THE EFFECTS of FDI on TURKISH ECONOMIC GROWTH

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DOĞRUDAN YABANCI SERMAYE YATIRIMLARININ TÜRKİYE’NİN İKTİSADÎ BÜYÜMESİ ÜZERİNDEKİ ETKİSİ

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ARALIK 2010
FOREWORD

I would like to express my deep appreciation and thanks for my advisors Mehtap Hisarcıklılar and İpek İlkkaracan.

December 2010

Zeynep SOLAK
Economics
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ABBREVIATIONS

ADF : Augmented Dickey-Fuller Test
FDI : Foreign Direct Investment
FIAS : Foreign Investment Advisory Service
MNEs : Multinational Enterprises
OECD : Organisation for Economic Co-operation and Development
SPO : State Planning Organisation
TCMB : Central Bank of the Republic of Turkey
TNCs : Transnational Corporations
UNCTAD : United Nations Conference on Trade and Development
YASED : International Investor Association of Turkey
YOİKK : Coordination Council for the Improvement of Investment Climate
WIR : World Investment Report
WWI : World War I
WWII : World War II
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EFFECT of FOREIGN DIRECT INVESTMENTS on TURKISH ECONOMIC GROWTH

SUMMARY

This study attempts to see whether there is an impact of foreign direct investment on Turkish economic growth. The analysis is relying on the hypothesis that foreign direct investment, apart from its direct contribution to capital stock, generates additional externalities. The results of the time series analysis conducted here do not support the existence of a relationship between the economic growth and FDI stock change for Turkey. Among the selected growth ingredients, only gross fixed capital stock and openness of the economy appears to be capable of explaining the economic growth.
DOĞRUDAN YABANCI SERMAYE YATIRIMLARININ TÜRKİYE'NİN İKTİSADİ BüYÜMESİ ÜZERİNDEKİ ETKİSİ

ÖZET

Bu çalışma doğrudan yabancı sermaye yatırımlarının Türkiye'nin ekonomik büyümesi üzerinde bir etkisinin bulunup bulunmadığını görmek aracını amaçlamaktadır. Analiz yabancı sermaye yatırımlarının sağlamış olduğu ek sermaye etkisi dışında, dışsal faktörler yaratığı hipotezine dayanır. Yapılan zaman serisi analizi sonucunda, Türkiye için ekonomik büyüme ile doğrudan yabancı sermaye yatırım stoğu değişimi arasında bir ilişki bulunamamıştır. Seçilen büyüme etkenleri arasında sadece sabit sermaye yatırımları ve ekonomik açık açık büyümeyi açıklıyor.
1. INTRODUCTION

The role of foreign direct investment (FDI) in the economic growth process has been the subject of intense debate, especially since the multinational enterprises (MNEs) gathered a great momentum after World War II (WWII). In contrast to the neoclassical theory, which predicts that FDI increase the rate of economic growth by providing a major source of saving and investment (Zhang, 2001), the dependency theory regarded large foreign corporations as major obstacles to economic growth since they weaken the social and economic structure of the country as a result of increasing dependency on FDI (Jones, 2005). In the 1970s, some scholars examined the effects of MNEs from a bargaining approach perspective. According to this view the relative power of MNEs and host governments is a function of the conditions of the firm, industry and the country involved (Dumludağ, 2007). The emergence of endogenous growth models since the 1980s, gave a broad insight to researchers. Several spillover effects were identified and the absorptive capacities of recipient countries emphasized in the growth enhancing role of FDI (Aslanoğlu, 2000). Today, the prevalent attitude towards FDI in terms of their contribution to economic growth (and development) is far from the dependency criticism of the 1970s. Especially for less developed countries which are generally associated with limited capital accumulation, low level of industrial and technological capability and insufficient human capital, FDI regarded as a critical factor to upgrade their conditions (Ekmekeçit and Ansal, 2009).

Debates on the relation between these two phenomena in Turkey intensified recently especially due to the privatization operations and sales during 2000s. Despite proponents of FDI argue that the hometown of capital does not make sense in present global world and FDI enhance the wealth of county and job opportunities as well as increase the efficiency of the companies they possessed, the belief that these operations have just alter the ownership of the companies is also widespread.

Indeed, we can trace the reasons of this sceptic stance of Turkish people against FDI even in the historical reasons dating back to Ottoman Empire. Ismet Inonu, the prime
minister for most of the interwar period, had a cautious (even conservative) stance as a keen observer of the recent period of the empire. Hence, the “balanced budget, strong money” was the government’s motto for its macroeconomic policy (Pamuk. 2007). The aftermath conditions of World War I (WWI) and the great depression gave rise to etatism as a means of economic development. This process was reinforced with the economic development plans of State Planning Organization (SPO) and although there did not exist a hostile stance against FDI, Turkey did not attract FDI so much until the sudden policy alteration to export-led growth from import substitution industrialization was occurred. Indeed the low levels of FDI inflows in comparison to the desired levels continued 1980s onwards until recently.

In this study I do not explore the reasons behind the low levels of FDI. Rather my focus is the positive or negative impacts of FDI for Turkish economic growth regardless of their levels. Hence instead of focusing on the direct capital effect of FDI, this study, focus on the question that whether the additions to the FDI stock crowd out capital over time and diminish the growth potential of Turkey. For this purpose a time series regression model, which comprise FDI stock as well as other selected determinants of growth, is employed.

The study proceeds as follows: Chapter 2 gives a general definition of foreign direct investment and its components which is often used in the text. Chapter 3 provides a historical background on the foreign direct investment both in the global and the Turkish context while Chapter 3 provides a theoretical background on the various theories explaining the FDI and growth. Chapter 4 highlights the results of the previous empirical studies. Chapter 5 uses the data for the period 1970-2009 to conduct a time series regression; and finally Chapter 6 concludes.
2. AN OVERVIEW OF FDI

2.1 Definition of Foreign Direct Investment

Foreign capital flows into a country (except for loans) can occur by means of portfolio investments and foreign direct investment (FDI). OECD defines FDI as follows:

Foreign direct investment reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor. The lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise. The direct or indirect ownership of 10% or more of the voting power of an enterprise resident in one economy by an investor resident in another economy is evidence of such a relationship (OECD Benchmark Definition of Foreign Direct Investment, 2008:48).

At this point we should emphasize the difference between portfolio investments and FDI. In portfolio investments, the investor’s focus is mostly on earnings that result from the acquisition and sales of shares and other securities (stock and bond purchases) without expecting to control the management of the assets underlying these investments. In FDI, by contrast, control matters. Hence, portfolio investments are perceived as short-term investments, so-called “hot-money”, since the main determinant for the purchase or sale of securities is the short-run return on the assets.

Multinational enterprises (MNEs) or transnational corporations (TNCs) are often the most important sources of FDI.¹ These are incorporated or unincorporated enterprises comprising parent enterprises and their foreign affiliates. A parent enterprise (which is the direct investor in this case) is defined as an enterprise that controls assets of other entities in countries other than its home country. A foreign affiliate is an incorporated or unincorporated enterprise in which an investor, who is resident in

¹ UNCTAD reports use the term “TNC”. These two terms are often used interchangeably in the literature although the latter emphasizes more strongly the ability to operate across countries independently and autonomously. In this study, the term multinational enterprise (MNE) will normally be used.
another economy, owns a stake that permits a lasting interest in the management of that enterprise. Foreign affiliates can be subsidiary enterprises, associate enterprises and branches (Methodological Notes of UNCTAD World Investment Report, 2005).² Entities other than MNEs are also engaged in FDI; these include individuals, governments, and regional or international organizations, as well as special funds (private equity funds and sovereign wealth funds). The amount of FDI by the former three entities is difficult to measure but we know that the estimated amount of FDI by special funds in 2009 is about $129 billion, accounting for over one tenth of global FDI flows (UNCTAD World Investment Report, 2010).

In literature FDI is classified in many different ways but according to OECD benchmark definition, statistics mainly encompass four types of operations that qualify as FDI:

- Greenfield investments,
- Purchase/sale of existing equity in the form of mergers and acquisition (M&A),
- Extension of capital (additional new investments) and
- Financial restructuring

Greenfield investment refers to altogether new investment which does not exist before while M&A implies the purchase or sale of existing equity. Extension of capital relates to additional new investments as an expansion of an established business while financial restructuring refers to investment for debt repayment or loss reduction (OECD Benchmark Definition of Foreign Direct Investment, 2008). The term “brownfield investment” can be used for M&A, extension of capital and financial restructuring.

² A subsidiary is an incorporated enterprise in the host country in which another entity directly owns more than a half of the shareholders’ voting power, and has the right to appoint or remove a majority of the members of the administrative, management or supervisory body. An associate is an incorporated enterprise in the host country in which an investor owns a total of at least 10 per cent, not more than half, of the shareholders’ voting power. A branch is a wholly or jointly owned unincorporated enterprise in the host country which is one of the following: (i) a permanent establishment or office of the foreign investor; (ii) an incorporated partnership or joint venture between the foreign direct investor and one or more third parties; (iii) land, structures (except structures owned by government entities), and/or immovable equipment and objects directly owned by a foreign resident; or (iv) mobile equipment (such as ships, aircraft, gas- or oil-drilling rings) operating within a country, other than that of the foreign investor, for at least one year (Methodological Notes of UNCTAD World Investment Report, 2005: 1)
Therefore, FDI includes three components: equity capital, reinvested earnings and intra-company loans. Equity capital is the foreign direct investor's purchase of shares of an enterprise in a country other than that of its residence. Reinvested earnings comprise the direct investor's share (in proportion to direct equity participation) of earnings not distributed as dividends by affiliates or earnings not remitted to the direct investor. Intra-company loans or intra-company debt transactions refer to short-term or long-term borrowing and lending of funds between direct investors (parent enterprises) and affiliate enterprises (UNCDATSTAT metadata, 2010).

2.2 Historical Process of FDI in the World

Although it appeared as a separate subject of interest in the literature after World War II (through the emergence of the modern MNEs), transborder direct business operations have existed many centuries. The history of these operations shaped over time, by the discovery of new territories, advances in technology, immigrations, as well as structure of governments and societies.

FDI activities prior to industrial revolution were heavily based on long-distance trade and in general were strictly limited to luxury goods which could bear their high transportation costs. The fruits of the industrial revolution, prompted foreign firms to engage in activities which comprise a broader range of products (O'Rourke and Williamson, 2000). Resource-seeking and market-seeking foreign firms emerged in the 19th century. However, the globalization process, which accelerated rapidly in the 19th century, was progressively destroyed by the World War I and subsequent political and economical shocks. The multinational firms emerged after WWII were not just market or resources seekers, they were also efficiency and strategic asset seekers. This evolution of MNEs is clearly summarised by Hymer (1970) as follows;

---

3 John H. Dunning uses this classification to identify the main types of foreign production. In his own words, "natural resource seeking enterprises" are prompted to invest abroad to acquire particular and specific resources of a higher quality at a lower cost than could be obtained in their home country while "market seeking enterprises" invest in a particular country or region to supply goods or services to markets in these or in adjacent countries. "Efficiency seeking enterprises" invest abroad to rationalize the structure of established resource-based or market-seeking investment in a such way that the investing company can gain from the common governance of geographically dispersed activities. And finally the "strategic asset seeking enterprises" engage in FDI, usually by acquiring the assets of foreign corporations, to promote their long-term strategic objectives-especially that of sustaining or advancing their global competitiveness (Dunning and Lundan, 2009: 68-72). However it is difficult to put precise borders between market-seekers and resource-seekers. For example, in the early 1900s,
Chandler distinguishes three major stages in the development of corporate capital. First, the Marshallian firm, organised at the factory level, confined to a single function and a single industry, and tightly controlled by one or a few men, who, as it were, see everything, and decide everything. The second stage emerged in the United States at the end of the 19th century when rapid growth and the merger movement led to large national corporations, and a new structure of administration was developed to deal with the new strategy of continent-wide, vertically integrated production and marketing. The family firm gave way to the modern corporation with a highly elaborate administrative structure to organize the many disparate units of a giant enterprise. The next stage, the multidimensional corporation, began in the 1920s and gathered a great momentum after the second World War. It too was a response to new marketing strategy. To meet the conditions of continuous innovation, corporations were decentralized into several divisions, each specializing in one product line and organized as an almost autonomous unit similar in structure to the national corporation. At the same time, an enlarged corporate brain was created in the form of the general office to coordinate the various divisions and to plan overall growth and survival. This form is highly flexible and can operate in several industries and adjust quickly to rapidly changing demands and technology (Hymer, 1970: 442).

The following sections aim to summarise this evolution of FDI in the history and the general situation of economic environment through a periodization based on three significant events that had impact on the structure of FDI: Industrial Revolution, World Wars and the rapid liberalization process of the post-1980 period.

2.2.1 Origins: FDI Until the Industrial Revolution

Flows of people, trade, and capital across political borders is not a new phenomenon. Earlier examples of embryonic MNEs first appeared in the old Assyrian Kingdom (modern states of Syria and Iraq) shortly after 2000 BC. Family-owned firms headquartered in the capital of Ashur opened branches in other political jurisdictions. Colonising activities of the Phoenicians (modern states of Syria and Northern Israel, between 1000 and 500 BC.) and the Romans (between 50 BC and 500 AD.) and, before that, in the more ancient civilisations of the Near and Middle East and China were all predecessors of MNEs (Jones, 2005).

Prior to the industrial revolution, neither capital nor intermediate product markets, as we know them today, existed. From the middle ages onward, most transactions were

Unilever’s involvement in oil plantations began when a predecessor company invested in Soloman Islands. In 1931, Unilever initiated large-scale plantations in the Belgian Congo (now Zaire). In more recent years, Unilever has established plantations in Malaysia (1947), and has expanded its African operations in the United Republic of Cameroon and Nigeria (UNCTAD Reports-Transnational Corporations in Food and Beverage Processing, 1981: 44).
undertaken primarily by chartered land companies, merchants and wealthy family
groups in order to advance the political or strategic goals of the governments of the
home countries. The state was directly or indirectly involved in most kinds of
overseas ventures (Dunning and Lundan, 2009).

In the 14th century Hanseatic League4 was organiser and promoter of Levantine
commerce. Also Merchant Adventurers were promoting marketing outlets for its
members’ goods in the Low Countries5 (Dunning and Lundan, 2009). As the
colonization period of America was started through the voyages of discovery of
Spanish and Portuguese explorers to the New World and Asia in the 15th and 16th
centuries, the world witnessed new developments in international business in the 16th
and 17th centuries. State-sponsored trading companies were created to support
European colonial trading systems (Jones, 2005). Among the best known trading
firms of this period, British East India Company (chartered in 1600) and the Dutch
East India Company (chartered in 1602) became deeply involved in India and the Far
East. The Muscovy Company (chartered in 1553) was formed to pioneer the North
East Passage. The Royal African company (chartered in 1672) exchanged European
products for African commodities (such as pepper and ivory) and for slaves, which
were transported to the West Indies6 (Jones, 2005; Dunning and Lundan, 2009).
However, as it mentioned earlier, most of these early MNEs were involved in trade,
not in the direct production of goods (Cypher and Dietz, 2009).

2.2.2 From 19th Century Onwards

The industrial revolution dramatically changed both the ability and the incentive of
firms and countries to engage in trade and colonising activities. As Dunning and
Lundan (2009) explain;

Industrial revolution introduced the factory system and helped to fashion the
business enterprise as we know it today. It also dramatically influenced the way
corporation were managed, the techniques of production and the range of value-
added activities that could be efficiently undertaken by a single hierarchy. It

---

4 Hanseatic League was a cross-border trading company owned and operated by a group of Hanseatic
merchants based at Lubeck in Germany. Among its many achievements, it helped to develop various
branches of agriculture in Poland, sheep-rearing in England, iron production in Sweden and general
industry in Belgium. Merchant Adventurers was a powerful consortium of UK wool and cloth
companies (Dunning and Lundan, 2009: 147).

5 Low Countries are including the modern countries of Belgium, the Netherlands, Luxembourg and
the parts of northern France and western Germany.

6 Island arcs that delineate the eastern and northern edges of the Caribbean Sea.
created the demand for new sources of energy and industrial materials. By helping to raise living standards, it also increased the demand for the kinds of food and other products that the temperate industrial colonies could not produce, or produce economically. It led to new and more efficient forms of transport, and drastically reduced inter- and intra-firm communication costs. It necessitated changes to the legal and financial status of companies and altered the character of exchange relationships.\(^7\) Personal transactions based upon trust and mutual forbearance were replaced by impersonal incentive structures backed up by legally binding contracts and elaborate monitoring devices.\(^8\) The growth of industrial capitalism also led to more specialisation and division of labour both between and within business enterprises...Embryonic hierarchies began to emerge, although these did not reach maturity until the third quarter of the 19\(^{th}\) century (Dunning and Lundan, 2009: 149).

As a result of developments aforementioned, trade increased in basic competing goods, convergence in commodity prices and large distributional effects occurred within domestic economies as well as between countries.\(^9\) 19\(^{th}\) century became the era of first globalization (O’Rourke and Williamson, 2000). With the onset of second industrial revolution the modern MNEs, which we will discuss in the modern FDI theories, emerged: Rubber tyre producers (Dunlop and Firestone) which owned plantations in Malaysia and Liberia; Singer, which owned iron mines and timberlands in Russia; the meat processing companies (Armour and Swift) which owned packing plants supplied by cattle ranches in Argentina and Uruguay; American Tobacco which owned tobacco plantations in Cuba and Turkey; Diamond Match, which owned forests in Canada; Amalgamated Copper, which owned copper mines in Mexico, DuPont, which owned saltpetre mines in Chile, Standard Oil, United Fruit, Imperial Tobacco, Royal Dutch Shell, Lever Brothers (later Unilever),

\(^7\) 17th century European governments had started to process of reducing risks of trade by signing bilateral commercial treaties that protected alien property, but it was only in the 19th century that these treaty standards hardened into international law, the core principle of which was that the property of foreigners could not be taken without prompt, full compensation (Jones, 2005: 24).

\(^8\) In the 18th century, owners were usually responsible for paying all of a firm’s debt. There were high levels of volatility. During the 19th century, legal reforms permitted new forms of corporate governance. During the first half of the century, many states in the United States permitted limited liability. Limited liability became fully available in Britain in 1861. Earlier forms of corporate governance, such as partnership, persisted, but limited liability facilitated capital rising, and opened the way for the growth of larger firms (Jones, 2005: 25).

\(^9\) Long-distance trade in the pre-18\(^{th}\) century period was strictly limited to what might be called non-competing goods such as spices, silk, sugar, silver, linens, tea, coffee, drug, perfumes, dye-stuffs etc. By definition these non-competing goods were very expensive luxuries in importing markets, and thus bear the very high cost of transportation from their (cheap) sources. Their presence or absence in Europe had no impact on domestic production since they were non-competing and had impact only on the living standards of the very rich who could afford these expensive luxuries. Their influence did not trickle down much to the vast majority. Hence, 19\(^{th}\) century was different in the sense that the commodities subject to trade. In 19\(^{th}\) century, trade increased in basic competing goods such as wheat and textiles (O’Rourke and Williamson, 2000).
Nobel Explosives, Nestlé, Siemens, AEG, Philips etc. were all established in the last half of 19th century (Dunning and Lundan, 2009). The examples could be multiplied.

Therefore, in 1913, the world economy was extremely well-integrated even by late 20th century standards (O'Rourke and Williamson, 2000). In the period of 1870-1913, short- and long-term capital movements were unsupervised, the transfer of profits was unhampered, the gold standard was at its height, citizenship was freely granted to immigrants, and domestic institutions exerted minimal influence over the direct allocation of resources (UNCTAD World Investment Report, 1994). Table 2.1 and Cypher and Dietz (2009) summarize the situation prior to World War I clearly;

In 1800, the European powers effectively controlled 55% of the total global land mass, including former European colonies. By 1878, this control had increased to 67%, and by 1914, colonial holdings stood at 84.4%. As David Fieldhouse emphasized: ‘Expansion continued; by 1939 the only significant countries which had never been under European rule were Turkey, some parts of Arabia, Persia, China, Tibet, Mongolia and Siam. In addition to new colonies, there were new colonial powers: Italy, Belgium, USA and Russia’ (Cypher and Dietz, 2009: 95).

Table 2.1: Selected colonial systems in 1914

<table>
<thead>
<tr>
<th>Colonial Power</th>
<th>Number of colonies</th>
<th>Population of colonies</th>
<th>Size (sq.miles)</th>
<th>Colonial Pop./ National pop.</th>
<th>Colonial Territory./ National territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>55</td>
<td>391,583,000</td>
<td>12,044,000</td>
<td>8.52</td>
<td>99.20</td>
</tr>
<tr>
<td>France</td>
<td>29</td>
<td>62,350,000</td>
<td>4,111,000</td>
<td>1.57</td>
<td>19.90</td>
</tr>
<tr>
<td>Netherlands</td>
<td>8</td>
<td>37,410,000</td>
<td>762,863</td>
<td>6.13</td>
<td>59.80</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>15,000,000</td>
<td>910,000</td>
<td>1.98</td>
<td>79.80</td>
</tr>
<tr>
<td>Germany</td>
<td>10</td>
<td>13,075,000</td>
<td>1,231,000</td>
<td>0.20</td>
<td>5.90</td>
</tr>
<tr>
<td>US*</td>
<td>6</td>
<td>10,545,000</td>
<td>172,091</td>
<td>0.14</td>
<td>0.05</td>
</tr>
<tr>
<td>Portugal</td>
<td>8</td>
<td>9,680,000</td>
<td>804,440</td>
<td>1.12</td>
<td>22.70</td>
</tr>
<tr>
<td>Italy</td>
<td>4</td>
<td>1,397,000</td>
<td>591,250</td>
<td>0.04</td>
<td>5.30</td>
</tr>
</tbody>
</table>

Source: Cypher and Dietz, 2009: 95

*Data from 1905

In this period about three-fifths of the foreign direct capital stake was directed to today’s developing countries (Dunning and Lundan, 2009). With the outbreak of World War I (1914-1918) the first global economy started to disintegrated. As it explained in World Investment Report (1994);

Wartime controls persisted after 1918 and, although economic growth accelerated in the 1920s, the international financial system was marked by increased instability, outflows of long-term capital from industrial countries slowed dramatically and world trade failed to recover to its pre-war level. The
international economic order crumbled in 1929 with the world recession and the insularity of national recovery strategies (UNCTAD World Investment Report, 1994: 122).

Between 1914 and 1950 the commodity price gaps between continents reverted to their 1870 levels. Mass migration fell sharply (Jones, 2005). Nevertheless, during the interwar period, FDI was, perhaps, less adversely affected than other international activities. Between 1914 and 1938, the stock of outward FDI almost doubled (UNCTAD World Investment Report, 1994). According to Dunning and Lundan (2009), the most significant features of this period were:

- the maturing of US direct investment and, in particular, the emergence of the diversified and integrated MNE\textsuperscript{10},
- the growth of defensive market-seeking investments, particularly in Europe,
- the entry by foreign investors into new resource-based activities, particularly oil, non ferrous metals and phosphates,
- the substitution of foreign production by international cartels in several sectors which had previously attracted a great deal of FDI, and,

The 1950s onwards, the world witnessed the second great globalization boom (O’Rourke and Williamson, 2000). The turmoil of the 1930s were still very much in mind, hence, post-war policy makers’ immediate concern was to establish a new international order towards a more open trading agreement and stable monetary conditions (UNCTAD World Investment Report, 1994). Between 1950s and 1970s there was a rebuilding of the global economy. Trade barriers and exchange controls, if not immigration controls, were removed between North America and Western Europe (Jones, 2005). FDI flows increased throughout the post-war period. Correspondingly, the stock of FDI rose to $700 billion in 1980 from $68 billion in 1960, an annual compound growth rate of \%11 (UNCTAD World Investment Report, 1994).

However, the period from roughly 1946 to the late 1970s was the peak era of import substitution industrialization (ISI). MNEs faced hostility in much of the developing world, even to a lesser degree in advanced countries, after World War II. Many nations sought to wrest control from MNEs. Between 1960 and 1980, 587

\textsuperscript{10} UK was the prominent foreign investor in 1914 with its share of 45.3\% in global FDI stock. Later, its' share declined to 39.8\% in 1938 and finally to 16.3\% in 1960 while the US foreign investment share rose from 14.0\% in 1914 to 27.7\% in 1938 and to 48.3\% in 1960 (Dunning and Lundan, 2009).
nationalization operations were recorded in various countries (Cypher and Dietz, 2009; Walter and Sen, 2009).

These nationalizations were, however, largely concentrated in the areas of ore, minerals and metals, and in food and raw material production, that is, they were largely directed at foreign investments which had for the most part been established during the colonial era in resource-specific or resource-dependent production. Furthermore, 76% of these nationalizations took place between 1966 and 1976, a decade when North-South tensions reached a zenith. Not only were the bulk of the nationalizations concentrated in time, they were concentrated in place. A study of 79 nations during 1960-85 period reveals a total of over 300 political regimes or governments, but a mere 28 accounted for nearly two thirds of all the expropriations of foreign transnationals (Cypher and Dietz, 2009: 453).

To sum up, according to Baran and Sweezy (1966), powerful external stimulus which enabled the economy to grow fairly rapidly during the later decades of the 19th century and, with significant interruptions, in the 20th century, were firstly the epoch making innovations: steam engine, railroad and automobile and secondly the wars and their aftermaths. Epoch-making innovations produced a radical alteration of economic geography with internal migrations and the building of whole new communities. Each required and made possible the production of many goods and services and each directly or indirectly enlarged the market.11 On the other hand, both phases of wars (combat phase and aftermath phase) exercised a determining influence on the absorption of surplus: the former through the tremendous demands of the military machine, and the latter through the backlogs of civilian demand created during the combat phase (Baran and Sweezy, 1966).

2.2.3 After 1980s: Recent Trends

From the 1980s onwards, integration of global capital and commodity markets intensified. Policy environment for FDI has become much more favorable for global firms. As Kazgan (2006) explained the transformation towards more liberal policies;

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11 Steam engine and the automobile opened up outlets for the investment of far more capital than they themselves absorbed. The industry of producing steam engines never bulked large in the economy as a whole, but without steam engine the great transformation of economic life which we call the industrial revolution would have been impossible. A very large proportion of the capital investment of the 18th and 19th centuries can therefore attributed to steam engine. The automobile industry also has had a much greater indirect than direct effect on the demand for capital...The railroad, however, occupies a unique place in the history of capitalism. During the second half of the 19th century and the first years of the 20th century, the building of railroad network directly absorbed enormous amounts of capital (Baran and Sweezy, 1966: 220)
International globalization slogans brought to the agenda by prevalent countries since 1980s is the new expression of the Manchester doctrine in the 21st century, and, its main elements are free capital flows and multinational corporations. While the ruling area of MNEs augment, government’s ruling area vis-à-vis market economy and MNEs -especially in emerging countries- tighten. Protectionism in favor of domestic capital disappear. New rulers of the world economy henceforth these huge MNEs. The fact that this happens in an era of rising ethnic-racist conflicts is the main paradox of nowadays (Kazgan, 2006:113).

In this period, FDI in the global economy have expanded rapidly, faster than global trade or GDP (Figure 2.1). From the late 1960s to the early 1990s, the number of MNEs in 14 major developed home countries rose from 7,000 to nearly 26,000. By the early 1990s, there were some 37,000 MNEs worldwide (UNCTAD World Investment Report, 1994). Today, number of MNEs is roughly 80,000 (nearly 30% of them located in developing and transition economies) and foreign affiliates’ share in global GDP is 11%. By 2009 MNEs’ foreign employment reached to 80 million workers (UNCTAD World Investment Report, 2010).

![Graph: FDI stock, trade and GDP with current prices](image)

**Figure 2.1**: FDI stock, trade and GDP with current prices

Data Source: UNCTADSTAT, 2010

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12 Manchester School urged unrestrained laissez faire as the best means against the Corn Laws gave increased protection to British agriculture (enacted in 1815). Their ideological roots come from Smith and Ricardo.

13 Translated from Turkish by the author.
As for its distribution in three major groupings, the amount of FDI inflows are in favor of developed economies. But after the global financial crisis of 2007, for the first time since 1980, developing and transition economies are now absorbing half of global FDI inflows (Figure 2.2).

![FDI Inflows and Outflows Graph](image)

**Figure 2.2:** FDI flows with current prices
Data Source: UNCTADSTAT, 2010

Despite their relatively lower share in FDI stock ($4.9 trillion by 2009 which is accounting for 30% of total world FDI stock), developing and transition economies host the majority of foreign affiliates’ labor force (UNCTAD World Investment Report, 2010). This situation reveals their ongoing labor-intensive business style in comparison to developed economies. Figure 2.3 shows top 20 host and home economies by 2009. Among largest recipients, China is second after the United States.
2.3 Historical Process of FDI in Turkey

Turkey till recently has been seen as an underperformer in terms of attracting FDI. The relevant literature points to plenty of reasons to explain this situation, varying from historical reasons dating back to Ottoman Empire to Turkish Republic’s economic and political instability or to international conditions. This study does not explore the reasons behind the low levels of FDI. Rather the focus is the positive or negative impacts of FDI for Turkish economic growth. Therefore, a general survey both on the economic environment and the situation of FDI is presented here under four headings: the recent period of the Ottoman Empire, the republican period prior to World War II, post-war era until 1980 and finally the rapid liberalization process of the post-1980 period.

2.3.1 The Recent Period of the Ottoman Empire

With the beginning of the 19th century, Ottoman Empire had to face mainly two big events: The industrial revolution and the weakening of the management structure of the government (Pamuk, 2010). Luxemburg (1896) explains the situation of Ottoman Empire in the 19th century as follows;
Until the beginning of the present century, Turkey was a country with a barter economy, in which every nationality, every province and every community lived its own separate existence\textsuperscript{14}... These conditions, however oppressive they might be, were nonetheless distinguished by great stability, and could therefore survive for a long time without provoking rebellion on the part of the subjugated peoples. Since the beginning of the present century, all this has changed considerably. Shaken by conflict with the strong, centralised states of Europe, but especially threatened by Russia, Turkey found itself compelled to introduce domestic reforms, and this necessity found its first representative in the person of Mahmud II (Ottoman Sultan 1808-1839). The reforms abolished the feudal government, and in its place introduced a centralised bureaucracy, a standing army and a new financial system (Luxemburg, 1896; 3).

As Luxemburg states above, reforms were needed, and the European countries supported the reform process provided that the Ottoman government changed the structure of the economy towards an open model. Thus, reform attempts accompanied with concessions given to European countries (especially Britain) for opening the economy to foreign trade and foreign investments (Pamuk, 2010).

In fact, the first commercial privileges granted to the French in 1536, which triggered later capitulations for other European countries, had already paved the road to easy and advantageous trade for foreigners (Geyikdağ, 2009). Free Trade Agreement of 1838\textsuperscript{15} with Britain (and all the others signed with other nations after that) opened the Ottoman economy to privileged activities of foreigners by relaxing former restrictions on free trade (Erdilek, 2005). In 1856 with “Rescript of Reform”, foreign direct investments were allowed. Rather than production, incoming foreign capital mostly concentrated on infrastructure investments which facilitate foreign trade activities. “Ottoman Bank” which was established in 1863 with equal shares of English and French capital was acting like a central bank. Ottoman Bank was one of the founders of tobacco regie and was acting as a defender of French capital interests therein. Also, in 1867 land ownership of foreigners in Ottoman territory was allowed (Pamuk, 2010).

\textsuperscript{14} Ottoman economy was heavily based on agriculture. According to Pamuk's (2007) estimations, in 1913, share of agriculture in GDP was \%655 and in employment was \%80.

\textsuperscript{15} According to this agreement known as “Convention of Balta Liman”, Ottoman bounded import-export duties at \%3, took higher internal tax from exports (\%9) than imports (\%2). In addition, henceforth, bans on certain export products and monopolies would be lifted (Geyikdağ, 2009).
In 1875, the Ottoman Empire declared bankruptcy, at the end of the borrowing process which started in 1854 for financial costs of Crimean War against Russia. Therefore, “The Council of the Public Debt” was established in 1881 by the European creditor nations for the rescheduling of Ottoman Empire’s defaulted foreign debt. The Council of the Public Debt controlled a significant segment of the national revenues by its power extending into every corner of the Ottoman Empire through taxation (Pamuk, 2010).

In 1910, more than 80 joint stock companies operating in the Ottoman Empire were controlled by foreign capital. By 1914, prior to World War I, FDI stock was 75 million British pounds which was nearly half of debt investments (Pamuk, 2010). The distribution of foreign capital stock according to country of origin was demonstrating the French domination with 50%, followed by Germany with 27.5%, and Britain with 15%. As for the sectoral distribution of FDI, railroads, with close to two-thirds of FDI were the most important sector. Some part of the FDI was on banking and insurance (13%), municipal works such as gas and water (5%), trade (6%) and ports (4%). On the other hand FDI stock in industry (5%) and mining (4%) accounted for less than 10% of total (Yayan and Kara, 2003). However, low level of manufacturing FDI was the general situation for developing countries during those times. In the same years, primary sector accounted for about 55% of the global FDI stock. The share of railroads was 20%, manufacturing activities was 15% and trade, distribution, public utilities and banking were 10%. Manufacturing investments were mainly concentrated in Europe, the US, the UK Dominions and Russia. As for mining, apart from iron ore, coal and bauxite, almost all mineral investments were located in the British Commonwealth or in other developing countries (Dunning and Lundan, 2009).

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16 In the global picture, there was a British domination. Distribution foreign investments worldwide in 1914 was respectively, 45% UK, 15% US, 14% Germany and 10% France. The share of other western European countries was 11% and of other countries such as Canada, Russia, Japan etc. was only 5% (Dunning and Lundan, 2009).

2.3.2 Republican Period Prior to World War II

Balkan Wars of 1912-1913, World War I (1914-1918) and War of Independence (1920-1922) had severe and long-lasting consequences for Turkey. Pamuk (2007) explains the situation in the early years of Republic of Turkey as follows:

As a result of massive changes, the population of what became the Republic of Turkey declined from about 17 million in 1914 to 13 million at the end of 1924. The population of the new nation-state had also become more homogenous, with Muslim Turks and the Kurds who lived mostly in the southeast making up close to 98% of the total. The dramatic decline in Greek and Armenian population meant that many of the commercialized, export-oriented farmers of Western Anatolia and the Black Sea coast, as well as artisans, leading merchants and moneylenders who linked the rural areas to the port cities and the European trading houses had died or departed. Agriculture, industry and mining were all affected adversely by the loss of human lives and by the deterioration and destruction of equipment, draft animals and plants during the war years. GDP per capita in 1923 was approximately 40% below its 1914 levels (Pamuk, 2007:9).

Under these circumstances, the new leadership was aware that financial and economic dependence on Europe had created serious political problems. Hence, the Republican regime gave cautious encouragement to FDI in light of the unfavorable experiences during the Ottoman Empire (Erdilek, 2005). They succeeded in abolishing the capitulations (that were cancelled by the Ottoman Empire in 1914 as WWI began) and aimed to impede the domination of foreign firms. Nevertheless, their attitude towards FDI remained positive and the local entrepreneurs were encouraged to collaborate with foreign firms. In his speech to Izmir Economic Congress in 1923, despite his criticism, Atatürk declared that Turkey was open to FDI as long as foreign capital respected the country’s laws, accepted national treatment without seeking extraterritorial privileges, and yielded mutual gains (Dumludağ, 2007). Several FDI firms were nationalized with fair compensation but new FDI firms, benefiting from the “Law for the Encouragement of Industry” that was enacted in 1927, began to emerge. However, after 1929, the Great Depression affected the activities of foreign firms operating in Turkey in a negative way (Erdilek, 2005). As the unfavorable world market conditions continued, the

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18 In 1923, the Turkish Grand National Assembly approved the Chester Concession, which was initially envisaged in 1908 but was prevented by the outbreak of World War I. The Chester Concession granted a U.S. company the rights of rebuilding Ankara and constructing railroads in order to explore and exploit mines in Anatolia and oil in Musul over a 99-year long concession period. The Chester Concession project was abandoned following Turkeys’ lost sovereignty over Musul (Erdilek, 2005).
19 Teşvik-i Sanayi Kanunu
government announced in 1930 a new strategy of etatism, which promoted the state as a leading producer and investor, due to the lack of private capital. In 1930, Law no 1567 titled “Protection of the Value of Turkish Currency” imposed quantitative controls on foreign exchange transactions, hence, ended the currency convertability. Although enacted initially to stay in effect for only three years, it remains in effect after several amendments. During 1934-1938, when FDI was neither opposed nor encouraged, 32 new FDI firms were established. However, 24 existing FDI firms (mostly railroads and municipal public utilities) were nationalized during 1930-1945 (Yavan and Kara, 2003; Erdilek, 2005). Although from 1926 to 1933, incoming FDI was 4.3 million pound (3.3 million from 1926 to 1929), between 1930 and 1950 the amount of incoming FDI was negligible (Yavan and Kara, 2003).

2.3.3 The Post-World War II Era until 1980s

Although Turkey’s one-party government, the Republican People’s Party, initiated changes in political and economic policies, it was the Democratic Party who, as the winner of the 1950 elections, put more emphasis on liberal policies. In 1951 the new government replaced Law no 5821 titled “Law to Encourage Foreign Capital Investments” for Law no 5583. It was superior in terms of relaxing the restrictions on profit transfers and identifying clear conditions under which they are to be conducted.

In August 1954, Law no 6224 titled “Law to Encourage Foreign Capital” was prepared with the help of U.S. experts. It removed the restrictions of entry in particular sectors (agriculture and trade) and profit transfers. Also, Law no 6326 titled “Petroleum Law” was enacted to attract FDI for petroleum exploration. Under both Law no 6224 and Law no 6326, FDI firms were exempt from the exchange regulations imposed by Law no 1567.

Dumludağ (2007) points out that Law no 6224, which governed FDI until its replacement with Law no 4875 in 2003, has been described as liberal, but in reality,

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21 Türk Parasının Kıyımetini Koruma Hakkında Kanun
22 Law 5583 enacted in 1950 was the first law to address the issue of FDI. It guaranteed profit transfers but under very restrictive conditions. See Appendix A.
23 5821 nolu “Yabancı Sermaye Yatırımlarını Teşvik Kanunu”. See Appendix B.
24 6224 nolu “Yabancı Sermaye Yatırımlarını Teşvik Kanunu”. See Appendix C.
25 Petrol Kanunu
during much of its existence it was not applied liberally. Law 6224 did not contain any provisions for nationalization and international arbitration. It specified the principle of national treatment for FDI firms but in practice the principle was often violated. Its vagueness enabled the Turkish bureaucracy to apply it restrictively and arbitrarily during much of its existence, making it more of a discouragement than encouragement of FDI (Dumludağ, 2007).

During the 1960s and 1970s, the main economic development strategy of Turkey was relying on import substitution industrialization (ISI) and state plans (TCMB The Impact of Globalization on Turkish Economy Report, 2002). In 1967, Law no 6224 was amended. Law no 933 titled “The Law on Principles of Implementation of the Development Plan” 26 abolished the Committee to Encourage Foreign Investment which had private sector representatives and transferred the FDI authority to the State Planning Organization (SPO) (Dumludağ, 2007).

The first five year development plan of SPO (for the period between1963-1967) was evaluating FDI just in terms of its balance of payment effects and neglecting the issue of technology transfer (Uras, 1979). Subsequent plans emphasized the importance of the foreign firms’ knowledge transfer and export-oriented production (SPO Five Year Development Plan, 1973 and 1979).

However, according to the calculations of Uras (1975), amount of realized FDI did not exceed $15 million annually between 1950 and 1974 (Figure 2.4). 27 Besides, there was a considerable lag between authorized and realized FDI: on average only 48% of authorized FDI were realized.

![Graph showing Authorized versus realized inward FDI flows with current prices](image)

**Figure 2.4**: Authorized versus realized inward FDI flows with current prices

Data Source: Uras, 1979

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26 Kalkınma Planının Uygulanması Esaslarına Dair Kanun.
27 Uras indicated his source as “Based on a study conducted by Ministry of Finance and Trade”.
Nevertheless, as for the sectoral distribution, 92% of the foreign direct investments were in industry (7% in services and 1% in mining). Among the industrial sectors, largest recipients were chemicals and automotive (17%), electrical equipments (15%) and rubber (13%) (Uras, 1979). 28 According to the development plan of SPO, by 1977 foreign share amounted to 40.5% of manufacturing sector and 29.9% of services sector (SPO Five Year Development Plan, 1979). As Yavan and Kara (2003) put it;

From 1950 onwards, entries of firms in Turkey directly or in collaboration with domestic capital contributed the proggess of industry as being the founder of particular sectors although those appeared in the form of assembly line. Fiat (1954), BMC (1964), MAN (1966), Mercedes (1966), Renault (1969) in automotive sector; Sandoz (1956), Pfizer (1957), Roche (1958), Bayer (1962) in pharmaceuticals; AEG (1964), Siemens (1964), Bosch (1970) in metal products, and Pepsi (1964), Coca Cola (1965) and Tuborg (1967) in food and beverages were all examples of these firms (Yavan and Kara. 2003: 30)

2.3.4 Republican Period – 1980s Onwards

From 1980s onward, as a result of supply-side oil shocks and increased budget expenditures, the world witnessed the end of Keynesian policies and the rising of neoliberalism. The case in Turkey was similar to the general situation in the world. As explained in The Impact of Globalization on Turkish Economy Report of TCMB:

The import substitution strategy, during the 1960s and 1970s, heavily relied on imported raw materials. Hence Turkey’s terms of trade have deterioed following the first oil shock in 1973-1974 period. This deterioration caused a huge burden on the balance of payments, while the additional burden was compensated by short-term borrowing. From 1977 onwards, since the required amounts of imports could not be realized in due time, there appeared problems in the labor market, and important difficulties emerged on the supply side. On the demand side, expansionary fiscal policy was maintained: Imbalances in the aggregate supply and demand accelerated the already increasing inflation. Inadequate measures taken to overcome the crisis, as well as the negative effects of the second oil shock in 1979, deepened the crisis. Turkey’s trade liberalization process was initiated to overcome the unresolved 1977-1979 balance of payments crisis in an environment of low domestic savings and sluggish investment (TCMB The Impact of Globalization on Turkish Economy Report, 2002: 5)

---

28 According to SPO data, in the period 1963-1970, share of industry in total FDI was 82.3% (SPO Five Year Development Plan, 1973).
In 1980, the newly installed minority government of Süleyman Demirel announced a comprehensive and radical policy package of stabilization and liberalization (Pamuk, 2007). January 1980 economic reforms significantly improved the FDI environment at the outset. A Foreign Investment Department was created in the Office of the Prime Minister. It was signaling a welcoming attitude towards FDI. However, the January 1980 reform program failed to attract sustained and substantial FDI flows since the economy became increasingly unstable, inflation began to rise again, and the feeble privatization efforts failed (Dumludağ, 2007).

In 1989, obstacles in the way of international capital flows were eliminated totally by Özal government in order to finance the deficits. However, this caused economy to became highly sensitive to external shocks (Pamuk, 1997). The availability of foreign capital, except crisis times, changed the composition of capital flows in favor of short-term credits. Foreign debt stock, as a share of GNP, which was around 10% during 1970s reached to 43% during 1990s (TCMB The Impact of Globalization on Turkish Economy Report, 2002). In mid-1996, Turkish economy was between hyperinflation and government default on spiraling domestic currency debts. Customs Union between Turkey and European Union came into effect in January 1996 but it did not create a surge in FDI. However, the amendment of the Constitution in August 1999 to allow for international arbitration for foreign investors, as well as the acceptance of Turkey as a candidate for full EU membership in December 1999, improved its prospects as a host country for FDI (Dumludağ, 2007). Şimşek and Behdioğlu (2006) (for 1980-2003 period) and Türkan (2005) (for 1992-2001 period), indicate the share of manufacturing and services sector in total FDI flows as 53% and 45% respectively for this period (Şimşek and Behdioğlu, 2006; Türkan, 2005).

In 2001, an initiative has been started through launching a reform process to improve administrative procedures to make Turkey more attractive location for foreign investment. Taking into account the findings and recommendation of a diagnostic study conducted jointly by the government and Foreign Investment Advisory Service (FIAS), government has enacted a “Principle Decision on the Reform Program for Improving the Investment Climate in Turkey”. After the decision, Coordination Council for the improvement of the Investment Climate (YOİKK) has been
established with the participation of government officials and private sector organizations (YASED Investment Environment in Turkey Report, 2010).

AK Party’s electoral victory in November 2002 signaled a significant improvement in the FDI environment first by bringing political stability and second by providing a clearly pro-FDI official stance. As it mentioned in Investment Environment Report of International Investors Association (YASED), Turkey’s foreign investment legislation, which has been gradually liberalized since the 1980s, was revised most recently in 2003 through some structural reforms. The enactment of Law no 4875 in June 2003 to replace Law no 6224 was a crucial step forward. Law no 4875 defined “foreign direct investment” and “foreign investor” within international standards. The procedures for foreign investment were simplified, some bureaucratic formalities were abandoned. It was indicated that foreign investors have the same privileges and obligations as domestic capital. It provided protection against expropriation, guarantee of transfers, international arbitration and employment of expatriates. With the purpose of establishing a one-stop office to assist investors during the stages of investment operations, Law no 5523, “Law on the Establishment of Investment Support and Promotion Agency of Turkey”\textsuperscript{29}, was enacted in 2006 (YASED Investment Environment in Turkey Report, 2010).

Especially after 2004, FDI flows to Turkey increased considerably (Figure 2.5). In terms of its inward FDI performance, while Turkey ranked 119\textsuperscript{th} among 141 countries in 2004, it became 84\textsuperscript{th} in 2007.\textsuperscript{30}

\textbf{Figure 2.5 : FDI inflows versus GDP in constant prices}

Data Source: UNCTADSTAT and TSL, 2010

\textsuperscript{28}Türkiye Yatırım Destek ve Tanıtım Ajansı Kurulması Hakkında Kanun
\textsuperscript{30}http://www.unctad.org/templates/webflyer.asp?initemid=2471&lang=1
This striking boom reveals itself when we compare FDI inflows with the other economies (Figure 2.6). Turkey, as a member of middle-income developing countries (in UNCTAD classification), has dramatically increased its FDI inflows after 2003, but lost this momentum at the same pace after the global economic crisis. Since the main investors to Turkey are European countries this decline was not a surprise.

![Graph: Average FDI inflows per country in the world in current prices](image)

**Figure 2.6**: Average FDI inflows per country in the world in current prices

Data Source: UNCTADSTAT, 2010

However, Turkey’s performance in attracting FDI after 2004 needs further attention. According to UNCTAD World Investment Report (2007), the rise in global FDI flows between 2003 and 2007 was partly driven by increasing corporate profits worldwide and resulting higher stock prices that raised the value of cross border mergers and acquisitions (M&As). M&As rose significantly in 2006 both in value (by 23%, to reach $880 billion) and in number (by 14% to 6,974). As many as 172 mega deals (i.e. deals worth over $1 billion) were recorded in 2006, accounting for about two thirds of the total value of M&As. More than half of these activities were in services sector (Table 2.2).

**Table 2.2**: Sector shares of cross-border M&As sales in the world

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>0.03</td>
<td>0.05</td>
<td>0.01</td>
<td>0.16</td>
<td>0.07</td>
<td>0.13</td>
<td>0.19</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.50</td>
<td>0.45</td>
<td>0.25</td>
<td>0.28</td>
<td>0.33</td>
<td>0.46</td>
<td>0.30</td>
</tr>
<tr>
<td>Services</td>
<td>0.46</td>
<td>0.50</td>
<td>0.74</td>
<td>0.55</td>
<td>0.60</td>
<td>0.41</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Data Source: UNCTAD World Investment Report, 2006 and 2010

Besides, as a result of higher corporate profits, reinvested earnings increased considerably: they accounted for an estimated 30% of total inflows worldwide in 2006 and for almost 50% in developing countries alone. As for Turkey, although the
number of companies established from 2004 onwards (12,290) was twice that the number established from 1954 to 2004 (6,408), looking more closely, one can see that the significant effects of the mega deals in the services sector (Figure 2.7). Purchases in telecommunications; Turkcell ($1.6 billion-13% of shares taken over) and Garanti Bankasi ($1.8 billion-25% of shares taken over) acquired by Alfa Group and GE Consumer Finance respectively in 2005, Telsim ($4.7 billion-100% of shares taken over) and Turk Telekom ($1.5 billion-41% of shares taken over) acquired by Vodafone and Ojer Telekom respectively in 2006, and purchases in financial intermediation; Diş Bank ($1.1 billion-100% of shares taken over) acquired by Fortis Bank in 2005, Denizbank ($3.2 billion-99% of shares taken over) and Finansbank ($2.7 billion-80% of shares taken over) acquired by Dexia Bank and National Bank of Greece respectively in 2006, Akbank ($3.1 billion-20% of shares taken over) and Oyakbank ($2.7 billion-100% of shares taken over) acquired by Citibank and ING Bank respectively in 2007, were constituting 42% of the total FDI inflows between 2005 and 2007 (Undersecretariat of Treasury Foreign Direct Investments in Turkey Report, 2005-2006 and 2007).

Figure 2.7: Sector distribution of FDI inflows in Turkey

Data Source: Undersecretariat of Treasury FDI Reports, 2005 and 2010

Between 2002 and 2010 financial intermediation accounted for 42% of total FDI inflows, while the other sectoral shares were as follows: 19% manufacturing, 17% transport, storage and communications, 8% electricity, gas and water supply, 13% other services and finally 2% primary sector (Figure 2.7). The share of foreign capital
in the top 1000 industrial enterprises of Turkey, rose from 10% in 1997 to 14% in 2002, and from 2002 onwards did not changed.\textsuperscript{31}

Another bounce, that we might omit due to its relatively very small amount, occurred in 2001 (Figure 2.5). FDI inflows increased almost fourfold, however, the share of privatization in this movement was 70% in 2001 and 60% in 2006 (Table 2.3).

\textbf{Table 2.3: Privatization and Turkish FDI inflows in current prices (Million USD)}

<table>
<thead>
<tr>
<th>Year</th>
<th>FDI</th>
<th>Privatization</th>
<th>FDI Inflows Through Privatization</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000*</td>
<td>980</td>
<td>3,302</td>
<td>585</td>
</tr>
<tr>
<td>2001*</td>
<td>3,352</td>
<td>2,579</td>
<td>2,369</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>2,779</td>
<td>1,283</td>
<td>49</td>
</tr>
<tr>
<td>2005</td>
<td>10,010</td>
<td>8,222</td>
<td>1,500</td>
</tr>
<tr>
<td>2006</td>
<td>20,223</td>
<td>8,095</td>
<td>1,768</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2008</td>
<td>18,148</td>
<td>6,297</td>
<td>611</td>
</tr>
</tbody>
</table>

Data Source: For FDI Inflows UNCTADSTAT, 2010; others from Foreign Direct Investments in Turkey Report of Undersecretariat of Treasury, 2008

\textsuperscript{31}Including GSM operator’s licence fees

\textsuperscript{31} Based on calculations of the Istanbul Chamber of Commerces’ Turkey’s top 500 and Turkeys’ Second Top 500 lists that are available in http://www.iso.org.tr/en/index.aspx. According to Erhanoğlu (2000) and Türkcan (2005) share of value added in industry sector by top 500 firms accounted for more than 50%.
3. THEORETICAL BACKGROUND

In order to explore and understand the impact of FDI on economic growth, both the motives of firms behind investing abroad as well as the dynamics of economic growth should be grasped at first. The following two sections present an overview of theoretical approaches in economics related to these two phenomena, namely FDI and economic growth. This is then followed with an overview of the theoretical literature concerning the effects of FDI on the economic growth.

3.1 Theories of Foreign Direct Investment

In reviewing the literature on foreign direct investment, we encounter a variety of analytical frameworks. This section will focus on the frameworks that are most well-known, and widely used: The first section summarise the neoclassical theories that were prevalent prior to 1960s. The latter section dwells on the theories which emphasize the oligopolistic expansion of MNEs in which FDI is mostly seen as a modality by which firms extend their territorial horizons abroad (Dunning and Rugman, 1985). Hence, the term “FDI” used in the text, indeed, implies the activities of MNEs.32

3.1.1 Neoclassical Approach: Theories Assuming Perfect Markets

The literature that directly explore the subject of foreign direct investment is very new. Until Hymer's seminal dissertation in 1960, there was no separate theory of FDI, hence, the movement of capital was explained due to borrowing and lending or similar reasons that is not directly linked to productive activities (Dunning and Rugman, 1985; Jetto-Gillies, 2005; Lizondo, 1991; Kindleberger, 2002; Buckley&Casson, 2009).

The differential rates of return approach, developed by Ragnar Nurkse in 1933, became the prevalent explanation of international capital movements in the late

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32 The literature generally treats MNE activity and FDI synonymously, however, the two are actually the same not identical because MNEs affect development through a range of quasi-FDI and non-FDI activities (Duttaray et. Al, 2008: 1927)
1950s. It argued that FDI is the result of capital flowing from countries with low rates of return to countries with high rates of return (Ietto-Gillies, 2005; Lizondo, 1991). The foreign investment was still considered as portfolio investment; however, the movements of capital were now prompted not by exogenous factors but by interest rate differentials. Consequently, the interest rates were determined by demand and supply (Ietto-Gillies, 2005). Since it assumed implicitly that there is a single rate of return across activities within a country, this theory was not consistent with some countries experience of simultaneous inflows and outflows.

Therefore attention was next focused on the role of risk (Lizondo, 1991). This time, as in the differential rates approach, capital movements were motivated by interest rate differentials, however, the theory explained the simultaneous flows as follows:

One of the elements that affect the level of interest rates is the risk involved in the operations: as the estimated or objective risk may be different in different sectors, we could, in fact, have different interest rate differentials between countries in different sectors and hence we might witness a two-way flow of capital between countries and according to sectors (Ietto-Gillies, 2005: 54).

Hence, according to this theory, a firm can reduce its overall risk by undertaking projects in more than one country. Therefore, FDI can be viewed as international portfolio diversification at the corporate level. As Lizondo (1991) put it, the portfolio diversification theory developed by Iverson in 1935, was an important step over the differential rates of return theory in the sense that it included the risk factor. However, the fundamental criticism of this theory had been the argument that in a perfect capital market there is no reason to have firms diversifying activities just to reduce risk for their stockholders. Since capital could be transferred between countries easily by purchase and sale of bonds in the international capital markets there is no need to route capital transfer through MNEs. If individual investors want reduced risk, they can obtain it directly by diversifying their individual portfolios. This criticism implied that for the diversification motive to have any explanatory power of foreign direct investment, the assumption of perfect capital markets must be dropped (Lizondo, 1991).

3.1.2 Modern Approaches: Theories Based on Imperfect Markets

Contrary to uniform technology assumption of trade theorists, industrial economists developed their theories relying on technology gaps (Buckley&Casson, 2009).
Hymer (1970) asserted that MNE is a creature of market imperfections, and he identified two distinct forms of division of labor: the division of labor between firms and the division of labor within firms. According to him, the former was coordinated by markets and mainly concerned by international trade theory whereas the latter was coordinated by entrepreneurs (Hymer, 1970). He put emphasis on the role of structural imperfections such as scale economies, knowledge advantages, distribution networks, product diversifications and credit advantages that help the multinational firms to increase their market power.

Vernon’s product life cycle theory explained the emergence of FDI by explaining why MNEs located certain kinds of production in their home countries and shifted others to subsidiaries. It predicted a gradual shift in the product mix in each location over time (Evans, 1981). According to Vernon’s theory, a new product is developed and produced locally (i.e. in the United States) at first because entrepreneurs in the United States are first aware of opportunities to satisfy new wants (this was associated with high income levels). Also, production at home provides the efficient coordination between research, development and production units, which facilitates the process of product standardization. Once the first production unit is established in the home market, any demand from a foreign market will be satisfied by exports. If the product has a high income elasticity of demand, in time, the demand will begin to grow quite rapidly in relatively advanced countries such as those of Western Europe. As the demand for the product expands, a certain degree of standardization usually takes place. First, the need for flexibility declines. Second, concern about production cost begins to take the place of concern about product characteristics. As long as the marginal production cost plus the transport cost of the goods exported from the United States is lower than the average cost of prospective production facility abroad, United States producers will presumably prefer to avoid an investment. Otherwise, they move production units completely abroad and even become a net importer of that product (Vernon, 1966).

Internalization theory proposed by Buckley and Casson in 1976 demonstrated that seemingly unrelated aspects of multinational operations, such as technology transfer and international trade in semi-processed products, can be understood using a single concept. According to their theory, in a situation where firms are attempting to maximize their profits in imperfect markets, there will often exist an incentive to
bypass imperfect markets in intermediate products. Therefore the activities that were previously linked by the market mechanism are bought under common ownership and control in a market internal to the firm. Where markets are internalized across national boundaries, MNEs are created. Benefits of internalization are arising from the avoidance of imperfections in the external market, but there are also costs. The optimum size of firms is set where the costs and benefits of further internalization are equalized at the margin (Buckley and Casson, 2009).

Dunning developed an eclectic approach integrating three strands of the literature on FDI by synthesizing a large amount of earlier work: the Hymers’ industrial organization theory, Vernons’ location theory and the internalization theory (Lizondo, 1991). Indeed, as Dunning (2001) explained, the origins of his theory was based on his dissertation in which he sought the reasons of superior labour productivity in US manufacturing industry than that in UK. The hypothesis of his thesis was, if the superior productivity was entirely managerially related, US manufacturing affiliates in the UK should perform at least as well as their parent companies, and fare considerably better than their indigenous competitors. This he identified as the ownership-specific effect, as the productivity differences were presumed to rest on the spatially transferable intangible assets of the parent companies. If, however, the US affiliates in the UK recorded no better performances than their UK competitors, he hypothesised that this would be due to the non-transferable (i.e. immobile) characteristics of the US economy. This he called the location specific component of any productivity differential. Later, he extended the ownership and location advantages identified in his earlier research with internalisation advantages; and this became the third leg of the ownership, location and internalisation (OLI) tripod in explaining the scope and geography of value added activities by MNEs (Dunning, 2001). Dunning proposed that for firms to have a strong incentive to engage in foreign direct investment they should both have a product or a production process such that the firm enjoys some market power advantage in foreign markets (ownership advantage), a reason to want to locate production abroad rather than concentrate it in the home country (location advantage) and finally a reason to want to exploit its ownership advantage internally rather than license or sell its product/process to a foreign firm (internalisation advantage) (Markusen, 2002).
Closely related to Dunnigs' work, a number of theoretical models have been developed to explain firms' decision to invest abroad. These models can be roughly classified as theories based on vertical firms, horizontal firms, and the knowledge capital model of multinational firms (Jensen, 2006). Vertical-horizontal classification broadly used for identifying FDI in terms of its position in the global supply chain of the parent firm. As Markusen (2002) explained, horizontal FDI refers to the foreign production of products and services roughly similar to those the firm produces for its home market with the aim of to serve them to the local market in the host country. Vertical FDI occurs when MNE fragments the production process internationally, locating each stage of production in the country where it can be done at the least cost. Vertical firms generally produce outputs not produced by the home country operation. However, since all horizontal investments generally have some vertical element in services such as management, engineering, marketing, and finance from parents to subsidiaries, vertical-horizontal terminology is not clear cut but the terms are convenient and in wide-spread use (Markusen, 2002).

Knowledge-capital model connected the idea of the OLI paradigm with the firm (technology) and country characteristics in a consistent way. This approach includes three principle assumptions: First, services of knowledge-based and knowledge-generating activities, such as R&D, can be geographically separated from production and supplied to production facilities at low cost. Second, these knowledge-intensive activities are skilled-labor-intensive relative to production. Third, knowledge-based services have a (partial) joint-input characteristic, in that they can be utilized simultaneously by multiple production facilities. The first two assumptions create a motive for the vertical fragmentation of production, locating R&D activities where skilled labor is cheap and production where unskilled labor is cheap. The third assumption creates firm-level scale economies and motivates horizontal investments that replicate the same products or services in different locations (Markusen, 2002).  

Markusens' knowledge capital model weaves horizontal models into the vertical

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33 According to OECD Glossary of Statistical Terms, "economies of scale" refers to the phenomenon where the average costs per unit of output decrease with the increase in a scale or magnitude of the output being produced by a firm. A distinction is often made between different types of economies of scale such as product specific economies of scale and plant specific economies of scale. Product specific economies of scale (firm-level) is associated with the volume of output of any single product made and sold whereas plant specific economies of scale is associated with the total output (frequently encompassing many products) of an entire plant or plant complex.

http://stats.oecd.org/glossary/index.htm

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models of multinational firms. In this framework, multinational firms can produce the same product or service in multiple locations (horizontal) or geographically separate their firm’s head-quarters from the production location (vertical) (Jensen, 2006).

According to Walter and Sen (2009), the OLI and knowledge-capital frameworks suggest that the rapid growth in FDI can be explained by several supply-side and demand-side factors. One of them is falling operation costs that was triggered by IT revolution (which leads lower transaction costs of managing intra-firm and extra-firm\textsuperscript{34} relationships), and, by general fall in the cost of international trade (as a consequence of falling trade protection since 1980s and continuing reduction in transportation costs). Expanding foreign opportunities through the rapid growth of some emerging market countries (which produce a larger segment of population with higher disposable income and tastes similar to consumers in advanced countries) is another reason. Besides these factors, a growing need for firms to defend their market positions through international expansion is also an important factor (Walter and Sen, 2009).

3.2 Theories of Economic Growth

Economic growth, represented by changes in gross domestic product (GDP) or gross national product (GNP), is often used as a proxy measure for evaluating the general level of national welfare.\textsuperscript{35} However, as Soubbotina and Sheram (2000) put it:

It is true that economic growth, by increasing a nation’s total wealth, also enhances its potential for reducing poverty and solving other social problems. But history offers a number of examples where economic growth was not followed by similar progress in human development. Instead growth was achieved at the cost of greater inequity, higher unemployment, weakened democracy, loss of cultural identity, or overconsumption of resources needed by the future generations...To be sustainable, economic growth must be constantly nourished by the fruits of human development (Soubbotina and Sheram, 2000: 7).

\textsuperscript{34} “Extra-firm relationships” refer to the relationship between parent firm and independent foreign-based firms execute the operations of outsourcing parts of parent firm’s global supply chain.

\textsuperscript{35} Gross Domestic Product (GDP): Gross Domestic Product is a value which is equal to the sum of the values of all goods and services produced by resident institutional units engaged in domestic production activities in an economy in a given period of time, minus the total inputs which are used in the production of these goods and services.

Gross National Product (GNP): Gross National Product is Gross Domestic Product plus net factor incomes from the rest of the world.

Hence, bearing in mind this fact, in the following sections I will present the main theories of growth varying from the classical school to today's elaborated endogenous growth models.

3.2.1 The Classical and Neoclassical School

Adam Smith, the founder of the classical school, explained the sources of economic growth as accumulation of physical capital, technological progress, the specialization of labor and free trade. According to him, as Cypher and Dietz (2009) explain,

Economic growth will continue as long as capital is accumulated and new technology is introduced. Both competition and free trade contribute to making this process cumulative, and a competitive market environment provides the framework for all producers, workers and owners...Smith was keenly aware that the institutional structure of the society played a crucial role in determining the likelihood of continued process. After all, his sustained criticism in “The Wealth of Nations (1776)” of England’s mercantilist policies, the fettered trade relations it fostered, and the feudal remnants of production in the countryside had provided evidence for Smith’s impassioned defense of capitalism, natural liberty, and a smaller state as being essential to economic expansion (Cypher and Dietz, 2009:114).

However, late 18th century and early 19th century England was not a world of harmony as Smith asserted in his one of the most famous metaphors for the capitalist market system: the invisible hand. For majority of the citizenry there was a wide gap between reality and the theory (Cypher and Dietz, 2009). In the first half of the 19th century first Malthus then Ricardo attempted to explain this situation and they asserted that the agricultural sector can impose a break on rising wages, and in the case of Ricardo, on overall economic expansion as well. As Hunt (1989) explained, Malthus, in his theory of population, argued that economic growth generates increased demand for labor hence raises wages. With an increase in living standards parents choose to have more children. Therefore, rising wages lead to an increase in population. Increase in population generates an increase in demand for food. Malthus assumed that while population grows in geometric progression (i.e. 2, 4, 8, 16... so on), agricultural output can only grow in arithmetic progression (i.e. 1, 2, 3, 4... so on). Hence any rise in mass living standards can only be temporary. But Malthus assumed a constant productivity of land over time, he ignored the importance of technological change. Ricardo, a contemporary of Malthus, undertook a more

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36 Invisible hand referred as the forces of supply and demand working to attain equilibrium in a competitive economy (Cypher and Dietz, 2009:111).
sophisticated analysis of agricultural growth with his *theory of diminishing returns* to agriculture which envisages eventually a stationary equilibrium state where profits in both farming and manufacturing are squeezed to zero. Ricardo believed that productivity of labor in agriculture is the main basis for sustaining economic growth. To Ricardo greater productivity on the existing land could be achieved by technical innovations in the long-run but in short-run free trade and open economy were the solutions to avoid the results of the rising marginal food production costs (Hunt, 1989). Thus, his other contribution to economics was his emphasis on the advantages of free trade with his theory of *comparative advantage* substituted for Smith’s theory of *absolute advantage*.

Drawing on the classical economists’ treatment of growth, Cypher and Dietz (2009) suggest a classical model of economic growth which builds upon Smith and Malthus but depends especially on Ricardo’s formulation:

\[ Y = f(N, L, K, T) \]  

(3.1)

where \( Y \) is aggregate production, \( N \) is land, \( L \) is labor, \( K \) is capital and \( T \) is technology. In this production function marginal product of each input is positive but subject to the law of diminishing returns, hence \( f_{NN}, f_{LL}, f_{KK}, f_{TT} < 0 \) while \( f_N, f_L, f_K, f_T > 0 \).

Taking time derivatives we will yield:

\[ \frac{dY}{dt} = f_N \frac{dN}{dt} + f_L \frac{dL}{dt} + f_K \frac{dK}{dt} + f_T \frac{dT}{dt} \]  

(3.2)

We take \( dN/dT = 0 \) since the available quantity of land can be taken as given. We can write \( dL/dT = q.dK/dL \) \((q > 0)\), where \( q \) is the number of workers required for each new unit of physical capital, \( K \), since adding more physical capital requires more workers

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37 In order to explain international goods and services flows, Smith used the term of “absolute advantage” which refers to the productivity superiority of one country in a particular sector vis-à-vis another country. Smith asserted that international division of labor will be shaped according to absolute advantage, i.e. each country will be specialized in sectors which they are more productive and export products of these sectors while import products they produce relatively inefficient. Ricardo substitute “comparative advantage” for “absolute advantage” and asserted that if a country specialize in a product which is relatively produced more efficient in itself, even it is unproductive in all sectors in comparison to another country, this will be augment the consumption opportunities hence welfare of parties in trade reciprocally (Ilkarrayan, 2008:2)
to operate these new machines and tools of production. If we also assume for simplicity that technology is given, or exogeneous, in the short term, then $f=0$.

Given the above conditions, equation (2.2) can be re-written as follows:

$$\frac{dY}{dt} = (q_{f_L} + f_K) \frac{dK}{dt}$$  

(3.3)

The rate of economic growth in the classical model thus depends essentially on the rate of physical capital accumulation, $K$.

This analysis of classical economics provided a basis for neoclassical economics which emerged after the 1870s, in reaction particularly against the radical implications of Marx’s version of classical theory.

Solow and Swan developed one of the most influential neoclassical growth model, which emphasizes the role of capital accumulation. Solow-Swan model can be depicted by a simple Cobb-Douglas production fuction (Aghion and Howitt, 2009):

$$Y = (AL)^{1-a}K^a$$  

(3.4)

Where $Y$ is total output, $A$ is technological knowledge, $L$ is labor, $K$ is capital and $a$ is income share of capital such as $0<\alpha<1$ with the assumptions of perfect competition conditions, constant returns to scale, exogenous technology, full employment, marginal product of labor and capital subject to diminishing returns.\textsuperscript{38}

After a series of mathematiccal implications eq. (3.4) yields:

$$\kappa = sK^a - (n + g + \delta)K$$  

(3.5)

In this equation $\kappa$ represents capital per efficiency units ($K/AL$), $n$ and $g$ represents the growth of population and technological knowledge respectively and $\delta$ represents the depreciation rate. The assumption of diminishing returns will impose an upper limit to capital per efficiency unit. That is, eventually a point will be reached where all of peoples’ saving is needed to compensate for population growth, technology

\textsuperscript{38} This way of writing production function makes technological progress equivalent to an increase in the “effective” supply of labor $AL$, which grows not at the rate of population growth but at the rate of population growth plus the growth rate of productivity (Aghion and Howitt, 2009:28)
growth and depreciation rate. Capital per efficiency \( \kappa \) approach a unique steady-state value, \( \kappa^* \), in the long run while output per efficiency, \( \varphi \), approaches its steady state which is defined as:

\[
\varphi^* = (\kappa^*)^a
\]  

(3.6)

Although output per efficiency unit \( \varphi \) does not grow in the long run, the same is not true for output per person \((K/L)\):

\[
\frac{y}{L} = A\varphi = A\kappa^a
\]  

(3.7)

Whose growth rate can be expressed as:

\[
G = g + \alpha k/\kappa
\]  

(3.8)

In the long run when \( \kappa \) approaches \( \kappa^* \), its time derivative approaches zero, so the long run growth rate \( G \) approaches the exogenous rate of technological change \( g \); \( G \rightarrow g \) as \( t \rightarrow \infty \). But in the short-run, the growth rate can rise above \( g \) temporarily as a result of an increase in the saving rate \( s \), which raises the rate of increase in the capital stock per efficiency unit \( \kappa \) according to the fundamental equation (3.5).

Hence according to neo-classical growth model although the height of the steady-state growth path would be determined by the savings rate, depreciation rate and the rate of population growth, the only parameter affecting the growth rate is the exogenous rate of technological progress and since science and technology were assumed global resources available to all countries what really separates countries economically were capital accumulation, not technology (Aghion and Howitt, 2009).

3.2.2 Endogenous Growth Theory

A basic criticism of the neoclassical model presented has been that it treats the rate of technological change as being determined exogenously, by noneconomic forces. The endogenous growth theory which was developed in 1980s as an alternative to the neoclassical growth model treats technology as an endogenous variable which is determined within the economic system since it comes from industrial innovations made by profit seeking firms and depends on the funding of science, the
accumulation of human capital, and other such economic activities. Since the rate of technological progress is what determines the long-run growth rate, growth theories should take this endogeneity into account. In the neoclassical theory based on the theory of competitive equilibrium, all factors be paid their marginal products because the production function exhibits constant returns in capital and labor alone.\(^{39}\) Since this assumption leaves nothing over to pay for the resources used in improving technology, hence, incorporating endogenous technology into growth theory needs to take account the phenomenon of increasing returns to scale (Aghion and Howitt, 2009).

One of the first attempts for explanation of technological change was Arrows' theory of learning by doing which argues that technical change (increasing productivity) in general can be ascribed to experience, in other words, acquisition of knowledge. The theorems he presented about the economic world were different from those in most standard economic theories. He ignored the possibility of capital-labor substitution and made assumptions such as that profits are the result of technological change and in a free-enterprise system the rate of investment will be less than optimum. (Arrow, 1962).

Learning by doing formed the basis of the first model of endogenous growth theory known as AK models which predicts that a country's long-run growth rate will depend on economic factors such as thrift and efficiency of resource allocation. Indeed, an early precursor of the AK Model was the Harrod-Domar model, developed in the late 1930s, which assumes that the aggregate production function has fixed technological coefficients (Aghion and Howitt, 2009):

\[ Y = F(K,L) = \min \{AK, BL\} \quad (3.9) \]

Where \( A \) and \( B \) are the fixed coefficients. When \( AK < BL \), which is the case that Harrod and Domar emphasize, capital is the limiting factor for output. Firms will produce the amount of:

\[ Y = AK \quad (3.10) \]

\(^{39}\) According to Euler's theorem if \( F \) is homogenous of degree 1 in \( K \) and \( L \) (the definition of constant returns), then

\[ F_1(K,L)K + F_2(K,L)L = F(K, L) \]
With fixed saving rate, the capital stock will grow according to the same equation as in the neoclassical model:

\[ \dot{K} = sY - \delta K \]  \hspace{1cm} (3.11)

So that the growth rate of capital will be:

\[ g = \frac{\dot{K}}{K} = sA - \delta \]  \hspace{1cm} (3.12)

Because output is strictly proportional to capital, \( g \), also will be the rate of growth. In the, Harrod-Domar model showed that economic growth depends on just three factors: the saving rate which is determined by households as they divide their income between consumption and saving, the capital/output ratio which reflects the way firms base their demand for capital on the amount of output they want to produce and, the depreciation rate which is partly a consequence of the quality of investment decision in the past (Gylfason, 1999). So, it was essentially all here, from Adam Smith onwards, in a single, simple equation: Growth depends on saving and efficiency, including depreciation. However, Harrod-Domar model's constant saving and capital-output ratio rates suggested a knife-edge equilibrium (Gylfason, 1999). This knife-edge result was compatible with Keynesian approach which rejects laissez-faire. Indeed Solow had developed his neoclassical growth model in response to the troubling implications about economic stability suggested by the Harrod-Domar model by endogenizing capital/output ratio (Cypher and Dietz, 2009).

So far, many scholars have developed several AK models of growth that consider increasing returns that arise from accumulation of knowledge.\(^{40}\) The inability of the AK paradigm to produce a convincing model of long run growth motivated a second wave of endogenous growth theory based on innovation rather than thrift and efficiency of resource allocation. One type of these models is product variety model

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\(^{40}\) See Aghion and Howitt (2009)
developed by Romer and the Schumpeterian model developed by Aghion and Howitt (Aghion and Howitt, 2009)

Learning by doing formulation endogenized the rate of accumulation of nonrival and nonexcludable\textsuperscript{41} knowledge but it takes the strict proportionality between knowledge and physical capital as an unexplained and exogenously given feature of the technology. It treated knowledge as a public good that is privately provided as side effect hence it rules out the possibility that firms make intentional investments in research and development (Romer, 1990).

Romer developed a growth model with four basic inputs: capital ($C$, measured in units of consumption goods), labor ($L$, skills such as eye-hand coordination that are available from a healthy physical body), human capital ($H$, distinct measure of the cumulative effects of activities such as formal education and on-the-job training) and index of the level of the technology ($A$). He separated the rival component of the knowledge, $H$, from the nonrival technological component, $A$. He considered three sectors: research sector which uses human capital and the existing stock of knowledge to produce new knowledge, intermediate good sector which uses the designs from the research sector together with forgone output to produce the large number of producer durables that are available in final goods production at any time, and final goods sector which uses labor, human capital and the set of producer durables that are available to produce final output. He asserted that technology partially excludable good hence new innovators benefit from the whole existing stock of innovations. To him, growth was driven by innovations that lead to introduction of new input varieties hence from intermediate goods sector (Romer, 1990).

Schumpeterian growth theory developed by Aghion and Howitt focused on quality of improving innovations that render old products obsolete. Compared to the product variety model, which based on innovations causes productivity growth by creating new but unnecessarily improved varieties of products, it assigns an important role to exit and and turnover of firms and workers (Aghion and Howitt, 2009).

\textsuperscript{41} A purely rival good has the property that its use by one firm or person precludes its use by another; a purely nonrival good has the property that its use by one firm or person in no way limits its use by another. A good is excludable if the owner can prevent others from using it. A good such as the code for a computer program can be made excludable by means of legal system that prohibits copying or by means of encryption and copy protection schemes (Romer, 1990).
Endogenous growth theory, which has addressed the issue of endogenous technological change from different perspectives, is evolving. But the logic of these models can be summarized as Romer(1994) put it:

If macroeconomics look only at the cross-country regressions deployed in the convergence controversy, it will be easy to be satisfied with neoclassical models in which market incentives and government policies have no effect on discovery, diffusion and technological advance. But if we make use of all of the available evidence, economists can move beyond these models and begin once again to make progress toward a complete understanding of the determinants of long-run economic success. Ultimately, this will put us in position to offer policy makers something more insightful than the standard neoclassical prescription—more saving and more schooling. We will able to rejoin the ongoing policy debates about tax subsidies for private research, antitrust exemptions for research joint ventures, the activities of national firms, the effects of government procurement, the feedback between trade policy and innovation, the scope of protection for intellectual property rights, the links between private firms and universities, the mechanisms for selecting the research areas that receive public support, the costs and benefits of an explicit government-led technology policy (Romer, 1994:20).

3.3 Impact of FDI on Economic Growth

According to neoclassical theory, introduced in preceding chapter, savings is the main determinant of economic growth in the short-run. Therefore, holding the assumptions that there is full employment and, that foreign and domestic producers utilize similar technology, neoclassical theory predicts that foreign direct investment will increase the rate of economic growth (since it provides a major source of saving and investment) and equalize income distribution by creating new job opportunities and by raising wages through rising demand for labor (Moran, 1978; Zhang, 2001).

In spite of this optimistic view of neoclassical theory, during the decades after World War II radical critics of multinationals in Latin America began to emerge. The dependency theory regarded large foreign corporations as major obstacles to economic growth (Jones, 2005). In Evans’ words ‘dependency theory is first concerned with process of development and then proceeds to consider the role played by MNEs’ (Evans, 1981). Fernando Henrique Cordoso\textsuperscript{42} and Enzo Faletto (1971) criticized conducting elaborate scientific explanatory models for the different socio-cultural dimensions of the society (Cardoso and Faletto, 1971). As Jones (2005) put it;

\textsuperscript{42} He later became President of Brazil in 1995
In this literature, writers ... regarded the role of multinationals in the growth of Brazil, Mexico, and elsewhere as ‘dependent development’. They baulked at the limitations on national policies required to maintain ‘good investment climates’. These dependency relations were solidified by a ‘triple alliance’ between multinationals, host country governments, and externally oriented segments of the local business community. Local firms provided the skills in political maneuvering, multinationals provided the technology, while governments provided the institutional framework and established a common set of goals (Jones, 2005: 278).

Hence, dependency theory denied the balancing effect of multinationals in the redistribution of benefits on a world scale and it emphasized that the results of the international expansion, such as technical progress and financial control, are concentrated in a few capitalist centers which will go on exploiting and preserving the dependence and underdevelopment of the periphery (Cardoso and Faletto, 1971).

Also, Baran and Sweezy (1966) asserted in their monopoly capital model that the growth of monopoly generates a strong tendency for surplus more than it can absorb, hence, harmful consequences of these giant firms emanating from their attitude towards the utilization of profits so as to provide absorption (Baran and Sweezy, 1966).

In the 1970s, some scholars examined the effects of MNEs from a bargaining approach perspective. According to this approach, bargaining power was a subject of the characteristics of the project under negotiation, characteristics of the host country and other exogenous factors. MNEs which have operations with low fixed investments, low fixed costs, changeable technology and complex marketing (or some combination thereof) would be less vulnerable to host country demands. In the same way countries with a small and stagnant local market, an unmobilize populace, an unskilled governmental bureaucracy and a limited indigenous industrial capacity would have a weak bargaining power (Moran, 1978). Also, as Dumludağ put it:

The main question in bargaining approach is to determine who gets the benefits after the investment take place...Over time, the bargaining power relationship can shift to ‘obsolescing power’, which refers to the decline of the power of the firm when it has heavily invested in the host country...However, the host country may be in difficulty gaining power in all fields. For instance, in the 1970s, although governments in Brazil were successful at directing the MNEs to the manufacture sector because of their control over the access to the markets and resources, they did not gain the same success when trying to direct MNEs in the pharmacy sector; the MNEs bargaining power was stronger than the bargaining power of the Brazilian governments in the pharmaceutical sector (Dumludağ, 2007: 29)
The emergence of endogenous models since the 1980s, gave a broad insight to researchers studying FDI. Several spillover effects of FDI, which may occur in the form of backward linkages (by helping prospective suppliers to render them compatible with their own production quality and process) and forward linkages (by helping the local distributors and sales organizations), were identified in the literature (Aslanoğlu, 2000). Besides linkages, spillovers may take place through demonstration and/or imitation (domestic firms imitate new technologies of foreign firms), competition (entrance of foreign firms leads to pressure on domestic firms to adjust their activities and to introduce new technologies) and training (domestic firms upgrade the skills of their employees to enable them to work with the new technologies) (Hermes and Lensink, 2003). Especially for less developed countries which are generally associated with limited capital accumulation, low level of industrial and technological capability and insufficient human capital, transfer of advanced technological knowledge is regarded as a critical factor to upgrade their national technological capabilities (Ekmekçi and Ansal, 2009). Hence, as Karimi and Yusop (2009) put it;

In neoclassical growth models with diminishing returns to capital, FDI has only a "short-run" growth effect as countries move towards a new steady state. Accordingly, the impact of FDI on growth is identical to that of domestic investment. In contrast, in endogenous growth models, FDI is generally assumed to be more productive than domestic investment, since FDI encourages the incorporation of new technologies in the production function of the host economy. In this view, FDI-related technological spillovers offset the effects of diminishing returns to capital and keep the economy on a longer-term growth path (Karimi and Yusop, 2009: 10).

An UNCTAD World Investment Report (1992) titled "Transnational Corporations as Engines of Growth", focused on the question of to what extent and under what circumstances transnational corporations can contribute to economic growth of developing countries. The report evaluated the effects of MNEs on determinants of growth: capital formation, technology, human resource development, trade, environmental quality. Overall the impact of FDI on growth is as follows;

An assessment of the overall combination to TNCs to growth, therefore, needs to take account not only the direct impact of TNCs via each individual channel, but also the existence of interrelationships between the various channels of economic growth. In other words, improved performance in more than one channel - investment, technology, trade and human resources- can occur simultaneously.

43 The term "spillover" refers to indirect effects of FDI on domestic industries (Aslanoğlu, 2000;1113)
Those interrelationships suggest that the various aspects of the activities of TNCs support each other, strengthening the overall contribution to TNCs to economic growth in host developing countries, in a manner that may not be directly evident from an assessment of their contributions to the individual determinants of growth... Thus, the overall impact of TNCs on the various factors determining growth may be greater than the sum of the individual effects, that is, likely to be synergistic (WIR, 1992:246).44

Today, the prevalent attitude towards FDI in terms of their contribution to economic growth (and development) is far from the dependency criticism of the 1970s. Especially you will see in empirical studies, the debate on the contribution of FDI to economic growth has focused on absorptive capacities which FDI may help to raise growth in recipient countries.

The explanation of this policy shift according to Walter and Sen (2009), relies mainly on four elements: changing societal interests, changing state interests, liberalization as a response to new ideas and liberalization as a product of hegemonic coercion. To them, the shift toward more liberal policies in host countries related to the changing nature of FDI: First the sectoral pattern in developing countries altered from politicized extractive sector to manufacturing and services45. Second, as firms and investment have become more mobile and the importance of knowledge capital has increased, hostile attitudes toward inward FDI has been softened.

44 Although this conclusion, as you will see in review of empirical literature, by estimating the same model in World Investment Report (1992), Aslanoğlu (1996) found insignificant impact of FDI on Turkish economic growth.
45 Nevertheless, he also mentioned about the reemergence of political conflict over FDI in extractive industries in Latin America as a consequence of rapid increases in commodity prices since 2002 (Walter and Sen, 2009:192).
4. EMPIRICAL LITERATURE

Because of the vast literature on the relationship between FDI and economic growth, a classification is required while exploring these studies. For this purpose, the empirical studies investigated in this section are first separated based on their sample, such as:

- Studies on international context
- Studies on Turkish context

In this classification, the former group is separated again as "inter-country studies" which explore more than one country and "country-specific studies" which explore just one country other than Turkey. Under each heading, tables which summarize studies in terms of their empirical models, techniques and results are given (Table 4.1-4.2 and 4.3).

4.1 International Context

4.1.1 Inter-country Studies

In FDI-economic growth studies exploring more than one country, panel studies (which is dealing with the country and time dimension of the data at the same time) and cross-section analysis (which conducts models on the average values of each countries) are widespread.

Borenstein et. al. (1999) and Hermes and Lensink (2003) in their panel studies emphasize the importance of absorptive capacities, based on their endogenous growth models. Borezstein et. al. suggest that FDI is an important vehicle for the transfer of technology, contributing relatively more to growth than domestic investment. However, the higher productivity of FDI holds only when the host country has a minimum threshold stock of human capital. Hermes and Lensink (2003) argue that the development of the financial system of the host country is an important precondition for FDI to have a positive impact on economic growth. A more developed financial system positively contributes to the process of
technological diffusion associated with FDI. Also Alfaro et al. (2010) constitute a model rests on a mechanism that emphasizes the role of financial markets in enabling FDI to promote economic growth through the creation of backward linkages and show that an increase in FDI leads to higher growth rates in financially developed countries compared to those observed in financially poor developed ones.

Apart from these studies, Balasubramanyam et al. (1999) find that the influence of the trade policy regime upon the strength of the growth-promoting influence of FDI is significant as well as human capital. They suggest that FDI can promote growth in the presence of a liberal trade regime. The fruits of FDI should be transferable abroad by the investors.

In their sectoral analysis, Dilek and Sayek (2007) investigate the effect of sectoral composition of FDI using cross-section data and conclude that while an increase in the share of FDI inflows in manufacturing sector has a positive impact on economic growth the increase of primary sector or service sector share has a statistically insignificant impact.

These studies reveal clearly, there exist a relative effect of FDI rather than a sharp “growth-enhancing” or “growth-retarding” effects. Thus, in his panel regression, Yang (2008) studies on 110 countries for the period 1973-2002, concludes that the effect of FDI on growth is not uniform over time and across regions. This article finds that, between 1973 and 1987, FDI effected growth positively in Latin America, but negatively in the Middle East; from 1988 to 2002, OECD and ECA countries experienced positive growth effect of FDI, but Africa suffered a negative FDI-growth relationship; in other regions, no significant effect of FDI was found. Also in another study by Duttaray et Al. (2008) which examines the Granger causality between FDI and economic growth for 66 developing countries shows that FDI causes growth in several developing countries, but the mechanism differs across countries and reverse causality from growth to FDI exists for many countries.
<table>
<thead>
<tr>
<th>Author</th>
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<th>Data</th>
<th>Technique</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borenztein, De Gregorio and Lee (1998)</td>
<td>$g = c_0 + c_1 FDI + c_2 FDI x H + c_3 H + c_4 Y_0 + c_5 A + \varepsilon$</td>
<td>(1970-1989) - 69 countries</td>
<td>Panel data- Seemingly Unrelated Regression (SUR)</td>
<td>At very low levels of human capital the contribution of FDI to growth is close to nil and that is rises rapidly at higher levels of human capital.</td>
</tr>
<tr>
<td>Balasubramanyam, Salius and Sapsford (1999)</td>
<td>$y^* = \alpha + \beta_1 I(Y) + \psi(FDI/Y) + \varphi x + \varepsilon$</td>
<td>(1970-1985) - 46 countries</td>
<td>Cross-section- Ordinary Least Squares (OLS) and Generalized Instrument Variable Estimator (GIVE)</td>
<td>FDI can promote growth in the presence of liberal trade regime</td>
</tr>
<tr>
<td>Hermes and Lensink (2003)</td>
<td>$PCG = \alpha + \beta_1 I + \beta_2 M + \beta_3 H + \beta_4 Z + \varepsilon$</td>
<td>(1975-1995) - 67 countries</td>
<td>Panel data- Estimation with a common constant/ with fixed effects and/ with random effects</td>
<td>A more developed financial system positively contributes to the process of technological diffusion</td>
</tr>
<tr>
<td>Dilek and Sayek (2007)</td>
<td>$g_0 = \beta_0 + \beta_1 GDP_{1990} + \beta_2 FDI_{1} + \beta_3 FDI_{2} + \beta_4 \text{Sect Comp}_1 + \beta_5 \text{Control}_1 + \varepsilon_0$</td>
<td>(1990-2003) - 56 countries</td>
<td>Cross-section- Ordinary Least Squares (OLS)</td>
<td>There exist positive impact of manufacturing FDI inflows. Other sectors have insignificant impact</td>
</tr>
<tr>
<td>Duttaray, Dutt and Mukhopadhay (2008)</td>
<td>$y_1 = c + \Phi_1 Y_{t-1} + \ldots + \Phi_4 Y_{t-4} + \mu_t$</td>
<td>(1970-1996) - 66 countries</td>
<td>Time series- Granger Causality approach of Toda Yamamoto</td>
<td>FDI causes growth in several developing countries.</td>
</tr>
<tr>
<td>Yang (2008)</td>
<td>$\text{Growth}_t = \alpha + \beta_1 \text{FDI}_t + \beta_2 \text{ln(GDP)}_t + \beta_3 \text{ln(Inv)}_t + \beta_4 \text{Pop}_t + \beta_5 \text{Sch}_t + \beta_6 \text{ln(Gov size)}_t + \beta_7 \text{ln(Openness)}_t + \beta_8 \text{ln(BMP)}_t + \beta_9 \text{ln(Credit)}_t + \varepsilon_t$</td>
<td>(1973-2002) - 110 countries</td>
<td>Panel Data- Estimation with fixed effects</td>
<td>Positive effect in Latin America, OECD and ECA countries, negative effect in Africa, insignificant effect for rest of the countries</td>
</tr>
</tbody>
</table>

Table 4.1 Empirical Studies (Inter-country)
4.1.2 Country-specific Studies

Studies in this section use time series data of countries under investigation. In the empirical studies using time series data, validity problem of F-statistics (if time series is integrated) is prompted many researchers to use error correction models and causality tests.

Akinlo (2004) and Mughal (2008) conduct error correction models to find the effect of FDI on economic growth in Nigeria and Pakistan respectively. In Nigeria, Akinlo (2004) do not find positive impact of capital on growth in Nigeria for the period 1970-2001 while Mughal (2008) finds the same result in his study for Pakistan. Mughal (2008) using the equation which was conducted in Borenzstein et. al. (1998) finds that FDI have no significant relationship with domestic investment in the short-term, which may indicate that domestic investment decisions are made independently of foreign investment, and probably do not follow the same motive. However, S. Oladipo et. al. (2009) by using a similar formulation with Akinlo (2004) find that FDI has a positive impact on growth of Mexico.

In their Granger causality studies, Asheghian (2009) and Karimi and Yusop (2009) find no strong evidence of a causality between FDI and economic growth.

Some scholars conduct two or three stage least squares models (2SLS-3SLS), bearing in mind that economic growth also might be a cause of FDI inflows. Among these, Roy et. al. (2006), in their three stage least squares (3SLS) regression, find that bigger shares of FDI in output has a positive impact US economic growth while, Ayanwale (2007), using 2SLS in his sectoral analysis, finds that overall effect of FDI may not be significant. According to Ayanwales’ study, it is the determinants of FDI which cause economic growth rather than FDI itself. Ayanwale’ results support the argument that extractive FDI might not be growth enhancing as much as manufacturing FDI which is also argued by the study of Dilek and Sayek (2007) introduced in the preceding chapter.

Apart from these time series studies, some scholar make regional analysis with panel data. Ford et. al. (2008) explore 48 US states for the period 1977-1997 by using least squares dummy variables estimation model (LSDV) with panel data. They estimate
a panel form of the empirical specification employed by Borenzstein et. al. (1998) which is extended to allow for FDI from multiple resources. They find that all else equal, Japanese FDI is most beneficial to state growth, whereas Swiss FDI is least beneficial. In an another study for China in the period 1984-1998, Zhang (2001) found that FDI support the argument that FDI help China’s transition and promote income growth. They also conclude that this positive growth effect is stronger in the coastal than in the inland regions.
<table>
<thead>
<tr>
<th>Author</th>
<th>Model</th>
<th>Data</th>
<th>Technique</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhang (2001)</td>
<td>$Y_{gr} = \beta_0 + \beta_1 L_{gr} + \beta_2 (U/Y) + \beta_3 (L/Y) + \beta_4 \Delta (F/Y) + \beta_5 Y_{gr} + \beta_6 H + \beta_7 H_{\Delta (F/Y)} + \varepsilon$</td>
<td>(1984-1988)-China -30 regions</td>
<td>Panel Data</td>
<td>FDI promote income growth</td>
</tr>
<tr>
<td>Akinlo (2004)</td>
<td>$\Delta y = \alpha_1 \Delta Y + \alpha_2 \Delta k + \alpha_3 \Delta k_{p} + \alpha_4 \Delta h + \alpha_5 \Delta x + \alpha_6 \Delta c + \alpha_7 \Delta B_{g} + \alpha_8 \Delta F_{r} + \alpha_9 \Delta T_{1} + \varepsilon$</td>
<td>(1970-2001)-Nigeria</td>
<td>Time Series - Error Correction Model (VECM)</td>
<td>No significant impact</td>
</tr>
<tr>
<td>Roy and Van Den Berg (2006)</td>
<td>$Gr(Y) = a_0 + a_1 (I/Y) + a_2 (FDI/Y) + a_3 (Gr(L) + a_4 (Gr(X))</td>
<td>1970-2001-United States</td>
<td>Time Series - Three Stage Least Squares (3 SLS)</td>
<td>Positive impact</td>
</tr>
<tr>
<td>Ayanwale (2007)</td>
<td>L=$\gamma_{L}= \alpha + \beta_1 FDI + \beta_2 \Delta DB + \beta_3 \Delta HUMCAP + \beta_4 \Delta ROI + \beta_5 \Delta GOV + \beta_6 \Delta INFRA + \beta_7 \Delta INFL + \beta_8 \Delta POLRS + \gamma_0 + \varepsilon$</td>
<td>1970-2002- Nigeria</td>
<td>Time Series- Two Stage Least Squares (2 SLS)</td>
<td>No significant impact</td>
</tr>
<tr>
<td>Mughal (2008)</td>
<td>$G_{y} = c_0 + c_1 FDI + c_2 FDIxH + c_3 H + c_4 Y_{r} + c_5 A + \varepsilon$</td>
<td>1960-2005 - Pakistan</td>
<td>Time Series- Error Correction Model (VECM)</td>
<td>No significant impact</td>
</tr>
<tr>
<td>Ford, Rork and Elmslie (2008)</td>
<td>$\gamma_{i} = \xi_i + \gamma_{0} + \beta_1 Y(0) + \beta_2 H_i + \beta_3 E_i + \sum [\delta_i (FDI_{m} + \theta_i (FDI_{m} \times H_{i})] + S_i$</td>
<td>(1977-1997) - United States- 48 States</td>
<td>Panel Data – Least squares dummy variable estimation (LSDV)</td>
<td>All else equal, Japanese FDI is most beneficial to state growth, Swiss FDI is least beneficial</td>
</tr>
<tr>
<td>Ashegian (2009)</td>
<td>$G_{y} = G_{TF} + \beta_{1} (1-\beta) G_{DF} + \lambda_{m} (1-\beta) G_{FD}$</td>
<td>1970-2006- Japan</td>
<td>Timer Series – Granger Causality Test</td>
<td>No causal relationship between FDI and economic growth</td>
</tr>
<tr>
<td>Karimi and Yusop (2009)</td>
<td>$\Delta l_{GDP} = \beta_0 + \sum \beta_1 \Delta GDP_{t} + \sum \beta_2 \Delta GDP_{t-1} + \beta_3 \Delta GDP_{t-2} + \beta_4 LN_{FDI_{t-1}} + \xi_t$</td>
<td>1970-2005 - Malaysia</td>
<td>Time series- ARDL and Granger Causality approach of Toda</td>
<td>No causal relationship between FDI and economic growth</td>
</tr>
</tbody>
</table>

**Table 4.2** Empirical Studies (Country specific-excluding Turkey)
4.2 The Turkish Context

Studies in Turkish context can be separated as spillover studies using firm level data and others using macro level data.

Among firm level studies, Aslanoğlu (2000) explore the spillover effects of FDI on Turkish manufacturing industry with top 500 firms data of Istanbul Chamber of Commerce. He conclude that the presence of foreign firms increases the competition in the manufacturing industry. However, he note that in sectors with high initial technology gap, domestic firms can not successfully compete with foreign firms and the technology gap is widened. Ekmekçi and Ansai (2009) explore vertical spillovers in their study, based on surveys with foreign firms in automotive sector and conclude that domestic suppliers’s benefits from spillover effects conditioned on their firm structure and government policies.

Macro level studies using time series data explore the relationship with error correction models and causality tests. Alci and Ucal (2003) using the industrial production index, export price index and FDI, find no causality relation between FDI and Turkish industrial production. Katircioğlu (2009), by using the variables FDI and GDP, finds that economic expansion in Turkey stimulates expansion in net FDI inflows. Darrat and Sarkar (2009), by estimating an error correction model, find that a robust long-run relationship linking economic growth with FDI inflows, economic openness and human capital using an error correction model.

Aslanoğlu (1996) in his Ph.D. dissertation estimated the growth equation used in UNCTAD World Investment Report (1992), in which growth is a function of share of fixed investments, growth rate of employment, foreign trade as a percentage of GDP. The results covering the period 1975-1995 showed that FDI has an insignificant impact on growth. He attached this result to the relatively low level of FDI Turkey attracted. Şimşek and Behdioglu (2003) added FDI into Cobb-Douglas production function and concluded that FDI has a positive but less effect on growth in comparison to domestic investments. Demirel (2006) in his dissertation estimated equations for FDI and growth simultaneously by using 3-SLS method and concluded that FDI has a positive impact on growth at 5% significance level.
<table>
<thead>
<tr>
<th>Author</th>
<th>Model</th>
<th>Data</th>
<th>Technique</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darrat and Sarkar (2009)</td>
<td>RY,ε = a₀ + αRF₁,γ + εEO₁,γ + δHC₁,γ + γLB₁,ε + μ₁</td>
<td>(1970-2006) RY: Real GDP, RF: Real FDI, HC: Literacy rate, LB: Liberalization Dummy</td>
<td>Time series – Error Correction Model (ECM)</td>
<td>There exists long-run relationship linking economic growth with FDI inflows</td>
</tr>
<tr>
<td>Katurcuoğlu (2009)</td>
<td>ΔlnY,ε = a₀ + β₁ΔlnY₁,ε + β₂ΔlnX₁,ε + β₃ΔlnY₂,ε + β₄ΔlnX₂,ε + ε₈</td>
<td>1970-2005 Y: GDP, X: FDI</td>
<td>Time series – ARDL and Granger Causality test</td>
<td>Granger causality from GDP to FDI</td>
</tr>
</tbody>
</table>

**Table 4.3 Empirical Studies (Turkey)**
5. REGRESSION ANALYSIS

5.1 The Model

The empirical analysis in this study explores the relationship between FDI and economic growth by emphasizing the externalities on capital stock created by foreign capital. The model is based on Akinlo (2004) which specifies a production function where foreign direct investment is explicitly incorporated as a factor of production:

\[ Y_t = A_t((L,L),K,\mu) = A_t(L,L)^{eK^z,\mu^{1-z^z}}, \quad \text{where } \lambda = H^z \]  
(5.1)

Where \( Y_t \) is real output, \( K \) is capital stock, \( L \) is raw labour input, \( H \) is the level of human capital, \( \lambda \) is the measure of educational level, \( z \) is the return to education relative to raw labour input, \( A \) is the efficiency of production, \( \alpha \) and \( \beta \) are the private capital and labour shares, respectively. It is assumed that, \( \alpha \) and \( \beta \) are less than one, such that there are diminishing returns to the labour and capital inputs. The externality, \( \mu \), can be represented by a Cobb–Douglas function of the form:

\[ \mu = [(L,L),K,K^\sigma]^{\gamma} \]  
(5.2)

Where \( \sigma \) and \( \gamma \) are, respectively, the marginal and the intertemporal elasticities of substitution between capital and foreign capital. Let \( \sigma > 0 \), such that a larger stock of FDI yields a positive externality to the economy. If \( \gamma > 0 \), intertemporal complimentarity prevails and, if \( \gamma < 0 \), additions to the FDI stock crowd out capital over time and diminish the growth potential of the host country.

If we combine Eqs. (1) and (2), we obtain:

\[ Y_t = A_t(L,L)^{eK^z}[((L,L),K,K^\sigma)]^{1-z^z} \]  
(5.3)
If we factor out Eq. (5.3), we obtain:

$$Y_t = A_t (L)^{\alpha + \gamma (1 - \alpha - \beta) K^\beta + \gamma (1 - \alpha - \beta) K^\gamma (1 - \alpha - \beta) K_f^\gamma (1 - \alpha - \beta)}$$  \hspace{1cm} (5.4)

Substituting $\lambda = \Pi^2$ and taking logarithms and time derivatives of Eq. (4) we generate the following dynamic production function:

$$\Psi_y = \Psi_A + z[a + \gamma (1 - \alpha - \beta)\Psi_H + [\alpha + \gamma (1 - \alpha - \beta)\Psi_L + [\alpha$$

$$+ \gamma (1 - \alpha - \beta)\Psi_K + [\gamma (1 - \alpha - \beta)]\Psi_{K_f}$$  \hspace{1cm} (5.5)

Where $\Psi$ is the growth rate of $i = Y, A, L, H, K$ and $K_f$. Eq. (5) says that given $\sigma$ and $\gamma > 0$ and $z$ is also positive, additions to stock of FDI will augment the elasticities of output with respect to raw labour, capital and human capital by factor $\gamma (1 - \alpha - \beta)$.

Hence derived from Eq. (5.5) above, the proceeding empirical analysis makes use of the following regression model:

$$\Delta y = b_0 + b_1 \Delta k + b_2 \Delta k_f + b_3 \Delta h + b_4 \Delta l + b_5 \Delta O + b_6 \Delta FD + b_7 \Delta D + \epsilon$$  \hspace{1cm} (5.6)

Lower case denotes growth rates, and $\Delta$ is the difference operator; $y$ is the logarithm of real GDP, $k$ stands for the gross fixed capital stock, $k_f$ stands for the FDI stock, $h$ stands for the human capital (measured by % of population aged 15 and over who completed tertiary school) and $l$ stands for the labor (measured by literacy rate). Control variables $O$ for openness (measured by foreign trade over GDP) and $FD$ for financial depth (measured by private sector credits given by deposit banks over GDP) also added since they are emphasized in FDI-growth literature (Borenzstein et. al.,1999; Hermes and Lensink, 2003; Alfaro et. al, 2010 and Balasubramanyam et. al. 1999). Finally $D$ represents the dummies, 1 for crisis years of 1980, 1994, 1998 and 2001 and 0 otherwise.
It is hypothesized that $b_1$, $b_3$ and $b_4$ have positive signs. Coefficient of openness, $b_5$ and FDI stock, $b_2$, is indeterminate. If accretions of foreign capital stock is complement private capital formation, it will have a positive sign, otherwise negative. The coefficient on financial depth, $b_6$, is also indeterminate, depending on whether financial development reduces or increases capital flight. If it increases capital flight, it will have negative sign. If it reduces capital flight, it will have positive value.

5.2 Data

The regression analysis in this study comprises the period 1970-2009. The majority of data comes from Turkish sources (Turkish Statistical Institute, Central Bank of the Republic of Turkey, State Planning Organization). While compiling data, because of the obstacles on the data availability in some years, several techniques (such as trend or comparison with other related variables) were applied to complete series for some of the variables. Below, the explanations, sources and the graphs of data used in the regression model is introduced.

The dependent variable, GDP, is measured by the expenditure approach data at constant prices for the period 1970-2006. There exist two different GDP series published by TURKSTAT, one comprise the period 1968-2006 (1987 base) while the other (1998 base) started from 1998. In the regression analysis, 1987 base series is used normally. The last three years, 2007-2008 and 2009, calculated by raising the 1987 base series by growth rates of recent 1998 base series. As you will see in Figure 5.1 below, despite these two series differ in the absolute levels, they have a similar path.46

46 All variables introduced in this chapter is deflated.
Figure 5.1 Gross Domestic Product (GDP)

Data Source: TURKSTAT

FDI-stock values extracted from UNCTAD statistical database. First ten years was accounted as cumulation of FDI inflows since UNCTAD use the same method for the 1980-2000 period (Figure 5.2).

Figure 5.2 FDI stock

Data Source: UNCDATSTAT

Capital stock data has taken from Saygili, Cihan and Yurtoğlu (2005). For last six observations, values found by using the growth rate of gross fixed investments used as proxy (5.3).

Figure 5.3 Gross fixed capital formation versus gross fixed investments

Data Source: SPO
TURSTAT's literacy rate data was used to proxy for the labor supply. Data has 5 year intervals; a linear trend was used to fill in the gaps (Figure 5.4).

**Figure 5.4** Literacy rate, adult total (% of people ages 15 and above)

Source: TURKSTAT

Human capital data was extracted from Barro and Lee (2010) Educational Attainment for Total Population data (% of total population aged 15 and over who attained tertiary school). Data has 5 year intervals; a linear trend was used to fill in the gaps (Figure 5.5).

**Figure 5.5** Share of population with tertiary schooling (Aged 15 and over)

Source: Barro and Lee, 2010

To calculate openness variable foreign trade data (export+import) over GDP, which was the method also used by Dilek and Sayek (2007), was employed (Figure 5.6):

**Figure 5.6** Openness (Import plus export over GDP)

Source: TURKSTAT
In literature both money supply and deposit banks private sector credits in GDP are used. In the regression model, private sector credits over GDP was used. Credit data taken from TCMB statistics (Figure 5.7):

![Graph showing M2/GDP and Credit/GDP over time]

**Figure 5.7** Financial depth (Private sector credits over GDP)

Data Source: TURKSTAT, TCMB

Before beginning the empirical analysis, we should be sure that the correct forms of variables are used. Hence, the first step in analysis is to determine whether we should take logarithms. Since the theoretical model implies a restriction on \( Y, L, H, K \) and \( K_Y \), these variables are used in logarithmic form. As for financial depth and openness, trends of levels versus logarithmic forms of data could be checked from Figure 5.8.
Figure 5.8 Non-logarithmic versus logarithmic forms of data
When we look at graphs, we cannot see the necessity of logarithmic transformation to openness and financial depth variables. However, by using the logarithmic transformation ladder method, we can make a crosscheck. According to this method, the distance of the median of first quartile and second quartile from the median of data is found. Then the proportion of these two values is taken. If the proportion is more close to 1 in logarithmic forms of data, this shows us that logarithmic transformation make data more linear (Şenesen, 2006).

Table 5.1: Transformation ladder results

<table>
<thead>
<tr>
<th>Parameter</th>
<th>O</th>
<th>ln O</th>
<th>FD</th>
<th>ln FD</th>
</tr>
</thead>
<tbody>
<tr>
<td>quartile 1 (1979+1980)/2</td>
<td>11.96</td>
<td>2.43</td>
<td>12.62</td>
<td>2.53</td>
</tr>
<tr>
<td>med(1989+1990)/2</td>
<td>24.50</td>
<td>3.20</td>
<td>13.78</td>
<td>2.62</td>
</tr>
<tr>
<td>quartile 2 (1999+2000)/2</td>
<td>28.90</td>
<td>3.36</td>
<td>20.20</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>2.85</td>
<td>4.68</td>
<td>0.18</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Logarithmic transformation ladder (Table 5.1) does not give us a strong support for transformation of variables. Hence the non-logarithmic forms of variables (O and FD) is used in regression analysis.

5.3 Empirical Results

In time series regressions the data need to be stationary in order for the usual econometric procedures to have the proper statistical properties. To check it, one of the first diagnostic tools is a simple time series graph of the data. A more formal method of detecting nonstationary is testing data for unit roots. The most prevalent unit root tests employing in the literature are Augmented Dickey- Fuller (ADF) and Phillips-Perron tests. In this study, ADF test will be used to detect unit roots. To perform this test, first by inspecting the graphs we try to determine whether the time series have a nonzero mean or if they have a linear or quadratic trend. If trend in the series is quadratic then the differenciated version of the series will have a linear trend in them (Adkins and Hill, 2009). For example, in the graphs of gross domestic product (Y) below, we can see that ln Y appears to be trending downward and its difference (D, ln Y) appears to wander around some constant amount. This suggests that the ADF test regressions for each of the series should contain a constant, but not a time trend.
Figure 5.9 Original versus differentiated forms of data
However, as it is point out by Adkins and Hill (2009);

...there is some art to doing this correctly and useful results depend on good judgement. Our goal is to reduce some of the artistry using formal tests wherever we can, but realize that choosing the appropriate test specification requires some judgement by the econometrician (Adkins and Hill, 2009; 289).

The next decision is to pick the number of lags to include in the ADF regressions. Akaike Information Criterion (AIC) and Schwarz Criterion (SCH) are used to determine the number of lags. Given a set of candidate models, the preferred model is the one with the minimum AIC and SCH value.

\[\text{Table 5.2: ADF results}\]

<table>
<thead>
<tr>
<th></th>
<th>Suppress constant term in regression</th>
<th>Include drift term in regression</th>
<th>Include trend term in regression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-LAG</td>
<td>2-LAG</td>
<td>3-LAG</td>
</tr>
<tr>
<td>(\ln y) AIC</td>
<td>-93.47</td>
<td>-88.65</td>
<td>-83.28</td>
</tr>
<tr>
<td>SCH</td>
<td>-90.20</td>
<td>-83.82</td>
<td>-76.94</td>
</tr>
<tr>
<td>ADF result</td>
<td>Nonstationary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Statistic (z(t)): -1.377; 1% critical value -2.438, 5% critical value -1.690, 10% critical value -1.306</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\ln k) AIC</td>
<td>-64.26</td>
<td>-62.28</td>
<td>-58.86</td>
</tr>
<tr>
<td>SCH</td>
<td>-60.98</td>
<td>-57.45</td>
<td>-52.52</td>
</tr>
<tr>
<td>ADF result</td>
<td>Nonstationary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Statistic (z(t)): -1.744; 1% critical value -2.438, 5% critical value -1.690, 10% critical value 1.306</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCH</td>
<td>-4.52</td>
<td>-5.11</td>
<td>-9.30</td>
</tr>
<tr>
<td>ADF result</td>
<td>Nonstationary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Statistic (z(t)): 0.271; 1% critical value -2.642, 5% critical value -1.950, 10% critical value -1.604</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\ln l) AIC</td>
<td>-395.52</td>
<td>-384.64</td>
<td>-371.68</td>
</tr>
<tr>
<td>SCH</td>
<td>-392.25</td>
<td>-379.81</td>
<td>-365.35</td>
</tr>
<tr>
<td>ADF result</td>
<td>Nonstationary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Statistic (z(t)): -1.756; 1% critical value -4.260, 5% critical value -3.548, 10% critical value -3.209</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\ln h) AIC</td>
<td>-84.22</td>
<td>-79.22</td>
<td>-74.01</td>
</tr>
<tr>
<td>SCH</td>
<td>-80.95</td>
<td>-74.39</td>
<td>-67.68</td>
</tr>
<tr>
<td>ADF result</td>
<td>Nonstationary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Statistic (z(t)): -0.340; 1% critical value -2.639, 5% critical value -1.950, 10% critical value -1.605</td>
<td></td>
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</tr>
<tr>
<td>(FD) AIC</td>
<td>-172.86</td>
<td>-168.86</td>
<td>-161.51</td>
</tr>
<tr>
<td>SCH</td>
<td>-169.58</td>
<td>-164.03</td>
<td>-155.18</td>
</tr>
<tr>
<td>ADF result</td>
<td>Nonstationary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Statistic (z(t)): 0.828; 1% critical value -2.639, 5% critical value -1.950, 10% critical value -1.605</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(O) AIC</td>
<td>-139.52</td>
<td>-133.51</td>
<td>-127.54</td>
</tr>
<tr>
<td>SCH</td>
<td>-136.24</td>
<td>-138.67</td>
<td>-121.21</td>
</tr>
<tr>
<td>ADF result</td>
<td>Nonstationary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Statistic (z(t)): 0.526; 1% critical value -2.639, 5% critical value -1.950, 10% critical value -1.605</td>
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</tbody>
</table>

Above in Table 5.2, Dickey-Fuller statistic (called \(z(t)\)) and that the 1%, 5% and 10% critical values for the test are given. The test statistics do not fall within the rejection region and it is concluded that the levels of data are nonstationary. When we repeat
ADF tests for differenced series, we see that all variables except human capital and labor become stationary.

**Table 5.3: ADF results of differenced series**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1-LAG</th>
<th>2-LAG</th>
<th>3-LAG</th>
<th>4-LAG</th>
<th>1-LAG</th>
<th>2-LAG</th>
<th>3-LAG</th>
<th>4-LAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>d.ln y</td>
<td>-85.43</td>
<td>-81.63</td>
<td>-76.41</td>
<td>-71.43</td>
<td>-287.89</td>
<td>-277.05</td>
<td>-266.29</td>
<td>-255.50</td>
</tr>
<tr>
<td>SCH</td>
<td>-82.21</td>
<td>-76.88</td>
<td>-70.18</td>
<td>-63.80</td>
<td>-284.67</td>
<td>-272.29</td>
<td>-260.06</td>
<td>-247.87</td>
</tr>
<tr>
<td>ADF result</td>
<td>stationary</td>
<td>nonstationary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Statistic z(1): d.ln y: -3.578; 1% critical value -2.641, 1% cri. val: -1.950, 1% cri. val: -1.605</td>
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<tr>
<td>Test Statistic z(1): d.ln k: -1.227; 1% critical value -2.641, 1% cri. val: -1.950, 1% cri. val: -1.605</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.ln k</td>
<td>-61.57</td>
<td>-57.37</td>
<td>-52.67</td>
<td>-47.98</td>
<td>-81.03</td>
<td>-75.78</td>
<td>-70.52</td>
<td>-65.40</td>
</tr>
<tr>
<td>SCH</td>
<td>-58.35</td>
<td>-52.62</td>
<td>-46.45</td>
<td>-40.35</td>
<td>-77.80</td>
<td>-71.03</td>
<td>-64.30</td>
<td>-57.76</td>
</tr>
<tr>
<td>ADF result</td>
<td>stationary</td>
<td>nonstationary</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Test Statistic z(1): d.ln k: -3.064; 1% critical value -2.641, 1% cri. val: -1.950, 1% cri. val: -1.605</td>
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</tr>
<tr>
<td>Test Statistic z(1): d.ln k: -1.729; 1% critical value -2.641, 1% cri. val: -1.950, 1% cri. val: -1.605</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>d.ln k_i</td>
<td>-11.94</td>
<td>-17.61</td>
<td>-14.18</td>
<td>-27.90</td>
<td>-169.54</td>
<td>-162.42</td>
<td>-155.19</td>
<td>-152.54</td>
</tr>
<tr>
<td>SCH</td>
<td>-8.72</td>
<td>-12.86</td>
<td>-7.96</td>
<td>-20.27</td>
<td>-166.32</td>
<td>-157.67</td>
<td>-148.97</td>
<td>-144.91</td>
</tr>
<tr>
<td>ADF result</td>
<td>stationary</td>
<td>stationary</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Test Statistic z(1): d.ln k_i: -5.225; 1% critical value -2.646, 1% cri. val: -1.950, 1% cri. val: -1.604</td>
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<tr>
<td>Test Statistic z(1): d.FD: -3.714; 1% critical value -2.641, 1% cri. val: -1.950, 1% cri. val: -1.605</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>d.O</td>
<td>-134.93</td>
<td>-128.63</td>
<td>-122.28</td>
<td>-116.59</td>
<td>-131.71</td>
<td>-123.87</td>
<td>-116.06</td>
<td>-108.96</td>
</tr>
<tr>
<td>ADF result</td>
<td>stationary</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Statistic z(1): d.O: -4.332; 1% critical value -2.641, 1% cri. val: -1.950, 1% cri. val: -1.605</td>
<td></td>
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</tr>
</tbody>
</table>

Since the theoretical model allows us to conduct regression analysis on differences (log difference refers to growth), without doing further cointegration tests or error correction models we estimate the regression equation. The results are below (Table 5.4):  

**Table 5.4: Regression results**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.016 (0.010)</td>
<td>*0.038 (0.006)</td>
<td>0.013 (0.009)</td>
<td>*0.036 (0.006)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>*0.351 (0.096)</td>
<td>*0.213 (0.064)</td>
<td>**0.267 (0.112)</td>
<td>*0.163 (0.065)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0.006 (0.046)</td>
<td>0.008 (0.026)</td>
<td>-0.014 (0.047)</td>
<td>0.020 (0.027)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>0.312 (0.309)</td>
<td>**0.506 (0.232)</td>
<td>**0.801 (0.361)</td>
<td>-0.001 (0.226)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*R*Significant at 1% level  
**Significant at 5% level  
Values in parenthesis show standard error
As it mentioned earlier, it is hypothesized that if the coefficient of growth of foreign capital stock is negative it crowd out capital over time and diminish the growth potential of the host country. The empirical results (Table 5.3) reveal that FDI stock growth does not have significant coefficient, hence, FDI does not have a statistically significant impact on growth.

The regression model also verifies the negative impact of crisis (represented by dummies variable) on the economic growth of Turkey. According to empirical analysis, main determinants spur economic growth in Turkey is capital growth and openness. Hence, our model supports the export-led growth approach for Turkey. This situation may explain the rapid increase observed after 1980- the year in which export-led growth strategy adopted (Table 5.10).

![GDP in constant prices](image)

**Figure 5.10** GDP in constant prices

Data Source: TURKSTAT. 2010
6. CONCLUSION

There is a widespread belief that FDI may not only provide direct capital financing but also create positive externalities in the recipient countries. In recent years, governments have been trying to attract foreign direct investment to foster economic growth.

Debates on the relation between these two phenomena in Turkey intensified recently especially due to the privatization operations and sales during 2000s. Hence, this study attempts to shed a little light on the debate of FDI-economic growth relation and seek whether there is a positive impact of foreign direct investment on the Turkish economic growth.

Following the recent approaches on FDI-economic growth relationship, instead of focusing on the direct capital effect of FDI, this study, focus on the question that whether the additions to the FDI stock crowd out capital over time and diminish the growth potential of Turkey. For this purpose a time series regression model, which comprise FDI stock as well as other selected determinants of growth, is employed.

Since using stationary data is a prerequisite in time series analysis, series employed in the analysis were tested for unit root via Augmented Dickey Fuller (ADF) test. After the stationary data was acquired by differentiation, OLS regression analysis was conducted on differentiated values since the theoretical model employs growth rates of the variables.

The results of the empirical study do not find any support for the statistically significant impact of FDI stock on economic growth in Turkey.

However, as it summarized in previous chapters, interpreting the effects of FDI on economic issues needs a deep insight than just interpreting the coefficients of solid models. The main reason of this, as endogenous literature emphasizes, the role of intangible assets on economic growth which is as important as the role of capital. In this context, rather than the direct capital effect, the contribution of FDI on economic
growth through their effect on institutions, technology and human capital is emphasized. Theoretically, the growth model employed in this dissertation is not the same with endogenous growth models. It explains the effect of FDI on growth through its effect on capital formation. It is hypothesized that if the coefficient of growth of foreign capital stock is negative it crowd out capital over time and diminish the growth potential of the host country. The necessity of sectoral or firm-level data for measuring the spillover effects in the studies other than those using panel data, prompt us to measure externality by this way.

Indeed, while the capital stock is rising the falling share of foreign firms in industry (40% in the late 1970s and %10 in the top 1000 industrial enterprises in 2000s might reveals that FDI does not have a crowd-out effect on capital formation. On the other hand, while this result might be interpreted as low levels of incoming FDI did not afford to enhance capital formation, hence growth by this way.

Finally, according to empirical analysis, main determinants explain economic growth in Turkey is capital growth and openness. Hence, the model supports the open economic model for Turkey.
REFERENCES


APPENDICES

A. FOREIGN DIRECT INVESTMENT LAW NO 5583

Hazinece özel teşebbüslerle kefalet edilmesine ve döviz taahhüdünden bulunulmasına dair Kanun

Kanun No: 5583                     Kabul tarihi: 1/3/1950

Maddede 1 --- Yurdu kalkanması için fayda mülahaza edilen endüstri, tarım, ülkməz ve hayvandırık işleriyle, turizmde doğrudan doğruya veya dolaylı olarak ilgili tesislerde ve istihsal çoğaltıcı veya ihracatı artıracak hâlde olana diğer işlerde kullanılmak üzere özel teşebbüsler tarafından yabancı memleketlerden yapılacak uzun vadeli borçlanmalara, toplamı 300 milyon liraya geçmemek şartıyla, Bakanlar Kurulu kararlarıyla tezini mutabakatinde kefalet etmeye Maliye Bakanlığı yetkilidir.

Maddede 2 --- Birinci maddede yazılan işlerde kullanılmak üzere yabancı memleketlerden döviz veya tesisat olarak getirilen sermaye gelirlerinin veya teşebbüs mevcudunun kısmen veya tamamen haric transferini sağlamak üzere gerekli döviz izninin verileceği hususunda Maliye Bakanlığı bu teşebbüslerle karşı taahhüde girebilir.

Maddede 3 --- Bu kanun yayını tarihinde yürürlüğe gider.

Maddede 4 --- Bu kanunu Maliye Bakanı yürüttür.

3/3/1950
Yabancı Sermaye Yatırımlarını Teşvik Kanunu

Kanun No: 5821
Kabul tarihi: 1/8/1951

Madda 1 — Memleket ekonomisinin kakoşmasına yarayan her hayvano ve biyette olmak üzere Türk insanlı sermayesine açık ülkelerde kullanılmaktayız, her hangi bir inşası ve imarının kazanılmasına damgası ve sermaye, enerji, maden, hayvanluk, ulaşımın ve turizm sektörlerine yarışmak üzere getirilecek yabancı sermaye bu kanunla yazılı huk ve mevfadelelerden faydalanır.

Maddede getirilecek yabancı sermayenin birincil sıkıرادa yazılı vasıtlarını hâlî olup olmadığı 7 nevi maddede yazılı Komite teşvik eder.

Su kadar sı: Komiteye bu vasıtları hâlî olduğu teşvik edilen yabancı sermayenin bu komanda faydalanmasına teşvik eden Bakanlar Kurulu yetkili olur.

Madda 2 — Bu kanun hükümlerine göre, birincil maddede yazılı teşviklerin kurulması veya kurulmuş olanların tevizi veya altı işler hâlî kınamaması için basın würtem getirilecek aşağıdaki unsurlar sermaye sayılır:

a) Döviz olarak getirilecek nakdi sermaye;

b) Tedarik, makine, esit, odevat ve bunların birikte getirilecek yedeğin parçaları ile lisanslı ingiliz makinesi;

c) İmżyaz, hattıra bakiş, alımıra da kâr idi gayrimindi nakdar.

Ayni ve gayrimindi nakdar olarak getirilecek sermayenin transferine esas olacak kaynaklar, giris tarihinden geçilere göre ve memleketin parası üzerinde, yedinci maddede yazılı Komitece seçilecek eksperte meşruiyet teşvik eder.

İkatperler raporu Komite kararı ile tekmüllü eder.

Madda 3 — Bu kanun hükümlerine teşvik edilen getirilmiş yabancı sermayenin:

a) % 10 u geçmiyim ve gelir ve kurumlar vergilerine esas olan vasıtlara göre taşıyıcı eden yâlınlar, faiz ve dividantlarınırm;

b) Giris tarihinden ölemek nakdar olarak getirileceklerin üç seneden, aynı ve gayrimindî nakî olarak getirilenlerin de beş seneden ölemek üzere, birincî maddemin sonu fikrinsızda yazılı Bakanlar Kurulu kararlığı teşvik edilecek middeletler dahilinde tamamı veya karsan;

Girisinde esas olan yabancı parâ para ve milletâr üzerinde, taşkiye hâlîn paranın net aktif vasıtları ile mukayyett olmak üzere, harice transferi tahsilde tahli değildir.

Bar yâlınlar, faiz ve dividendleri yekunu sermayen % 10 tim eş- tılıg tah抽检de ajan miktâr, % 10 dan az netice veren mütasekip yıllar için—

72
de, transfer hacmi % 10'a trieb ederek güçlenebilir. Bundan daha fazla olan netoslar ana sermaye ile beraber ve aynı hükümete tabi olarak trans-
fer olunabileceği gibi, Türk Para Biriminin Kredi Belgesini Türkiye'ye devreden sermaye ve diğerlerine devreden sermaye ve diğerlerine

Transfer zamanı gelmiş sermaye ve bu sermaye ile birlikte transfore 
tarı tahr belgelerinin hâl ve bakterler için yapılan müzakereler üzerine Ma-
lkiye Bakanlığı, hâllerin mevzu anıtlarını uydu bir içe derhal ve mümbe-

klenin de en geç altı ay içinde gerçeklen transfer müzakereini yerle.

Madde 4 — Birinci maddeye yazılı iş ve istihza sahallarında yerli 
sermaye ve teşebbüslerde sağlık ve sağlıkçılık olan her türlü hak,
müşafyet ve koltuklardan nay verilir, nay çıkarılır, muhtemel iş kollarında 
galan yabanı sermaye ve teşebbüsler de istifade eder.

Madde 5 — Bu kanun hükümlerine göre Türkiye’ye sermayeye getir-
müş olan yabancı mültezimlerle bunların yabancı vekilleri ve teşebbüslerin 
kurulup işletmeleri için 7 nol maddeye yazılı Komitece lisnuni kabul edi-

Yedinci maddeye yazılı Komitece bu kanunun şimdideki mevcut ipler-
la meşgul bulunduğunu baskan edilen yerli teşebbüslerle, yabancı mültebas-

Mass ve vekilleri hâlinde de yukarıdaki fiyata hükümetleri tabi olmam.

Madde 6 — Birinci maddeye yazılı vasıfları haiz olduğu yedinci 
madde den Komite tarafından teşvikt olunan teşebbüslerde (Tarım dahil) 
kullandırmak üzere yabancı memlekettirden yapılacak usul ve dişleri 
şövalı maddeye yazılı masalası dairinde ay-

Bundan başka, bu kabul borçlanmalara, unumı olarak (300) mily-

Bu şehitlerde temin olunan sermayemin ölçüsü maddeye tevüklenen harı-

Bundan başka, bu kabul borçlanmalara, unumı olarak (300) mily-

Maddde 7 — Bu kanunun tabi olduğu ile ilgili işleri Körmekce 

Maddde 8 — Komite kararlarına karşı, agı terbiyle tarihinden 
tibaren, 30 gün içinde itiraz olunabilir.
Süraçlar Maliye, Ekonomi ve Ticaret ve İşletmeer Bakanlarından müteşekkil bir heyet tarafından 15 gün zarında karara bağlanır. Bu karar boşta.

Madde 9 — Bu kanun hükümlerinden faydalanmak üzere yapılabacak müsacaatlar için merkez Ekonomi ve Ticaret Bakanlığındır.

Madde 10 — 5583 sayılı kanun kaldırılmıştır.

Geçici Madde — 1567 sayılı kanuna mümkün 13 sayılı kanunun 31 число madde ve 5583 sayılı kanunla tanınmış haklar mahfûs durur.

Madde 11 — Bu kanun yayını tarihinde yürürlüğe girer.

Madde 12 — Bu kanunu Bakanlar Kurulu yürüttür.

7/9/1951

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C. FOREIGN DIRECT INVESTMENT LAW NO 6624

Kanun No:6224

Tarih: 18.1.1954

1) KANUNUN MEVZUU

MADDE 1- Bu kanun. yatırım yapılacak teşebbüsün:

a) Memleketin ıktisadi inkışafına yararlı olması.

b) Türk hisseleri teşebbüslerine açık bulunan bir faaliyet sahasında çalışması. şartıyla ve Yabancı Sermayeyi Teşvik Komitesinin karan ve Icra Vekilleri Heyetinin tasvibi ile Türkiye’yeye ithal edilecek yabancı sermaye ve dışarıdan yapılacak istikrazlara tatbik olunur.

Ancak, Türkiye’yeye ithal edilecek yabancı sermaye, ülke çapında tekel teşkil edecek faaliyetlerde bulunan kuruluşlarda coğuşlu hissesine sahip olamaz.(*)

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Bu maddede derpiş edilen ve 8'inci maddede ile kurulmuş olan "Yabancı Sermayeyi Teşvik Komitesi" bundan böyle "Komite" diye zikredilecektir.(***)

2) ANA YABANCI SERMAYE

MADDE 2- Bu Kanunun tatbikatı bakımından ana yabancı sermaye tabiri aşağıda gösterilen şekilde takdir ve tesbit olunan kıymetlerin mecmuunu ifade eder:

a) Bu kanun mevzuuna giren bir teşebbüsün verimli bir şekilde kurulması. tevsi veya yeniden faaliyete geçirilmesi için hariçten ithal edilen :

1- Yabancı para şeklindeki sermaye.

2- Makine. teçhizat. alet ve bu maviyetteki mallar. makina aksamı.yedek parçalar ve malzeme ile Komitenin kabul ettiği sair lüzumlu mallar.

3- Lisanslar. patent hakları ve alameti farika gibi fikri haklar ve hizmetler.

4- 3'üncü madde gereğince yeniden yatırılacak suretiyle sermayeye kalbedilen mallar.

b) Mal. hizmet veya fikri haklar şeklinde ithal edilen sermayenin kıymet ve Komitede kabul edilen teşebbüs mevzuu mallar ve kıymetler olup olmadığı Komitece seçilen eksperler tarafından takdir olmamı.

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(*) 4105 sayılı Kanunla. bu Kanuna ilave edilmiştir.

(**) Bu Kanunla Yabancı Sermaye Komitesine verilmiş olan görevler 4059 sayılı Kanun ile Hazine Müsteşarlığına devredilmiştir.

Eksperlerce takdir olunan kıymet. Komite tarafından yeniden tetkik ve teşvik edilebilir.

Kıymet takdiri. hem menşe memleket parasıyle. hem de ithal zamanında cari resmi kamiboio rayicine göre Türk parasıyle yapılır.

8'inci maddede derpiş edilen itiraz yolu mahfuz kalmak şartıyla Komitenin kıymet takdiri hususundaki kararı nihaidir.

3) KARLARIN SERMAYEYE KALBİ

MADDE 3- Bu Kanuna tabi bir teşebbüsün yürürlüğekte vergi kanunları hükümlerine göre elde ettiği karlardan ana yabancı sermayenin sahiplerine isabet eden net miktarların tamamı veya bir kısmını Komitenin kararı ile ana yabancı sermayeye ilave edilebileceği gibi 1'inci maddedeki şartları haiz diğer bir teşebbüs de yatırılabilir.

4) KARLARIN VE ANA SERMAYENİN TRANSFERİ
MADDE 4- a) Aşağıda yazılı kar ve sermayeler. bu maddenin (c) fikrasi hükümlerine tabi olarak ana yabancı sermayenin mensup olduğu menşe memleket para cinsiyle ve cari resmi kambiyo rayici üzerinden harice transfer edilir;

1- 31 Aralık 1953’den sonra elde edilmiş bulunan ve yürütülükteki vergi kanunlarına göre taayyün eden kazançlardan ana yabancı sermaye sahiplerine isabet eden net karlar.

2- Bu Kanuna tabi bir теşebbüsün, kısmen veya tamamen tasfiyesi halinde; makul fiyatla satış neticesi elde edilen hasilattan. ana yabancı sermayenin sahiplerine isabet eden hisse.

3-Bu Kanuna göre kurulmuş veya çalışmakta olan bir теşebbüsteki ana yabancı sermayenin kısmen veya tamamen. makul fiyatla satış neticesi elde edilen hasilat.

4- Bu Kanunun 6’nci maddesi hükümlerine dahilinde akdedilen bir dış istikrazın. istikraz mukavelesi hükümlerine göre hülül eden resulmal ve faizleri.

b) Maliye Vekaleti veya Komite lüzum gördükleri takdirde:

1- Bu maddenin (a) fikrasında 1’inci bendine göre transfreri istenebilecek miktarları tayin etmek üzerine. bu Kanuna tabi теşebbüsün defterlerini ve vergi beyannamelerini.

2- Hisselerin ve mevcutların satışının. istikrazların. hüsnüniyete makrum olup olmadığını tetkik ettirebilirler.

5) HİSSELERİN TRANSFERİ

MADDE 5- a) Maliyet Vekaleti talep vukuunda 2’nci maddede tariif edilen ana yabancı sermayeyi temsil eden ve bir Türk şirketinin defterlerinde mukayyet bulunan hisse senetleri veya muvakkat makbuzlara aşağındaki metinde ifade ettiği şekilde garanti verir:

(Bu hisse senedine isabet eden temettüller. transfer za- manında hari olun resmi kambiyo rayici üzerinden hisse senedi veya muvakkat makbuzun Türkiye Cumhuriyet Merkez Bankası veya onun yabancı memleketlerdeki selahiyetli mümessillerine ibrazi üzerine. derhal...(Menşe Yabancı Para) olarak transfer edilir. Bu hisse senedi veya muvakkat makbuzun. satış haslalı veya tasfiye neticesi elde edilen hasilattan bu hisse senedi veya muvakkat makbuz sahibine isabet eden miktar transfer zamanında hari olun resmi kambiyo rayici üzerinden...(Menşe Yabancı Para) olarak Türkiye Cumhuriyetinin 6224 numaralı Kanununun 4’üncü maddesi mucibince transfer edilir.)

Maliyet Vekili
veya
Selahiyetli Kılacağı Memur
b) Bu garantileri haiz bulunan nama mubaher hisse senetleri veya muvakkat makbuzlar gerek Türkiye'de, gerekse hariçte her tabiyyetin kimseler arasında serbestçe tedavül eder. Bu hisse senetlerinin veya muvakkat makbuzların Türkiye'de yerleşmiş hakiki veya hukuki sahıslara satıldından önce, yerlerine kaim olmak üzere yeniden hisse senedi veya makbuz çıkarılın veya çıkarılmasının garantilerinin iptali için Maliye Vekaletine ibrazı mecburudur.

6) İSTİKRAZLARIN GARANTİ EDİLMESİ

MADDE 6- a) Maliyet Vekaleti bu Kanunun 1’inci madde- sinde yazılı vasiıatları haiz bir teşebbünün yapacağı dış istikrazın resümları ve faizler için teminat veya kefalet mukabilinde bir milyar Türk Lirasını geçmemek üzere. Vekiller Heyeti karan ile kefalet verebilir.

b) Bu kefalet. istikrazın resümları veya faizlerinin ödenen kısımları için kendiliğinden kalkar.

7) YABANCILARIN İSTİHDAMI

MADDE 7- a) Bu Kanun gereğince kurulan bir teşebbünün etdik, kurulma ve işletme devrelerinde 2007 ve 2818 sayılı Kanunların koydukları şartlar ve memnuniyeler böyle bir teşebbüs para yatırıyan yabancılar, para yatıranların müesssili olanın yabancılar, müttehassıs. ustabaşı ve diğer yetişkin personele. Komitece teşebbüsün verimli surette kurulması, genişletilmiş. yeniden faaliyete geçirilmiş veya işletilmesi için gerekli bir devre zarında tatbik olunmaz.

b) Yukarıdaki hüküm. Komitece. bu kanunun 1’inci maddesinin koyduğu şartlara uygun olduğu kabul edilen yerli teşebbüslerin istiham edecekleri yabancı müttehassıs. ustabaşı ve diğer yetişkin personel hakkında da tatbik olunur.

c) Bu madde hükümleri gereğince istiham edilen yabancılar. Maliye Vekaletinin önceden istihsal edilmiş muvafakatı şartıyla. ailelerinin maişeti maksadiyle veya normal tasarruflarının harice gönderilmesi için kazançlarının hizmet mukavelelerinde derpiş edilen kısmını. cari resmi kamibo rayıcı-üzerinden. kendi memleketleri paraşıyle transfer edebilirler.

8) YABANCI SERMAYEYİ TEŞVİK KOMİTESİ


Komitenin Umumi Katılığı İç Ticaret Umum Müdürü tarafından ifa ve icabınca Komite Umumi Katip tarafın- dan toplantıya davet olunur.
Komite Reis ve üyelerine verilecek ücret. İcra Vekilleri Heyetince tesbit edilir.

b) Komite kararlarına, ilgililerce kararın kendilerine teblig tarihinden itibaren (30) gün içinde itiraz edilebilir. İtiraz mercii Maliye, Ekonomi ve Ticaret ve İşletmeler Vekillerinden terekktip eder. Bu mercekarı nihaidır. (*

MADDE 9- a) Bu Kanunun tatbikatında merci Ekonomi ve Ticaret vekaletidir.

b) Ekonomi ve Ticaret Vekaleti. Komitenin vereceği karar üzerine aynı sermayenin memlekete ithalı hususunda ilgili giriş mümkününe emir verir.

9) YERLİ VE YABANCI SERMAYENİN MÜSAVİ MUAMELE GÖRMESSİ

MADDE 10- Yerli Sermayeyle ve teşebbüslerle tanınan haklar. muafiyetler ve kolaylıklardan. aynı sahalarda çalışan yabancı sermaye ve teşebbüler de aynı şartlar dahilinde istifade ederler.

MADDE 11- a) 1567 sayılı Kanunun verdiği selahiyete instaden çıkarılmış olan 13 sayılı kararın 31’inci maddesi gereğince yatırım yapmış olanlara tanınmış bulunan haklar ile 5583 ve 5821 sayılı Kanunlarla tanımlı olan haklar mahfuzdur.

b) 1 Ağustos 1951 tarihi ile bu Kanunun mer’iyete girdiği tarih arasında 5821 sayılı Kanuna göre yapılmış yatırımlar da bu Kanunun hükümlerinden faydalanır.

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(*) 933 sayılı Kanunun 6. maddesinde. "Bu fikrada zikredilen itiraz mercii Yüksek Planlama Kuruludur" denmek suretiyle 8. maddenin (b) fikrasi tadir edilmiştir.

10) ESKI KANUNUN YÜRÜRLÜKten KALDIRILMASI

MADDE 12- 5821 sayılı Kanun yürütülükten kaldırılmıştır.

11) KANUNUN MER’IYETE GİRMESSİ

MADDE 13- Bu Kanun neşri tarihinden itibaren mer’idir.

MADDE 14- Bu Kanunun icrasına İcra Vekilleri Heyeti memurdur.

(24.1.1954 tarihinde Resmi Gazette’de yayınlanmıştır.)

D. FOREIGN DIRECT INVESTMENT LAW NO 4875

KANUN NO: 4875

KABUL TARIHİ: 5 HAZİRAN 2003

RESİMİ GAZETE : 17 HAZİRAN 2003

Amaç ve kapsam

Madde 1- Bu Kanunun amacı, doğrudan yabancı yatırımların özendirilmesine, yabancı yatırımcıların haklarının korunması ile yatırım ve yatırımcı tanımlarında uluslar arası standartlara uyulmasına, doğrudan yabancı yatırımların
gerçekleştirmesinde izin ve onay sistemünün bilgilendirme sistemine dönüştürülmesine ve tespit edilen politikalar yoluya doğrudan yabancı yatırımların artırılmasına ilişkin esasları düzenlemektedir. Bu Kanun, doğrudan yabancı yatırımlara uygulananak muameleyi kapsar.

**Tanımlar**

**Madden 2- Bu Kanunda geçen**;

a) Yabancı yatırımcı: Türkiye'de doğrudan yabancı yatırım yapan.

1) Yabancı ülkelerin vatandaşlığına sahip olan gerçek kişiler ile yurt dışında ikamet eden Türk vatandaşlarını.

2) Yabancı ülkelerin kanunlarına göre kurulmuş tüzel kişiler ve uluslar arası kuruluşları.

b) Doğrudan yabancı yatırım : Yabancı yatırımcı tarafından.

1) Yurt dışında getirilen;
   - Türkiye Cumhuriyet Merkez Bankası’nca alım satımı yapılan konvertibl para ülkeyle nakit sermaye.
   - Şirket menkul kıymetleri (devlet tahvilleri hariç).
   - Makine veтехizat.
   - Sinai ve fikri mükâyet hakları.

2) Yurt içinden sağlanan;
   - Yeniden yatırımın kullanlan kar. hasılat, para alacağı veya mali değeri Olson yatırımla ilgili diğer haklar.
   - Doğal kaynakların ararnmasi ve çıkarılmasına ilişkin haklar, gibi iktisadi kıymetler aracılığıyla;
     i) yeni şirket kurmayı veya şube açmayı.
     ii) menkul kıymet borsaları dışındaki hisse edinimi veya menkul kıymet borsalarından en az % 10 hisse oranı ya da aynı oranda oy hakkı sağlayan edinimler yoluya mevcut bir şirkete ortak olmayı.

c) Müsteşarlık: Hazine Müsteşarlığı’nı.

ifade eder.

**Doğrudan yabancı yatırımlara ilişkin esaslar**

**Madden 3- a) Yatırım serbestisi ve milli muamele**

Uluslar arası anlaşmalar ve özel kanun hükümleri tarafından aksi öngörülmüdükçe;

1- Yabancı yatırımcı tarafından Türkiye’dede doğrudan yabancı yatırım yapılması serbesttir.

2- Yabancı yatırımcı yerli yatırımcılarla eşit muameleye tabidirler.

b) Kamulaştırma ve devletleştirme

Doğrudan yabancı yatırımlar. yürütülükteki mevzuat gereğince; kamu yararı gerektirmedikçe ve karşılıkları ödenmedikçe kamulaştirilmaz veya devletleştirilemez.

c) Transferler

Yabancı yatırımcıların Türkiye’deki faaliyet ve işlemlerinden doğan net kar, temetti, satış, tasfiye ve tazminat bedelleri, lisans, yönetim ve benzeri anlaşmalar karşısında ödenek mebağlar ile dış kredi ana para ve faiz ödemeleri, bankalar veya özel finans kurumları aracılığıyla yurt dışına serbestçe transfer edilebilir.


e) Uyumsuzlıkların çözümü

Özel hukuka tabi olan yatırım sözleşmelerinden kaynaklanan uyumsuzlıkların çözümü ile yabancı yatırımcıların idare ile yaptıkları kamu hizmeti imtiyaz şartlaması
ve sözleşmelerinden kaynaklanan yatırım uyuşmazlıklarının çözümlenmesi için; görevli ve yetkili mağkemelerin yan sıra. ilgili mevzuatta yer alan koşulların oluşması ve tarafların anlaşması kaydıyla, milli veya milletlerarası tahkim ya da diğer uyuşmazlık çözüm yollarına başvurulabilinir.

f) Nakit dış sermayenin değer tespiti
Nakit dışındaki sermayenin değer tespiti. Türk Ticaret Kanunu hükümleri çerçevesinde yapılır. Yabancı ülkelerde kurulu bulunan şirketlerin menkul kıymetlerinin yatırım aracılı olarak kullanılması halinde, menşe ülke mevzuatına göre değer tespitine yetkili makamların veya menşe ülke mağkemelerince tespit edilecek bilirkişilerin ya da ulusal arası değerlendirme kuruluşlarının değerlendirmeleri esas alınır.

g) Yabancı personel istihdamı
Bu Kanun kapsamında kurulan şirket. şube ve kuruluşlarda istihdam edilecek yabancı uyuşku personele. Çalışma ve Sosyal Güvenlik Bakanlığına çalışma izni verilir. 27.2.2003 tarihli ve 4817 sayılı Yabancıların Çalışma İzini Hakkında Kanun’un 23. maddesi uyaranca Hazine Müsteşarlığı ve Çalışma ve Sosyal Güvenlik Bakanlığına müsterekken hazırlanacak yönetmelikte; yabancı sermayeli şirket ve kuruluşlardan hangilerin bu kapsamına gireceği ile söz konusu yönetmelik kapsamında izin verilecek kilit personelin tanımı ve çalışma izinlerine ilişkin özel nitelikteki diğer esas ve usuller belirlenir.

Bu kapsamında istihdam edilecek personele. 4817 sayılı Kanun’un 14. maddesi birinci fıkrasının (b) bendi hükümleri uygulanmaz. İstihdam edilecek yabancı uyuşku kilit personele. 4817 sayılı Kanun’un 13. maddesi birinci fıkrasının hangi durumlarda uygulanacağı hazırlanacak yönetmelikte belirlenir.

b) İrİtbat büroları
Müsteşarlık. yabancı ülke kanunlarına göre kurulmuş şirketlere. Türkiye’de ticari faaliyette bulunmamak kaydıyla iri rat bürosu açma izni vermeye yetkilidir. Politika belirleme ve bilgi isteme
Maddde 4- Müsteşarlık; kalkınma plan ve yıllık program hedeflerini. ülkenin genel ekonomik durumunu. dünyadaki yatırım eğilimleri ve ilgili kamu kurum ve kuruluşları ile özel kesim meslek kuruluşlarının görüşlerini dikkate alarak. doğrudan yabancı yatırımlara ilişkin politikaların genel çerçevesini belirlemeye. bu amaçla diğer kuruluşların faaliyetlerine katılmaya yetkilidir. Doğrudan yabancı yatırımları ilgilendiren mevzuatta yapılacak değişiklik ve yeni mevzuat taslakları hakkında Müsteşarlığın uygun görüşü alınır. Müsteşarlık. doğrudan yabancı yatırımlara ilişkin bilgi sistemini kurmak ve geliştirmek amacıyla. yatırımlar hakkındaki istatistik bilgileri. her türlü kamu kurum ve kuruluşları ile özel kesim meslek kuruluşlarından isteme yetkilidir. Yabancı yatırımcılar. yatırımları ile ilgili istatistik bilgileri Müsteşarlıkça hazırlanacak yönetmelikle belirlenen usul ve esaslar çerçevesinde Müsteşarlığa bildirirler. Söz konusu bilgiler istatistik amaçları dışında ispat araci olarak kullanılmaz.
Çeşitli hükümler

b) Yönetmelik
Bu Kanunun uygulanmasına ilişkin esaslar Kanunun yayınımlı izleyen bir ay İçerisinde Müsteşarlıkça hazırlanacak yönetmelikle düzenlenir.
FOREIGN DIRECT INVESTMENT LAW NO 4875 (ENGLISH)

FOREIGN DIRECT INVESTMENT LAW
Law No. 4875
Date of Passage: June 5, 2003
Date of Official Gazette: June 17, 2003

OBJECTIVE AND SCOPE
Article 1. The objective of this Law is to regulate the principles to encourage foreign direct investments; to protect the rights of foreign investors; to define investment and investor in line with international standards; to establish a notification-based system for foreign direct investments rather than screening and approval; and to increase foreign direct investments through established policies. This Law establishes the treatment to be applied to foreign direct investments.

DEFINITIONS
Article 2. The terms used in this Law shall have the following meanings:

a) Foreign investor:
1) Real persons who possess foreign nationality and Turkish nationals resident abroad. and
2) Foreign legal entities established under the laws of foreign countries and international institutions. who make foreign direct investment in Turkey.

b) Foreign direct investment:
i) Establishing a new company or branch of a foreign company by foreign investor.
ii) Share acquisitions of a company established in Turkey (any percentage of shares acquired outside the stock exchange or 10 percent or more of the shares or voting power of a company acquired through the stock exchange) by means of. but not limited to the following economic assets:
1) Assets acquired from abroad by the foreign investor:
   - Capital in cash in the form of convertible currency bought and sold by the Central Bank of the Republic of Turkey.
   - Stocks and bonds of foreign companies (excluding government bonds).
   - Machinery and equipment.
   - Industrial and intellectual property rights;
2) Assets acquired from Turkey by foreign investor:
- Reinvested earnings, revenues, financial claims, or any other investment-related rights of financial value.
- Commercial rights for the exploration and extraction of natural resources.

c) The Undersecretariat: The Undersecretariat of Treasury.

PRINCIPLES CONCERNING FOREIGN DIRECT INVESTMENTS

Article 3.

a) Freedom to Invest and National Treatment
Unless stipulated by international agreements and other special laws:
1. Foreign investors are free to make foreign direct investments in Turkey.
2. Foreign investors shall be subject to equal treatment with domestic investors.

b) Expropriation and Nationalisation
Foreign direct investments shall not be expropriated or nationalised, except for public interest and upon compensation in accordance with due process of law.

c) Transfers
Foreign investors can freely transfer abroad: net profits, dividends, proceeds from the sale or liquidation of all or any part of an investment, compensation payments, amounts arising from license, management and similar agreements, and reimbursements and interest payments arising from foreign loans through banks or special financial institutions.


e) Dispute Settlement
For the settlement of disputes arising from investment agreements subject to private law and investment disputes arising from public service concessions contracts and conditions which are concluded with foreign investors, foreign investors can apply either to the authorised local courts, or to national or international arbitration or other means of dispute settlement, provided that the conditions in the related regulations are fulfilled and the parties agree thereon.

f) Valuation of Non-Cash Capital
Non-cash capital is valued within the regulations of Turkish Commercial Law. In case that stocks and bonds of companies established abroad are used as foreign capital share of foreign investors, the values determined by the relevant authorities in the home country, or by the experts designated by the courts of the home country, or any other international institutions performing valuations will be accepted.

g) Employment of Expatriates
Work permits are issued by the Ministry of Labour and Social Security for foreign personnel to be employed in the companies, branches and entities established within the scope of this Law. In accordance with the Article 23 of the Law on Work Permits for Foreigners No. 4817 dated 27 February 2003, the definition of the key personnel within the scope of the Regulation the companies and the entities with foreign capital which shall be in the context of the Regulation, and other special procedures and principles concerning the work permits of the key personnel will be determined in a Regulation to be prepared jointly by the Undersecretariat of Treasury and the Ministry of Labour and Social Security. Provisions stipulated in Article 14, paragraph 1, sub-paragraph (b) of Law No. 4817 will not be applicable to those personnel to be employed within the context of this Regulation. The conditions under which the provisions stipulated in paragraph 1 of Article 13 of Law No. 4817 are to be applied to key foreign personnel employed will be specified in the Regulation.

h) Liaison Offices
The Undersecretariat is authorised to permit foreign companies established under the laws of foreign countries to open liaison offices, provided that they do not engage in commercial activities in Turkey.

**DETERMINATION OF POLICIES AND DATA COLLECTION**

**Article 4.** Considering the objectives of the development plans and annual programs, the general economic status of the country, trends in international investments and the opinions of the relevant public institutions and private sector professional organisations, the Undersecretariat is authorised to determine the general framework of policies concerning foreign direct investments, and for this purpose to participate in the activities of other organisations. The consent of the Undersecretariat shall be taken before any amendment or enactment of a regulation related with foreign direct investments. For the purpose of establishing and developing an information system related to foreign direct investments, the Undersecretariat is authorised to request statistical information concerning the investments from all public establishments and institutions and private sector professional organisations. Foreign investors shall submit the statistical information on their investments according to the procedures and principles to be determined by a regulation to be enacted by the Undersecretariat. Such information cannot be used as evidence other than for statistical purposes.

**OTHER PROVISIONS**

**Article 5.**

a) **Existing Companies with Foreign Capital**

The companies with foreign capital established pursuant to Law No. 6224 dated 18 January 1954 shall be subject to this Law, reserving their granted rights.

b) **Regulations**

The implementing principles for this Law will be determined in a regulation to be prepared by the Undersecretariat within one month following the publication of the Law.

c) **Repealed Provisions**

The Law for Encouragement of Foreign Capital No. 6224 dated 18 January 1954 is repealed. The references made to Law No. 6224 in the legislation are considered as referring to the related provisions of this Law.

d) **Any amendments concerning the articles of this Law can only be done by means of amending or appending provisions to this Law.**

**PROVISIONAL ARTICLE 1.** The provisions of the decrees, communiqués and circulars in effect, which are in conformity with this Law, shall remain in force until new regulations for the implementation of this Law take effect.

**EFFECTIVENESS**

**Article 6.** This Law shall come into force on the date of its publication.

**ENFORCEMENT**

**Article 7.** The provisions of this Law shall be enforced by the Council of Ministers

F. ESTIMATION for COINTEGRATION
CURRICULUM VITA

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