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CONCEPTUAL FRAMEWORK: THE IMPACT OF TRADE WAR ON FINANCIAL MARKETS

ANUM SHAFIQUE
PhD Scholar (Capital University of Science and Technology). Email: An_shafique@yahoo.com

Dr. NOUSHEEN TARIQ BHUTTA
Assistant Professor (Capital University of Science and Technology).
Email: nousheen.bhutta@cust.edu.pk

Abstract

Trade War has been a subject of debate for the researchers on many fronts be it political or economic. The issues between the two countries (USA and China) has reemerged on the surface repeatedly. It has an impact on the economies of the two countries but across the globe as well. Research studies take this issue as an event or try to capture it through news announcements as and when any dispute occurs, thus focusing on the short-term effects of it and to test its impact on the financial markets particularly stock, currency and bitcoin. Therefore, the aim of this research is to propose a conceptual framework to create a composite variable by identifying its most suitable proxies from the literature and to treat it as a variable. Secondly, it aims to study both perspectives. The composition of variable with all the data obtained for US and for China separately. Two composites one where all the proxies are used for china and other where all proxies were used with data specifically for US are created. Principal component analysis is used to create the composite variable and Time series data analysis is used to investigate the impact of trade war on the financial markets.

Keywords: trade war, currency, stock, bitcoin

1. INTRODUCTION

There has been a substantial increase in the economic relations between China and USA in the past three decades. In 2016, the mutual trade between two countries increased from 2 billion dollars to 579 billion dollars (Total merchandise), making China the second largest trading partner of the USA. The country (China) has tapped the largest export destination and has got a big source of imports in USA. The benefits of this trade are mutual for both the countries. The imports of US from china provide cost effective goods for its consumers. On the other hand, for China, USA is a large export market. It is also pertinent to note that China is also a second largest holder of US Treasury securities (Li and Lin, 2018).

Besides the prospective elements, which portray a bright picture of China and USA, trade relations, there is a darker side to it as well which relates to the disputes between the two countries. These disputes are becoming intensifies day by day. There are numerous concerns over both ends. For instance, for USA, following areas of concern are important in relation to China:

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- Large amount of trade surplus
- Relatively ineffective record of enforcing Intellectual property rights (IPR)
- Discriminatory Innovation policies
- Mixed record on implementing WTO obligations
- Concerns of China include
- US restrictions on China for its Exports from US on high technology products.
- Unfair treatment of US of China's Market Economy Status
- Unreasonable Trade Sanctions on China

The literature suggests that although these issues exist and are gradually increasing, the overall economic relations have been positive between the two countries. However, the situation does not seem to persist in the existing political scenario given the orientation of the Trump Administration.

The trump administration has explicitly adopted an aggressive stance on China. Certain measures with respect to the economic relations provide evidence of this claim. For instance,

- Levying 45% punitive tariffs on imports from China
- Levying 35% punitive tariffs on imports from Mexico
- Trade bargaining for adjusting trade imbalance and foreign exchange rate

1.1 Basic Concept

The concept of trade war is defined differently in the literature depending on the type of aspect being covered. For instance. Few literal definitions state that a trade war is a situation in which countries try to damage each other's trade, typically by the imposition of tariffs or quota restrictions. Moreover, a trade war is an economic conflict often resulting from extreme protectionism in which states raise or create tariffs or other trade barriers against each other in response to trade barriers created by the other party.

The literature of the subject of trade war intends to capture the effects of trade war through four dimensions. For instance, Nong (2021) took economic policy uncertainty in order to study the deep economic integration and the trade link between US and China. The found the connection of EPU between US and China with the focus of US-China Trade War. Further, as the US-China trade war has caused both the countries to make notable policy changes especially in trade policy. This has reinvigorated the academic interest in EPU.

Besides this, Fugazza and Nicita (2013) studied the overall tariff structures in order to analyze the trade war. According to this study, the researcher used overall tariff

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structure. This investigates whether the two countries subjected to trade war may be also be using trade policy in retaliation against each other.

Further, Benguria (2019) studied the bilateral tariffs in order to study the impact of trade war. Bilateral tariff mean the tariffs imposed by one country on imports from the other country and is reciprocated by the second country on imports from the first country. In other words, it is a type of trade barriers that both countries agree to apply to each other's goods in order to protect their domestic industries and other economic objectives. These tariffs are different from unilateral tariffs, which are imposed by a country on imports from all countries without any reciprocal agreement or arrangement. They are also different from multilateral tariffs, which are imposed by multiple countries on imports from a specific country, often as a response to trade disputes or violation of international trade rules.

Lastly, a study conducted by Ozdagli (2021) measured the trade policy uncertainty shocks through the approach of Rigobon and sack model, who assumed that daily system of linear equations may be used to characterize the daily changes in the financial markets.

The author in his research study states that anecdotal evidence suggests that news related to trade war can have effect on financial markets. (he gave evidence by pointing to the movement in S& P index, he said it was flat till august 23, 2019 and reacted immediately when president trump tweeted that he "hereby ordered" American companies to "immediately start looking for an alternative to China" that day the stock market closed down about 2.5%.

The above definitions and the scope of work on trade war shows a general understanding offered by the literature. However, it lacks to provide a composite variable to capture long-term variations. The studies are limited to the trump era only but in reality, the history of trade war goes beyond that. A standalone factor cannot provide a complete understanding.

2. PROBLEM STATEMENT

Financial markets are a barometer for any uncertainty and turbulence emerging in the global arena be it political or economic. The world has already witnessed the dependency between the stock markets due to the rapid increase in the globalization (Balios and Xanthakis, 2003). This integration due to the increase in globalization has tend to cause trade liberalization and is dependent upon the information flows from the international markets. In that context, any turbulence or event in the international market is promptly translated to the domestic markets.

Where on one side globalization and integration of the financial markets bring more prosperity for the domestic and international markets and other benefit it offers, there is also a flip side to the picture in terms of risk that globalization offers to the financial markets during the periods of turmoil. One of such turmoil's has been the emergence of Trade War between USA and China and its repercussions on the other markets and also the Covid-19 Pandemic.

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Trade war has been triggered again intensively in the Trump era and escalated to a level where many economists predicted a new cold war as the country (USA) once experienced with USSR. In 2018, U.S Trade policy took a stern action against china, by increasing tariffs towards china and China retaliated with the same intensity. The changes in the trade policies between these two countries has created a friction in the world markets.

The studies on the subject to Trade War has studied it as an announcement. For instance, (Fajgelbaum, 2021) have studied Trade war in terms of Tariffs announcement and its impact on US, China and Other countries. Nong (2021) investigated the impact of policy uncertainties between US and China and studied whether the Trade War effect these two parties. Benguria (2019) studied the firm level impact of Trade war on the Chinese firms. The study concluded that the firms that have export exposure to China have declined in their productivity. On the other hand firms that have export exposure to USA have increase in their productivity.

There has been a lot of repercussions of it at different fronts. For instance, the economic relations between the countries i.e. US and China along with their close allies has been affected which has created the trade imbalance which has caused various industries in both countries. Secondly, the current war has also been initiated which has been termed in the literature as exchange rate disequilibrium/Misalignment. Therefore, the trade policies of these two countries that are popularly labelled as trade war (Benguria, 2019) and are proved more intense and persistent than initially expected, is of crucially importance to be understood for the investors and the policy makers worldwide.

All these limitations left gaps and spawn question for one holistic answer “what is the impact of trade war on Financial Market?” in order to fill this gap and answer the research question, the present research is aimed to target two things. First to create a composite variable. The composite variable is created by using four proxies. One of the proxies is computed following Rigobon and Sacks (2003) economic model (as suggested by the literature). Secondly, the focus will be both countries. It means that the analysis is proposed from US and China perspective separately. The impact of Trade War on financial markets where trade war variable is USA focused and then for China where the variable is created using data that is china focused.

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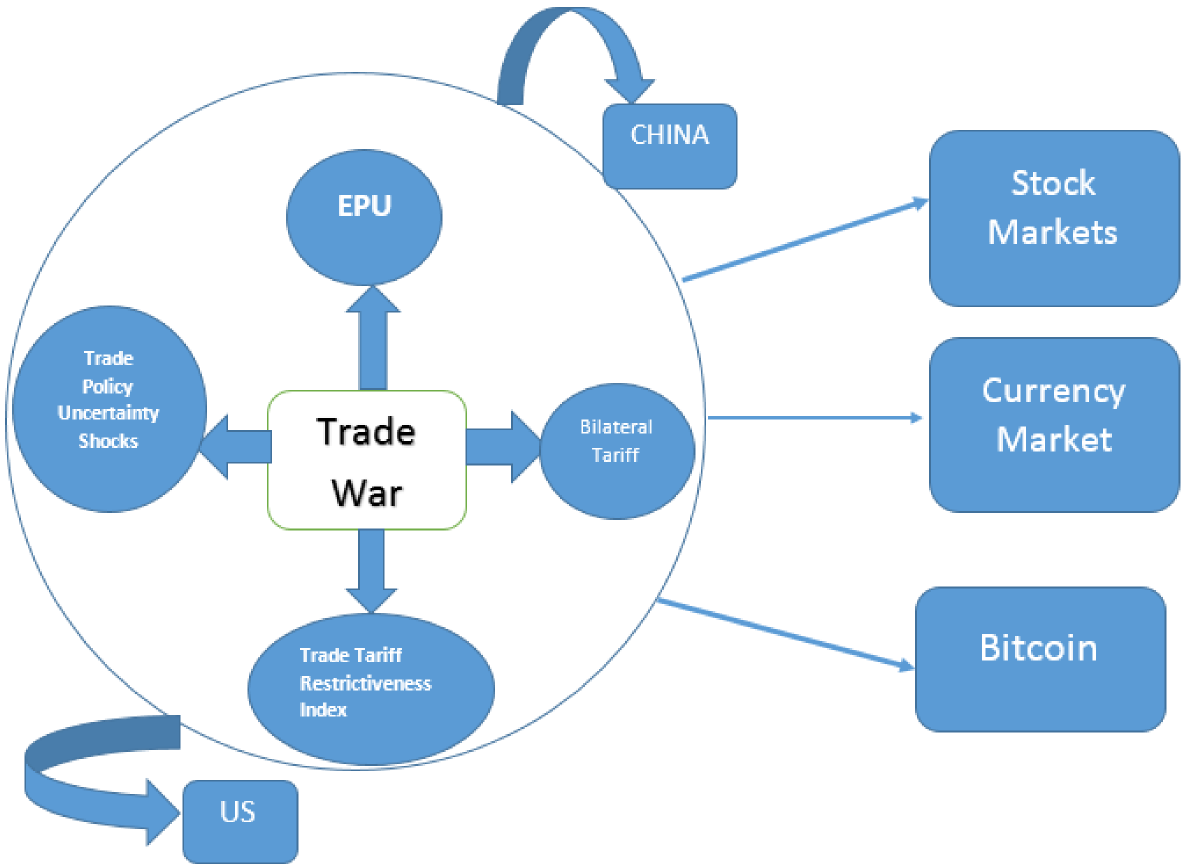

3. LITERATURE REVIEW

A study conducted by Saijai et al (2021) investigated the dependence structure between US stock markets and the BRICV stock Markets. The study considered the period of Trade War to evaluate if there is stock market volatility in the returns of these stock markets during this period. The findings of the study reveal that US stock market and the BRICV markets have strong positive correlations during the period of trade war, when DCC GARCH is applied. The study further shows that the bivariate copulas of US-China, US-Vietnam and US-Brazil have been effected by the Trade war.

The study gives a strong reference to analyze the financial markets. Firstly, it is pertinent to note that when a country that is a big economy like USA initiates Trade restriction other countries may response to such trade policy so as to protect their economies. This situation may lead to the economic slowdown to the whole world. Secondly, in the investment perspective, if the effect of Trade war on US economy are positive and cause to increase the investment funds, it may also cause to increase the expected return on the assets. The rise in expected return on assets may be due to

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inflation as well. Thus, this rise may attract more investments internationally. This scenario may change the outcomes of Trade War.

The right terminology for justifying the argument of investigating dependence and spillover between the markets is Financial Contagion. This is the situation that cause the markets to co-move. A number of research studies in the literature justify the presence of financial contagion. For instance, a study conducted by Dornbusch et al (2001) found that contagion effect exists between the advanced and emerging markets. Further, it found high correlations among the markets that had high volatility during that period. The period of the study was 1960-1990.

Benguria (2019) investigated the global impact of US and China Trade War. The research study evaluated listed firms of 40 countries and found that the firms due to the Trade war between the two countries, firms in china that have export exposure towards USA have declined in productivity (revenue, profits and capital stocks). The research study further reveals that those business which are sensitive to the business cycles are more likely to get drastically impacted due to the trade war and policy uncertainty during this period. The researchers created a dummy variable of trade war to study its impact on the firm level basis. It is important to note that this study highlights two perspective under which the trade war may cause a global impact. Firstly, the trade policy uncertainty and secondly the substitute of Chinese imports which are targeted by the US tariffs. This shift in the supply chain also create a huge impact toward the connected economics worldwide.

Nong (2021) studied policy uncertainties in the context of trade war, between the two countries to measure the trade war effects. The researcher then attempted to find out how these uncertainties labeled as trade war effect the two countries. The research took into account the data related to fiscal, monetary and trade policy to reach towards the meaningful insights. The findings of the study reveal that monetary policy is the main cause uncertainty in China whereas fiscal policy is the main cause of uncertainty in US.

Amstad at el (2021), created a Trade sentiment index in order to measure the impact of trade tensions between the two countries (US and China) on the global stock markets. This Trade Sentiment index is not empirically tested however; it has been created through the textual analysis of the news related to the trade war. Machine learning tools had been applied on a big data pool and to obtain the results. The findings of the study reveal that the results of Trade war are not hopeful for any equity markets rather the Asian equity markets are severely affected by it.

4. CONCLUSION

How trade war impacts any economy is an important concern for the policy makers throughout the world as two superpowers are the main parties to it. However, clear evidence regarding the conceptualization of trade war in a long-term perspective is missing. In addition to this, separate impact measurements also lack in this regard. Therefore, this study intends to address these two issues. The outcomes of the study could provide clear evidence about the impact of trade war on the financial markets and

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will contribute to the body of literature. It will also provide meaningful insights to the policy makers to improve trade policy actions in the light of it. The research presented in this paper is a part of an ongoing PhD research at Capital University of Science and Technology, Islamabad to develop a composite variable for trade war and to test its impact on financial markets of developed and developing countries.

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