TELECOMMUNICATIONS AS INFRASTRUCTURE INVESTMENT AND PRIVATIZATION: A CASE STUDY IN TURKEY

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Abstract: The rapidly enhancing technological improvements and increasing globalization trend have required radical changes in the telecommunications sector by leaving the services of telecommunications out of classical forms. In the 1980s, many countries have started reform toward this sector. The reform in telecommunications could be characterized by commercialization, corporatization, privatization liberalization. Privatization has been accepted as a main tool. The purpose of this paper is a) to identify the features of telecommunications services, the reasons of the sector's reforms and privatization which has a significant place in these reforms in general, b) to examine the privatization in the Turkish Telecommunications sector in particular. This paper presents the potential for privatization of the Turkish Telecommunications sector from the point view of country risk, sector risk and company risk, all of which are used by the global investors in evaluating investment opportunities. As a result, this paper indicates that a successful reform in telecommunications sector doesn't depend on privatization. The reform in telecommunications requires a process. The whole of them should be imply due to the telecommunications sector's features.

Keywords: Telecommunications, Liberalization, Regulation, Privatization.

I. INTRODUCTION

In the late 1980s, the reform in public sector enterprises was seen as a necessity in the world. Many countries have embarked on microeconomic reforms in various sectors. The telecommunications sector is one of the sectors which are mostly in need of restructure. Together with the globalization trend and enhancing technological improvements, the sector's structure has been changed. In the telecommunications area, there is a wide range of services in addition to the classical services. A company lacking in modern telecommunications systems can't effectively participate in the global economy. Also, telecommunications services are a kind of encouraging force behind the economic development of developing countries.

Until the 1980s, telecommunications services were provided by state-owned public enterprises as a monopoly

ALTYAPI YATIRIMI OLARAK TELEKOMÜNİKASYON VE ÖZELLEŞTİRME: TÜRKİYE'DE BİR ÇALISMA

Özet: Artan globalleşme ve hızlı teknolojik ilerlemeler, telekomünikasyon sektöründe radikal değişimleri gerektirmiş olup, telekomünikasyon hizmetlerini klâsik kalıpların dışına çıkarmıştır. 1980'lerle birlikte birçok ülkede bu sektöre yönelik reformlar başlatılmıştır. Telekomünikasyon reformları; ticarileşme, şirketleşme, özelleştirme ve liberalizasyon denilen süreçlerden oluşmaktadır. Özelleştirme temel bir araç olarak kabul edilmektedir. Bu makalenin amacı genel olarak; a) Telekomünikasyonun hizmetlerinin özelliklerini, telekomünikasyon sektöründe reformların nedenleri ve bu reformlar içinde özel bir öneme sahip olan özellestirmeyi açıklamaktır. b) Spesifik olarak da, Türk telekomünikasyon sektöründeki özelleştirme incelenmektedir. Bu çalışma; ülke riski, sektör riski ve global yatırımcılar için yatırımları değerlendirme fırsatlarında kullanılan şirket riski açılarından Türk telekomünikasyon sektörünün özelleştirme potansiyeli değerlendirilecektir. Bu çalışma sonucunda telekomünikasyon sektöründe başarılı bir reformun sadece özelleştirmeye bağlı olmadığı görülmektedir. Telekomünikasyonda reform bir Bunların tümü gerektirir. telekomünikasyon sektörünün niteliğinden dolayı uygulanmalıdır.

Anahtar Kelimeler: Telekomünikasyon, Liberalizasyon, Düzenleme, Özelleştirme

due to the telecommunications services' features. But It was pointed out that these public enterprises were unsatisfactory in meeting demands. The state couldn't adapt itself to changes in the sector from the standpoint of technology and the economy. As a consequence, in order to obtain the transformation of this sector, privatization has started to be used as a tool. Many countries have undertaken privatization programmes.

The aim of this paper is to research the process of privatization and liberalization of The Turkish telecommunications sector. In this case study, the Turkish telecommunications sector and privatization studies are evaluated in the light of some indicators. Initially, the features of telecommunications, the reform and privatization in this field are explained theoretically. Later on, some information is given about the structure of the Turkish telecommunications sector. By taking the public sector going through the process of privatization into

account, my paper aims to show the current research being done by Turk Telecom in this sector.

II. THE FEATURES of TELECOMMUNICATIONS

Telecommunications an infrastructure investment is increasingly recognized as a key component of economic development [1]. With the globalization trend in the world, the expansion of technological innovation in this sector, classical telecommunications services (post, telegraph and telephone) have grown in quality and quantity, thanks to developments in information, electronics, communications and computer technology. The structure of the telecommunications sector has been changed. New value added services such as mobile phone, car-phone, satellite, internet, data transmission start to supersede the traditional telecommunications services [1]. No company, especially a telecommunications company, and no country can neglect these innovations in this sector. Nowadays, telecommunications is not only used as a means of transport from one place to another, but also used to give firms a competitive advantage [3]. telecommunications sector basically has four features:

1) Supporting Other Industry Branches: Telecommunications is one of the most important branches of industries. It provides individuals and firms with an essential service. In addition, It buys advanced technology and is a supporter of manufacturing industries [4].

Telecommunications offers support to not only the manufacturing sector, but also the service sectors such as education and health.

2) Natural Monopoly: Telecommunications was referred to be a natural monopoly from an economic point of view, due to the following reasons mentioned below:

A natural monopoly can arise from "economies of scale "and/or "economies of scope ". In economies of scale, the single firm production is cheaper than multifirm production, at every level of output as average (and marginal) costs continuously decrease with increasing output [5], so one firm grows larger than its rivals. It has cost advantage which allows it to grow. As a result, It has dominated the whole market. This firm can earn larger profits [6,7].

From an economic point of view, the telecommunications sector has significant economies of scale. Because the cost of every added customer will be less, while the number of subscribers increases. Natural monopoly can arise from economies of scope as well as

economies of scale. Economies of scope are said to exist if a given quantity of two or more goods can be produced by one firm at a lower total cost than the one if the same goods are produced separately by different firms. In other words, there is shared equipment or common facilities that make producing goods together less expensive than producing them separately [8]. For example, improving the size of the telecommunications network will lead to larger rate of increase per time due to its technological features [9]. Natural monopoly distorts the conditions of perfect competition and creates inefficiency in allocation of resources and unfair distribution of income [10]. This inefficiency is known as x-inefficiency [1].

- 3) Zero Marginal Costs of Production: The telecommunications sector has zero marginal costs of production. Initially, the established cost of new television or radio transmitters consists of its fixed costs in the early years of its establishment. While production increases, the cost per production will decrease. At the given level, marginal cost will be zero. At this point, if full capacity isn't used, the price is zero. The marginal cost of an additional person is zero for any other individual. That is, the production of services in question may be increased without decreasing other production by using scarce resources apart from its production. In that event, price equals marginal cost, so that price is zero because marginal cost is zero [11].
- Externalities: Telecommunications externalities. It can be said that telecommunications has the characteristics of a club. Both the cost of club membership and its value depend on the number of subscribers. Every new member of the club provides existing members with some benefits. This means the private value of every membership will differ from the social value. The existence of such "network externalities "creates a probable case for subsidization of new membership. This externality is likely to be important in the early years of establishment of a network where the value of a new subscriber may be anticipated to be highly valued by existing subscribers [8]. Both monopoly and externality prevent allocation of resources according to Pareto optimal [12-13].

III. TELECOMMUNICATIONS REFORM AND PRIVATIZATION

Until the 1980s, in many countries, telecommunications services were provided as a monopoly by state-owned enterprises (Exception Canada, Finland and United States). However, It was seen that these enterprises were inefficient and their services fell short of meeting demands. In addition, the state enterprises couldn't adapt themselves to changes in

neither technological nor economic activities. These enterprises are inefficient organizations as follow:

- 1) Services are supplied inefficiently. The traditional tendency in PTTs (Post, Telegraph and Telephone Administrative) builds the largest possible network at the lowest possible cost, without taking updating and upgrading requirements into account.
- 2) Since the state enterprises need to rely on government subsidies, the availability of incentives to ensure productivity and efficiency in the state enterprises causes ineffectiveness in management. [14]. This case has created a gap between the supplied and demanded services in both technology and capacity. The developments in information and communications technology have caused more increasing demands for telecommunications services. Owing to deteriorating national economies and strict international credit conditions, governments didn't have funds to build new investments meeting increasing demands.
- 3) Operational inefficiencies are raised from unbalanced tariff policy leading to cross subsidization, x-inefficiency [15], ill-directed investment and overstaffed organizational structure pursuing political support. For example, due to political worries, investments may be built in a geographical location, which will bring greater electoral support, rather than in areas that will be low cost.
- 4) Increased information intensity. Economic activities increasingly focus on information and globalization of capital flows and other advanced activities. Information is seen to be a fundamental production factor together with labor and capital. This situation created a strong demand for better, more varied, but less costly communications and information services. Also, the rapid technological development in this sector is at a global level. Therefore, rapid growth and diversification in demand became intertwined with great and rapid challenge in the telecommunications technology [1,14].
- 5) Owing to worsening economic conditions, most governments withdrew their funds from these enterprises having low performance. This caused a serious decline in telecommunications investments.

In particular, developing countries have got bigger problems than those of developed countries in this sector. In other words, the development levels telecommunications sectors in developing countries have been inferior to those of developed countries. For example, developing countries which have approximately 75 percent of the world's population have got only 12 percent of the total number of telephone lines [1].

In the 1970s, most countries wanted to allocate a larger share of public funds and to obtain more external credit to solve their problems about telecommunications. These attempts resulted in rapid growth and modernization of these services. Despite such innovations, the sector neither satisfied capital flows nor used scarce resources efficiently. The radical change in this sector wasn't achieved [1]. This situation has created a reforming incentive in the telecommunications sector.

In the 1980s, It was accepted that the role of government in this sector needed to be changed. The intervention of government in the telecommunications sector based on economic, social and politic reasons is quite essential. But the form of this intervention has been changed. The government doesn't supply telecommunications services directly any longer. These services are provided by the private sector. The intervention of the government will continue as a policy maker, regulator and controller, since these services need to be monitored and regulated.

The public sector couldn't provide the transformation of this industry. It is claimed that the conditions which state the necessity of telecommunications services to be supplied by state-owned enterprises as a monopoly are currently invalid. These conditions have changed nowadays like that:

1) It is claimed that existence of economies of scale does not dispose of the question of lower cost. This case can be depicted in figure.1.

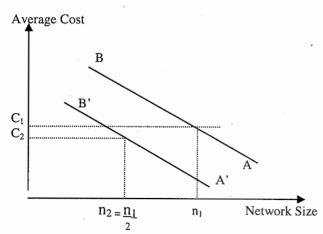


Figure.1: Economies of Scale and Shift of Cost Curve

At size n_1 , the cost is c_1 . If the competition is permitted at this level, monopoly is valid. A second network enters the market and its rivalry leads to reduction of costs at each level of production. The second network depicts an AB line. We assume that both

networks share this market equally (the network size of each is $n_{1/2}$).

At this network size, the cost of each network is c₂, which is lower than the cost in the monopoly network. It doesn't take increases into account due to lowered prices and increased marketing efforts of the competitors, which should move average cost further downward on the competitive cost curve [5].

2) Other reasons of public monopoly are social and political. The government has the social responsibility of providing public services which are unprofitable but socially desirable enterprises. The fulfillment of this obligation necessitates subsidization, which must come out of revenues from more profitable telecommunications services. Conversely, these services aren't the only source of subsidy. There are many ways of providing subsidies to support social services such as welfare or social service programs, cash payments, tax incentives or producer subsidies.

- 3) Another argument in favor of monopoly is related to the protection of the integrity of the network, especially from the point of view of national defense and security. However, harm to network can be prevented by establishing safety standards just as in other products.
- 4) Another case in favor of state monopoly is that telecommunications as an important infrastructure service is the responsibility of a government. That is why; the control of private sector over telecommunications should be avoided. But competition in the telecommunications area will prevent one firm from becoming predominant [5].

All over the world, both developed countries and developing countries have embarked on reform in this sector within the framework of microeconomic reform. The reform toward telecommunications is focused on four processes. These are commercialization, corporatisation, privatization and liberalization.

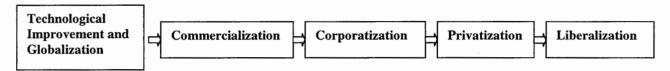


Figure.2 Telecommunications Reform Process

Commercialization is defined as the restructure of government departments and functions so as to introduce accountability and economic efficiency into government commercial activities [16]. In Commercialization, some departments and agencies may be re-oriented by their functions towards their commercial activities even if this case isn't always suitable in the public interest [17]. Corporatisation means the conversion of a state-owned organization into a company operating under the same legal conditions as a private enterprise [18]. Sometimes the corporatized enterprise is described as a "private firm " due to the fact that it may be organized under private law conditions, but the control of enterprise in question is governmental [5]. Corporatisation involves commercialization plus the adoption of the principle of competitive neutrality. This means that the public enterprises operate under the same conditions as competing organizations in the private sector, without tax exemptions and government guarantees. Privatization involves the total or partial sale of assets to the private sector. Liberalization includes more pronounced changes in market structure. Liberalization changes the nature of markets and the power of the established suppliers, providing equipment supply and services for entry. Therefore, in telecommunications services, private monopoly can be prevented [19]. More radical liberalization strategy is to open every market segment to

unlimited competition [20]. The success of privatization depends on performance of liberalization.

While traditional neoclassical economic theory is silent in relation to the relative efficiency of privately owned firms and public enterprises. Some theorists think that public sector enterprises will in practice not be cost minimizers. Their economic performance in terms both of productive efficiency and profitability will be inferior to that of privately owned firms [21].

Privatization in the reform process is crucial. Because privatization has been used as a means of reform in order to achieve restructure in the sector.

Briefly, government agencies can be privatized because of the following reasons [22]:

1) Privatization assists most government decisionmakers in obtaining the dual aims of economy and efficiency: In the private sector, decisions about production are based on economic factors. In the public sector, many of the important decisions are made on political grounds.

- 2) It satisfies the society's needs more efficiently, effectively and equally, because privatization aims to have more performance or efficiency [23].
- 3) It brings innovation and flexibility to the organization. For this reason, the private sector has more prestige in comparison with the public sector.
- 4) It provides revenue to the government. Especially, this is crucial in the event of being faced with high level debt.
- 5) It can provide the state with the possibility to save. Privatizing an enterprise like telecommunications might reduce the charge on the government budget [24].
- 6) x-efficiency in the public sector is weaker than that in the private sector [25].
- 7) According to outcomes arising from several major researches, the cost of production in the public sector is higher than that in the private sector. The rate may change from country to country. But on the average the cost production of the private sector, which varies from 20 to 40 percent, is lower than that in the public sector [26].
- 8) A saving in the development of capital markets and capital mobilization can occur [27].
- 9) It can help private enterprises and investments to stimulate. For this reason, the rate of growth in the economy will accelerate [28].

The relative importance of reasons for privatization differs from country to country. For example, Indonesia has started a privatization program for transferring private capital. In Latin American countries, privatization was used as a means of reducing the heavy debt burden. In Eastern Europe, It is led by the need for foreign capital and expertise. However, in developed countries, privatization aims to overcome borrowing or investment restrictions on public enterprises and to provide a means of shaking up bureaucratized enterprises [20].

In addition, countries have accomplished changes in restructure and privatization in this sector thanks to economic and political changes. For example, the transfer of the telecommunications company from the public sector to the private sector was realized as part of a political scheme [29].

After 1980s, privatization was started to be used commonly. In the 1990s, It became an international phenomenon [13]. In many countries, the tendency of privatization has rapidly spread also in

telecommunications sector, as in other sectors. The interest in privatization has been considerably growing since the British experienced it (Telecom Market, February, 1992). For example, 51 privatizations in 1995 were realized [30].

Both privatization and liberalization policies are required in an effective regulatory policy. For example OFTEL in England is a successful regulatory authority. Established in 1984 OFTEL, the goals of which are to monitor the retail price and network charge and to protect consumer interests [30,31].

Public enterprises can be privatized by various methods. Also, privatization can be considered in three different levels [32];

- The first is the transfer of 100 percent of the capital called total privatization,
- The second is the transfer of a majority of the capital (when exceeded 51 percent),
- The third is the transfer of a minority of the capital.

The second and the third are known as partial privatization.

The process of privatization in telecommunications in most countries began to separate the post, telegraph and other telecommunications services from each other.

IV. TELECOMMUNICATIONS SECTOR AND REFORMS IN TURKEY

In Turkey, the telecommunications services began to be provided by The Post, Telegraph and Telephone General Directorate.

Firstly, the main characteristics of the Turkish telecommunications sector can be summarized as follows:

- The Telecommunications investments aren't enough to meet needs. The rapid growth and liberalization in Turkish economy, after 1983 increased demands for these services. The investments didn't satisfy the boosting demand. The government's limited budget has prevented the government from closing the gap between necessary and actual investments. Also, this gap has increased continuously. This case is indicated in figure 3. Another indicator is Investment / Gross National Product rate. While this rate was % 1.3 in 1987. In 1993, this rate was % 0.7-0.8 [33].

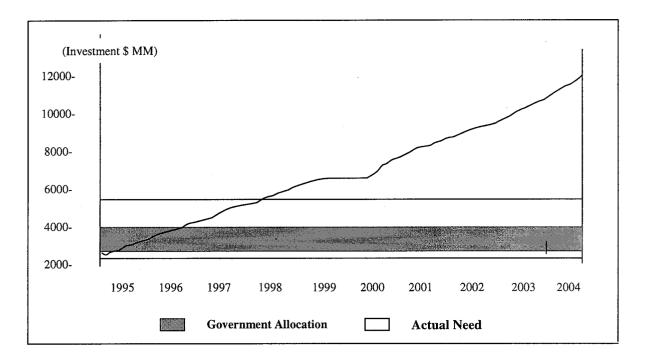


Figure.3: Investment Need of The Turkish Telecommunications Market (The Turkish State Planning Organization's Estimates)

- PTT as a traditional enterprise has collapsed. PTT Administration couldn't adapt itself to the rapid technological development of this industry,
- Ineffective management and unbalanced tariff structure, as a result of low revenue and high expenditures,
 - Poor response to user needs,
- Abuse of monopoly power, especially owing to political interference,
- Since PTT Administration has monopoly power, the marketing strategy oriented to consumer has not been constituted. Services based on strategy oriented to supply.
- Since 983 telecommunications demand has increased with the help of a liberal economic policy which began in the 1980's.

The research of the reform toward telecommunications in Turkey is made according to reform process.

IV.1. Commercialization And Corporatization

The Post, Telegraph and Telephone General Directorate was a state-owned enterprise as a monopoly in 1924. PTT was corporatized in 1953. Law No: 4000 in

1994 split PTT into two separate bodies as, the Directorate of Postal Operations and a Joint Stock Company called Turk Telecom.

IV.2. Privatization

Privatization studies in telecommunications started in 1992. The reasons leading to the privatization in Turkey are as follows [34]:

- to close the investment gap between demand and supply which was mentioned before,
- to ensure a competitive and liberalized telecommunications market.
- to improve the efficiency in this sector which will lead to cheaper (the same level of service at lower cost) and better quality service (better service at the same cost),
- to enable the national monopolistic provider to have sufficient know-how to offer world class services and to compete in the international markets,
- to remove harmful effects which are created by monopoly price mechanism in economics,

Furthermore, the privatization in telecommunications, as in the whole privatization programs, aims to put some macro objectives into practice. They are as follows:

- Promoting the sectoral growth for the development of a strong Turkish economy,
- Developing the Turkish capital markets and spreading the share of ownership of public enterprises among citizens,
- Providing the high growth rate of economy, by stimulating investments and private entrepreneurship,
- With respect to its geographical location, becoming a bridge between European countries and Turkish Republics,
- Declining the government's high debt burden. International credit rating agencies such as Moody and Standard and Poor will observe the economy of the country and be ready to downgrade the government's credit rating unless debts are reduced.

IV.2.1. The Potential For Privatization

The potential of privatization can be evaluated with three criteria [34]: They are country risk, sector risk and company risk.

Country Risk

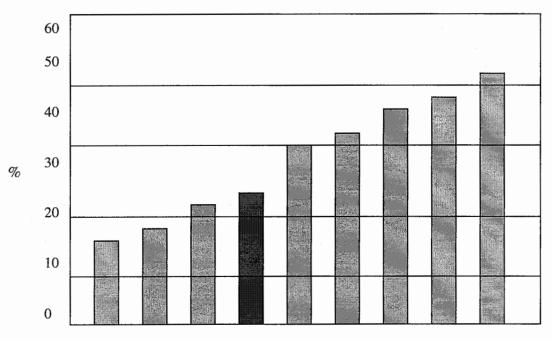
As a country, Turkey has many advantages. These advantages can be summarized like that:

- Its strategically position which is an excellent base for international business, for Turkey has strong cultural links with the Turkish Republics,
- The increase of the young population continuously,
 - Crucial economic potential,

Sector Risk

The Turkish telecommunications sector is an attractive sector for privatization for the following reasons:

- i) The Turkish telecommunications sector, as in many countries, has a power to attract both domestic and foreign investments owing to its enormous value added services and its significant role in the development of other industries.
- ii) It has some potential due to some indicators when compared with other countries. One of these indicators is teledensity ratio (lines in service/total population). When teledensity ratio is compared to that of other countries, this ratio, which is 25.5 %, is low for Turkey. This case is indicated figure.4. This means that there are demands, which haven't been met. This rate may be seen as a disadvantage. But investors can return to great potential.



Poland Hungary Czech Turkey Portugal Spain Israel İtaly Greece Rep.

Figure. 4: Teledensity Comparison

The telephone revenue as a percentage of GDP (Gross Domestic Product) in Turkey is lower than that of other countries, especially European countries. But its percentage isn't very low. For Example, while Turkey has a percentage of 0.6, Italy and Denmark have percentage of 1.1. The Turkish market has a potential to grow.

Another factor, which is used to evaluate this sector, is the international traffic inside and outside the country. The International traffic of the Turkish Telecom considerably increased owing to growing population. For example, the Turkish Telecom's International traffic increased by an average of 33 % between 1995 and 1997. Despite instability tariff, as soon as this tariff is arranged. The difference between inside and outside traffic will be decrease.

In 1994, supplied mobile services as GSM 900 network have taken place in the 6th range among the European countries. With respect to network size and access line, mobile phone is ranked as the 11th largest operator in the world. The number of GSM subscribers has increased continuously. Between 1994 and 1997, the number of GSM subscribers increased 15 times as much as the one in the previous years. It is estimated that the number of GSM subscribers will reach 25 million up to 2010 (The Turkish The State Planning Organization's data). It is expected that mobile will be the biggest driver of revenue growth in Turkey's telecom market, contributing almost half of total telecom revenues by 2005 [35].

Penetration rate (Mobile phone / Population) in Turkey was % 22 in 2000. However, In Europe, penetration rate was average % 56 (Turkish Republic, Prime Ministry Privatization Administration 's Data).

The whole indicators show that Turkish Telecommunications has a great potential for investors. There is a considerable amount of demand for these services. Also, if this sector can solve its problems such as unbalanced tariff caused by a management lacking in commercial outlook, it will be a crucial profitable sector.

iii) Turk Telecom has a wide range of services which have an important place in corporate buying and combination.

Company Risk

One of the other criteria which determine the investor's decisions is company risk. With respect to this factor, Turk Telecom is an attractive investment due to the fact that it supplies a broad range of services such as mobile telephone, cable TV, satellite, Internet, data transmission and payphone. In addition, Turk Telecom has reached 18.2 million subscribers and 18 million line capacity, approximately 85 % of which was digitalized. In this respect, it is ranged as the 14th largest operator in the world and 5th largest operator in Europe [36].

In terms of line per employee and in comparison with European countries, Turk Telecom has established itself as being even more efficient than that of some European countries such as France, England and Germany. (Figure.5) (1997 Annual Reports for Companies).

All these indicators show that Turk Telecom is a profitable investment for both domestic and foreign investors.

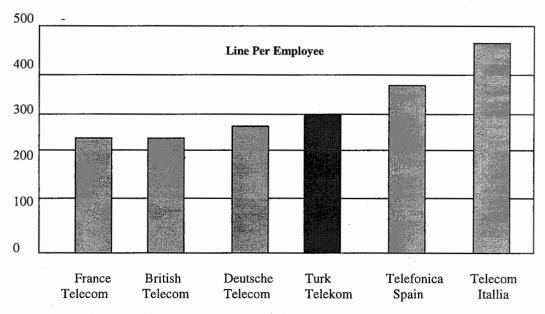


Figure.5: Comparison of European Operators with Respect to Employee Size

IV.2.2. The Process of Privatization

By 2001 only four of the 30 OECD member countries had monopolies over the provision of international telecommunication infrastructure- Hungary, Poland, Slovak Republic and Turkey [37].

In the process of privatization in the Turkish Telecommunications Sector, the first step came true in 1994. PTT was divided into two separate units as postal operations and The Turkish Telecommunications Incorporated Joint-Stock Company (or Turk Telecom), like other countries beginning privatization. Turk Telecom is 100 % owned by the treasury.

After several constitutional cancellation of Law No:4161 related to privatization for Turk Telecom, it was

enacted in 1996. According to mentioned Law, the privatization process is carried out in two phases. The first phase consists of "The Sector Reform and Company Valuation ". The second phase is " Actual Execution of the Sale ". In order to achieve these phases, two separate committees which are called "Value Assessment Committee (VAC)" for the first phase and "Tender Committee" were founded. They are represented by five related government agencies; The Ministry Transportation, The Undersecretary of Treasury, The Capital Market Board, Turk Telecom and The Privatization Administration the representative of which is a chairman. Goldman Sachs consortium was appointed as VAC's advisor (Turkish Republic, Prime Ministry Privatization Administration's data).

TURK TELECOM PRIVATIZATION PROCESS

PHASE I SECTOR AND SECTOR **SALE** VALUATION COMPANY REFORM STRATEGY ANAL VSİS PHASE II EXECUTION OF BLOCK **PUBLIC** THE SALE SALE **OFFERING**

VAC and Its advisors started their studies to perform a sector reform. Based on these studies Law No: 4502 was prepared and it came into force in the year 2000. This law has such objectives:

- establishing an independent regulator for the telecommunications sector,
- bringing full liberalization for value added services,
- giving commercial independence to Turk Telecom, minimizing government intervention,
- specifying the defined period and service scope of Turk Telecom under an authorization agreement,
 - changing the status of Turk Telecom workers,
- enabling the establishment of an effective legal and regulatory framework for a competitive market, which is in line with the World Trade Organization and European Community principles,

- meeting International investor's expectations and requirements for investing in Turk Telecom by restructuring the company and the environment it operates in.

VAC completed its studies in December 1997. Thus, the first phase was finished. Later telecommunication act (No:4673) was enacted in May 2001. This law permits the sale of 100 % of Turk Telecom's shares. More fundamental changes were introduced with this act.

The allocation of Turk Telecom's shares, according to regarded law is shown in figure 6 The stock ratio of domestic and International shareholders is restrained with 45 %. This share 45 % will be sold according to the sale strategy to be determined by The Council of Ministers. The treasury will be the majority shareholder with 55 % ownership. The share consisting of 5 % will be sold to the employees of General Directorate of Postal Operations, Turk Telecom and small scale investors by public offering.

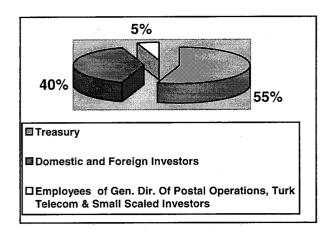


Figure.6: Allocation of Turk Telecom's Shares to Be Transferred

No: 4673 Law doesn't contain limitation in the participation of foreign investors. But a "concession share" in this law is stated as "Golden stock" applied in England. The concession share aims to prevent major drawbacks which are created by monopoly and to protect national benefits related to national security. The concession share permits government intervention when monopoly occurs in the market. But government intervention is not apt to both privatization's and liberalization's philosophy.

IV.3. The Implications of Liberalization

In the reform process, privatization should consist of liberalization. Turkey has promised to the World Trade Organization that the market will be opened to International competition as well as national competition until the end of 2004.

The liberalization process of the Turkish Telecommunications Sector is as follows:

- Liberalization of telecommunications equipment sector was performed in 1993.
- Liberalization of value added telecommunications services was partially performed in 1996.
 - Full liberalization will be realized before 2004.

IV.4. Regulation

A successful privatization requires a well regulated framework. In order to achieving any regulation, the following are required:

- To protect the consumers (by ensuring quality standards, price- cap regulation etc.),

- To control any anti-competitive practice in the telecommunications market (by regulating prices and terminating entry barriers),
- To prevent private monopoly (with regulation mechanism). In 2000, a law was passed to establish a regulatory authority called Telecommunications Authority. This regulatory authority will be independent from political authorities and has a power to give licenses. Briefly, telecommunications authority will be responsible for the whole Turkish telecommunications sector.

V. CONCLUSION

In all countries, both developed and developing, the desire to restructure the telecommunications sector is a major goal in microeconomic reform. In the 1980s, the reform process began. In the 1990s, this process notably increased. Technological improvements, globalization trend and problems existing in the sector put a great emphasis on telecommunications.

Telecommunications services were provided by public enterprises as a monopoly for along time. It is agreed that public enterprises cannot provide these services neither in good quality nor in enough quantity. The basic reasons can be summarized as high costs, inefficiency, low level productivity, poor discipline, unbalanced tariff policy and wrong employment policy. The most important problem is lack of effective competition.

this reform In sector, the process telecommunications has involved commercialization, corporatisation, privatization and liberalization. Privatization as the main tool to reach defined targets has been accepted. The government's role is no longer redefined as a producer, but a regulatory and policy maker. The economic argument for privatization is that a privatized company will improve its performance in terms of productive efficiency.

At the beginning of the 1980s, many countries undertook privatization. The interest in privatization grew considerably after the British experience in the early 1980s.

With respect to Turkey, despite significant development in telecommunications investments after 1983, the expectation couldn't be reached. Turkish Telecommunications is far behind most countries. A successful reform in telecommunications sector requires a reform process, which consists of commercialization, corporatisation, privatization and liberalization. Only privatization doesn't meet expectations, even if it will be success. Besides privatization law has many faults.

Turkey began privatization studies in this area in 1992. Turkey has followed this privatization process for a long time. Based on research done by hitherto, this paper offers some conclusions about privatization of Turk Telecom:

- a) Despite efforts, the pace of privatization has slowed down in comparison with other countries. One of the reasons is constitutional cancellation. Another reason originates from the fact that governments rapidly change, in other words political instability. The results from the empirical analysis related to the success of the privatization of telecommunications depend on the role of the state. It is shown that in countries where the government resists demands such as Asian countries, more successful outcomes have been obtained [38].
- b) When Turkish telecommunications is evaluated in respect to the potential of privatization, it has some advantages and a powerful foundation for growth.
- c) According to the recent Law, the sale strategy comprises public offering and block sale. Many countries, especially European countries, mostly use public offering. Public offering is expected to contribute to meet government objectives such as increasing public and employee ownership and developing capital markets. Preference of public offering will be more beneficial in Turkey.
- d) In order to promote the sale to employees, there are different implications. For example, the British government offered fifty-four free shares to each eligible employee in British Telecom in 1984. In France, one free share for every ten shares was purchased [39]. Similarly, for the share to be sold to employees, special selling conditions should be offered in Turkey.
- e) Arrangements oriented liberalization isn't enough to open market competition. Whereas, the success of privatization programs depends on competition. It is agreed that the competitive market is the best way of realizing privatization in this sector. In order to prevent private monopoly, some measures have to be taken. For example, as soon as privatization studies began, the second telecom enterprise was permitted in England. In Australia, Optus is the second enterprise. In this country, the competition between Optus and Telstra is obvious [40].

Also privatization is one of the most effective tools that governments can use to attract foreign investments, but privatization when accompanied by measures to liberalize the market and open it to competition, can attract foreign investors.

Telecommunications policy should be determined as a way of fostering a competitive market.

- f) Another matter concerns regulatory authority. Regulatory authority should be independent financially and functionally and transparent. Decisions should be taken without being influenced by political bodies. But Turkish Telecommunications will be responsible to the Ministry of Transportation as a body of political administration.
- g) In a privatization program, the lack of price regulation is seen. After privatization, so as to prevent price increase, price caps of tariffs should be determined.

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