation profitable.¹³⁵

Timmer *et al.* report several key features of global supply chains¹³⁶: first, fragmentation, measured as the share of foreign value-added content of production rose on average from 28 to 34 percent over the period 1995 to 2008;¹³⁷ second, an increasing share of value-added is accruing to capital and skilled labor as opposed to unskilled labor;¹³⁸ and, third, countries in the North are increasingly specialized in using the services of skilled labor.¹³⁹ Related to the latter is the increased importance of production of intangibles such as intellectual capital (software and databases, research and development, and designs), which typically requires employment of skilled labor in its production, and is adding to the wage gap of skilled over unskilled labor in the U.S. This is a richer version of the Heckscher-Ohlin theorem.¹⁴⁰

Once global supply chains are explicitly recognized, the effect of an additional across the board tariff, as proposed by President Trump, on goods imported from China results in harmful effects that are greater and more wide-ranging. First, if a high proportion of value-added in goods imported from China is generated in the U.S., then an import tariff not only raises the price of these goods to U.S. consumers, but it also becomes an explicit tax on production of intangibles and employment of skilled labor in the U.S.¹⁴¹ Second, it is highly unlikely that assembly of consumer goods currently undertaken in China will actually return to the U.S. if tariffs are implemented – assembly jobs were not simply offshored but were “destroyed” by

¹³¹ SEE SECRETARIAT OF THE ECONOMIC COUNCIL, FINNISH PRIME MINISTER'S OFFICE, GLOBALIZATION: THE GREAT UNBUNDLINGS, IN GLOBALIZATION CHALLENGES TO EUROPE (2006).

¹³² See The Problematic Proposal, *THE ECONOMIST* (Aug. 13, 2016), <http://www.economist.com/news/finance-and-economics/21704789-shifts-global-trade-patterns-are-fuelling-new-anti-trade-fervour>

¹³³ See Jason Dedrick, Kenneth L. Kraemer, & Greg Linden, Who Profits from Innovation in Global Value Chains? A Study of iPod and Notebook PCs, 19 *Indus. & Corp. Change* 81, 92 (2009).

¹³⁴ See *Id.* at 90.

¹³⁵ See Richard Baldwin, Global Supply Chains: Why They Emerged, Why They Matter, and Where They are Going, *Ctr. For Trade and Econ. Integration, Working Paper CTEI-2012-13*, (2012).

¹³⁶ See Marcel P. Timmer, Abdul Azeez Erumban, Bart Los, Robert Stehrer, & Gaaitzen J. de Vries, Slicing up Global Value Chains, 28 *J. Econ. Persp.* 99, 104-113 (2014).

¹³⁷ See *Id.* at 105.

¹³⁸ See *Id.* at 106.

¹³⁹ See *Id.* at 109.

¹⁴⁰ See Haskel, Lawrence, Leamer, & Slaughter, *supra* note 54, at 128.

¹⁴¹ See Timmer, Erumban, Los, Stehrer, & de Vries, *supra* note 130, at 115.

productivity changes in the U.S. economy.¹⁴² Third, fragmentation of global supply chains allows multinational corporations to shift production of inputs and assembly of final consumer goods from China to another emerging economy such as Vietnam to avoid the tariff.¹⁴³ Fourth, China might retaliate by explicitly disrupting Apple's supply chain and those of other U.S. multinationals in China to punish the U.S.¹⁴⁴

a. International Trade and the Distribution of Income

A recent study by Fajgelbaum and Khandelwal¹⁴⁵ analyzed who gains from trade across consumers within countries. From this, the authors calculate the expected reduction in consumer purchasing power if trade were actually closed off resulting in autarky. Their results indicate that if the U.S. were to move in the direction of autarky, consumers at the lower end of the income distribution (the 10th percentile) would suffer a 69 percent reduction in their real income, compared to those at the upper end of the income distribution (the 90th percentile) who would see their real incomes fall by 4 percent.¹⁴⁶ In other words there is a clear bias in favor of poor consumers from trade because they spend a relatively high proportion of their income on traded goods compared to high-income consumers who spend a high proportion of their incomes on the least-traded areas such as services.¹⁴⁷ Even if President Trump's trade policy does not fully close- off the U.S. economy, there is cause for concern that low-income consumers who have benefited from cheap Chinese exports of goods such as clothing, shoes, furniture, and toys and electronics, will be disproportionately hurt the most by such a policy.¹⁴⁸ Ironically, this is the group that President Trump argues he is trying to protect.

b. The Economic Logic of Trade Wars

While it is reasonable to assume that China will likely retaliate against any tariffs that President Trump unilaterally imposes against its exports, it is important to consider the basic economic logic for China doing so, and why economists have always pointed towards the destructive costs of a trade war.¹⁴⁹ In the textbook representation of the economic effects of trade policies, it is usual to start from the assumption that a country is too small to affect the world price of a good that it imports.¹⁵⁰ In this case, when a tariff is imposed, only the price of

¹⁴² See Politicians Cannot Bring Back Old-Fashioned Factory Jobs, *THE ECONOMIST* (Jan. 14, 2017), <http://www.economist.com/news/briefing/21714330-they-dont-make-em-any-more-politicians-cannot-bring-back-old-fashioned-factory-jobs>.

¹⁴³ See Noland, Hufbauer, Robinson, & Moran, *supra* note 42, at 29.

¹⁴⁴ See Dealing with Donald: Donald Trump's Trade Bluster, *THE ECONOMIST* (Dec. 10, 2016), <http://www.economist.com/news/briefing/21711498-whatever-he-thinks-dealmaking-wont-help-mr-trumps-trade-negotiations-donald-trumps-trade>.

¹⁴⁵ See Pablo D. Fajgelbaum & Amit K. Khandelwal, Measuring the Unequal Gains from Trade, 131 *Q. J. Econ.* 1113, 1113 (2016).

¹⁴⁶ See *Id.* at 1152.

¹⁴⁷ See *Id.* at 1154.

¹⁴⁸ See Free Trade in America: Open Argument, *THE ECONOMIST* (Apr. 2, 2016), <http://www.economist.com/news/leaders/21695879-case-free-trade-overwhelming-losers-need-more-help-open-argument>.

¹⁴⁹ SEE PAUL R. KRUGMAN, MAURICE OBSTFELD, & MARC J. MELITZ, *INTERNATIONAL ECONOMICS: THEORY AND POLICY* 235-236 (9th ed. 2012).

¹⁵⁰ See Markusen, Melvin, Kaempfer, & Maskus, *supra* note 55, at 246.

the import-competing domestic good increases, generating an increase in “producer surplus” (the difference between the price domestic firms actually receive for supplying a good and the minimum price at which they are willing to supply). On the demand side, consumers in the importing country also face the tariff-driven increase in the price of the import-competing domestic good, generating a decrease in “consumer surplus” (the difference between the maximum price consumers are willing to pay for a good and the price they actually pay). The net effect of the price increase is the difference between the gain in producer surplus plus tariff revenue, and the total loss of consumer surplus. The net effect will be negative, and what economists refer to as “deadweight losses.” In this case, the tariff is a self-inflicted wound on the importing country, and the only reason it would implement such a policy would be if the policymaker were responding to a well-organized lobby of firms in the import-competing sector by transferring economic benefits from consumers to firms.¹⁵¹

This model is considerably richer if it is assumed an importing country the size of the U.S. has buying power in the world market in the sense that if it imposes a tariff, it drives down the world price of the imported good relative to the price of its exports.¹⁵² In this case, it is possible for the additional tariff revenue to outweigh the negative effect of the tariff, providing an additional incentive for a policymaker to implement such a tariff.¹⁵³ Of course, this imposes a cost to exporting countries like China, which will now face lower demand for its good due to the increased price to U.S. consumers created by the tariff, as well as a lower world price for the good it exports. If countries do not cooperate when setting trade policy, the net result is a “prisoners’ dilemma,” in which each country ends up reducing access to its own market through imposing import tariffs, thereby lowering total global trade, and assuming a symmetric reduction in market access, world relative prices actually do not change.¹⁵⁴ The result is lower levels of global trade, causing losses to all members of the global economy.

The latter result, originally due to Johnson¹⁵⁵, has subsequently been analyzed in the context of a trade war. Grossman and Helpman assume that a country’s policymakers react only to contributions from its domestic lobby and ignore the effects of their trade policies on the foreign policymaker and lobby.¹⁵⁶ This assumption is also part of the economic logic justifying the General Agreement on Tariffs and Trade (GATT) propounded by Bagwell and Staiger.¹⁵⁷ If the GATT (and its successor the World Trade Organization), is treated as a cooperative bargaining game between countries, its function is quite clear: it removes the incentive for each country to manipulate its tariffs and other international terms of trade. By committing to a mutual reduction in their import tariffs, every WTO country is better off due to increased access to the markets of all other members. Consequently, if President Trump does reduce U.S. market

¹⁵¹ See Gene M. Grossman, & Elhanan Helpman, Protection for Sale, 84 Am. Econ. Rev. 833, 834 (1994).

¹⁵² See Markusen, Melvin, Kaempfer, & Maskus, supra note 55, at 254-256.

¹⁵³ See Id.

¹⁵⁴ See Kyle Bagwell & Robert W. Staiger, An Economic Theory of GATT, 89 Am. Econ. Rev. 215, 216 (1999).

¹⁵⁵ See Harry G. Johnson, Optimum Tariffs and Retaliation, 21 Rev. Econ. Stud. 142, 142 (1954).

¹⁵⁶ See Gene M. Grossman & Elhanan Helpman, Trade Wars and Trade Talks, 103 J. Pol. Econ. 675, 684-694 (1995).

¹⁵⁷ See Bagwell & Staiger, supra note 154, at 216. See also Kyle Bagwell & Robert W. Staiger, What Do Trade Negotiators Negotiate About? Empirical Evidence from the World Trade Organization, 101 Am. Econ. Rev. 1238, 1238 (2007).

access to Chinese imports through unilateral implementation of tariffs, even without the constraints of the existing legal disciplines of the GATT/WTO, China will have every incentive to respond in kind, with potentially disastrous consequences for the U.S. economy. Moreover, as Chinese imports will be diverted from the U.S. to other international markets, other countries might immediately raise their tariffs as a defensive measure. The cumulative effective of all these tariff increases might be a precipitous drop in world trade, leading to a global recession.

An analysis of the economic rationale President Trump's proposed tariff on China indicate that its basic premise, that China's devaluation of its currency is the cause of the trade imbalance between the U.S. and China is a dubious assumption. Moreover, Trump's proposed response of an across the board tariff on Chinese imports will likely result in harm to the U.S. and global economy. These effects are magnified if China, as expected, imposes a retaliatory tariff on U.S. imports, igniting a global trade war.

III.

THE LEGALITY OF TRUMP'S PROPOSED 45% TARIFF UNDER THE WTO

The preceding part of this article argues that the economic assumptions underlying President Trump's proposed response to China's currency policies are dubious and could result in even greater harmful effects than the alleged harms caused by the manipulation itself. In this part, this article now examines the legal validity of Trump's proposed new China tariff. If the tariff is unlawful under the applicable legal standards, then this represents a second set of reasons why the proposed tariff should not be implemented.

1. Whether Currency Devaluation is an Illegal Subsidy under the WTO

Under the WTO, if the United States imposes an additional 45% tariff imposed on top of existing tariffs on imports from China, the additional tariff must be justified in the texts of the WTO in order to be lawful.¹⁵⁸ Every tariff or other import trade barrier must be imposed according to the requirements of the WTO.¹⁵⁹ As Trump and Navarro have argued that China's currency devaluation makes Chinese products cheaper to the U.S. consumer, the effect of the devaluation is that it creates an export subsidy for Chinese goods.¹⁶⁰ Since the additional 45% tariff is to offset or neutralize the effects of the subsidy, the tariff functions as a countervailing duty.¹⁶¹ Under the WTO, a countervailing duty is justified under the WTO only when it is used to countervail an illegal subsidy.¹⁶² The crucial legal issue thus becomes whether China's currency devaluation qualifies as an illegal subsidy under WTO law.

¹⁵⁸ See Daniel C.K. Chow, *Can the United States Impose Trade Sanctions on China for Currency Manipulation?* Wash. U. Global Studies L. Rev. at 19 (forthcoming) (manuscript on file with the author).

¹⁵⁹ See *Id.*

¹⁶⁰ See *Id.* at 15.

¹⁶¹ See *Id.*

¹⁶² See *Id.* at 20.

The relevant legal standards defining a subsidy are contained in the WTO Agreement on Subsidies and Countervailing Measures (SCM) adopted in 1994 to amplify the original GATT Article XVI on illegal subsidies.¹⁶³ SCM Article 1 provides in relevant part:

Article 1 Definition of a Subsidy

1.1 For the purpose of this Agreement, a subsidy shall be deemed to exist if:

(a)(1) There is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as “government”), i.e. where:

(i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion, potential direct transfers of funds or liabilities (e.g. loan guarantees);

(ii) government revenue that is otherwise due is foregone or not collected (e.g., fiscal incentives such as tax credits;

(iii) a government provides goods or services other than general infrastructures, or purchase goods;

(iv) a government makes payments to a funding mechanism or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense differs from practices normally followed by governments;

and

(b) a benefit is thereby conferred.

Article 1.1 makes it clear that a subsidy consists of a (1) financial contribution and (2) a benefit conferred. SCM Article 1.1.2 adds a third element: the subsidy must be (3) specific.¹⁶⁴ These three conditions are cumulative, i.e. the failure to satisfy any one of these conditions means that no subsidy exists.

a. Financial Contribution

U.S. – Soft Lumber III set forth an explanation of the term “financial contribution” as set forth in SCM Article 1.1(a)(1):

Article 1.1(a)(1) . . . provides that the first element of a subsidy is a “financial contribution by the government.” Subparagraphs (i) through (iv) then explain that a financial contribution can exist in a wide variety of circumstances including, of course,

¹⁶³ Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14 [hereinafter SCM].

¹⁶⁴ See *Id.* at art. 1.1.2.

the direct transfer of funds. But subparagraphs (ii) and (iii) show that a financial contribution will also exist if the government does not collect the revenue which it is entitled to or when it gives something or does something for an enterprise or purchases something or a group of enterprises. Subparagraph (iv) ensures that government directed transfers effective through a private entity do not thereby cease to be government transfers. In other words, Article 1.1(a)(1) . . . provides that a financial contribution can exist not only when there is an act or an omission involving the transfer of money, but also in case goods or certain services are provided by the government.¹⁶⁵

*U.S.-Measures Treating Export Restraints as Subsidies*¹⁶⁶ further explained:

The negotiating history confirms that items (i)-(iii) [of Article 1.1(a)(1)] limit these kinds of measures to the transfer of economic resources from a government to a private entity. Under subparagraphs (i)-(iii) [of Article 1.1(a)(1)], the government acting on its own behalf is effecting that transfer by directly providing something of value—either money, goods, or services – to a private entity.¹⁶⁷

These explanations indicate a financial contribution consists of a payment of funds or an omission by the government to collect funds that are due. A financial contribution also exists when the government provides goods or services to an enterprise or group of enterprises.¹⁶⁸ The government can provide payments, goods, or services directly to the recipient or by funneling it through a private entity.¹⁶⁹ None of these transactions occur in the case of a currency devaluation measure. No direct or indirect provision of funds, goods, or services is provided in the case of a currency devaluation, which is an adjustment in exchange rates. As the wording of Article 1.1(a)(1) indicates that it is exhaustive, it would appear that currency devaluation measures fall outside the scope of SCM Article 1(a)(1).

b. Benefit Conferred

If a currency measure is not a financial contribution, then it is not a subsidy because the three conditions of a subsidy are to be determined cumulatively, i.e. a measure must satisfy all three.¹⁷⁰ Assuming *arguendo* that a currency devaluation measure is a financial contribution, it must also confer a benefit. In *Canada-Aircraft*, the Appellate Body explained the meaning of “benefit” as follows:

¹⁶⁵ Panel Report, U.S.-Preliminary Determinations with Respect to Certain Softwood Lumber from Canada, ¶ 7.24, WTO Doc. WT/DS236/R (adopted Nov. 1, 2002).

¹⁶⁶ Panel Report, U.S.-Measures Treating Export Restraints as Subsidies, WTO Doc. WT/DS194/R (June 29, 2001).

¹⁶⁷ See *Id.* at ¶ 8.65.

¹⁶⁸ See SCM art. 1:1.1(a)(1)(iii).

¹⁶⁹ See SCM art. 1:1.1(a)(1)(iv).

¹⁷⁰ The cumulative nature of these conditions can be understood by examining the structure of SCM Article 1 (definition of a subsidy) and Article 2 (specificity), which create a mandatory requirement that all *three* conditions must exist in the case of an illegal subsidy.

[T]he ordinary meaning of “benefit” clearly encompasses some form of advantage . . . In order to determine whether a financial contribution . . . confers a “benefit,” i.e. an advantage, it is necessary to determine whether the financial contribution places the recipient in a more advantageous position than would have been the case but for the financial contribution.¹⁷¹

Under the “but for” approach indicated by the Appellate Body, the U.S. would have the burden of showing that Chinese enterprises are placed in a more advantageous position by the currency devaluation than it would otherwise enjoy without the devaluation. China critics argue that the devaluation of the RMB creates a price advantage for Chinese enterprises but a price advantage alone is insufficient to constitute a benefit. It is also not sufficient to show that a currency devaluation leads to more exports from China to the U.S. Exporting more goods to the U.S. is not necessarily an advantage unless Chinese enterprise earn a higher profit than would be the case in the absence of the currency devaluation.¹⁷² An enterprise already working at full production capacity will not automatically export more goods due to a currency measure in the short term.¹⁷³ The enterprise is already working at full capacity and is unable to manufacture more goods without costly changes to its production capacities, which can hardly be said to be certain to occur.¹⁷⁴ Whether an enterprise receives more profits due to a lower price cannot be determined with a detailed investigation of the cost and pricing structure of the enterprise.¹⁷⁵ Suppose that one of the inputs of the enterprise is an export from the U.S. Fewer exports from the U.S. will occur as a result of the currency devaluation and, as there are fewer inputs, the price of the inputs might increase, leading to lower profit margins by the enterprise. In order words, it is far from certain that the U.S. will be able to discharge its burden of showing that a currency devaluation confers a benefit.

c. Specificity

Even if currency devaluation constitutes a financial contribution and confers a benefit, Article 2.1 of the SCM provides that a measure must also be “specific to an enterprise or industry or group of enterprises or industries” in order to qualify as a subsidy. This requirement exists because governments normally provide public goods such as highways, parks, and police services that are available to all. If a subsidy is not specific then all public goods provided citizens might all qualify as a subsidy, an unacceptable result. To be a subsidy, the measure must benefit only an enterprise or a group of enterprises.

According to one account:

¹⁷¹ Appellate Body Report, Canada-Measures that Affect the Export of Civilian Aircraft, ¶ 149, WTO Doc. WT/DS70/AB/R (adopted Aug. 20, 1999).

¹⁷² The currency devaluation itself cannot be an advantage; it is an advantage only if it results in some trade or general economic benefit is derived.

¹⁷³ If the enterprise is already at full capacity, then it cannot produce more goods without additional capitalization, which operates as a barrier to increased production.

¹⁷⁴ Additional capital investment may not be available at all or may be available only at high costs.

¹⁷⁵ It is too simplistic to assume that prices have a direct relationship to profits; profits depend on a host of factors.

An undervalued exchange rate is probably the least specific of any benefit that a government might confer. WTO case law in other subsidy disputes runs strongly against the proposition that an undervalued exchange qualifies as a specific benefit. Public policy measures that are generally applicable to broad swaths of the economy are not viewed by the WTO as actionable subsidies; rather for trade policy purposes, the focus is on sector-specific benefits.¹⁷⁶

Currency devaluations are available to all sectors of the economy.¹⁷⁷ Any person or entity needing to exchange RMB for foreign currency will be able to use the devalued exchange rate so it would not seem to qualify as specific under the standard set forth by SCM Article 2.1.

An alternative basis for specificity is set forth in SCM Article 2.3, which states that subsidy is deemed specific if it is an export subsidy under SCM Article 3. Export subsidies are defined under SCM Article 3 to be “subsidies contingent, in law or in fact . . . upon export performance.”¹⁷⁸ Subsidies contingent at law require some explicit statement in a law that subsidies are available only if the subsidized products are exported.¹⁷⁹ There is no indication that China has any law expressly stating that access to undervalued currency is dependent upon export performance, so the first prong of contingency in law is not satisfied. As for contingency in fact, the Appellate Body in *Canada-Aircraft* stated that “the facts must ‘demonstrate’ that the granting of a subsidy is tied to or contingent upon actual or anticipated exports.”¹⁸⁰ The purported subsidy is that provided by a devalued exchange rate is not tied to or contingent upon exports. Any person or entity can obtain foreign currency at the devalued exchange rate regardless of whether that entity engages in exports or not.

2. Article XV of the General Agreement on Tariffs and Trade (GATT)

If the proposed 45% tariff does not qualify as a subsidy under the SCM, Trump must find an alternative justification in the WTO agreements. Robert Lighthizer, Trump’s pick for USTR,¹⁸¹ has stated that an “obscure provision” of the WTO provides an alternative justification for imposing tariffs against China for currency manipulation.¹⁸² The provision in question is contained in GATT Article XV entitled “Exchange Arrangements.” GATT Article XV:4 states:

¹⁷⁶ Gary C. Hufbauer et al., *China Bashing 2004 International Economics Policy Briefs* Number PB04-5 (Sept. 2004) available at <https://piie.com/publications/pb/pb04-5.pdf>.

¹⁷⁷ *Devaluation and its Impact on Different Economic Sectors*, UK ESSAYS (Mar. 23, 2015), <https://www.ukessays.com/essays/economics/devaluation-and-its-impact-on-different-economic-sectors-economics-essay.php>.

¹⁷⁸ See SCM art. 3.1(a).

¹⁷⁹ Mitsuo Matsushita, Thomas Schoenbaum, Petros Mavroidis, and Michael Hahn, *The World Trade Organization: Law, Practice and Policy* 330-334, (3rd ed. 2015) (stating that de jure violations of the WTO usually require that the measure at issue contains some explicit statement that, on its face, violates a WTO obligation).

¹⁸⁰ See *Canada-Measures that Affect the Export of Civilian Aircraft*, supra note 171, at ¶ 171.

¹⁸¹ See Lawder, supra note 10.

¹⁸² Keith Bradsher, *What Trump’s Nominee for Trade Representative Has Said About China and the W.T.O.*, *THE NEW YORK TIMES* (Jan. 13, 2017), https://www.nytimes.com/interactive/2017/01/13/business/document-lighthizer-2010-china-two-trade-testimony.html?_r=1&mtref=undefined&gwh=B3E16C81416066FEE61A8EB58C0BDD2A&gwt=pay.

“Contracting parties shall not, by exchange action, frustrate the provisions of this Agreement.”¹⁸³ The argument that this provision justifies the use of trade sanctions is that devaluation of the RMB versus the U.S. dollar makes U.S. imports more expensive to the Chinese consumer and thereby undermines the tariff concessions made by China to the U.S. under the WTO. China’s tariff concessions resulting in lower tariffs on U.S. imports were designed to provide greater access for U.S. goods to China’s market.¹⁸⁴ This tariff concession by China to allow U.S. goods to have greater access to China’s market was made in exchange for various promises by the U.S. which gives China greater access for Chinese goods to the U.S. market.¹⁸⁵ By making U.S. goods more expensive to the Chinese consumer, however, China is in essence withdrawing its promise to allow U.S. goods greater access to China’s market. In return, the United States should be able to impose higher tariffs against Chinese goods reducing their access to the U.S. market in a tit-for-tat. In other words, the proposed 45% tariff on Chinese goods is not a countervailing duty imposed to offset a subsidy under the SCM, but a retaliatory tariff imposed on China under GATT Article XV for withdrawing its commitment to provide access for U.S. goods to the Chinese market.

GATT provides no further guidance on the meaning of “exchange arrangements” or what would constitute “frustration” of GATT provisions. No WTO case has ever considered the meaning of GATT Article XV:4. Issues of interpretation of these terms can be open ended. Note that GATT XV is not concerned with a *violation* of GATT provisions but a *frustration* of such provisions indicating something short of a violation. Frustration implies defeating the goal or intent of GATT provisions. How one determines the intent of GATT provisions seems difficult as there is no definitive methodology or answers to a single intent of the GATT. It is certainly far from clear that it would be possible to articulate a single goal of the GATT as opposed to multiple goals. A quick perusal of the preamble of the GATT illustrates that it was intended to serve many purposes and many different goals.¹⁸⁶ These uncertainties surrounding GATT Article XV:4 make it unlikely that it can serve as a justification for the proposed new tariff. Given the history of WTO, it seems highly unlikely that a WTO panel would use GATT Article XV, filled with such ambiguity and devoid of clarification by any existing WTO jurisprudence, to strike down China’s currency devaluation exchange rate as a breach of a WTO commitment.

3. The Legality of the Proposed Tariff under the Articles of the International Monetary Fund

A second set of legal arguments that China’s currency manipulation is illegal under international law is based upon the Articles of Agreement of the International Monetary Fund (IMF).¹⁸⁷ The IMF was established in the period immediately following the Second World War

¹⁸³ See General Agreement on Tariffs and Trade article XV(4), Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

¹⁸⁴ See Bob Davis, How China’s Trade Concessions Made it Stronger, *The Wall Street Journal* (Aug. 12, 2016, 11:05 AM), http://blogs.wsj.com/economics/2016/08/12/how-chinas-trade-concessions-made-it-stronger/?utm_content=buffercdf26&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer.

¹⁸⁵ See *Id.*

¹⁸⁶ See GATT Preamble.

¹⁸⁷ See Articles of Agreement of the IMF, 60 Stat. 1401, 2 U.N.T.S. 39.

as one of the three Bretton Woods Institutions designed to create a new trade and financial structure for the post war period.¹⁸⁸ The IMF was designed to oversee the international monetary system and to exercise surveillance over the exchange rate policies of member in order to avoid the ruinous cycle of vicious currency devaluations that plagued the world before the Second World War.¹⁸⁹ Along with the International Trade Organization, which was to liberalize trade, and the World Bank, which was to lend money to developing countries to foster economic development, the IMF would form a triumvirate of international organizations that would prevent a reoccurrence of the disastrous protectionist economic policies that contributed to the start of the Second World War.¹⁹⁰ Today, the IMF, the World Bank, and the WTO have overlapping memberships and work cooperatively in many areas of trade, finance, and development.

The powers of the IMF to provide guidance to countries on their exchange rate policies is set forth in Article IV:3(b), which provides that “the fund shall exercise firm surveillance over the exchange policies of its member and shall adopt specific principles for the guidance of all members with respect to those policies.”¹⁹¹ Among the specific obligations of IMF members, the most pertinent for present purposes contained in Article IV:1(iii), which states that “each member shall . . . avoid manipulating exchange rates or the international monetary system in order to . . . gain an unfair competitive advantage over others.”¹⁹² Based upon this provision, some China critics have argued that China’s currency manipulation is in breach of its legal obligations under the IMF Articles of Agreement.¹⁹³

¹⁸⁸ See Chow and Schoenbaum, *International Trade Law*, supra note 11, at 18-21.

¹⁸⁹ See *Id.* at 19. A brief summary of the history and role of the IMF is set forth below:

The IMF was founded to ensure stability in the flow of currency (money) across national borders. One of the original goals of the IMF was to control the vicious cycle currency devaluations that gave rise to the Great Depression of the 1930s. If Country B is holding large amounts of Country A’s currency and Country A suddenly devalues its currency by 50 percent, Country B’s holdings of A’s currency immediately decrease in value by one-half and Country B may feel cheated. Today, the IMF ensures stability by discouraging devaluations and encouraging countries to allow for free convertibility of currencies through the use of stable exchange rates. The IMF also assists countries with balance of payment obligations, i.e., the need to repay loans or other monetary obligations in foreign currency. To achieve these objectives, the IMF provides loans as well as technical assistance. Member in the IMF (189 states) overlaps with membership in the World Bank and both institutions work closely together. Like the World Bank, voting in the IMF is determined by the monetary contributions of its members.

Id. at 19-20 (footnotes omitted).

¹⁹⁰ See Chow and Schoenbaum, *International Trade Law*, supra note 11, at 18 (discussing the pre and post world history leading to the Bretton Woods conference and the financial and trade institutions proposed as a result of the conference). Although the World Bank and the IMF were quickly approved, the ITO never came into existence due mainly to the opposition of the US Congress. *Id.* at 18.

¹⁹¹ See Articles of Agreement of the IMF, art. 4 § 3b, 60 Stat. 1401, 2 U.N.T.S. 39.

¹⁹² See Articles of Agreement of the IMF, art. 4 § 1(iii), 60 Stat. 1401, 2 U.N.T.S. 39.

¹⁹³ See Elizabeth Pettis, *Is China’s Manipulation of its Currency an Actionable Violation of the IMF and/or the WTO Agreements?*, 10 *J. Int’l Bus. & L.* 281, 285-287 (2011).

This argument suffers from a number of shortcomings. First, although the IMF is charged with overseeing exchange rates, the IMF, unlike the WTO, has no enforcement powers.¹⁹⁴ Rather, the IMF is limited to working with countries in resolving currency issues through dialogue, surveillance, technical assistance, and persuasion.¹⁹⁵ If an IMF member is in violation of any IMF Articles, the IMF is powerless to impose or authorize any sanctions; certainly nothing in the IMF Articles authorizes the use of trade sanctions, such as countervailing duties, by one IMF member in retaliation for any breaches of IMF obligations by another IMF member.¹⁹⁶ Second, the articles of the IMF are generally viewed as “soft law,” i.e. as creating guidelines that are precatory in nature but not legally binding.¹⁹⁷ Assuming that China has run afoul of Article IV:1(iii), China has merely failed to observe a guideline but is not a breach of a legal obligation. Even if Article IV:1(iii) created a binding legal obligation to “avoid manipulating exchange rates . . . to gain an unfair competitive advantage,” the IMF has never found a single member to be in violation of Article IV:1(iii). Finding a violation of Article IV:1(iii) is not a simple or straightforward task. Aside from the significant political complexities involved in finding China to be in violation, there are also significant economic complexities that must be resolved before it is possible to find a violation of Article IV:1(iii).¹⁹⁸ Even assuming that Article IV:1(iii) creates legal obligations, it is unlikely that the IMF will find China to have violated these obligations.

IV. CONCLUSION

President Trump’s proposed 45% tariff on all Chinese imports does not withstand a serious economic or legal analysis. From an economic perspective, it is dubious that devaluation of the RMB is the cause of the U.S. trade deficit and losses in employment in the manufacturing sector. Fundamentally, China cannot use currency devaluation to obtain a lasting trade advantage. Under basic economic principles, no country, including China, can use changes in nominal variables (the exchange rate) to affect real variables (the trade balance) over the long run. To the extent that China’s intervention pushes the exchange rate below what would prevail in a free market, rising domestic prices in China will in the long run ultimately undercut and neutralize any advantage the policy conferred on China’s exporters or China’s domestic firms in the import-competing sector. Based on the IMF’s declaration that the RMB is no longer undervalued,¹⁹⁹ this has already come to pass. In other words, China’s current exchange and

¹⁹⁴ Edwin Truman, *The International Monetary Fund and Regulatory Challenges 3* (Peterson Institute for International Economics, Working Paper WP 09-16, 2009) (stating explicit and implicit obligations imposed by the IMF are dependent on governments subjecting themselves to the IMF’s oversight).

¹⁹⁵ See *Our Work*, International Monetary Fund, <http://www.imf.org/external/about.htm> (last visited Mar. 15, 2017).

¹⁹⁶ See Chow, *supra* note 158, at 24 (suggesting that trade sanctions are the domain of the WTO and that there must be an agreement between the IMF and the WTO authorizing “cross retaliation” in order to justify the use of WTO sanctions for an IMF violation).

¹⁹⁷ See *Our Work*, *supra* note 195 at 2.

¹⁹⁸ See IMF, *Article IV of the Fund’s Articles of Agreement: An Overview of the Legal Framework*, Policy Paper (June 2006).

¹⁹⁹ Press Release, International Monetary Fund, *IMF Staff Completes the 2015 Article IV Consultation Mission to China* (May 26, 2015).

currency policies do not create any trade advantages for China over the U.S. Moreover, the proposed tariff as a remedial measure will not only fail to remedy the problem but will likely cause additional harms to the U.S. and global economy. The tariff would reduce consumption and lead to inefficient production within the U.S. China is also very likely to retaliate against the U.S. by raising tariffs of its own. Sparking such a trade war with China could only leave the U.S. and the rest of the world worse off.

From a legal perspective, the proposed tariff is not justified under the WTO or the IMF. If the tariff is implemented, China will most likely immediately challenge the tariff in the WTO and win a decision by the WTO striking down the proposed tariff. However, as a legal challenge could take several years, the harmful effects of the tariff might become manifest before the WTO can strike down the measure. In addition, there is the possibility that despite a WTO rejection of the measure, the U.S. might defy the WTO and maintain the tariff or delay its withdrawal. Aside from the political and legal fallout from such U.S. defiance of the WTO, the harmful economic effects of the tariff for an extended period could escalate, deepening into a global economic crisis.

As the proposed tariff stands on both dubious economic and legal grounds, we believe that it is both inadvisable and also an inappropriate response to China's currency and trade policies. Although the measure may have immediate superficial appeal to certain anti-China groups, the measure will soon become a grievous self-inflicted wound on the U.S. and global economy with severe consequences, including a global recession that could take years or decades to overcome. We believe that a more appropriate response would be a policy that redistributes some of the benefits of trade from the winners to the losers in the U.S. economy. It is important to recall that openness to trade generates sufficient gains such that the winners in the U.S. can hypothetically compensate the losers. We cannot ignore that openness to trade with China (as well as other countries such as Mexico) has imposed costs on some groups within the U.S. However, compensating those groups is a matter of crafting the appropriate domestic redistribution policies. Expanding programs such as Trade Adjustment Assistance²⁰⁰ as well as broadening existing wage-loss insurance would be a much wiser way to deal with these costs.²⁰¹ Such measures would be far preferable to a blunt, across the board tariff that will likely lead to a destructive trade war with China.

²⁰⁰ What is Trade Adjustment Assistance?, United States Department of Labor, <https://www.doleta.gov/tradeact/factsheet.cfm> (last visited Mar. 15, 2017).

²⁰¹ See Grant D. Aldonas, Robert Z. Lawrence, and Matthew J. Slaughter, Succeeding in the Global Economy: An Adjustment Assistance Program for American Workers, The Financial Services Forum Policy Research White Paper, 8-10, 1-27 (2008).