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The increasing importance of foreign direct investment and Turkey

Abstract

The research results have clearly proven that direct foreign capital investments affect economic, social, cultural and political variables positively. Direct foreign investments are expected to have a positive impact on Gross Domestic Product, especially on the exports of host countries. Therefore, many countries have welcomed foreign capital and preferred the policies that benefit from foreign capital for economic and social development. Various arrangements were made in the Turkish economy to encourage direct foreign investment. Especially during the period beginning in 1980 these changes were supported by the export-oriented growth and expressive model and the fundamental changes in the economy. In this study, direct foreign investment in the economy was examined in general terms, and from Turkish perspective. In addition, the effects of export industry on the Gross Domestic Product have been determined.

Keywords: direct foreign capital investment, Turkish economy, structural conversion, export.

JEL Classification: E02, E22, F21.

Introduction

As a result of the current phenomenon of globalization, the economic borders between countries have disappeared around the world since the 1990s and especially in developed countries the capital accumulation has increased (Eren, Samsunlu, 2003, p. 85). Thus, the ability of countries to isolate themselves from the rest of the world has been eliminated. Following the process of globalization, all countries have influenced each other in political, economic, financial, social, cultural, and many other areas (Acartürk, Arslaner, Tekeli, 2004, p. 1). While regional integrations were getting more and more common together with globalization, the circulation of capital has dramatically increased in parallel with the increase in capital accumulation (Rubio, Munioz, 2001, p. 305). Throughout this process while the free movement of capital increased, trade has become freer and consumer habits have become similar to each other. New relationships have developed among industries and businesses, cooperation between transnational enterprises has emerged and foreign investments have been initiated (Eren, Samsunlu, 2003, p. 72). Throughout this process, even the closed economies have opened up for direct foreign investment (Nunnenkamp, 2002, p. 7). As foreign investment is still important to especially the less developed countries in terms of financing, these countries have opened up for foreign investments among which direct foreign investments have been favored more as they are deemed to have a share in the fate of the whole country.

1. Definition and scope of direct foreign capital investment

Foreign capital is defined as financial or technological or financial and technological resources, which can be added to the economic power within a short period of time, received by a country from other

countries under the condition of paying back in different forms. Financial and technological investments or financial or technological investment from one country to another can either be given as a loan or it can be investment and participation in production (Uras, 1979, p. 27). Within the framework of private capital movements on the international level, foreign capital is divided into three basic groups, namely bank loans, portfolio investment and direct foreign investment.

Portfolio investments is a type of investment performed through purchasing financial instruments like bonds issued by money and capital markets in international capital markets (Arikan, 2006, p. 7). The fact that capital markets in transition economies have not yet developed enough and the investments promoting and supporting direct investments are common in these countries causes portfolio investments remain limited (Tandircioğlu, Özen, 2003, p. 117). Another type of foreign capital is bank loans which can be divided into four groups under the title of development loans, namely, project-program credits, self-dependent loans, export credits and postponement and refinancing loans (Açba, 1991, pp. 23, 26). The credit granting process which only existed between countries previously, has gained a new dimension under the name of commercial credit under private enterprises due to the enlargement of international capital markets. These credits are a kind of conventional financing and generally they bare the characteristics of interest based loans. They have developed in parallel with the amount of the accumulating funds in developed countries (Bal, 1998, p. 16). As for the direct foreign investments which constitute the most important form of foreign capital investments, manufacturing products by a company in foreign countries, establishing production plants abroad or buying the existing production facilities there or enthrallment of those facilities through capital raising are defined as direct foreign or external investment (Seyidoğlu, 2001, p. 397).

2. Criteria needed by a country to attract direct foreign investment

Given that political decisions always come before economic decisions and the former leads the latter, the most important factor here seems to be the policies of the government and the state (Miyamoto, 2003, p. 9). Existence of the government in the markets has two different effects; on one hand, its efficiency in the market has negative effects on the foreign investments; on the other hand, its regulative and redirecting role which facilitates foreign investments rivalry with the domestic companies on equal basis (Arikan, 2006, p. 30), and government's initiatives that remove the obstacles limiting factor movements which strengthens the relationship between direct foreign investments and commerce constitute positive effects (Rubio, Munioz, 2001, p. 312). Among the general factors affecting the investment climate macroeconomic policies, monetary policy and fiscal policy can be listed as the most important ones. In this framework, incentives, subsidies (Sass, 2003, pp. 7, 12), taxes, and privatization policies have been used as tools in this regard. Cheng and Kwan (2000), in their study on the importance of Chinese government for the economy of the country concluded that the government plays a role of catalyst in terms of restructuring the economy and thereby increases attractiveness of the country for direct foreign investments. Morrissey and Rai (1995) asserted that the state regulations outstand as the potential determiner of foreign investments as institutional features of the host country and the degree of political intervention by the state policies play an important role in determining the level of direct foreign investment

The success of the policies in some European countries constitutes important examples in this respect. These policies can be listed as liberalization efforts, privatization of telecommunications, electricity companies, railways and water enterprises, and finally, financial regulations. The Chinese government, on the other hand, emerged as the world's second-largest direct foreign investment receiver, following the United States, soon after initiating liberal policies (Agiomirgianakis, Asteriou, Papathoma, 2006, p. 8).

Beside state policies, the development of human capital as well as improvement of the quality and skills of labor force (Miyamoto, 2003, p. 9), and the type of local currency directly affect the structure of costs of a multi-national corporate. Moreover, they also influence the amount of financial assets and decisions of the investors. Thus, it is necessary to manage the local currency with a balanced and stable foreign exchange policy (Arikan, 2006, p. 31). The primary infrastructure support activities of a

host country are the production and transport activities, while the others can be listed as infrastructure support services, insurance services, legal services, commercial banks and brokerage houses (Arikan, 2006, p. 35). Advances in technology and liberalization of the neighboring markets can be considered as the other applications independent of those of the host government (Dunning, Kim, Lee, 2007, p. 31).

On the other hand, it is now possible to discuss the situation of the other determiners of direct foreign investments in the first period of the process of globalization because under the current economical structure the importance of the traditional determiners has gradually decreased (Nunnenkamp, 2002, p. 7). For example, in the 1970s, the critical place determinants of the activities were natural resources, cheap labor and proximity to local markets, while in 1980s and 1990s, factor aid and accessibility to factors, policy-practice standards and the compliance of the values created with the criteria along with access to regional markets, supporting physical and institutional infrastructure, scale economies, and the existing markets at both regional and global levels have gained importance (Dunning, Kim, Lee, 2007, p. 31).

3. Importance of direct foreign investment

Since especially the less developed countries need the savings of the developed countries as they lack investment and production, and imports of technical equipment and intermediate goods needed by the newly developing sectors cause imbalance of payments, foreign aid was replaced by direct investments especially after 1960s. Direct foreign investments are the most advantageous kind of external resources as they bear all the risk themselves (Erdem, 1994, p. 1). On the other hand, inadequacy and the slow growth of capital accumulation in underdeveloped countries, low national income and rapid population growth, per capita income and savings that remain low (Savaş, 1974, p. 27), increasing share of direct investments in production and investments within the process of globalization (Slaughter, 2002, p. 1) increase the importance of direct foreign investments.

Considering the positive correlation between trade and direct foreign investments within the framework of the traditional industry organization (Rubio and Munioz, 2001, p. 305), beside their contribution to economic growth, capital accumulation and human capital development and their positive effects on international trade and employment (Chang and Chen, 2006, p. 235), the importance of direct foreign investments for the current economic structure increases day by day. Moreover, direct foreign investments are cheap and reliable resources. Thus, they contribute the global competitive advantages of countries (Duning, Kim, Lee, 2007, p. 27).

Another advantage of direct foreign investments is transfer of technology and consequent increase in production (Slaughter, 2002, p. 2). Especially in underdeveloped countries some products that could never be produced due to the limited saving and investment facilities would be supplied to the consumers, which mean an increase in prosperity. The companies with foreign capital contribute to the criterion of prosperity by widespread production. As spread of production would promote the quality of production it would have positive effect on the level of prosperity (Uras, 1979, p. 54). Moreover, foreign companies affect the production of the local companies through various factors and they cause an increase in productions, which in turn decreases production costs (Alfaro, 2003, p. 5).

As a result of the impact of direct foreign investment, labor market and the labor itself are subject to change in all aspects and the host country workers become more experienced and skilled (Slaughter, 2002, p. 1). In parallel, due to the interaction between foreign and domestic firms workforce becomes high-quality and better educated (Chang, 2005, p. 254). Especially for transition economies, it is necessary to cooperate with foreign investors to benefit from the advantage of technology and information transfer. Because foreign investors are relatively more advanced and they own a trained workforce (Demekas, Horwath, Ribekova, Wu, 2005, p. 3). In this case, depending on the increased quality of labor, costs are also likely to increase. Moreover, when the foreign investors that are active in the same sector as local companies pay higher wages to the workers, the average level of wages would increase, demand for labor would also increase and consequently all the wages would rise (Arikan, 2006, pp. 42, 43). On the other hand, the positive effect of direct foreign investments in terms of reducing unemployment is known (Chang, 2005, p. 254). Because together with foreign capital investments, senior managers go to the host countries and the rest of the need for labor is met by means of domestic sources. Therefore, for the underdeveloped countries that face the problem of unemployment the foreign investments create a favorable situation in terms of employment (Akdiş, 1988, p. 75).

Direct foreign investments, along with elimination of trade barriers or reducing them and creating pressure for industrial regulations, facilitate innovations while increasing competitive power of the organizations established with cheap and reliable resources (Dunning, Kim, Lee, 2007, p. 27). Thus, together with the increasing integration movement with world economy and competitive power exports will increase. Based on this, the companies having to do with direct foreign investment will enjoy price and cost advantages (Girma, Kneller, pisu, 2005, p. 193).

Foreign investment brings along modern marketing methods and access to international markets, which can result in changes in favor of producers and consumers (Uras, 1979, p. 58). Its impact on the host country's national income appears as the production realized within the borders of that country. However, sometimes the input used for production is supplied from the local market, which should be deducted from the production value (Arikan, 2006, pp. 40, 41).

Foreign investments have a changing effect on the host countries' balance of payments. Foreign capital in the country has a positive impact on the balance of payments at first, and as the activities continue, then other positive effects on import substitution and exports and the balance of payments occur. However, within this process, if the foreign investors initiate the use of imported raw materials and supplies in the production this will have a negative impact on the balance of payments (Erdem, 1994, pp. 3, 4).

4. Direct foreign capital investment around the world

The first initiatives of Britain that was in need of raw materials in the first half of the 19th century in some certain countries with the aim of drilling petrol constitute the first examples of foreign capital investments while the first plantations for products of agriculture and industry date back just recent years. Following the first investments in the colonies, the British aimed at the South America for investments. In this context, the first investments were made in 1820s. After that, while the French entered Haiti, they entered Ecuador and Venezuela in 1930. The cost of the investments by Britain in South America in 1870 was 85 million sterling while it reached 750 million sterling in 1914.

The British carried out major investment activities in Canada and America in 1900s and while the German capital was entering South America the sum of the investments had reached 900 million dollars in 14 years. In Europe, Spain, Portugal and Greece received foreign investment and the United States entered this market after 1914. As the economic crisis of 1929-1930 affected foreign investments negatively a new era started and the investments already made were liquidated. After the Second World War investments were replaced by loans (Uras, 1979, pp. 30, 31). However, for developing countries the flow of direct foreign investments which were of particular financial importance gained a different dimension after 1985. From then on foreign capital flow into the industrializing countries increased (Rubio, Munioz, 2001, p. 305). On the other hand, average annual flow of direct foreign investment into developing countries had increased

dramatically compared to that of early 1980s and with this increase, the less developed countries managed to attract almost one third of the world-wide flow of direct foreign investment by the end of 1990s. In the last quarter of 1990s, the increase in the direct foreign investments into developing countries equaled 20% of their GNPs. For developed countries this rate was 12%. Despite the visible differences among various groups of developing countries in terms of direct foreign investment, the Southern, Eastern and South-Eastern Asian countries appeared as the most attractive region for foreign investments. This group of developing countries managed to capture half of the whole direct foreign capital flow in the 1990s leaving Latin America behind. However, Latin America continued to be an important and attractive investment area. In this context, Africa remained indifferent towards foreign investments, as compared to the above mentioned regions, and could not receive investments. Even rejecting foreign investments in 1980s, Africa remained outside the economic globalization. However, the average annual direct foreign investment flow into Africa increased by 3.5% by 1994 (Nunnenkamp, 2002, pp. 3, 6). This case proves that if the specific arrangements are put into effect, Africa can also attract some foreign investment.

The table below shows the distribution of direct foreign investments in the world between 1997 and 2001, with the decrease visible in 2001, and especially the share of developed countries which continue to be too high are worth mentioning. Asia and Pacific region, despite some decrease, keep their leadership, while Caribbean and Latin America come the second. However, especially with the recent developments, African and Central and Eastern European countries are following them as serious rivals.

Table 1. Direct foreign capital investment allocation between 1997 and 2001 (million dollars)

Host region	1997	1998	1999	2000	2001
World	478,1 ^A	694,5 ^A	1088,3 ^A	1491,9 ^A	735,1 ^A
Advanced economies	267,9 (56,0) ^B	484,2 (69,7) ^B	837,8 (77,0) ^B	1227,5 (82,3) ^B	503,1 (68,4) ^B
Developing economies	191,0 (39,9) ^B	187,6 (27,0) ^B	225,1 (20,7) ^B	237,9 (15,9) ^B	204,8 (27,9) ^B
Africa	10,7 (5,6) ^C	9,0 (4,8) ^C	12,8 (5,7) ^C	8,7 (3,7) ^C	17,2 (8,4) ^C
Asia and the Pacific	106,0 (55,5) ^C	96,4 (51,4) ^C	103,0 (45,8) ^C	133,8 (56,2) ^C	102,3 (49,9) ^C
Caribbean and Latin America	74,3 (38,9) ^C	82,2 (43,8) ^C	109,3 (48,5) ^C	95,4 (40,1) ^C	85,4 (41,7) ^C
Central and Eastern Europe	19,1 (4,0) ^B	22,6 (3,3) ^B	25,4 (2,3) ^B	26,6 (1,8) ^B	27,2 (1,8) ^B

Notes: A) Direct foreign investments including advanced countries and oil exporting countries, B) Percentile distribution of the total value around the world (%), C) Percentile distribution of the total value of developing countries (%).

Source: Joong-Wan Cho, Foreign Direct Investment: Determinants, Trends in Flows and Promotion Policies, http://www.unescap.org/tid/publication/chap5_indpub_2259.pdf.

In parallel with the developments, the share of foreign direct investments in world production increased from 5% to 16% between 1979 and 1999. Consequently, the accumulation of capital increased from 2% to 14%. The share of direct foreign investments in the total world production was realized as about 15% by 2000s (Slaughter, 2002, p. 1).

The export ratio of foreign direct investments world-wide was around 3% in the year 1980 while in 1999 this figure exceeded 15%. At this point, while the efforts for determining common strategies for exports continue, direct foreign investments gain importance in line with globalization. This increase in export rates remained limited to the years 1992-1999. As a result of this case, world-wide growth of direct foreign capital investments realized at low levels considering GDP (Nunnenkamp, 2000, p. 3)

As for the 2000 data, the amount of direct foreign investment reached 1.271 billion U.S. dollars level. As a result of the increasing importance of direct foreign investments, many governments initiated positive implementations about this subject. The UNCTAD data for the years between 1991 and 2000 shows that the total number of legislative changes applied is 1185, among which about 1121 are liberal changes aimed at capturing international capital. As a result of these developments, an important aspect of direct foreign investments is that by 2002, the share of investments into developed countries increased from 55% to 80%. On the other hand, this rate was reflected on the rate for the developing countries as a decrease from 40% to 20% (Karaca, 2002, p. 59).

Direct foreign capital flows at global level increase much faster than world GDP. The global foreign direct investment flow, which rose from 0.5% of world GDP to 1% from 1980 until 1990, increased much faster between 1990 and 2000 and reached 4.5% of world GDP. In 1990s restrictions were removed in many countries, therefore the financial and direct capital movements gained acceleration. During the period after 1992, some developing countries called the rising markets among the middle income group enjoyed large-scale capital inflow due to their high profit potential especially in stock markets and bond markets. Despite the economic crisis experienced at the end of 1990s the FDI/GDP ratio continued to increase until 2000. (<http://www.yased.org.tr/webportal/Turkish/Yayinlar/Documents/DYYStrateji-TR.pdf>).

5. Foreign capital investment in Turkey

The first foreign investments in Turkey were realized in the period of the Ottoman Empire. Because of the capitulations included in the trade agreements between the years 1838-1839 the British and the French were given privileges such as reduced cus-

toms duties and bureaucracy, operation of natural resources, railways, ports and communications, energy, and some service sectors and the banking sector organizations were overtaken by foreigners (Ören, 1993, p. 54).

At the beginning of the twentieth century, most of the foreign investors in the Ottoman Empire were from France. The share of the French capital used in the railroads was 78%, this ratio was 16% for the construction of ports, and 16% for municipal services. In parallel with the importance of construction of the railways, foreign capital investments into the Ottoman Empire seem to emerge as a result of an integrated approach for foreign trade. Instead of investments aimed at production necessary for transfer of raw materials to Europe railway investment, ports and municipal services were preferred. Thus, Europe's products reached inside Anatolia and the Ottoman's agricultural products and raw materials needed by Europe were provided (Buluş, 2003, p. 34).

Sectoral distribution of foreign investment by 1910 within the borders of Anatolia is shown in the table below.

Table 2. 1910 year of the industrial investment by country

	Million kuruş	%
Railways	3,368	59,0
Industrial	650	11,4
Bank-insurance	560	9,8
Mines	328	5,7
Electric-tram-water	311	5,5
Ports	288	5,0
Trade	206	3,6
Total	5,711	100,0

Source: Güngör URAS, Türkiye'de Yabancı Sermaye Yatırımları, İktisadi, Yayınlar Ltd.Şti. Formül Matbaası, 1.Basım, İstanbul, 1979, s. 100.

In the same period, distribution of foreign capital among industrial investments as for the countries was as follows. Germany and France were the leaders (25,4%), followed by the United Kingdom (16,9%), Belgium (3,7%), the U.S. (1,8%), Italy (1,2%), and the Netherlands (0,9 %) (Uras, 1979, p. 100)

Although, the climate of freedom and liberal approach gained importance together with the Republic, which eliminated any negative attitude towards foreign capital in the economic and social life, historical experiences, disagreements that had taken place during the Lausanne negotiations caused some hesitation about foreign investments. However, this situation did not lead to an understanding that would block foreign capital (Tezel, 1986, pp. 166, 167). As an indicator of this positive attitude of the Young Republic against foreign capital, Mustafa Kemal Atatürk's speech in the Izmir Economic Congress is

significant. Atatürk, in his opening speech at the İzmir Economic Congress, first mentioned the capitulation type legal privileges given foreigners, which can be listed among the causes of the Ottoman Empire's collapse leading her become a kind of semi-colonial country; then he declared that the new republic was ready to supply the foreign capital with the necessary guarantee as long as it complies with the law (Boratav, 2000, p. 312). Minister of economy of the Atatürk period, Mahmut Esat (Bozkurt) also stated that within the framework of the Turkish law they were ready to grant larger privileges to foreign capital (Karluk, 1999, p. 545). This understanding dominated the entire official attitude and policies in that period (Boratav, 2000, p. 312).

During this period (years between 1920-1930) among the joint-stock companies established under main seven sectors, in the field of textile industry there were three companies which had foreigners among their founders, shareholders and the management council members. However, among these companies there were significant differences between the amounts of capital in favor of those holding foreign capital. In the same period, in the field of food industry there were three companies among whose founders, shareholders and the management council members there were foreigners. Accordingly, among all the twenty-two companies established between the years 1920-1930 there were three in which foreigners were included. During the period between the years 1920-1930, of all the five companies established in the field of chemical industry, there were three that included foreign capital. During this period it is significant that the foreign capital companies were stronger than domestic companies in the mining business, while a Turkish bank was undertaking initiative for an organization concerning mining. In the field of forest management, there were five companies established, among which only one included foreign capital. Only one of the four companies in agriculture had foreign capital, while three of them were domestic companies. In this sector, the share of foreigners in local companies was very important as capital position of the domestic companies seemed to be relatively weak (Arrow, Decin, 1997, pp. 78, 87).

While the distribution pattern between the years 1920-1930 was similar to the above mentioned condition a free zone law was introduced in 1927 in order to increase foreign investment and by the year 1929 the number of foreign capital companies in the country increased to 114 (Ören, 1993, p. 54).

As a result, although the foreign investment in Turkey was not adequate, it might be observed that the investments until the year 1930 display an increasing trend. The particular effect of the industrial promotion law enacted in 1927 should be remarked.

Table 3. Foreign private equity investment and foreigners in Turkey profit, interest and other income transfers (1926-1933, million Turkish lira)

Years	New investments	Profit and interest income (1)	Other income	Total transfers
1926	6,5	8,3	4,0	12,3
1927	5,3	8,3	4,0	12,3
1928	8,0	7,0	4,7	11,7
1929	12,0	6,0	3,9	9,9
1930	1,2	7,3	4,5	11,8
1931	0,8	1,5	2,0	3,5
1932	4,2	0,5	3,5	4,0
Total	39,1	39,9	28,0	67,9

Source: TEZEL Yahya Sezai, Cumhuriyet Döneminin İktisadi Tarihi 1923-1950), Yurt Yayinlari, Ankara 1986, s. 169. (1) Profits and interest income arising from private foreign capital in Turkey excludes interests above public debts.

Despite the encouragement of foreign investors to invest in Turkey and the positive approach towards foreign capital the nationalizations during the period, 1929-1930 world financial crisis and the Second World War hindered the introduction of foreign capital to the country at the desired levels (Karluk, 1999, p. 546). After the Second World War, the IMF and the GATT were established as a result of the Bretton Woods agreement and global international capital and trade flows have shown a high growth. In parallel with these developments Turkey started taking measures of benefit from foreign capital investments only after 1950 and on March 19, 1950 Law no. 5583 concerning "...the bailing of the treasury to private enterprises and making foreign-exchange commitments" was enacted (Ören, 1993, p. 54). The law proved to be a failure although it provided state guarantee for foreign enterprises. Thus another law, Law No. 5821 dated August 9, 1951, named "Promotion of Foreign Capital" was enacted (Ören, 1993, p. 54).

Promotion of Foreign Capital act No. 5821 is a milestone in the developments concerning foreign capital since it encouraged foreign capital in the fields of industry, energy, mining, transportation and tourism. However, the desired level was not reached due to the restrictions on profit and capital transfer. In 1954, new regulations were introduced by law No. 6224. With this law, capital owners were given the freedom of transferring their profits and capitals, import machinery and equipment, and their patents and non-financial rights were accepted as foreign capital and they were provided with the opportunity to benefit from all the rights given to domestic capital (İlkin, 1974, p. 398).

The investments during 1950s and 1970s especially following the law concerning the promotion of foreign capital might be observed in the table below.

The expected investments were not realized during the first half of the 1950s; however, a relative development occurred during the second half of the 1950s. A significant rise was observed during the period between 1960 and 1970 yet a fluctuation stemming from domestic and international political instability was experienced.

Table 4. Private foreign capital, and permissions and realizations (thousand TL)

Years	Given permissions	Log in the capital
1951	4,800	3,410
1952	26,993	2,993
1953	108,440	1,148
1954	48,968	2,598
1955	66,954	8,002
1956	42,985	21,655
1957	57,693	10,531
1958	69,474	15,068
1959	48,926	19,825
1960	48,055	18,711
1961	133,604	43,056
1962	243,849	87,246
1963	125,281	97,386
1964	93,320	69,885
1965	229,933	95,538
1966	170,200	69,580
1967	196,300	67,700
1968	373,300	92,300
1969	196,300	61,400
1970	152,500	90,500

Source: İLKİN Akin, Türkiye'de Sanayi Politikası, İstanbul Üniversitesi İktisat Fakültesi Mecmuası, 30. Cilt, Ekim – 1970, Eylül – 1971, s. 399.

By the second half of the 1970s, Turkey went through the first decade of planned economy and steps towards the third planning period that would cover the years 1973-1977 were taken. During the third 5-year development plan period, some political and financial problems were faced both in domestic and international arena and strict policies were followed in encouraging private foreign capital. In this period an intensive mixed-economy model has been preferred. Land and petrol reforms, and the application of the land reform were the major implementations during the period. The petroleum reform has taken the leadership in the fields of petroleum and mining from private and foreign private sector and laid it in the hands of the public sector (Hiç, 1990, p. 70).

Table 5. Incoming foreign capital to Turkey between 1971 and 1979 (million US \$)

Years	Annual	Cumulative
1971	11,7	117,2
1972	12,8	130,0
1973	67,3	197,3
1974	-7,7	189,6

Table 5 (cont.). Incoming foreign capital to Turkey between 1971 and 1979 (million US \$)

Years	Annual	Cumulative
1975	15,1	204,7
1976	8,9	213,6
1977	9,2	222,8
1978	11,7	234,5
1979	-6,4	228,1

Source: CÖMERT Faruk, "Yabancı Sermayenin Dünyü, Bugünü ve Geleceği", Hazine Dergisi, Sayı: 12, Ekim 1986, s. 14.

The incoming foreign investments between 1971 and 1979 are given in the table above. The growth trend, although not at the desired level, is significant and the investments are regulated according to Law No. 6224. With the liberal policies followed from 1980 onwards bureaucratic processes concerning foreign capital have been reduced and all the processes were ruled by a single unit, that is, State Planning Organization, General Directorate of Foreign Capital, which proved to be a fruitful action taken with positive results (Oren, 1993, p. 55).

In this context, early 1980s mark a milestone for direct foreign investment into Turkey. The reform program accepted on January 24, 1980 not only aimed at outward-oriented growth and industrialization strategies instead of import substitution industrialization strategy but at the same time, as a part of comprehensive liberalization program, anticipated an important change in the field of foreign capital investments. With this program, new administrative and legal arrangements that would positively affect foreign capital investments were made. The Foreign Capital Branch founded un-

der Prime Ministry on 25.01.1980 has been represented as General Directorate of Foreign Capital under State Planning Organization in 1991 and under Undersecretariat of Treasury in 1994, respectively. After January 24, the provisions of Law no. 6224 dated 1954 have received major amendments in 1986, 1992 and 1995 and the legislation has been largely liberalized. Along with these changes, another major change outside the scope of this study formed the legal framework for the issue namely "Direct Foreign Investments Law" No. 487 dated June 17, 2003, and improved the conditions for direct foreign capital investments (<http://iibf.kou.edu.tr/ceko/ssk/kitap50/42.pdf-HTML>).

As seen in the table, the actual foreign capital inflow quoted as \$18 million in 1980 has increased to \$113 million in 1984 and \$684 million in 1990. In the year 2000 it increased to \$982 million. Although there are many reasons accounting for the difference between the permissions given to foreign capital and realization rates, the main reason is the realization period of the investments. Other reasons are inability to change permissions into investments and the currency exchange rate differences between the year of permission and the year of investment (Göver, 2005, p. 19).

When the sectoral distribution of the foreign capital permitted between 1980-2000 is observed, it is seen that the investments in manufacturing industry and mining have a certain level though they fluctuate, however, the service sector investments increase due to structural change. Agriculture sector generally remains influential.

Table 6. Sector status of permitted foreign capital (million US \$)

Years	Manufacturing	%	Agriculture	%	Mining	%	Services	%
1980	88,76	92	-	0	-	0	8,24	8
1981	246,54	73	0,86	0	0,98	0	89,13	26
1982	98,54	59	1,06	1	1,97	1	65,43	39
1983	88,93	87	0,03	0	0,02	0	13,76	13
1984	185,92	69	5,93	2	0,25	0	79,26	29
1985	142,89	61	6,37	3	4,26	2	80,97	35
1986	193,47	53	16,86	5	0,86	0	152,81	42
1987	293,91	45	13,00	2	1,25	0	347,08	53
1988	490,68	60	27,35	3	5,62	1	296,87	36
1989	950,13	63	9,36	1	11,69	1	540,59	36
1990	1.214,06	65	65,56	4	47,19	3	534,49	29
1991	1.095,48	56	22,41	1	39,82	2	809,55	41
1992	1.274,28	70	33,59	2	18,96	1	493,13	27
1993	1.568,59	76	21,05	1	11,37	1	462,38	22
1994	1.107,29	75	28,27	2	6,20	0	335,85	23
1995	1.996,48	68	31,74	1	60,62	2	849,48	29
1996	640,59	17	64,10	2	8,54	0	3.122,74	81
1997	871,81	52	12,22	1	26,70	2	767,48	46
1998	1.017,29	62	5,75	0	13,73	1	609,67	37
1999	1.123,22	66	16,19	1	6,76	0	553,40	33
2000	1.105,49	32	59,74	2	5,01	0	2.307,18	66

Source: http://www.hazine.gov.tr/stat/yabser/izin_sektorel.xls.

Table 7. Country-based distribution of permitted foreign capital (million US \$)

Countries	1980-90	1991-1995	1996-2000
France	1.045,61	1557,42	2.3790,21
Netherlands	322,4	1485,96	2.512,92
Germany	696,43	196,41	1.881,92
USA	770,59	1159.83	1.234.93
United Kingdom	877,44	519.44	518,03
Switzerland	799,61	830.74	394,85
Italy	214,06	982.18	409,51
Japan	363,33	1067.47	329,99
Other countries	582,16	265.18	74,88

Source: http://www.hazine.gov.tr/stat/yabser/izin_ulkeler.xls.

France is the leader in the country-based distribution of permitted foreign capital. During 1996-2000, she strikingly took the first ranking with \$2512,92 million, while the increasing values in the USA and Germany are noteworthy.

6. Direct foreign capital investment and related research findings

It can be observed that the global trend in recent studies that investigate the effects of direct foreign investment on export and development, generally covers those countries which have made a progress on the issue. The Chinese economy, which opened itself to the world and foreign direct investment in 1978, is at the focus of the studies. The Chinese economy which opened its markets to international trade reached a growth rate of 9.6% between 1978 and 2001. During this period, China became the largest foreign direct capital investment recipient in the world (Wen, 2007, p. 126). In this framework, Sun (2001), Zhang and Song (2000), Athukorala and Menon (1995) studied the macro-economic effects of direct foreign investment on Chinese economy (Goran, Kutan, http://www.entrepreneur.com/tradejournals/article/168547300_3.html).

Sun (2001) studied the effects of direct foreign capital investments in three different regions of China on export investments during 1984-1997. Sun's findings suggest that direct foreign investment provided different results for all three regions. However, a positive effect is common for three regions. Hence, it might be asserted that direct foreign investment has a positive effect for all three regions though at different levels. Another result of the study asserts that this positive effect occurred at the coastal regions.

Zhang and Song (2000), in their study on China, also determined that high level direct foreign investments have a positive effect on obtaining higher export figures. Zhang and Song also determined that multinational companies realize a large portion of

China's exports and thus invest in the country. Athukorala and Menon (1995), in their study on Chinese economy, identified the positive effects of foreign direct investment on exports (Wen, 2007, p. 126).

Goldberg and Klein (2000) studied the macroeconomic effects of foreign direct investment. In their study, they analyzed the final effects of USA-based direct foreign investments on exports in the manufacturing industry sector in Latin American countries. A positive interaction is common in their effects for different countries.

Barry and Bredley (1997) analyzed the impact of direct foreign investment on Irish exports and determined that direct foreign investment increased the exports (Goran, Kutan, http://www.entrepreneur.com/tradejournals/article/68547300_3.html)

On the other hand, Turkey has also been the subject of many studies on foreign capital and the relationship between economic growth and exports. While some of the conclusions support export-based growth hypothesis (Alici and Ucal, 2003), for instance, Abdunnasser and Menuchehr (2000) determined that no causality exists from export to growth.

Athukorala, Chand, and Balasubramanyam, in their study dated 2000, observed positive effects among exports, direct foreign investment and growth in connection with open trade policies and positive trade regimes of the country (Wen, 2007, p. 127).

In another study on Ireland, O'Sullivan (1993) determined that foreign investment has positive effects on exports. Cabral (1995), in his study on Portuguese economy, indicates that direct foreign investments increase exports. In their study on the UK economy, Blake and Pain (1994) assert that foreign investments have positive effects on exports (Pain, Wakelin, 1997, pp. 5, 8). However, Sjöholm (1999) has not identified a significant positive effect of direct foreign investment on manufacturing industry exports in Indonesian economy (Kneller, Mauro, 2007, p. 112).

Sharma, in his study where he used the data belonging to 1970-1988 period of Indian economy, has found out that direct foreign investments do not have a positive effect on exports in contrast with the general trend. However, in the same study, Sharma has determined that direct foreign investments have a positive effect on growth (Sharma, 2000, pp. 17, 18).

In parallel with these studies (1994-2004), Karagöz and Karagöz (2006) who investigated the effects on export and growth performance of Turkey have obtained significant findings only between exports

and gross domestic product, in view of econometrical findings. Accordingly, while exports serve as a reason for GDP increase no significant results were obtained for other combinations, Granger causality has not been encountered. In this case, while export-oriented growth hypothesis is supported for the Turkish case, the expected causality moving from foreign capital to exports and growth under normal conditions has not been realized (Karagöz, Karagöz, 2006, pp. 118, 125). Karagöz and Şen, have not achieved positive and significant results in their study on the effects of direct foreign investment on exports and growth (<http://iibf.kou.edu.tr/-ceko/ssk/kit-ap50/42.pdfHTML>).

7. Scope of the research, data set and method

In this part of the study, the effect of foreign investment on industrial exports and GNP will be investigated using an econometrical model. The direction of the influence of direct foreign investments on industrial exports and GNP in Turkey will be examined given the assumption that other factors affecting industrial exports and GNP increase are constant. The basic model was taken as $Y = \beta_1 + \beta_2 X_i + u_i$ (DFI = IE + GNP). In our analysis the data, covering 18 years, obtained from the official publications of State Planning Institute belonging to the 1983-2000 period were used. The data comprise direct foreign investment, industrial exports, and GNP between the mentioned dates. In our analysis, the independent variable of direct foreign investment was abbreviated as DFI and the dependent variable

of industrial exports, was used as IE. Lastly, gross national product was used as GNP. The differences before 1980 and after 2000 were not taken into consideration yet the results of the liberal transformation between 1983-2000 were studied within the framework of selected variables. In the analysis Eviews 5.1 econometric analysis package program was used.

8. Analysis findings

Unit root test appears as a precondition of causality analysis (<http://homepage.uludag.edu.tr/~eris/neden.htm>). A test of stationarity (or nonstationarity) that has become widely popular over the past several years is the unit root test. (<http://www.sayisalyontemler.com/node/87>). According to this test, the average and variance of the time series subject to analysis should be stationary not to the period where the unchanging common variance is calculated but for the stochastic process depending on the distance between two periods (Gujarati, 2001, p. 713).

In our analysis, Augmented Dickey-Fuller and Phillips-Perron (PP) tests were applied to the time series and the test results were interpreted considering AKAIKE Information Criterion (AIC) and Newey-West values. It has been observed that the time series included in the analysis were not stationary after the analysis, hence, the test was repeated taking the first and second differences. Since the first differences of all time series were stationary they were expressed in this framework.

Table 8. ADF unit root test applied to existing data

	Constant		Constant and trend		Constant		Constant and trend	
	ADF	t-table	ADF	t-table	PP	t-table	PP	t-table
DFI (first difference)	3.933*	3.065	-3.898*	3.733	3.927*	3.065	4.281*	3.733
IE (first difference)	4.314*	3.065	4.276*	3.733	4.314*	3.065	4.276*	3.733
GNP (first difference)	5.728*	3.065	5.647*	3.733	6.159*	3.065	6.159*	3.733

Notes: H_0 = GNP series is not stationary. H_1 = GNP series is stationary.

For the DFI given in the table, ADF and PP statistical values are not significant at 5% level both for constant and constant and trend forms. Thus, H_0 hypothesis is applicable and the series belonging to the variable is not stationary and unit root exists for this variable.

In order to make the mentioned variable stationary and clearing it from unit root the first difference of DFI series was taken and the test statistics were re-applied. As observed in the table, both ADF “3933-3898” and PP “3927-4281” test statistical results are significant at 5% level both for constant and constant and trend forms as they are larger than t-statistics values. Thus, the H_0 hypothesis is rejected. This series is stationary and has no unit root.

For IE, the ADF and PP test statistics are not significant at 5% level. Thus, H_0 hypothesis is applicable and the time series belonging to the variable is not stationary and unit root exists for this variable.

In order to make the mentioned variable stationary and clearing it from unit root, the first difference of IE series was taken and the tests were re-applied. As observed in the table both ADF “4.314 - 4.276” and PP “4.314 - 4.276” test statistical results are significant at 5% level both for constant and constant and trend forms as they are larger than t-statistics values. Thus, the H_0 hypothesis is rejected. This series is stationary and has no unit root.

For GNP, the ADF and PP test statistics are not significant at 5% level. Thus, H_0 hypothesis is applicable and the time series belonging to the variable is not stationary and unit root exists for this variable.

In order to make the mentioned variable stationary and clearing it from unit root the first difference of GNP series was taken and the tests were re-applied. As observed in the table both ADF “5.728 - 5.647” and PP “6.159 - 6.159” test statistical results are significant at 5% level both for constant and constant and trend forms as they are larger than t-statistics values. Thus, the H_0 hypothesis is rejected. This series is stationary and has no unit root.

As the DFI, IE and GNP series are stationary at their first differences after the unit root test, the possible long-term relationship among these series should be investigated using cointegration test. Cointegration analysis first appeared in literature during mid-1980s and became popular for constructing experimental models. Integrating short-term dynamics with long lasting equilibrium is important for econometrics. Partial correction model is used for modelling short-term disparities. An expanded version of this model is the Error Correction Model which also combines the disparity of past periods (as in $X^*_{t+1} = \beta_0 X_t + \beta_1 X_{t-1} + \dots + \beta_k X_{t-k}$). In short-term dynamic analysis the trend in variables is eliminated through taking differences. Moreover, this method also gives potentially valuable data on long-term relationships mentioned in financial theories. The cointegration theory developed by Granger (1981) and mentioned by Engle and Granger (1987) aims to integrate long-lasting equilibrium with short-term dynamics (Yigitbaş, Firuzan, 2000, p. 276). When the cointegration analysis is applied to the data set for determining the existence of any long-term relationship the following results were obtained:

Table 9a. DFI-IE cointegration test results

Hypothesis	Trace statistics	5% critical value	1% critical value
$H_0: r = 0$	14,37055	29,797,07	35,45817
$H_0: r \leq 1$	4,620461	15,49471	19,93711

Notes: r: The number of co-integration vectors, * Number of significant cointegrated vectors. Optimal lag time is taken as 1 according to the Akaike information criterion.

Table 9b. DFI-GNP cointegration test results

Hypothesis	Max. eigen-value statistics	5% critical value	1% critical value
$H_0: r = 0$	9.750090*	21.13162	25.86121
$H_0: r \leq 1$	4.458627	14.26460	18.52001

Notes: r: The number of Co-integration vectors, * Number of significant cointegrated vectors. Optimal lag time is taken as 1 according to the Akaike information criterion.

In Tables (9a) and (9b), three variables belonging to the analysis were tested in terms of cointegration.

As a result of the analysis, it was determined that $r = 0$ hypothesis was refused neither at 5% nor at 1% significance level. So, the Trace statistics value calculated as “14.37055” is smaller than “29,797,07” and “35.45817”. Similarly, the Maximum eigen-value statistics value calculated as “9.750090” is smaller than “21.13162” and “25.86121”. Moreover, when the result concerning $r \leq 1$ hypothesis is examined it is observed to be not refused at 5% and 1% significance levels. As a result, it has been determined that no cointegration vector exists among the series and no findings that suggest the existence of a long-term relationship among the series were encountered.

As the possibility of the existence of a causality relationship between the variables is weakened by the non-existence of a cointegrated vector among the series it is expected, in view of literature, that direct foreign investments should effect industrial exports and GNP positively and the econometric relationship would be in the same direction yet the causality test was omitted partially for the shortness of the time interval and real numeric values.

Conclusion

The transformation process after 1980, when Turkey met liberal economy, coincides with the quickening pace of freedom movements. During early 1980s Turkey experienced both the liberal transformation and problems including balance of payments deficits, foreign currency problems, and the chaos stemming from related political unrest. During the mentioned period, the world underwent some important developments. One of these developments is the concept of globalization and related increase in direct foreign investment. Foreign investments, one of the core dynamics of liberal process, which is related to concepts such as foreign trade and privatization, became a major source of growth for all countries. Turkey has also worked hard for expanding the legal infrastructure of attracting more foreign capital.

When the results of the undertaken researches are evaluated it might be seen that foreign investments positively contributed to exports and GNP figures. As a result of this study, Turkey has not benefited from foreign investments at the desired level during the liberal period. In other words, Turkey not only missed the chance to attract enough foreign capital but could not increase industrial exports, one of the items she desired to improve through changing the strategies used, as well. The results of our analysis suggest that the effects of direct foreign investments on industrial exports and GNP during the studied time period are not significant. It has been determined that there aren't any strong and significant cointegration and causality links among the vari-

ables and foreign investments to Turkey have not significantly influenced GNP and industrial exports.

As an outcome, it has been considered that a new study might be carried out as the political ideology has changed and liberalism reached new dimensions in Turkey after year 2000, the upper limit of the data set. The results obtained might be accounted for the shortness of the period under study and the low value of investments. However, when the financial

policies are evaluated erroneous and defective applications, political instability, lack of a regular privatization policy might be considered as other factors that affected the results. From this point of view, these years might be considered as lost years in view of direct foreign investments. Turkey has not made sufficient use of foreign investments during a period when she employed liberal policies and discourse.

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