FOREIGN DIRECT INVESTMENT AND INTERSTATE MILITARY CONFLICT

Quan Li

On 8 December 1996, Thomas L. Friedman published his Golden Arches Theory of Conflict Prevention, which states that, “No two countries that both have a McDonald’s have ever fought a war against each other.” The rationale, according to Friedman, is that when a country reaches the level of economic development required to support a McDonald’s, people in that country will stop fighting wars for fear of the resultant economic and personal losses. McDonald’s, as a global food-service retailer, represents not just a quality standard of living, but also, in the words of James Cantalupo, president and chief executive officer of McDonald’s International, “a symbol of something—an economic maturity and [openness] to foreign investments.”

Since then, Friedman’s claim, along with the publication of his popular book, The Lexus and the Olive Tree: Understanding Globalization, has generated enormous interest and attracted scrutiny. For the purpose of this essay, if McDonald’s is viewed as a symbol of foreign investment, interesting questions arise regarding the relationship between foreign direct investment (FDI) and interstate military conflict. Is it the presence of McDonald’s that induces interstate peace? Or is it the absence of interstate military violence that leads to McDonald’s investment? For Friedman’s claim to be valid, the presence of McDonald’s should induce peace rather than the other way around. But in reality, capital typically evades violence. Scholars in international relations, business and economics have concerned themselves with these difficult questions before, but not to a sufficiently detailed level of analysis.

This essay will examine some key positions, arguments and evidence in recent academic scholarship on whether foreign investment mitigates interstate violence, as well as whether interstate conflict deters investment. Evidence will be offered using new data on bilateral foreign investment flows and militarized interstate disputes. At a time when international production—widely viewed as one of the most salient aspects of globalization—has been increasing in volume and expanding in scope,
many developing countries compete to attract foreign capital, the relationship between FDI and interstate peace is a timely and significant topic. 4

**DEFINITION, ATTRIBUTES AND GROWTH OF FOREIGN DIRECT INVESTMENT**

A multinational corporation (MNC) organizes production of goods and services in more than one country, involving the transfer of assets or intermediate products within the investing enterprise and without any change in ownership. 5 Foreign direct investment is the purchase of physical assets or a significant amount of the ownership of a company in another country to gain a measure of management control. 6 About three-quarters of International Monetary Fund (IMF) member countries use the 10 percent rule to define foreign direct investment in data collection—that is, 10 percent or more of the ordinary shares, voting power or the equivalent establishes a direct investment relationship. 7

Scholarship in international business suggests a widely cited ownership, localization and internalization (OLI) paradigm to explain why national firms become transnational. It is said that they do so to exploit three types of advantages: (1) a firm’s ownership advantages derived from its control over tangible assets such as land or factory equipment and intangible assets such as product innovations, management practices, marketing techniques and brand names; (2) the firm’s internalization advantages resulting from its hierarchical control of cross-border production; and (3) the firm-perceived location-specific advantages based on the characteristics of host countries in terms of their economic environment or government policies. 8

The nature and logic of FDI define two important, relevant attributes: the ex post illiquid nature of investment and cross border jurisdiction. The former refers to the fact that FDI does not move easily—certainly much less than financial capital such as stocks and bonds—because foreign direct investors tend to adopt a long time horizon and build factories and facilities that do not translate into liquid assets easily. The latter attribute is almost self-evident, for direct investment flows out of the home economy to enter the foreign host economy, thus involving the laws and regulations of both countries. These two attributes determine that foreign investors have an inherent interest in the relationship between the home and host countries.

Statistics indicate the growing importance of FDI and the economic power of MNCs in host economies. According to the 2000 World Investment Report, the number of transnational corporation parent firms has reached 63,000, associated with 690,000 foreign affiliates. 9 International production has increased faster than global GDP and global exports as the sales of foreign affiliates worldwide rose from US$3 trillion in 1980 to US$14 trillion in 1999 and are now twice as high as global exports. Gross product from international production is one-tenth of global GDP.
World FDI inflows amounted to US$865 billion in 1999—about 14 percent of global gross domestic capital formation—relative to 2 percent 20 years ago. The current strong increase in FDI remains a steady trend, with investments dispersed among all developed and most developing economies. The number of foreign affiliates located in developing economies has reached nearly 130,000. According to the 2006 World Investment Report, FDI inflows to developed countries in 2005 increased by 37 percent, or US$542 billion, relative to the 2004 level, while developing countries received US$334 billion—the highest level of FDI ever recorded. The inward FDI stock flows of developing countries ($2.3 trillion) rose from about 13 percent of their GDP in 1980 to about a third of their GDP in 2002, almost twice the 19 percent for developed countries.

**Does Interstate Military Conflict Influence Foreign Direct Investment?**

One may think about this question from two alternate perspectives: the perspective of the state that controls the financial regulatory environment and makes decisions about the use of force; and from the perspective of the investor who makes investment decisions. Foreign investors operating in an unfamiliar host environment will be concerned about the issue of cross border jurisdiction. They inevitably care about the expected return to their investments and the ease of exit if the security of their property is threatened. Government policies toward FDI are thus important for foreign investors. Of particular importance are host policies on expropriation, exchange control, breach of contract, repatriation of profits, voluntary divestment, performance requirement, taxation and other relevant regulations. To the extent that political violence influences these government policies, foreign investors will take political violence into account when they make decisions on the investment location and amount.

From the perspective of the state, it seems intuitive that when two states fight with each other, both have an incentive to increase their own chance of winning. As FDI becomes more valuable to many host economies, so have the security externalities. Foreign Direct Investment brings to the host economy needed capital and managerial know-how and creates technology spillovers, helping to promote host economic growth. Outward investment to a belligerent host country may be subject to both home and host government restrictions. Home governments are more likely to encourage FDI to go to their military allies. Politicians engaged in financially and politically costly military warfare often have an incentive to impose capital controls and prevent capital flight. The need to finance expensive wars often requires higher tax rates.

In addition, market-seeking FDI often produce goods aimed for sale within the host market. In the event of interstate conflict, nationalist sentiments are likely to
run high. Consumers in the host country may be reluctant to purchase goods and services that are produced by the foreign affiliates of an MNC headquartered in a belligerent country. Finally, interstate conflict often interferes with transportation, communication and the smooth functioning of the market, resulting in delays in the delivery of goods or unexpected damages. This has an impact on the trade-dependent vertically integrated FDI, where the affiliate operating in the host country is just one link within an MNC’s global value chain. Conflict is likely to disrupt the smooth operation of vertically integrated FDI.

International business scholars have paid much attention to aggregate indicators of political risk or stability in which interstate conflict is sometimes one component. For example, Friedrich Schneider and Bruno S. Frey find that political instability has a negative effect on FDI flows. In a cross sectional analysis of FDI flows to thirty-six countries for 1977 and 1982, David Loree and Stephen Guisinger find that political stability significantly promoted FDI inflows in 1982, but not in 1977. Using data for all reported manufacturing plant openings from 1984 to 1987, Douglas Woodward and Robert Rolfe find that political stability increases the probability of a country being selected as an investment location. However, Kamal Fatehi-Sedeh and Hossein Safizadeh fail to find statistical association between political stability and FDI. Kingsley Olie and D. Larry Crumbley do not find consistent evidence that political risk indexes influence U.S. FDI flows to ten out of thirteen Organization of Petroleum Exporting Countries (OPEC) countries. Deepak Sethi, S.E. Guisinger, S.E. Phelan and D.H. Berg find that political instability, measured by a composite variable on a hundred-point scale, did not influence U.S. FDI flows to twenty-eight countries from 1981 to 2000. Stephen Globerman and Daniel Shapiro conduct a two stage analysis of U.S. FDI flows to 143 countries from 1994 to 1997, in which the first stage investigates the causal factors of the probability that a country is an FDI recipient, while the second stage examines the determinants of the amount of FDI received. Using an index of political instability and violence, including armed conflict, social unrest, terrorist threats, etc., they find that these indicators do not influence the probability of whether a country receives any FDI inflow, but reduces the amount of FDI inflow a country receives. That is, the average size of an FDI transaction may change independently of the probability of a country receiving the FDI. The econometric evidence is obviously mixed and inconsistent across studies.

In an exceptional analysis, Douglas Nigh emphasizes the need to separate conflict and cooperation and to distinguish interstate and intrastate factors. Nigh argues that the political aspect of an investment environment is driven by the subjective perception of investors from the home country. Host countries could have the same democratic level of development, but investors could subjectively choose one
country over another because of a historical relationship or contemporaneous events within the host nation. Moreover, since “U.S. investors realize that many host country officials and citizens do not distinguish between the interests of the U.S. government and those of U.S. direct foreign investors, even if the two are usually carefully differentiated by the U.S. political process,” investors have to take into account politico-economic relations between two nations.26 Therefore, investors watch closely for the possible international and intranational cooperation or conflict that provide invaluable information about the business environment in a particular host country for an investor from a particular home country. In his statistical analysis of manufacturing FDI by U.S. firms to twenty-four countries over twenty-one years, Nigh finds that international and intranational conflicts reduce U.S. investment while international and intranational cooperation increases it.27

In a recent study, I addressed the puzzling contradictory findings on political risk, offering a new analysis with several innovations. My theory considered how rational expectations and uncertainty on the part of foreign investors influence the ways in which political violence, including interstate and intrastate conflicts and transnational terrorism, changes investment behaviors.28 According to this theory, foreign investors are forward-looking, constantly anticipating how political violence affects both the expected returns of their investments and the political barrier to exit. They frequently assess the probability of political violence and the likelihood that such occurrences might induce hostile policy changes. When firms internalize these risk assessments into their investment decisions, a high risk of political violence will deter future investment flows and may lead to divestment from existing projects. These changes in investment decisions are based on expected risks and, therefore, often occur before the events of political violence materialize. One implication is that ex post, many actual events of political violence do not produce behavioral changes in investment.

But this is not the whole story. Because investors do not have perfect foresight, they cannot fully anticipate all the occurrences of political violence or accurately assess the level of the risk involved. This forces investors to adjust their investment decisions ex post when they experience unanticipated political violence. The reason is simple. Unanticipated occurrences of political violence often lead to unanticipated hostile policy changes (e.g. expropriations), causing the expected returns of an investment project to decline. In the absence of perfect foresight, the ex ante and ex post risk-adjusted returns will not be identical. Hence, unanticipated incidents of political violence carry new information and compel investors to moderate their ex ante optimism. Consequently, it is conceivable that even without an actual unfavorable policy change, investors may expect such a policy change to be forthcoming, thus choosing to divest, reduce or stop future investments altogether.
I further separate different types of political violence into civil war, interstate war and transnational terrorism and conducted a country level statistical analysis of 129 countries from 1976 to 1996. With respect to interstate war, anticipated conflict does not affect the chance that a country is selected as an investment destination or the amount of FDI inflows a country receives. However, unanticipated interstate war reduces a country’s chance to be chosen as an investment location, though it has little effect on the amount of FDI a country receives. These results suggest that interstate war largely deters new equity investment flows into a country.

In a recent study, Glen Biglaiser and Karl DeRouen argue that U.S. troops stationed in host countries signal positive relations and possible alliances between the United States and host countries, indicating investment stability that is only available to U.S. firms. Through statistical analysis of 126 developing countries between 1966 and 2002, they find that the presence of U.S. troops encourages U.S. capital inflows.

**DOES FDI INFLUENCE MILITARY CONFLICT?**

If one follows the convention of treating FDI as one of the most salient aspects of integration into the global economy, then answers to this question are more contentious, involving such familiar schools of thought as realism, Marxism/dependency theory and liberalism. The realist position considers economic forces as operating in the realm of low politics—not supposedly higher realms like diplomacy or war. To realists, “the most important events in international politics are explained by differences in the capabilities of states, not by economic forces operating across states or transcending them.” If globalization matters at all, it serves to threaten political stability in international politics because the loss of economic policy autonomy spills over into the foreign policy area.

Dependency theory emphasizes international trade and investment as the mechanisms through which the international capitalist order distorts the economies of developing countries. Reliance on foreign capital perpetuates the low status of developing countries in the hierarchy of the world system, which will cause conflicts between the core and the periphery. As evidence of this phenomenon, theorists often point to many instances of the nationalization of foreign investment in various countries in early stages of their development. More recent expropriations also appear to confirm FDI to be a source of interstate conflict. For example, Namibia initiated land reform in 2004 to redistribute land from white farmers of German origin to black landless people. By November 2005, the government had issued expropriation orders to eighteen white commercial farmers and had said the land would be given to almost 250,000 landless people. In April 2006, Venezuelan president Hugo Chávez seized two oil fields from two foreign oil firms—France’s Total and Italy’s Eni—because both firms failed to reach an agree-
ment with the Venezuela government on new joint-venture contracts that would give a majority stake to the state-owned company, Petróleos de Venezuela. On 1 May 2006, Bolivian president Evo Morales decreed the nationalization of the country’s natural gas industry and ordered the military to occupy the natural gas fields and all companies to turn their production over to the state’s Yacimientos Petrolíferos Fiscales Bolivianos.

Adherents of liberalism argue that economic linkages created through free international markets make war more costly, thus reducing the incentive for war. Cumulative statistical evidence appears to favor the liberal notion that trade interdependence is associated with peace. In the context of FDI, Richard Rosecrance and Peter Thompson suggest that FDI represents a link that is costly and time-consuming to break due to its illiquid nature. Thus, FDI is more likely to reduce conflict than trade. Looking at data on U.S. FDI and conflict with other countries between 1950 and 1992, they find that FDI reduces conflict and that two-way FDI has a stronger impact than one-way FDI.

Criticizing both the narrow focus on trade and the underlying theory of liberalism, Erik Gartzke, Quan Li and Charles Boehmer study why and how FDI—among other things—affects interstate military conflict. They argue that the liberal opportunity cost argument is logically inconsistent with the bargaining theory of war. The game theory literature of international conflict posits that the decision to go to war results from the failure of bargaining between states because states are uncertain about their opponent’s payoff structure and resolve over a contested issue. States sometimes fight to demonstrate capability or resolve. Economic integration, measured in terms of trade, FDI and financial openness, reduces the probability of war by serving as a means of costly signaling, rather than by changing the cost-benefit calculus. On one hand, when both parties already know the value of their economic exchange before engaging in military action, the size of the economic stake per se provides no information about the resolve of the contestant. On the other hand, when a military threat over the contested issue drives away international production capital, the economic price the state is willing to pay gives the state’s threat additional credibility. Such costly signaling informs the other state of its opponent’s resolve, often resulting in bargaining success and avoidance of violence. Statistical analyses confirm that globalization indicators including FDI reduce interstate militarized disputes between countries.

Focusing on how international production affects international security, Stephen Brooks presents three causal channels. First, the geographic dispersion of international production reduces the economic benefits of military conquest, particularly among the advanced countries. Military conquest threatens foreign capital, often reducing the spoil for the conqueror along the dispersed value chain and decreases
technological innovation in knowledge-based economies. Brooks demonstrates how Soviet rule in Hungary prevented the country’s policy efforts from producing any significant amount of FDI inflow before 1990, bringing about little economic benefit to the Soviet Union itself.44

Second, competition for global production capital deepens regional economic integration among long-standing security rivals, producing better political relations with some qualifications. That is, members of regional trade agreements have to be few in number and have large economies; forcing them to cooperate to attract foreign capital. Brooks cites how the development of the Southern Cone Common Market (MERCOSUR), motivated partly by the pursuit of foreign capital, helped Argentina and Brazil to resolve their 150-year-long security rivalry.45

Third, states pursuing cutting-edge military technology can no longer resort to autarkic defense production. The involvement of MNCs in the defense industry leads to the internationalization of weapons production and the rising cost, complexity and scale of developing new military technologies. The internationalization of U.S. defense production and military technology stood in sharp contrast with the autarkic production of the Soviet Union, which contributed to a technological gap.46

Brooks attributes the postwar peaceful relations among great powers to the dispersion of international production, but argues that the dispersion of international production capital has not produced such pacifying effects on security relations among developing countries and has had only a mixed effect on security relations between great powers and developing countries.47 This is mainly because the noted economic and institutional conditions under which international production reduces the economic benefits of military conquest and deepens regional integration among security rivals are not present in developing countries. Furthermore, since developing countries most often employ their militaries in regional actions and focus on less complicated, smaller weapons systems, it is unlikely that the globalization of defense-related production would be relevant to their security relations.

**NEW EVIDENCE ON BILATERAL FDI AND INTERSTATE MILITARY CONFLICT**

There is little direct evidence that links bilateral FDI with interstate military conflict. Almost all studies focus on FDI inflows at the country level or bilateral outflows to others from only the United States. It seems imperative that empirical inquiry be expanded. Here, two factors are examined: bilateral FDI flows and dyadic military conflict (conflict between two nations), using relatively more comprehensive data. The data used for this study tracks FDI flows among twenty-nine OECD countries, as well as between those countries and twenty-nine non-OECD countries,
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Figure 1: Bilateral FDI Flows in Dyads with and without Military Conflict

![Bar Chart: In millions constant $]

Dyad in peace
Dyad in conflict

Source: Organization for Economic Co-operation and Development; Scott Bennett and Allan C. Stam.

from 1980 to 2003. There is no coverage of FDI flows among non-OECD countries. Still, this is by far the most comprehensive bilateral FDI data currently available. For dyadic conflict, we use the widely used and recently updated Militarized Interstate Dispute (MID) data. An MID is a conflict in which one or more states engages in a threat of military force, display of force, use of force or war against one or more other states between the years 1816 and 2001.

Average FDI flows from one country to the other can be computed and compared between the dyad in peace and the dyad in MID or military conflict. Such a comparison allows us to observe whether the two types of dyads differ systematically in terms of foreign investment. Figure 1 illustrates this comparison. The dyad in peace witnesses an average of 410 million constant U.S. dollars worth of FDI flowing from the source to the recipient country. In contrast, the dyad in conflict observes an average of 250 million constant U.S. dollars worth of FDI flowing from the source to the recipient, which is nearly 40 percent less than the level for the dyad in peace. While this evidence does not indicate whether it is peace that induces more FDI or that it is more FDI that curtails conflict, it is rather obvious that peace and conflict go hand in hand with differing amounts of investment.

Economies differ in size and level of development. Average bilateral FDI flows tend to be heavily influenced by outliers and do not accurately gauge the relative significance of bilateral FDI flows to recipient and source economies. One way to circumvent this problem is to measure the relative importance of bilateral FDI flow to an economy by looking at the percent ratio of the FDI flow over the GDP of the recipient or the source. Figure 2 compares the average FDI/GDP percent ratio...
between the dyad in peace and that in conflict. For the recipient, the FDI/GDP ratio is 0.014 percent in the conflict dyad and 0.084 percent in the peace dyad. There is little doubt that this 83 percent difference is enormous. One may interpret this evidence as demonstrating either that the bilateral FDI recipient suffers a huge loss in foreign capital inflow due to its involvement in military conflict, or that a low level of FDI inflow tends to increase the probability of conflict between the recipient and the source or that both channels work simultaneously.

Interestingly, for the source country, the FDI/GDP ratio is 0.47 percent versus 0.84 percent between the conflict and peace dyads. This is still a large difference, although not as dramatic as that for the recipient country case. Likewise, one may interpret this as being produced by one of the three possible causes: the source of bilateral FDI invests much less in the recipient with whom it has a military dispute; too little investment from the source to the recipient tends to increase the likelihood it will fight militarily with the recipient; or both.

Evidence from Figures 1 and 2 indicates that bilateral FDI flows and dyadic military conflict are negatively correlated. This pattern contradicts both the realist position that these two phenomena are unrelated, and the dependency position that more FDI flows tend to beget more military conflict. This evidence also appears to support the liberal position and Friedman’s Golden Arches Theory that FDI leads to peace. The difficulty with this inference favorable to the liberal position, though, is as noted above: one simply can not rule out the possibility that conflict reduces investment—not the other way around.
Is it possible to disentangle the issue of causation between bilateral FDI flow and dyadic military conflict? Without complicating this essay with technicalities, one may get a glimpse of the relationship by looking at the changes in bilateral FDI flows over time. Figure 3 illustrates the temporal changes for average bilateral FDI flows in millions of constant U.S. dollars. For dyads in peace, bilateral FDI flows tend to be stable across the current year (t), the year before (t-1) and the year after (t+1). In contrast, for dyads that are involved in conflict, the graph shows interesting temporal changes. It is worth noting that for both the FDI and source-GDP and the FDI and recipient-GDP series, the same temporal patterns emerge. In the year before conflict occurs, FDI flows are already quite low when compared with those of the same period in the peace dyad. In the year of conflict occurrence, the amount of flows only declines slightly from the year before. In the year after conflict occurrence, investment resurrects and climbs up to almost the same level as in the peace dyad. The evidence supports the rationalist explanation that investors are forward looking and—at times—anticipate conflict correctly and do not invest in conflict areas before conflict occurs. The ex ante investment decline is followed by only a small drop in the conflict year because investors guess right often enough, or because they do not always correctly anticipate conflict occurrence. In the post-conflict year, investors reevaluate the situation and, in light of the new information revealed by the dispute, anticipate less conflict for the future. This demonstrates much about how conflict or the expectation of conflict influences investment decisions, but the new evidence does not reveal much about whether investment reduces conflict—a possibility that also cannot be ruled out.
CONCLUSION

The evidence demonstrates that bilateral FDI flows and dyadic militarized disputes are negatively correlated. This contradicts the realist position and the dependency theory on how integration into the global economy influences peace. It is consistent with the liberal expectation and Friedman’s Golden Arches Theory, but the underlying mechanism of liberalism is incompatible with the bargaining theory of war. The signaling argument is consistent with the bargaining theory of war, but it does not fully consider the suppressive effect of conflict on investment. A rationalist explanation of how conflict affects investment appears linked to temporal patterns of investment over time. It remains unclear how this fits with the signaling argument of how investment influences conflict.

NOTES

6 Ibid.
10 Ibid., xvi.
11 Quan Li and Adam Resnick, “Reversal of Fortunes: Democracy, Property Rights and Foreign Direct Investment Inflows in Developing Countries,” International Organization 57, no. 1 (Winter 2003), 175-211.
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14 For a discussion of the policy types, see note 4. Thomas L. Brewer, “Government Policies, Market Imperfections, and Foreign Direct Investment,” Journal of International Business Studies 24, no. 1 (1993), 101-120. One may argue that a multi-national enterprise (MNE) may not necessarily care too much about the risks for particular investment asset, since the firm can diversify away some of the risks by holding a market portfolio (Butler and Joaquin (1998), 600). For specific investment asset in a particular country, at least part of the political risks resulting from political violence-related policy changes are not diversifiable risks. This is because investors cannot fully anticipate all contingencies and because the market for the securitization of political risks is not yet well developed; John Finnerty, “Securitizing Political Risk Insurance: Lessons From Past Securitization” in International Political Risk Management, ed. Theodore Moran, (Washington: World Bank Group, 2001). See also Kirt Butler and Domingo C. Joaquin, “A Note on Political Risk and the Required Return on Foreign Direct Investment,” Journal of International Business Studies 29 (1998), 599-607.

15 Quan Li, “Political Violence and Foreign Direct Investment,” in Research in Global Strategic Management, Regional Economic Integration 12, ed. Michele Fratianni and Alan M. Rugman (Oxford: Elsevier Ltd., 2006).

16 Ibid.


25 Ibid.

26 Ibid., 4.

27 Ibid., 10-11.

28 Li (2006).

29 Ibid.

30 Ibid.
Quan Li


44 Ibid.

45 Ibid.

46 Ibid.

47 Ibid.
