Affect of international trade and global economy through foreign direct investment

Uppu.Suneetha Chowdari
Sri Durga Malleswari Siddhartha Mahila Kalasala.

ABSTRACT
This paper investigates the affect of international trade and global economy through foreign direct investment. Foreign direct investment (FDI) and trade are often seen as important catalysts for economic growth in the developing countries. FDI is an important vehicle of technology transfer from developed countries to developing countries. FDI also stimulates domestic investment and facilitates improvements in human capital and institutions in the host countries. International trade is also known to be an instrument of economic growth. Global foreign direct investment (FDI) trends are likely to modify during the period 2004-2007. FDI has promoted to effective economic growth in a number of developing countries and the role of the foreign direct investment in this field has been extensively known in China and India, the world’s two most populous growing economics have been using FDI as a stimulus in the growth process. Foreign direct investment (FDI) is an integral part of an open and effective international economic system and a major catalyst to development. The growing role of foreign direct investment and multinational corporations (MNCs) in developing countries in the age of globalization is rarely disputed. The nature of the impact of FDI on the growth and development of the Third World, however, is a controversial topic in contemporary international relations and economic development theory. Historically, developing countries heavily depended on the economies of the industrialized world for their own economic survival. During the past two decades, however, the world economy has increasingly "globalized" through the liberalization of world trade and capital markets, the growing internationalization of corporate production and distribution, and the destruction of barriers to the trade of goods and services through technological advances. Meanwhile, the world’s developing countries are now more important, and influential, actors in international trade and the global market.

Introduction
Foreign Direct Investment (FDI) plays an extraordinary and growing role in global business. It can provide a firm with market and market channels. Cheaper production facilities, access to new technology, products, skills and financing. For a host country or the foreign firm which receive the investment? It can provide a source of new technologies, capital, process, products, organizational technologies and management skills and as such can provide a strong impetus to economic development. Foreign Direct Investment in its classic definition.

The miraculous performance of outward-oriented east Asian economies in the post-second world war period fueled a search for explanations of how they came to grow so fast for so long. Static trade theories predict that greater specialization leads to higher income measured at international prices but do not offer an explanation for sustained growth.

Can international trade promote growth? The endogenous growth literature implies that trade and technology diffusion can generate growth effects by increasing the size of the economy’s research sector. The empirical evidence on the relation between trade and growth has become a controversial subject.

What determines whether a country becomes a technological leader or a follower? Technological change, that is, the development of new technologies, alters the competitive conditions of firms, regions, and countries. The availability of new technologies causes some traders to gain competitive advantages, while other lose them. A dominant industrial position can be lost due to the inability or unwillingness to adopt or develop new technologies.

Technological leadership is often gained by adopting productivity – increasing technological breakthroughs. A key point is that current industry leaders are not always the first to adopt new technologies. For instance, learning – by – doing implies that the productivity of existing and new technologies depends on the accumulated experience in using them. New, untried technologies might thus be less productive initially than old but well understood technologies. In fact, nations that have established an industrial lead, and have acquired a large enough accumulated experience in using a particular technology, will find out that new technologies can be initially worse than older alternatives.

New leaders arise when they develop or adopt new technologies that improve their competitive position by a large enough margin. Learning – by – doing productivity gains resulting from using a new technology dominate the old technology once users acquire experience with it. Leapfrogging is a process allowing a logging a region or country to become a leader following the adoption of new technologies that the current leader fails to adopt. The implication of new technologies enables the lagging region or country to eventually
achieve lower costs of production than the current leader. This process generates a cycle of alternating technology leaders.

The emergence of England as the leader of the industrial revolution illustrates leapfrogging. In the eighteenth century, Holland had established a lead in shipping, banking, and trading. Its income per capita and wage levels were higher than in England, other European economies, and the United States. However, Holland stayed within the scope of leading sectors and did not exploit new technologies such as that for cotton spinning. In contrast, the poorer English rapidly exploited the new technologies arising at the onset of the industrial revolution. Eventually, England surpassed the Dutch in technology leadership and income per capita. A similar process underlies the rise of the United States as the industrial leader of the twentieth century and the rise of Japan to become a formidable US rival in the 1980s.

This paper investigates about impact of foreign direct investment and trade on economic growth. Foreign Direct Investment and Trade are often seen as important catalysts for economic growth in the developing countries. FDI is an important vehicle of technology transfer from developed countries to developing countries. FDI also stimulates domestic investment and facilitates improvements in human capital and institutions in the host countries. International trade is also known to be an instrument of an economic growth. Trade facilitates more efficient production of goods and services by shifting production to countries that have comparative advantage in producing them.

FDI and trade have a positive impact on economic growth, the size of such impact may vary from across countries depending on the level of human capital, domestic investment, infrastructure and macroeconomic stability, and trade policies. The literature continues to debate the role of FDI and trade in economic growth as well as the importance of economic and institutional developments in fostering FDI and trade. This lack of consensus limits our understanding of the role of FDI and trade in economic growth processes and restricts our ability to develop policies to promote economic growth.

This article analyzes the role of foreign direct investment and trade in promoting economic growth across selected developing countries and the interaction among FDI, trade, and economic growth. We examine data from 66 developing countries over the last three decades. Our results suggest that FDI, trade, human capital, and domestic investment are important sources of economic growth for developing countries. We find a positive interaction between FDI and trade in advancing economic growth. Our results also show that FDI stimulated domestic investment. The contribution of FDI to economic growth is enhanced by its positive interaction with human capital and sound macroeconomic policies and institutional stability.

Methodology and Data
Our econometric model is derived from a production function in which the level of a country’s productivity depends on FDI, trade, domestic investment, human capital, and initial gross domestic product (GDP) per capita. The model is based on endogenous growth theory, in the tradition of Balasubramanyam, Salisu, and Sapsford and Borensztain, Gregorio, and Lee, where FDI contributes to economic growth directly through new technologies and other inputs as well as indirectly through improving human capital, infrastructure, and institutions. To assess empirically the effects of FDI and trade on economic growth, we specify the following basic formulation:

\[ g = a + b_1 FDI + b_2 TRD + b_3 HC + b_4 K + b_5 G0 + c_1 FDI \times TRD + c_2 FDI \times HC + c_3 FDI \times K + d_1 IRT + d_2 TX + d_3 GC + e \]

where \( g \) is the per capita GDP growth rate, FDI is the foreign direct investment, TRD is the trade (exports plus imports) of goods and services, HC is the stock of human capital, K is the domestic capital investment, G0 is the initial GDP (initial stock), IRT is the inflation rate, TX is tax on income, profits, and capital gains in the host country expressed as percentage of current revenue, and GC is government consumption. The variables FDI, TRD, K, GC are measured as ratios to GDP. Our model extends the work of Borensztain, Gregorio, and Lee to include the decade of the 1990s when FDI and trade grew rapidly in the developing countries. We also account for interaction of FDI with trade and domestic investment, in addition to human capital. Past empirical studies have indicated that FDI, trade, human capital, and domestic investment have a positive impact on economic growth in developing countries. We expect the estimated coefficients for these variables to be positive. We also expect positive interactions between FDI and trade and FDI and domestic capital investment in promoting economic growth.

International trade and foreign direct investment
This paper also takes example for international trade and foreign direct investment. Since the earliest days of European immigration to North America, international trade has played an important part of the North American Economy. Colonists and other émigrés were highly dependent on international trade companies such as the Hudson Bay company, Boston Tea Company and the Dutch west Indian company to provide goods that were available on the continent and to provide access to wealthy European markets for excess goods such as furs, tobacco, and raw materials.

As a nation, the U.S. economy has long maintained trade relationships with a wide range of countries through out the world as both a means to support U.S. based companies and leverage U.S. financial resources and provide a higher quality of life to residents who benefit from increased choice and potentially lower cost products.

Importance of Trade with in the Global Economy
California is the one of the large and most diversified economies in the world with a gross domestic product (GDP) of over $1.95 trillion in 2011. If California were a country, its 2011 GDP would place it 9th in the worldwide GDP ranking as follows: United States ($15 trillion), China ($7.29 trillion), Japan ($5.86 trillion), Germany ($3.57 trillion), France ($2.77 trillion), Brazil ($2.47 trillion), United Kingdom (2.43 trillion), Italy ($2.19 trillion), India ($1.86 trillion), the Russian Federation ($1.85 trillion), and Spain ($1.49 trillion).

A significant driver of GDP is international trade and foreign direct investment. As the world’s largest economies, it is not supporting that the U.S., Germany, China and Japan are also world’s largest importers. As illustrated by the chart-1 – U.S. Imports and Exports (1960 – 2010), international trade has played as increasingly valuable role with in the U.S. economy. Innovations in technology during the 1990s rapidly increased global market integration, and “suddenly” foreign markets that had been previously considered too remote were accessible to trade. These new markets brought access to natural resources for International Corporation, as well as created opportunities for a
the rising middle class who wanted products and services from developed economies.

The National Gains from International Trade

Although conceivably a nation might have a sufficient variety of productive factors to produce every kind of goods and service. It would not be able to produce each good and service with equal facility. The United States could produce hand woven rugs, but only at a high cost, since the production of such rugs requires great quantities of labor, which is expensive this country. The production of hand woven rugs, however, would afford reasonable employment for the large supply of cheap labor in a country like India. It would be advantageous for united states, therefore, to specialize in a commodity such as computers, whose production makes use of the abundant supply of technology in this country, and to export computers in exchange for hand woven rugs in India.

Each nation is able to utilize its productive factors in their most productive combinations. By raising the productivity of national economies, international specialization increases the output of goods and services. This is its economic justification and principal justification of the international trade that make possible such specialization.

The contribution of international trade is so immense that few countries could become self sufficient even with the greatest effort. Contemporary economies have been shaped by the international trade and the specialization of past, and their continued viability is closely dependent on the world economy.

For example, it is physically impossible for the United Kingdom or Japan to feed, clothe and house their present population at their current levels without imports from other countries. Economic self sufficiency of these two nations would mean poverty standards of living unless emigration proved possible on a very large scale. The survival of these countries depends essentially on the export of manufacturer that require little space to produce or found in any certain areas of the earth.

The Interest of International Business Enterprises

The value of international trade to the manufacturers, extractive producers, intermediaries, transportation agencies, financial institutions, and other enterprises that engage in international trade is easily engaged. Simply stated international trade is a source of income and profit.

Domestic producers gain from international trade in many ways. They depend upon imports to meet their need for raw materials and productive equipment at a lower cost than if the same items were acquired from domestic sources of supply. Export afford domestic producers a profit on sales, and they often make possible a large scale production with lower unit costs. Imports and exports, moreover tend to material fluctuation in the supply demand, and prices of individual goods. Sudden shifts in the availability of domestic raw materials may be offset by opposing shifts in raw material imports, and producer with substantial sale abroad are less sensitive to purely domestic economic conditions compared to producers in the same industries who dispose of their entire output at home.

International trade

Accompanying the increase in world trade over the period since the Second World War, there has been equally rapid growth of private foreign investment. Much of this has taken the form of companies setting up or acquiring a controlling interest in overseas subsidiaries affiliates. Today most large companies and many medium sized firms operate in more than one country, such companies have come to be variously referred to as multinational companies (MNCs), multinational enterprises (MNEs) or transnational corporation (TNCs). The largest among them have overseas operations that much or exceed the size of their domestic operations, such companies invariably operate on a regional or international scale.

Overseas investment by companies to setup a new overseas subsidiary or acquire a controlling interest in another company is referred to as direct abroad or foreign direct investment (FDI). This is different from investment by individuals and financial institutions in the purchase of interest bearing securities, which is called portfolio investment. Direct investment abroad is one way in which companies can expand their operations internationally. It may be that producing abroad is viewed as an alternative to exporting much investment by United States subsidiaries or acquire a controlling interest in another company on a regional or international scale.

The Growth of Foreign Direct Investment since the Second World War

This paper is also analyses about the growth of the foreign direct investment since the Second World War. Ninety-three percent of all FDI outflows originates with the developed
countries, although the importance of the developing countries as FDI exports has been growing. The developed countries also account for the bulk of FDI inflows. Their share was in fact slightly higher in the period after 1988 than before. Thus, well over three-quarters of FDI flows take place between the developed countries.

FDI did take place in the late 19th and early 20th centuries, although it was less important than portfolio investment. An estimated one-half of all British Foreign investment before 1914 was portfolio investment. Much it was directed towards infrastructure needed to support primary producing activities in the colonies of the British Empire.

In the late 1960s and early 1970s, the rate of new investment by U.S. companies in western Europe began to taper off and U.S. companies began to seek out new locations in other parts of world. Latin America and middle far-east became important new locations for U.S. direct investment. One reason was that western Europe was losing its advantage as a location for manufacture production due to rising wage costs. Wages began to catch up with U.S. levels, while new social security legislation, minimum wage laws and employment protection measures imposed additional non-wage costs on all employers.

Recently, there has been a significant growth of direct investment by companies in the newly industrializing countries. For the first time ever, South Korea (1990) and Taiwan (1991) have become net exporters of FDI. As with Japan a key factor has been the lifting of exchange controls on capital outflows in these countries as the current account of the balance of payments swung into surplus in the second half of the 1980s. An increasing amount of FDI by these countries has been directed towards south East Asia and China. Legally, this has been in response to rising costs at home and the appreciation of local currencies like Japanese investment in the region, much of it has been designed to relocate the production of certain low value-added goods to countries, where labor costs are lower. However, a number of companies in these countries have also been active in establishing subsidiaries in the western industrialized countries. As with Japanese FDI, this has been motivated by a proliferation of trade restriction against the products of east Asian countries. In some cases, the subsidiaries established have been little more than ‘screwdriver’ plants concerned only with the assembly of a product using kits imported from the parent company. Thus the names of Korean conglomerates such as Daewoo and Samsung have become well known to most north Americans and Europeans. The current financial crisis afflicting these economies, however has resulted in a downturn of such investment.

Endogenous Growth through R & D

Endogenous growth theory explains the growth residual, that is, that part of growth that is not explainable by growth in factors of production (e.g. capital accumulation, population growth). This approach aims to provide explanations for the observed differences in growth rates across countries. The engine of growth is technological change.

Trade and Growth

This paper is also investigated about trade and growth. What is the effect of greater international trade on income and economic growth? The general intuition explaining the relation between trade, income and growth is that greater openness leads to higher income or faster growth if its expands sectors generating technological change and encourages activities that produce learning-by-doing productivity gains. Greater trade leads to slower growth if it expands sectors that do not generate new technologies or produce learning-by-doing gains.

A takeoff effect leading to sustained income growth can arise if the trade has an enlarged market affect that
1. leads to exploitation of economies of scale in the presence of increasing returns to scale,  
2. encourages the diffusion of ideas,  
3. strengthens creative destruction.

If these effects lead to sustain improvements in manufacturing and R&D productivity, technological change will proceed at a faster rate resulting in faster growth. These positive growth effects are explicitly modeled in Segerstorm et al. (1990), Grossman and Helpman (1990, 1991a), Rivara-Batiz and Romer (1991a,b), and Aghion Howitt (1992).

Let us contrast two polar cases in the open economy model of Rivera-Batiz and Romer (1991a): trade in technology only and trade in goods only. Trade in technology refers to trade in ideas leading to diffusion of technology with no trade in intermediates goods. Trade in goods refers to trade in intermediate goods and no diffusion of technology.

When there is trade in ideas only, the growth rate becomes

\[ g^{\text{trade}} = (\delta H - \Delta p / \lambda \sigma + 1) > g^{\text{autarky}} = (\delta H - \Delta p / \lambda \sigma + 1) \]

This formula can be heuristically derived from its closed economy analog by recognizing that trade in ideas effectively doubles the productivity of research in this setup and is equivalent to doubling \( \delta \). The growth rate in an economy that is open to trade in ideas is higher than the growth rate in a closed economy. This result illustrates the growth-promoting role of technology diffusion. The intuition is that technology diffusion makes the research sector more productive for both economies.

What happen if there is only trade in goods with no trade in technology and growth is driven by endogenous technology creation? In this case, trade in goods is counter productive in terms of economic growth. The growth case when there is trade in inputs but no trade in ideas is given by (Barreto and Kobayashi)

\[ g^{\text{input}} = (\delta H - 2 \Delta p / 2 \lambda \sigma + 1) < g^{\text{autarky}} = (\delta H - \Delta p / \lambda \sigma + 1) \]

This formula is heuristically derived by replacing \( \lambda \) for 2\( \lambda \) in the formula, which takes into account that expanding the range of available intermediates inputs increases the productivity of human capital in the manufacturing sector. Trade makes the manufacturing sector more productive.. in turn, a more productive manufacturing sector shifts resources away from the growth creating research sector.

The previous example illustrates a case in which opening trade in goods is counterproductive in terms of growth rate. The reason is that it shifts resources away from the sector that generates growth. A policy of trade liberalization turns out to be growth-reducing.

What happens if there is trade in intermediates and trade in ideas? The knowledge driven model with trade in intermediates plus trade in ideas incorporates growth effects through both the manufacturing and research sector. The growth rate is given by

\[ g^{\text{trade+inputs}} = (\delta H - 2 \Delta p / 2 \lambda \sigma + 1) = (\delta H - \Delta p / \lambda \sigma + 1 / 2) > g^{\text{autarky}} = (\delta H - \Delta p / \lambda \sigma + 1) \]

The formula can be heuristically derived from Romer’s (1990) model by
1. Replacing \( \delta \) by 2\( \delta \). This takes into account the greater productivity of human capital devoted to research;  
2. Replacing \( \lambda \) by 2\( \lambda \), this takes into account that expanding the range of available intermediates increases the productivity of human capital in the manufacturing sector.
The greater productivity of research resulting from trade in ideas shifts resources toward the research sector and reinstates a positive growth effect from trade. The combination of trade liberalization and the policies to promote diffusion of technology increases growth even if trade liberalization alone with slow down in this setting.

What are the lessons from these growth experiments? The key idea is that the growth effect of trade depends on whether it shifts resources toward or away from the sector that represents economy’s engine of growth. International technology diffusion makes the innovative research sector more productive and ceteris paribus, induces a shift of resources toward research. In turn, growth rate increases. In general, there is no presumption that trade in goods must increase the growth rate. It could very well shift resources toward activities that do not generate growth-generating sector. If this happens, greater trade leads to slower economic growth. Both cases, growth acceleration and growth deceleration, can be derived from alternative frameworks.

Does greater trade lead to faster growth?

The discussion of impact of trade and trade policies on growth, productivity, and global competition is part of the broader on the factors determining economic success. Lucas (1993) stresses the role of human capital and externalities. Young (1995) finds that productivity growth, entry of women into the labor force and demographic factors were quite important in explaining per capita growth in Hong Kong. By contrast high investment rates drove Singaporean growth, which was characterized by slow productivity growth. Rodrik (1995a) comparison of Korea and Taiwan stresses the role of selective and market oriented industrial policies but does not assign an important role of openness. The stagnation of Japan throughout the 1990s and interruption of fast growth in East Asia in 1997 has shed doubts over many proposed explanations of their past success and has led an ongoing reexamination of the growth and productivity debate. This debate can only be refueled by the sudden slowdown or stop of growth in Argentina (1998-2002) and other paradigmatic economies.

Industry value creation

This paper describes how airlines add value to the inputs used in supplying air transport services, and how virtually all of that value is captured by consumers and the wider economy. We first look at the rapid expansion of air transport volumes and how income growth in the BRIC economies, together with increasing connectivity with major cities, will keep this a high growth industry in coming decades. Next we examine the structure of costs and how substantial efficiency gains have been passed fully through consumers in lower real transport prices. we also look at various facets of service quality. Finally we examine profitability. The few airlines that have created shareholder value are identified. We then report on a detailed assessment of the return on invested capital along the airline supply chain and, in particular, the persistent economic losses by the airline industry as a whole.

The value provided by the airline industry

The size of the industry

In the fast 40 years the volume of air travel, as measured by worldwide scheduled RPKs (revenue passenger kilometers), has expanded tenfold. This is an expansion three times greater than the growth of the world’s economies, which partly reflects the high income elasticity of air travel. It also reflects, and has facilitated, globalization. Air travel has risen broadly in line with world trade during the fast 40 years. In has been one of the fastest growing economic sector.

The linkages between FDI and Growth

This paper is also study about the linkages between FDI and Growth. FDI can affect growth if its results in increased physical investment, plant, and equipment upgrading and greater transfer of technologies to host country firms. Studies using the growth regression methodology find that FDI has significant positive growth effects, at least for countries surpassing a threshold schooling level, and that this growth effect is greater than that of domestic investment. A well cited result in the FDI and growth literature is that the productivity of FDI in Latin America is three times that of domestic investment (De Gregorio, 1992). This result was obtain comparing the growth effects of domestic investment and FDI in a sample of twelve Latin American countries, after controlling for economic and institutional variables that have been found to have an effect on growth rates.

Borensztein el al. (1998) find a positive growth effect of FDI but only if the host country has surpassed a threshold schooling level. This result is derived from a sample of sixty-nine developing countries during the decades 1970-79 and 1980-89. the study performs cross-country regressions of the growth rate of per capita income g on human capital H, FDI from OECD countries as a proportion of GDP, the interaction between the FDI ratio and human capital H, and a vector X representing additional variables such as the regression constant, initial income, domestic investment, and others. The authors obtain z negative coefficient from FDI and positive coefficient from the interaction between DI and schooling. Putting these estimates together means that the effect of FDI on growth becomes positive only if the schooling level is high enough.

Oliva and Rivera-Batiz (2002a) consider a sample of 120 developing for 1970-94, they confirm the positive effects of FDI and the superiority of FDI over domestic investment and find that non-FDI capital flows did not exert a significant growth effect.

Conclusions

This paper deals with all related information of affect international trade and global economy through foreign direct investment. This paper is also explain with live examples and related graphs. FDI plays a major role in every country particularly like developing countries, poor countries and also developed countries. Developing and Poor countries have all sources of factors for establishing factories or companies, but they don’t have require capital to invest, so, these countries required lot of FDI, then only these countries can develop. FDI is great opportunity for developing and poor countries for technology developed, technology transfer from developed countries to developing and poor countries, create employment, expand in international trade and growth in global economy and
also these countries are generating profits and also developing many ways. This is not only opportunity to developing and poor countries but also best opportunity to developed countries. Developed countries have lot of funds but these funds may be idle i.e. these funds are not used effectively and efficiently. So, these countries are not generate any income or profit from these funds. These funds are invested as FDI, then only these countries will generate income and profit and Although conceivably a nation might have a sufficient variety of productive factors to produce every kind of goods and service. It would not be able to produce each good and service with equal facility. The United States could produce hand woven rugs, but only at a high cost, since the production of such rugs requires great quantities of labor, which is expensive for this country. The production of hand woven rugs, however, would afford reasonable employment for the large supply of cheap labor in a country like India. It would be advantageous for United States, therefore, to specialize in a commodity such as computers, whose production makes use of the abundant supply of technology in this country, and to export computers in exchange for hand woven rugs in India. Expand the international trade and also great growth in global economy through foreign direct investment.

References
International trade – theory, strategies and evidence by Luis a. Rivera- Batiz, Maria-angels Oliva, oxford university press
International trade and investment by Franklin R. Root
International trade by Nigel Grimwade.
Foreign direct investment in developing economies by Carrie Cutter
Foreign direct investment and international trade by Lionel Fontagne.