The effects of US-China trade war and Trumponomics

Evans, Olaniyi

School of Management and Social Sciences, Pan Atlantic University, Lagos, Nigeria

2019
The effects of US-China trade war and Trumponomics

Olaniyi Evans

e-mail: oevans@pau.edu.ng

School of Management and Social Sciences, Pan Atlantic University, Lagos, Nigeria

Abstract. Trumponomics describes the economic policies of U.S. President Donald Trump and has “America-first” approach. The Trump administration risks creating a more fragmented global economy and has started the biggest global trade war. The various sides are still on tenterhooks to impose additional tariffs worth hundreds of billions of dollars. Using deadweight loss (also known as excess burden or allocative inefficiency) and Harberger's triangle, this study shows that: the trade war is devastating not just for the US and China, but for the whole world economy: (i) the prices of items that directly affect consumers’ welfare will rise; (ii) firms will face extra costs for exports; (iii) investors will become more nervous; (iv) some investors will diversify into Bitcoin and other cryptocurrencies; (v) the trade war could turn into a currency war; (vi) even developed countries could be hit by the trade war; and (vii) tariffs applied on developing countries’ exports would rise steeply. In a trade war, everyone may lose.

Key words: Trumponomics, US-China Trade War, Consumers, Stocks, Cryptocurrency, Brexit

Introduction

A trade war is an economic conflict that result from extreme protectionism where countries raise or create tariffs (or other trade barriers) against each other in retaliation to trade barriers created by the other party.¹ A consequence of a misapprehension of the benefits of free trade, trade wars can be instigated if one country sees another country's trading practices to be unfair (Krugman, 2016;

¹ A tariff is a tax imposed on imported goods and services.
Zoellick, 2017). It can therefore result from a protectionist stance. Protectionism restricts international trade, though most often the general intent is to protect local businesses and jobs from foreign competition (Coughlin et al., 2000).

In 2017 and 2018, President Donald Trump embarked on a protectionist campaign, in an attempt to bring manufacturing jobs back to the United States from other nations such as China where such jobs have been outsourced (Costinot, 2009; Zoellick, 2017). He imposed a new import duty on 818 goods from China totaling $34 billion. China retaliated in kind, imposing a 25% duty on the import of U.S. goods, also totaling $34 billion.

The advantages and disadvantages of such protectionism are the subject of fierce debate that has a long history in political economy and world politics (Findlay, 2017; George, 2017; Irwin, 2017; Alden 2018). Standard economic theory highlights the adverse effects of trade protectionism (Draper, 2017; Fong, 2017; Zissimos, 2017; Weingast, 2018). Critics argue that protectionism can lead to price increases of domestic manufactured goods as well as slow down economic growth and cultural exchange. However, proponents argue that the free trade principle that trade is mutually beneficial for countries has always been mired with national political calculus in negotiations. They argue that protectionism in conjunction with well-crafted policies can provide competitive advantages and generate more jobs (Costinot, 2009; Abboushi, 2010).

However, it is difficult to uncover from this debate any widely accepted ramifications and effects of the US-China trade war. Thus it is not clear what the effects and implications of the US-China trade war are likely to be. This study fills the gap. It identifies the effects of US-China trade war on consumers, firms, stocks, cryptocurrency, developed and developing countries. The layout of this article is as follows. The next section discusses Trumponomics and the US-China trade war. Section 2 describes the theory of the deadweight loss and Harberger's Triangle in relation to the US-China trade war. Section 3 presents the implications of the US-China trade war. The last section concludes.
1. **Trumponomics and the US-China Trade War**

Trumponomics describes the economic policies of U.S. President Donald Trump to restructure trade deals, cut personal and corporate taxes, and introduce large fiscal stimulus measures focused on infrastructure and defense. For further details into the appurtenances and technicalities of Trumponomics, see Ruccio (2017), Ghosh (2017), Jakupec (2017), Locke (2017) and Jakupec (2018).

Trumponomics has “America-first” approach. By this, it risks creating a more polarized global economy. In fact, it has started the biggest global trade war by imposing a new import duty on 818 goods from China totaling $34 billion. China has retaliated in kind, imposing a 25% duty on the import of U.S. goods, also totaling $34 billion. The Trump administration has also extended the trade war to Canada (which has imposed tariffs on $12.8 billion worth of US goods in return), the EU (which has enforced tariffs on $7.2 billion of US products in return), and Russia (which has also slammed 25-40% additional duties on the import of American products). In 2018, President Donald Trump has threatened significant tariffs on Chinese goods, as much as $500 billion on products including steel and soy. He has also threatened to pull the U.S. out of the World Trade Organization (WTO). The Trump administration and the affected countries are still on tenterhooks to impose additional tariffs worth hundreds of billions of dollars.

With the imposition of tariffs, the Trump administration hopes to reduce the large US trade deficit with China as well as to impel China to make key adjustments to its economic policies, including reducing existing tariffs and limiting the alleged theft of US intellectual property by Chinese firms. The Trump administration seeks to use trade negotiations to massage its electorate’s concerns over the lost manufacturing industries of the US rust belt and the perception that China’s trade practices are “not fair” and threaten the US in high-tech sectors. While much focus has been on tariffs on steel and other heavy industrial goods, the US tariffs also target a range of high-tech industries,

---

2 The WTO is the only global impartial organization that regulates trade among the 164 countries that belong to it.
particularly where the Chinese are likely to become leaders in the next decade. This has further led credence to the argument that, in recent times, the rise of China and other vibrant emerging economies have posed huge competitions for the US and other developed economies, with uneven patterns of winners and losers within them (Rugman and Li, 2007; Hsiang, 2016; Lee and Schwartz, 2016; Rugman, 2016).

2. Theoretical framework

2.1 Deadweight Loss and Harberger's Triangle

Deadweight loss (also known as excess burden or allocative inefficiency) is the loss of economic efficiency that occurs when equilibrium for a good/service is not achieved (such that optimal or allocative efficiency is not achieved). It is the loss of welfare, social surplus or utility for consumers/producers due to reasons like tariffs, subsidies, taxes, price ceilings/floors, externalities and monopoly pricing (Coughlin, 2010; Dixon and Rimmer, 2010; Irwin, 2010; Porcher, 2014). For tariffs, deadweight loss is the excess burden created due to loss of benefit to participants in trade which can be consumers, producers or the government. If tariff is imposed on a firm for each unit of the good it imports, the new equilibrium price will be higher (Chen and Ma, 2012). Therefore, some of the burden is passed on to the consumer and this leads to reduced trade from both sides. The loss in welfare is attributable to a shift to less efficient market outcomes which lead to wastage or underutilization of resources.

Harberger's triangle, attributed to Arnold Harberger, can be used to study the deadweight loss (as measured on a supply and demand graph) created by government intervention in a market (Magee, 2011; Perelman, 2011; Sorensen, 2011; Harberger and Just, 2012; Wang and Chen, 2012). In the case of tariff, the amount of tariff drives a wedge between what consumers pay and what producers receive, and the size of the wedge is equivalent to the deadweight loss from the tariff (Figure 1). The area denoted by the triangle arises from the fact
that the intersection of the demand and supply curves are cut short so that the producer surplus and consumer surplus are also cut short. The loss of such unrecovered surplus is the deadweight loss. Economists such as James Tobin have argued that the triangles do not have significant effects on the economy, but others such as Martin Feldstein have argued on the contrary that they can significantly affect long-run economic trends by spinning the trend downwards and magnifying losses in the long run (Tobin, 1977; Feldstein, 1999; Fletcher, 2011; Spulber, 2015; Blinder, 2016; Rösl and Tödter, 2017).

2.2 Application to the US-China Trade War

The Harberger’s triangle or tariff wedge is the deviation from the equilibrium price/quantity as a result of tariff imposition. Put differently, the Harberger’s triangle or tariff wedge is the difference between what consumers pay and what producers receive (net of tariff) from a transaction. The first round of tariffs on $34 billion worth of Chinese imports means that the price for the American buyers is greater than the price for the Chinese sellers. With such tariffs, consumers pay more than they did before, and suppliers receive less for the good than they did before. Represented by the shaded Harberger triangle in Figure 1, the deadweight loss created by the tariff is equal to

$$\frac{1}{2} \times (Q^* - Q_t)(P_c - P_s)$$  \hspace{1cm} (1)

**Figure 1.** The Harberger’s Triangle for US-China Trade War
For example, when America imposed a new import duty on China, the tariff drives a ‘wedge’ between the price American consumers pay and the price Chinese sellers receive. The difference between the price that consumers pay and the price that sellers receive is equivalent to the size of the per-unit tariff. In line with the law of supply and demand, as the price paid by consumers increases, and the price received by sellers decreases, the quantity that each wishes to trade will decrease.

After the tariff is imposed, a new equilibrium is reached, where consumers pay more, and the quantity traded falls. With such tariffs, the equilibrium price is $P^*$ where the difference between the buyer's ($P_c$) and seller's prices ($P_s$) equals the value of the tariff (Figure 1). The total of the shaded triangular region is the Harberger’s triangle which represents the magnitude of the welfare loss. While the top shaded triangle represents the loss of welfare to consumers (the demand side), the lower shaded triangle represents the loss of welfare to sellers (the supply side).

3. Implications

In line with the deadweight loss in Harberger’s triangle, tariffs and counter-tariffs will have wider effects on consumers, sellers and the global economy.

3.1 Consumers

Firms are likely to pass on the additional costs of imposed tariffs to consumers by raising prices. The prices of items that directly affect consumers’ welfare such as food, prescription drugs and foreign holidays will therefore rise. Unlike stocks, prices would rise over a period of months rather than immediately, demonstrating the time it may take before consumers begin to feel the effects of the trade-war. Not as expected, these tariffs may not bring manufacturing jobs back. Any jobs created in industries protected by tariffs would be offset by those lost in industries that make use of these products experiencing rising costs and export sectors hit by retaliatory tariffs.
3.2 Businesses

It should be noted that the longer the trade war continues, the likelier firms get hurt. American businesses have reported increased prices as a result of the tariffs, impelling them to make hard choices such as laying off workers or delaying expansion plans. Many companies will shift production overseas to circumnavigate the tariffs because they may not want to absorb extra costs for exports (e.g., Harley-Davidson). Cases like Harley-Davidson has shown that Trumponomics indeed have weaknesses. It may be difficult for the US to resolve trade deficits bilaterally, especially with China. A lot of US companies have moved their production to China; they operate within complex international networks and protection will not bring them back to the US. The trade war could still extend into areas that have not been considered. For example, it could extend into bureaucratic hurdles for companies operating abroad, and interference with licensing.

Similarly, a growing number of Chinese companies are adopting crafty ways to evade higher tariffs on their exports to the US. They remove the “Made in China” label by shifting production to countries such as Mexico, Serbia and Vietnam. For example, HI Corp, a Shenzhen-listed bike parts maker, has moved production to Vietnam.

3.3 Stocks and Investors

Investors generally loath any sign of protectionism in global markets. For example, U.S. stocks declined, with the Dow falling more than 200 points immediately after the Trump administration imposed duties on Chinese goods. Fears of a global trade war dragged equity prices lower, with all of Wall Street’s major indexes recording declines. The Dow Jones Industrial Average fell by 84.83 points to 25,090.48. The broader S&P 500 Index fell by 0.1% to 2,779.42, with the bulk of its primary sectors booking losses. Industries tied to primary goods led the declines. The VIX fear index went below 12 on a scale of 1-100.
where 20 is the historic average. Within this time, stocks on all the major US indexes have been adversely affected. Indeed, the trade war is getting a large part of the investor base noticeably more nervous, which may worsen as the trade war continues.

3.4 Cryptocurrency

Recent history has shown that cryptocurrencies blossom when countries battle uncertain economic times. For example, Chinese switched to cryptocurrencies when their national currency, the yuan, was devalued. Similarly, in 2016, Bitcoin experienced a significant increase during Brexit. As the US takes on more countries on a trade war, the value of national currencies will likely decline, including the US dollars. Investors will look for alternate ways to store their wealth. Traditionally, investors have stored their wealth in precious metals like gold and silver but their acquisition and storage are hard and expensive. Cryptocurrencies offer the best alternative.

Cryptocurrencies are digital currency in which encryption techniques are used to control the units of currency and verify the transfer of funds, functioning independently of a central bank. Cryptocurrencies such as bitcoin provide an outlet for wealth that is beyond restriction and confiscation. Though cryptocurrencies are volatile, some investors with appetite for risk may diversify into Bitcoin and other cryptocurrencies. As the trade war hits more countries with economic instability, cryptocurrencies are set to increase.

3.5 Currency war

The trade war could turn into a currency war. Theoretically and practically, cheaper currency may be a potential way to offset import tariffs (Biswas and Sengupta, 2015; Chow, 2017; Vashneya and Gupta, 2017). For example, the yuan has weakened lately against the dollar. The devaluation of the yuan could be the first sign that the ongoing trade war may descend into a currency war. However, it is an open question whether it is a conscious policy
move (China has a semi-managed currency). Since devaluation makes exports cheaper and more competitive against foreign manufacturers, allowing the national currency to weaken will soften the blow of tariffs on the economy, ceteris paribus. Conversely, it will make the foreign products more expensive, reinforcing the effects of the tariffs.

3.6 Developed countries

Even the developed economies could be particularly hit by this. For example, Britain is a relatively open economy, advocating for an open global trade order (Ojo, 2016; Oliver and Williams, 2016). A weakened rules-based world trade system would be damaging for Britain. A change to a more protectionist world order would be challenging for the UK, independent of the EU (Pabst, 2016). Currently Britain is party to preferential trading arrangements with the EU and 50 other partners. The UK is more specialized in services, but trade negotiations have become increasingly complicated, particularly in services, focusing on harmonizing standards and regulations rather than merely reducing tariffs. It may be difficult for a medium-sized country like the UK to negotiate favourable trade deals in a fragmented world trade order beyond the EU and with other countries.

3.7 Developing countries

According to an old African proverb, “When elephants fight, it is the grass that suffers.” The same is true for the US-China trade war: developing countries will be among the hardest hit as, on average, tariffs applied on their exports would rise steeply. A trade war would be a severe blow to the world’s poorest countries, as it would compromise the fragile global economic recovery, thus undermining growth and development around the globe. Moreover, developing countries are likely to face higher tariff barriers which may be unfavorable to export-oriented growth. Some of the growth miracles, including Japan and South Korea, were driven by increased exports to developed countries.
Conclusions

Using deadweight loss (also known as excess burden or allocative inefficiency) and Harberger's triangle, this study has shown that the US-China Trade war could have boomerang effects and various implications. Firms are likely to pass on the additional costs of imposed tariffs to consumers by raising prices of items that directly affect consumers’ welfare such as food, prescription drugs and foreign holidays. Not as expected, the imposed tariffs may not bring manufacturing jobs back.

Many companies will move their production overseas to circumnavigate tariffs because they may not want to absorb extra costs for exports. The trade war could even extend into bureaucratic hurdles for companies operating abroad, and interfere with licensing. The trade war could get investors more nervous, which may worsen as the trade war continues. The trade war could turn into a currency war, reinforcing the effects of the tariffs.

The developed economies could be particularly hit by the trade war (e.g., the UK). It may be difficult for a country like the UK to negotiate favourable trade deals in a fragmented world trade order. Developing countries will also be hard hit as tariffs applied on their exports would rise steeply, thus undermining growth and development around the globe. Moreover, they are likely to face higher tariff barriers which may spell doom for their export-oriented growth. However, it must be noted that restrictions on global trade might be opportunity for developing countries to fall back on domestic sectors and develop high-tech industries. This may provide a protection for domestic entrepreneurs and investors to expand production, learning by doing, giving domestic firms the chance to grow and become globally competitive. As firms grow, they may invest in physical and human capital and develop new capabilities and skills. Once these capabilities are developed domestic firms can compete globally.

The current waves of tariffs and counter-tariffs by US, China and major trading countries represent a reversal of efforts (multilateral cooperation, and
eight rounds of global trade negotiations, first under the GATT and then under the World Trade Organization) since the end of World War II to remove trade barriers and promote uninterrupted global commerce. In the current trade war, everyone is likely to lose. Companies will lose profits; workers will lose jobs. Governments will lose revenue; consumers will have fewer products to choose from. Households, firms, and governments would incur higher costs. A global trade war would threaten the multilateral trading system itself.

However, the effects of the trade war are likely to hit some industries and regions harder than others. It would cause disruption in global supply chains which are likely to cause the largest drag on global growth from the strain over trade (Hughes, 2005; Korniyenko, Pinat and Dew, 2017; Manners-Bell, 2017). Summarily, trade war is debilitating not just for the US and China, but for the whole world economy.

This study has its limitations. A major limitation of this study pertains to the lack of empirical evidence; further research could therefore focus on empirical verification of the effects of the US-China trade war on consumers, firms, stocks, cryptocurrency, developed and developing countries, in various settings and using different methodologies. Such detailed empirical investigation would be very interesting and promising.

References


Jakupec, V. (2018). Trumponomics. in development aid—populism and the end of the neoliberal agenda (pp. 53-68). Springer, Berlin, Germany


Weingast, B. R. (2018). War, Trade, and Mercantilism: Reconciling Adam Smith's Three Theories of the British Empire, Department of Political Science, Stanford University.


Olaniyi Evans is a faculty member at Pan Atlantic University, Lagos, Nigeria. His research interests encompass financial inclusion, digital economy and dynamic stochastic general equilibrium (DSGE) modelling from an African economic perspective. With snowballing citations, his scholarly publications proliferate in high-impact journals hosted by high-rank publishers such as Elsevier, Emerald, Sage, Springer, Taylor & Francis, and Wiley. Some of his bestselling books are How to Get a First-class Degree, The Firstclass You, Art of Research, iMathematics and iStatistics. Also, he is the founding editor of BizEcons Quarterly.