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DOES FDI PROMOTE PEACE? A Relationship Between Foreign Direct Investment (FDI) and Global Peace

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Abstract

Peace is a superlative form of pleasant and harmonious atmosphere, cause happiness all over the globe. Global peace is chimerical plans of terrestrial non-violence through nations enthusiastically cooperate by means of voluntarily or by virtue of a system of governance which prevents conflict between nations.

Nowadays some new thesis and theories regarding promotion of global peace are on-going in the world. Not only world trade being dependent on global peace, previously, global peace and concord may be influenced and brought nearer to reality through escalating world trade unlike in the past theories where trade was a function of global peace. In this study we discuss that can peace may be the function of trade, can it be used to exterminate terrorism and develop harmony among nations. In this article, we concentrate and evaluate various studies on this issue. It is common understanding that global trade thrives well during peacetime but here we argue that global peace prosper well during enhanced global trade. We should also recognize the important role that trade and foreign direct investment (FDI) engage as a main catalyst in fabricating and procuring peace. International trade brings entities and individuals together by means of motivation and business. This interaction provides not only, mutual gain allied with business relationships but also promotes relationships and mutual understandings. Global peace and prosperity based on these foundations. In this modern age most theologists believe that "trade naturally promotes peace," In contrast, a number of economists and political scientists strongly advocate the concept that “trade leads to peace”. This article develops a critical framework concluding that higher gains from trade among two trading nations suppress the level of conflict between them.

Keywords: International trade, Foreign Direct Investment, Conflict and Global peace

1. Introduction

Global peace is a utopian idea of planetary non-violence by which nations willingly cooperate, either voluntarily or by virtue of a system of governance which prevents warfare (Gasiorowski, M. and S. Polachek 1982). Global peace is an ideal form of freedom, harmonious atmosphere and happiness among all nations or peoples (Barbieri, K. and G. Schneider 1999). Hence, the term is sometimes referred to accession of enmity among the individuals, global peace more commonly refers to a permanent end of regional, tribal and global wars with upcoming conflicts should resolved by means of nonviolent norms. Global peace is theoretically possible; some people like, pessimists school believe that human nature intrinsically prevents it, as human nature is wickedness. This belief originates from the idea that human beings are naturally violent and wicked, or those rational powers will prefer to commit violent acts in certain circumstances. However, others believe that war is not an inherent part of human nature, and this myth in actual prevents people from gaining global peace.

If we fantasize the definition of global peace it becomes as the absence of hostility, conflict and violence, not just regional but also at national level, but among individuals, global peace would entail a worldwide end to violence and the institutions which rely on threats of violence to sustain their existence. There could be no law enforcement agencies, because force is a shape of violence. Without law enforcement agencies, there could be no laws, except those which everyone willingly agrees to follow. Consequently, there could be no governments of that rely on terrorization of violence to maintain their borders, govern their citizens and collect levy from individuals. And this assumption consequently leads us to ideal belief, which fails to prevail in real life. It is well established that trade is proportional to the sizes of the trading partners measured by gross domestic product (GDP) and population, and, inversely, to the distance between them (e.g., Deardorff, 1998; Rose, 2006; Martin, Mayer & Thoenig, 2008; Tomz, Goldstein & Rivers, 2007; Long, 2008). This is a gravity model because of its similarity to Newton's formula for the mutual attraction of two masses. Supply and demand are proportional to the size of an economy and increase with per capita income. Transportation and other transaction costs increase with distance; thus trade is inversely related to the distance separating countries. Contiguity, on the other hand, facilitates commerce. The gravity model is not limited to positive interactions, however. The sizes of countries and their proximity also influence the likelihood of interstate conflict (Boulding, 1962; Werner, 1999; Bearce & Fisher, 2002; Xiang, Xu, & Keteku, 2007; and Hegre, 2008). Militarized disputes are more frequent between large, powerful states that are geographically proximate. Large countries can project their power at great distance and engage several countries at once. They have more neighbors and far-reaching economic and political interests. Thus, a nation's size indicates both opportunity and willingness to use force. In studying interstate conflict, it is best represented with an explicit measure of active and potential military capabilities, such as the Composite Indicator of National Capabilities (CINC) of the Correlates of War (COW) Project (Singer, Bremer & Stuckey, 1972). Of course proximity also influences interstate conflict. Because of its importance, contiguity and the distance between two states capitals should both be used in analyses of interstate violence (Oneal & Russett, 1999a). States that share a border are particularly prone to conflict, and non-contiguous states in the same region are more likely to fight than more remote pairs.

Nor is a dichotomous indicator of contiguity highly correlated with distance. Failure to recognize the importance of size or proximity for interstate conflict biases the estimated effects of other influences such as trade, alliances, or states involvement in international organizations that are themselves affected by these fundamental, exogenous factors. Studies of militarized disputes must, therefore, incorporate all elements of the gravity model to avoid proxy effects and spurious results.

Infrastructures for peace have been defined as a dynamic network of interdependent structures, mechanisms, resources, values, and skills which, through dialogue and consultation, contribute o conflict prevention and peace-building in a society. Such infrastructures constitute a society's collaborative capacity to facilitate finding internal solutions to disputes through multi stakeholder dialogue. Underlying to infrastructures for peace is a cooperative, inclusive, problem-solving approach to conflict based on dialogue and mediation. At the same time, infrastructures for peace represent pragmatic mechanisms for catalysing action. While different in their manifestation in specific contexts, components of infrastructures for peace include:

2. Globalization, Trade and Conflicts

Recently report of the Economist (August 20, 2005) reminds us that terrorism is not a new phenomenon. "Bombs, beards and fizzing fuses" are just as much the trademark of today's Islamic inspired terrorism as of the revolutionary anarchism that swept Europe and the United States from 1870 to the start of World War I. In addition to numerous ordinary people, victims of the earlier movement included the President of France, the Empress of Austria, the King of Italy, and the President of the United States, two Spanish Prime Ministers, an Indian Political leader, and a famous Pakistan former Prime Minister. Having conceptualized in general "what global peace is?". The basic question to ask is, that "is global peace a reality, if so by which means can this be achieved? Some see a trend in national politics by which cities and nations have unified in promotion of trade, and propose that the international dome will ultimately follow suit. Many countries such as China, Italy, the United States, Germany and Britain have unified into single nation-states, with others like the European Union following suit, suggesting that further globalization will result into a unified World Order. The resulting features will be higher trade volumes and reduced conflicts. The force behind this rapid globalization is not other than trade, which is used as a flare of piece, as trade is actively bringing all people together having different boundaries. Consequently, every individual have no choice but to live in peace and harmony if they have to trail further trade. There are more costs to conflicts than that achieve through trade.

Counterterrorist policies tend to aggravate the impact of terrorism on trading costs. To detect potentially harmful cross-border transactions, flows of people and goods must be subject to costly inspection and monitoring. This translates into a reduction of total factor productivity and real income. While all transactions are subject to this cost, cross-border transactions gain special attention, based either on evidence or the supposition that lethal components are more likely to be imbedded in foreign goods or in foreign people than in domestic ones. This was definitely the reaction of the U.S. government following the destruction of the twin towers on September 11, 2001: the national border was completely shut down for hours and consequently was made much less permeable for "terrorists, weapons of mass destruction, illicit migrants, smuggled goods, and other unauthorized commodities" (White House, 2002).

2.1 Defining Global Peace

Solomon W. Polachek (2006) defines conflict as trade gone skewed. He argues that it is well known fact that nations (or for that matter other economic entities such as households) can raise their well-being through trade (if there is a difference in the relative prices each faces prior to trade). It results from gains due to interest in production, which leads to higher levels of income and therefore greater consumption and even if the level of production remains unchanged from its pre-trade level, prospect to exchange at the lower prices.

Pragmatic evidence indicates that gains from trade can be significant. For example, Acemoglu et al. (2003) demonstrate that access to the Atlantic is responsible for the rise of (Western) Europe between 1500 and 1850, and this is especially true for nations engaged in long distance oceanic trade. But what happens when a particular economic entity's gains from trade are not as high as it thinks it should receive? Often in such a circumstance the entity uses force to attain redistribution through various means of oppression. Liberalists have argued that using force to intimidate is also a form of conflict. Since force can be viewed as a type of trade, ("I'll be violent if you don't give me what I want"), conflict is a form, as well as symptom, of "trade gone awry", he argues that conflict occurs when parties fight over economic rents. When conflict lasts over a long period, it is known as lingering conflict. From a normative perspective, the control and suppression of conflict is an area of interest in the field of defense economics and peace science. Theologists and Economists in this area, propose ways to achieve peace through eradication of conflict, while also exploring the more positive phase of assessing its impact on civilization. But to control and eradicate conflict, one must know how and why inadequate trade gains come about. Therefore, with this observation of studying ways to achieve peace through eradication of conflicts leads us to the issue of obligation for peace.

2.2 Trade and Conflicts

International Relations studies, particularly liberalists have pragmatic that exterminating the hostility and promoting cooperation is a significant step leading to peace. One of the most profound and diplomatic mediums of this is through trade. However, the problem is that attempts at peace imposed by others may be innately unstable, especially when the underlying differences originally separating the countries remain. For this reason, it seems reasonable that a viable peace is a natural peace based on mutual dependence and therefore trade enhances and facilitates this linkage. We have seen that terrorism exerts a large negative impact on trade by raising trading costs. By hardening borders, especially between neighboring trading partners, terrorism contributes to higher trading costs and to the subsequent substitution of home trade for cross-border trade. These effects are likely to be much higher for small and open economies than for large and relatively closed economies. Another adjustment resulting from the hardening of the borders comes from the redistribution of trade from country pairs with higher trading costs to country pairs with lower trading costs. Some evidence showed that terrorism redistributes and diverts trade from neighboring to distant countries suffering from terrorism. Treaty of Versailles, Keynes (1920) criticized that Germany be allowed to have economic relations with the rest of Europe or the prospects for peace would be dim. In The Economic Consequences of the Peace he writes "If we oppose in detail every means by which Germany or Russia can recover their material well-being, we must be prepared to face the consequences of such feelings." Similarly, Solomon W. Polachek (2006) argues that only through mutual dependence can equilibrium come about where peace remains solid and secure, so that neither party is motivated to change the status quo. Probably many types of mutual dependence affect international relations. In many ways, political motivations form the basis of mutual dependence. When Willy Brandt became Foreign Minister in the Federal Republic of Germany in 1966, he developed the policy of Neue Ostpolitik, eventually leading to a 1970 agreement accepting the borders of Berlin. Henry Kissinger pioneered the policy of détente that led to a considerable reduction in U.S.-Soviet tensions; including the SALT I strategic arms reduction talks, and the "opening" of China leading to an anti-Soviet Sino American alliance.

Consequently, underlying most of these instances of mutual cooperation are economic considerations which are normally attained through trade among partners. Willy Brandt observed closer trading relations with Eastern Europe and the Soviet Union. Referring to Solomon, this helped prop up the weak communist economies, but it also highlighted the contrasting wealth and poverty between the east and west and probably ultimately set the stage for reunification. Certainly from the Soviet perspective decelerating the arms race reduced the drain on social and economic resources, but equally America's economic vulnerability to nuclear holocaust was unimaginable. Certainly from China, Kissinger and Nixon hunted trade in one of the fastest growing world markets. Finally, more recently, mutual dependence based on economics served as justification for the European nations to come together to form the European Union.

The suggestion that trade deters conflict has roots as far back as the sixteenth century. First, theologists philosophers such as Erasmus (1981) realized that war was "bad." Later, the French monk Crucé (1623) wanted international bodies to arbitrate international disputes. This point of view was later taken up by Rousseau (2005) who realized that using organizations designed to arbitrate disputes would bring nations closer through communication. Related to arbitration, Immanuel Kant (1795) argued that perpetual peace could be achieved through appropriate governance in which all means used to wage war should be prohibited in order to establish mutual trust among nations. And trade is seen as a long bridge to this. But whereas Kant believed mutual trust must be legislated, forty-five years earlier, in 1750, Baron de Montesquieu (1900) provided an economics approach to achieve mutual trust. He stated that "peace is the natural effect of trade" because "two nations who trade with each other become jointly dependent" leading to "their union, founded on their mutual necessities".

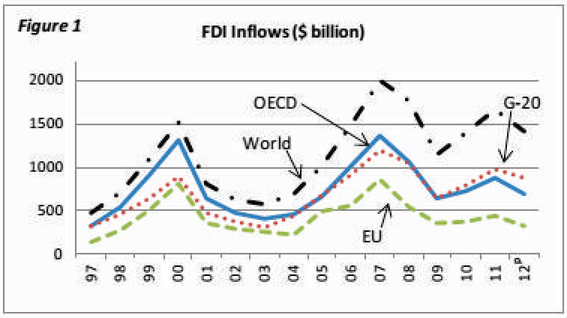
When we talk about the Global peace relative to trade, recently Hakimullah Mehsud, the bloodthirsty leader of the Pakistani Taliban deserved to die in a CIA drone strike on Friday November 1st. He was the main hurdle regarding peace issues including Pakistan, Afghanistan, NATO and all over the world. Among other terrorist outrages he had carried out a senselessly brutal suicide bombing campaign against civilians in Pakistan and Afghanistan that slaughtered up to 3,000 last year in a slow motion version of 9/11, his followers attacked NATO convoys travelling through the neighbouring tribal region of Khyber and burnt hundreds of transport trucks, his followers killed activists who were trying to combat the spread of polio in North Waziristan, and he was actively involved in efforts to overthrow the Pakistani government reduces the peace as well as trade process between the two nations..

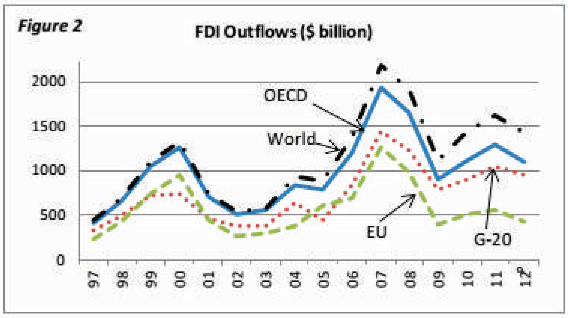
3. Foreign Direct Investment (FDI)

Foreign direct investment (FDI) is the process whereby residents of one country (the source country) acquire ownership of assets for the purpose of controlling the production and other activities of a firm in another country (the host country). Many policy makers and academics contend that foreign direct investment (FDI) can have important positive effects on a host country's development effort. In addition to the direct capital financing it supplies, FDI can be a source of valuable technology and know-how while fostering linkages with local firms, which can help jumpstart an economy. Based on these arguments, industrialized and developing countries have offered incentives to encourage foreign direct investments in their economies.

Nowadays, most of the developing countries have framed a more complicated interdependent network as global integration has broadened. As trade increasing, the amount of capital flows also increasing. For example, foreign direct investment (FDI) has experienced the fastest growth in the 1980s and 1990s and now has become a major economic force that might promote global pacific relations. Some figures give us a first impression of this alternate economic force. The annual growth rate of FDI is surpasses the growth of international trade over the past decade and broke through the trillion U.S. dollar level in 2000 to 2010. This becomes contrary with the period of the 1960s and 1970s when developing countries were more concerned about their sovereignty going to reduce by foreign direct investment. China's rapid economic growth and international integration have captured a lot of media attention and cocktail party conceptualizing as to the causal relationships within China, as well as the possible impacts on China's major trade and investment partners like Japan and the United States. According to the Global Investment Trends Monitor released by the United Nations Conference on Trade and Development, for the first time since 2003, China has surpassed the United States as the world's largest recipient of global foreign direct investment (FDI). During the first half of the year, FDI flows to China totaled $59 billion, a slight decline from $61 billion in the first half of 2011. However, FDI flowing to the U.S. reached $57.4 billion, a decline of 39.2 percent from the last year.

According to initial estimates, global FDI flows have declined in 2012 by 14% from 2011 to USD 1.4 trillion in spite of the 22% increase in the last quarter but remain comparable to global FDI flows in 2010. OECD investments abroad declined by 15% to USD 1100 billion in 2012 accounting for 77% of global FDI (80% in 2011) and OECD attracted only USD 686 billion of FDI (or 48% of global FDI) representing an annual decrease of 21%. Investment to and from the European Union, in aggregate, declined by around 25%. China became the first FDI destination in 2012 and the United States maintained its position as the leading investing economy.





Source: OECD International direct investment statistics database

In 2012, 44% of global FDI inflows were hosted by only five countries. China attracted the lion's share by USD 253 billion (or 18% of total) followed by the United States (USD 175 billion), Brazil (USD 65 billion), the United Kingdom (USD 63 billion) and France (USD 62 billion). Some EU countries recorded negative inflows such as Belgium at USD -1.6 billion (declining drastically from USD 103 billion in 2011) as a result of major disinvestments in the fourth quarter of 2012. However, the impact of some of the decreases recorded in the OECD area in 2012 was offset, in part, by significant increases. FDI inflows to France increased by 52%, to USD 62 billion (ranking as 3rd OECD recipient). Due to historically high levels of intercompany loans, inflows to Luxembourg reached USD 58 billion, excluding investments in special purpose entities hosted in this country.

While China and Argentina received respectively 11% and 25% more FDI as compared to 2011, inflows to India, Russia and South Africa's decreased by more than 15%. Indonesia recorded it s highest level of FDI inflows at USD 19.9 billion and Saudi Arabia received USD 13.7 billion in the first three quarters of 2012, while Brazil maintained the same level of FDI inflows at USD 65 billion. In recent years the focus is on the positive effects of FDI and other types of capital flows on the home and host countries' economies. The change in attitude was harmonized by the adoption of positive policies by many countries to attract Foreign Direct Investment. Corporate taxes reductions, subsidies and partial or complete elimination of import duties become the major part of the policies. In this regard World Trade Organization has played an active role to decide incorporating rules on investment. All these actions have supported the expansion of capital flows and in-particular FDI, over the last decade. These developments support the possibility that FDI is prospectively important in determining International relations. Recently, however, the special merits of FDI and particularly the kinds of incentives offered to foreign firms in practice have begun to be questioned. Fuelling this debate is that empirical evidence for FDI generating positive spillovers for host countries is ambiguous at both the micro and macro levels. In a recent survey of the literature, Hanson (2001) argues that evidence that FDI generates positive spillovers for host countries is weak. In a review of micro data on spillovers from foreign-owned to domestically owned firms, Gorg and Greenwood (2002) conclude that the effects are mostly negative. Lipsey (2002) takes a more favorable view from reviewing the micro literature and argues that there is evidence of positive effects. Surveying the macro empirical research led Lipsey to conclude, however, that there is no consistent relation between the size of inward FDI stocks or flows relative to GDP and growth. He further argues that there is need for more consideration of the different circumstances that obstruct or promote spillovers.

It might be seem natural to argue that FDI can convey great advantages to host countries, such gains might differ across primary, manufacturing, and services sectors. UNCTAD World Investment Report (2001:138), for instance, argues, "in the primary sector, the scope for linkages between foreign affiliates and local suppliers is often limited. The manufacturing sector has a broad variation of linkage intensive activities. As the trade increasing, the amount of capital flows is as well increasing. As global incorporation has expanded, countries have moved into a more convoluted inter-reliant network. FDI's annual growth rate exceeded the growth of international trade over the past decade and broke through the trillion U.S. dollar level in 2000 (Solomon W. Polachek 2006). This contrasts with the period of the 1960s and 1970s when countries were concerned with the possibility that their sovereignty would be reduced by multinational FDI, mercantilist approach. The focus now is on the positive effects of FDI and other types of capital flows. This change in mind-set was complemented by the adoption of encouraging policies by many countries to attract FDI which did away with the static mercantilist approach. These developments raise the possibility that the role of FDI in determining interstate relationships has increased in significance. Research on the impact of foreign investments by multinational corporations (MNCs) on the international system predates the recent enhance in globalization.

The more conservative literature [Vernon (1971), Gilpin (1975) and Nye (1974)] takes the view that MNCs are tied to their home countries and that nation states are still the foremost actors in the international system. However, if multinational firms are essentially national firms competing with one another throughout the globe, as Gilpin (2001) highlights, then one would expect some correlation between the direct investments of multinationals and the foreign policy of their home countries.There is now a body of literature probing the determinants of FDI. But FDI's effect on international relations is still at its immaturity. Thompson (2003) concludes that FDI draws countries closer to each other thereby decreasing the possibility of deadly conflicts. According to World War II data, he illustrates that reciprocal FDI flows leads to fewer instances of conflict. Using the current political environment he argues that United States, China, and Taiwan are drawn closer together because of FDI flows between the countries instigate the inevitability of corporation in order to maintain stability. Further, China has a lot of equity flows in USA as foreign debt, a situation that has helped to alleviate the balance of payment deficit problems in USA and enhanced international relations between the two nations, in this regard no country including Japan and India is willing to desperately engage in conflict with China. Referring to the data from World War I, Thompson argues that the warring countries had little or no FDI leading to diminished amalgamation. Recently, Due to some so called Islamic terrorism groups in Pakistan and Afghanistan, a lot of foreign direct investment projects running by China have been rolled back from the country which results in the great loss for both the nations.

3.1 Interpretation from the Trade Conflict Model concerning the Global Peace

Two theories are given to explain why democracies rarely fight each other. This can also utterly attest to the fact that in real life we have seen how big the volume of trade between two democracies is. However, empirical evidence also shows how non democratic and democratic trade volumes have inclined to be higher than what the theory predicts such as the trade between USA and China. Therefore, the first theory is owed as cultural-normative, and the second as structural. In reality both are related because in part structural determinants are possibly culturally induced. Cultural normative theories are based on Kant (1795), Wright (1942), and Doyle (1986), and advanced by Russett (1989) and others. They claim that intercession and bargaining are so embedded within democratic societal norms that democracies are able to resolve disputes peacefully, especially with other democracies even though recent evidence shows to the contrary like the trade between China and USA.

Structural school, advanced by Morgan and Campbell (1991), and based on Rummel (1979a), Hagan (1987), Domke (1988), and Bueno de Mesquita and Lalman (1992), argue that there are so many checks and balances in the democratic decision procedure that make the resort to fighting difficult. Though one might have difficulty using this logic to explain why democratic actors don't fare much better against non-democratic targets than non democracies. It is argued that non-democracies such as dictatorships need less rationalization to go to war. Zinnes (2004) uses propositional calculus to provide an explanation based on normative as well as the structural factors. Characterizing these two theories requires separating identifiable structural distinctiveness defining decision constraints which explain why democracies rarely fight each other and therefore tend to have huge trade flows among the trading democracies. Failing to find such characteristics would lead one to conclude in favor of innate cultural/normative characteristics of democracies and spurious conclusions.

Before turning to the conflict among democracies question, we append this issue to the past results relating trade and conflict: To be applicable, one would have to show that democratic dyads exhibit greater trade (or greater gains from trade) than nondemocratic dyads, and that as a consequence the greater trade contributes to greater cooperation and the less conflict. Democracies cooperate more and conflict less to protect greater welfare levels arising from trade gains. By cooperating rather than fighting, trade is protected and individual welfare is maximized by per capita increases in GNP attributable in part to these gains from trade. To test the validity of this scenario one must illustrate first that democratic dyads in fact trade more, and show second that this greater trade is related to lower amounts of conflict. Consistent with the above hypothesis, democratic dyads exhibit far greater levels of trade and cooperation. The mixed dyads have higher trade levels in between. This might be somewhat puzzling to the above hypothesis that trade is directly related to conflict since as one would expect conflict to be in between the purely democratic and purely non-democratic dyads.

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Suppose that one pair country's conflict and peace has no relationship with any other countries conflict and peace. We analyze two countries separately in the international system, country J and country K, and we only have one good. CCjk means country J starts conflict or peace on country K, and CCkj means country K starts conflict or peace on country J. Generally speaking, CCjk doesn't equal to CCkj. Suppose that country J is a big country, country K is a small country, and country J choose his strategy CCjk based on country K's strategy CCkj. In country J, conflict is defined as Zj=-CCjk, in country K, conflict is defined as Zk=-CCkj. Numeral conflict is positive and numeral peace is negative. Considered country J, which means the starting country, starts conflict to targeting tradable country K. Country J's social warfare function is represented by U(Cj,Zj), while Cj is country J's consumption, and consumption is regarded as a exogenous variable.

$$\frac{\partial U}{\partial C_J}=U'_{C_J},\quad \frac{\partial U_{C_J}}{\partial C_J}=U''_{C_JC_J},\quad \frac{\partial U}{\partial Z_J}=U'_{Z_J},\quad \frac{\partial U_{Z_J}}{\partial Z_J}=U''_{Z_JZ_J}$$

Suppose that with consumption and the level of conflict increasing, the maximized utility function of government increases. Government maximizes his utility by choosing the level of conflict to targeting country. Suppose that with domestic consumption increasing, social welfare increases, but the margin utility of consumption decreases, which means

$$U'_{C_J}>0,\quad U''_{C_JC_J}<0$$

Also we can assume that when one country starts conflict to another country, the starting can get benefit, which means

$$U'_{Z_J}>0,\quad U''_{Z_JZ_J}<0$$

Country J's consumption is represented by Cj=Qj+Qkj-Qjk, Qj is country J's domestic consumption, Qkj is export from country K to country J, and Qjk is export from country J to country K. owing to Zj's improvement, the export good's price (Pjk) from country J to country K comes down and the giving price (Pkj) from country J to country K goes up. Hence we can get that

$$(P_{JK})'_{Z_J}<0,\quad (P_{KJ})'_{Z_J}>0\ (P_{JK})''_{Z_JZ_J}<0,\quad (P_{KJ})''_{Z_JZ_J}>0$$

Assuming that conflict has direct effect on import and export, and it also decreases trade and the loss of "trade profit", thus the cost of conflict lies in decreasing the amount of import and export. This illustrates that

$$(Q_{JK})'_{Z_J}<0,\quad (Q_{JK})''_{Z_JZ_J}<0,\quad (Q_{KJ})'_{Z_K}<0,\quad (Q_{KJ})''_{Z_KZ_K}<0$$

The revenue of conflict lies in welfare gained from conflict. Given Qj、Qjk、Qkj, country J maximize its own utility by selecting Zj, its limited condition is equilibrium of budget $Q_{JK}P_{JK}-Q_{KJ}P_{KJ}=0$. Thus Lagrange function is

$$L=U(Q_J+Q_{KJ}-Q_{JK},Z_J)+\lambda(Q_{JK}P_{JK}-Q_{KJ}P_{KJ})$$

Now we let Lagrange function take derivative with respect to Zj, then make the result derivative with respect to Pjk, then we can

$$\frac{\partial Z_J}{\partial P_{JK}}=\frac{-\lambda Q_{JK}'\left[U_{Z_KZ_K}+\lambda(Q_{KJ}''P_{KJ}-Q_{JK}''P_{JK})\right]}{\left[U_{Z_JZ_J}+\lambda(Q_{JK}''P_{JK}-Q_{KJ}''P_{KJ})\right]\left[U_{Z_KZ_K}+\lambda(Q_{KJ}''P_{KJ}-Q_{JK}''P_{JK})\right]-U^2_{Z_JZ_K}}$$

Among the upper function $\lambda>0,\quad (Q_{JK})''_{Z_JZ_J}<0$, however country J is a big country, country K is a small country. Thus $Q_{JK}''P_{JK}-Q_{KJ}''P_{KJ}<0,\quad U_{Z_JZ_J}+\lambda(Q_{JK}''P_{JK}-Q_{KJ}''P_{KJ})<0$, then , $\frac{\partial Z_J}{\partial P_{JK}}<0$ sign of the effect of trade on conflict is negative. We let Z take derivative with respect to Qjk and Qkj, the result is:

$$\frac{\partial Z}{\partial Q_{JK}} = \frac{-\lambda P_{JK}^{'}}{U_{Z_J Z_J} + \lambda\left[Q_{JK} P_{JK}^{\cdot} - Q_{KJ} P_{KJ}^{\cdot}\right]}$$

$$\frac{\partial Z}{\partial Q_{KJ}} = \frac{-\lambda P_{KJ}^{'}}{U_{Z_K Z_K} + \lambda\left[Q_{JK} P_{JK}^{\cdot} - Q_{KJ} P_{KJ}^{\cdot}\right]}$$

The sign of the upper two equations is negative. Thus as Qjk and Qkj increases, Z decreases.

Other factors concerning to this are country size and multilateral interactions. The larger the country is the bigger the size of trade volumes and this subsequently lead to reduced conflicts among nations, partially this can explain the huge volume of trade between China and USA. On the other hand multilateral interactions also enhance trade volume in that bilateral trade is not independent of other countries. Feng (1994) relates trade to alliance conflict. He finds that the relationship between trade and alliance conflict depends upon what he calls externality cost. As such, post-World War II trade between the United States and an ally (e.g., Britain, Canada, France, West Germany, Italy and Japan) increased in direct proportion to conflict between the United States and Soviet Union. How alliances form and how third parties intervene in ongoing conflicts form a large political science literature.. In this vein, Altfield (1984), Morrow (1991), Powell (1991), and Simon and Gartzke (1998) among others base alliances on security gains from joining a coalition. Altfield and Bueno de Mesquita (1979) use an expected-utility model to predict that intervention depends on the utility gained from one or the other party winning. As such intervention is more likely if a third party gains considerable utility from one country winning, instead of another. Therefore, one can incorporate multilateral interactions into the conflict-trade framework described above.

4. Conclusion

We can conclude this as foreign direct investment works parallel with trade in influencing international relations. More specifically, we find that the flow of FDI reduced the degree of international conflict and encouraged cooperation between dyads during the past decades.

The economic consequences of safer boundaries are likely to hit hardest small and open economies and to increase the home bias of Foreign Direct Investment. In an attempt to minimize the cost of conflict, some regional trade agreements may experiment with common security perimeters. This, in turn, will lead to a deeper regional trade bias. The proposition that international trade specifically, and economic interdependence in general reduces conflict and terrorism activities between nations has a long tradition in the history of economic thought and now that of international relations. The argument proposed is that trade leads to welfare gains that countries do not want to put in jeopardy, losing it by engaging in trade-disruptive activities such as wars or other forms of conflict. Thus far, until fairly recent times economists have not applied some of the modern tools of economics to explore this proposition though scholars from international relations have endeavored. This is surprising given the large cost to society of diverting resources towards a purely predatory or redistributive motive instead of productive activity. Given the slow pace of economic development in large parts of the world ravaged by conflict, and the dim prospects of a convergence of their income with those of the developed world, it seems the incentives to explore this topic is of some urgent. Our appraisal of the empirical literature on the conflict-trade relationship indicates that researchers use several different historical data sets to gauge conflict. In this regard, the paper has shown that overwhelming evidence indicates that trade reduces conflict regardless of the proxies used to measure the gains from trade and conflict. We also note that recent empirical results show that FDI plays a similar role as trade in affecting international interactions.

More specifically, we find that the flow of FDI has reduced the degree of international conflict and encouraged cooperation between dyads. This is an especially important result since one of the main characteristics of globalization has been the reduction of barriers to international capital flows and as a consequence the amounts of capital and equity flows have expanded enormously dwarfing potential conflicts. Furthermore, we conclude that to a large extent the observed evidence that has been found that democracies are less prone to fight with other democracies can be explained by accounting for the larger trade relationship between democracies. The finding can be stated as, further international cooperation in reducing barriers to both trade and capital flows can promote a more peaceful world. The major issue in South Asian trade is terrorism, nations have to take strapping steps to deteriorate the terrorism activities to promote trade, FDI and peace within the region as well as all over the globe. Eventually, results show that each country has its own structural change and this indicates that international relations play an important role in attracting inward FDI to the host countries.

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