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Chapter 12

GLASS HALF EMPTY? POLITICS AND INSTITUTIONS IN THE LIBERALIZATION OF THE FIXED LINE TELECOMMUNICATIONS INDUSTRY IN TURKEY[1]

Izak Atiyas*[1] and Pinar Dogan*[2]
[1] Sabancı University
[2] Harvard University

ABSTRACT

This chapter reviews Turkish experience with reform of the fixed line telecommunications industry. It provides an account of earlier incoherent attempts to privatize the incumbent operator in the absence of any regulatory framework or political consensus. It also describes the regulatory framework emerged in early 2000s and discusses the various political-economic and institutional factors behind its weak implementation, and hence its limited success in promoting competition.

INTRODUCTION

As of the end of 2008, the market shares of the incumbent operator in the Turkish fixed line telecommunications in voice and broadband segments remains very high, even though a regulatory framework that aimed at promoting competition was adopted as early as 2000 and the elimination of the incumbent's monopoly rights was envisaged by the end of 2003. This chapter attempts to review policy making in the fixed line telecommunications industry and explores political and institutional dynamics that may explain the limited success of the liberalization process.

The Turkish experience reveals an interesting interplay between privatization, liberalization, and regulation. Policy making towards the fixed line telecommunications industry in the 1990s focused primarily on privatization, which if successful, would have created a partially privatized monopoly without a transparent regulatory framework that

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* Sabancı University. E-mail: izak@sabanciuniv.edu.
* Harvard Kennedy School, Harvard University. E-mail: pinar_dogan@hks.harvard.edu.

would curtail monopoly behavior and open the industry to new entry and competition. Perhaps fortunately, these attempts failed due to a lack of cohesiveness at the political level as well as deficiency in policy making capacity, in particular in creating the necessary legal infrastructure that would have enabled the privatization policy to survive the constitutional challenges.

By contrast, in the 2000s it appeared that Turkey got it right: it first established a European Union inspired regulatory framework and privatized only afterwards. Nevertheless, the weakness in the implementation of the regulatory framework led to relatively poor market outcomes. The chapter attempts to explain this limited success by looking at the role of privatization, political ownership, sequencing of reforms, the quality of regulatory institutions, including de facto (as opposed to de jure) independence and transparency The chapter also addresses the question of whether, given the problems associated with the implementation of the regulatory framework, the privatization of the incumbent fixed-line operator was a good idea to begin with.

The chapter is organized as follows: Section 2 provides a brief historical overview of early privatization attempts in the fixed-line telecommunications industry. Section 3 discusses the evolution of the regulatory framework and documents the very slow pace of development of competition followed by a discussion on the factors that may explain it in Section 4. Section 5 reevaluates the problem of privatization under imperfect regulation. Finally, Section 6 concludes the chapter.

1. PRIVATIZATION IN CHAOS: POLITICAL PATRONS VERSUS PRIVATIZORS AT ALL COST

Attempts to restructure the fixed-line telecommunications industry in Turkey actually started not through liberalization or establishment of a regulatory framework, but from the outright privatization of the incumbent operator.[2] A review of those attempts provides interesting input on the political economy of the whole liberalization experience.

The incumbent operator, Türk Telekom A.Ş. (TTAŞ), itself was separated from the Ministry of Transport (MT) and formed as a state economic enterprise and a joint stock company in 1994 (Law No. 4000).

The placement of privatization of TTAŞ on the economic policy agenda followed significant growth and modernization of the fixed network, largely thanks to an ambitious modernization and investment program launched by the government during the 1980s. This was as part of an overall strategy to re-orient the government away from manufacturing and services towards infrastructure investments. The results were impressive: for example, the penetration rates (main lines per 100 inhabitants) rose from about 2.6 percent in 1980 to 12.1 percent in 1990 and 21.4 percent in 1995.[3]

The fact that initial attempts to privatize TTAŞ were undertaken without the establishment of a regulatory framework meant that there were no measures to limit its monopoly power and to promote competition. However, most of the laws that attempted to

[2] For background information on the Turkish telecommunications industry see Yilmaz (2000), Ulusoy (2002), Atiyas (2005), Burnham (2006), Atiyas and Renda (2007). Ardiyok (2003) presents a discussion of the early privatization efforts.

[3] See Atiyas (2005) for details.

implement privatization were taken to the Constitutional Court by opposition parties and many important components of these laws did not survive constitutional review. Hence, Decree Law No. 509 (1993) allowed the company to transfer up to 49% of its shares to third parties with the approval of the MT. This decree-law was cancelled by the Constitutional Court because the authorizing law had been cancelled.3 TTAŞ was then established through law no. 4000 in 1994. However, a critical article of this law, which authorized the MT to determine the rules and procedures to sell 49 percent of TTAŞ' shares was cancelled by the Constitutional Court, on the basis that giving such authority to the Ministry amounted to a transfer of legislative authority to the executive and that such procedures had to be specified in law. Then Law No. 4107 was enacted in 1995 that enabled the privatization of up to 49 percent of TTAŞ.[4] Critical articles of this law were also cancelled by the Constitutional Court, basically on the basis that it gave too much discretion to the administration (in this case, the Privatization High Council) in determining the valuation and sale conditions of TTAŞ.

These challenges forced the governments to develop a less ad-hoc and more structured approach to privatization. A new phase was launched with Law 4161 (1996), which established a Value Assessment Committee that would include representatives of the Treasury, the MT, and the Capital Markets Board. This law was also taken to the Constitutional Court for cancellation, but most of it survived constitutional review. This was followed in 2000 by the enactment of the landmark Law No. 4502 which envisaged the termination of TTAŞ' monopoly rights by 2003 and which finally established the Telecommunications Authority (TA) in charge of developing sector-specific regulations. Then, Law No. 4673 was enacted in May 2001, this time stipulating that 1 percent golden share would be retained by the Treasury, employees would be entitled to a 5 percent share and the rest would be available for block sale or IPOs. This law stipulated a 45 percent limit on foreign ownership. This limit was later removed through Law No. 5189 adopted in June 2004.

Law No. 4161 formed the basis of the first actual attempt to sell 20 percent of shares of TTAŞ in 2000. The privatization decision was taken by the Cabinet in 1998. The decision stated that 20 percent of TTAŞ shares would be privatized through a block sale to a strategic investor (or a partnership) that owns a telecommunications infrastructure. In the event, no investor participated in the tender and it was cancelled in September 2000.

This was hardly surprising since even though Law No. 4502 was recently enacted, there was complete uncertainty regarding how its provisions would be implemented. Specifically, by the time TTAŞ was to be tendered, not a single secondary legislation related to the fixed-line segment was passed. Furthermore, the concession agreement that TTAŞ would eventually sign with the Ministry (and obligations that would thereby be imposed on TTAŞ) was not yet ready at the time of the tender. Moreover, the fact that the tender did not confer any control rights to the purchasing group aggravated the risks generated by the regulatory uncertainty.[5]

The whole episode was not a smooth political operation. The MT (who oversees the telecommunications industry) was opposed to the privatization of TTAŞ and frequent clashes

[4] The authorizing law, which gave wide powers to the government to issue decree-law in diverse fields including social security and privatization, was cancelled by the Constitutional Court because, among other things, in the Court's view it amounted to transfer of lawmaking authority from the parliament to the executive.

[5] The drying up of international financial resources in the wake of 3G auctions in Europe was possibly another reason for lack of participation. See Ardiyok (2001).

occurred between the MT on the one hand and the Minister of State responsible for privatization and the president of the Privatization Administration (PA) on the other.[6] Among other disagreements, the MT did not want to grant any control rights to the new partner whereas the PA insisted that no one would buy TTAŞ otherwise.[7]

There was a fiscal-macroeconomic dimension to the problem as well. In 1999 Turkey had launched a major disinflation program and the privatization of Türk Telekom became an important part of the stand-by agreement signed with the IMF. When the auction failed in September 2000, this caused serious concerns because the sale revenues (estimated at about $ 2-2.5 bn) were seen as an important part of the adjustment program. Then, towards the end of 2000 and early 2001 Turkey fell into a severe financial crisis (in fact, some commentators claimed that the failure to privatize Türk Telekom was one of the triggers that contributed to the decline of investor confidence, causing a collapse in short term capital inflows).

The failure to privatize prompted further bickering. In the end, the MT conceded and in December 2000 the cabinet of ministers issued another privatization decision this time increasing the ratio of shares to be tendered to 33.5 percent and taking several measures to ensure some degree of control rights to the strategic partner (including allowing strategic partner representation in the Board of Directors and the need to obtain the approval of the strategic partner in key strategic decisions, and selecting the General Manager of the company from among the names nominated by the strategic partner). The tender was announced in December 2000. This tender failed to raise any investor interest as well, and was cancelled in May 2001. The general consensus was that the modifications in the governance arrangements were not sufficient to ease investor worries about control and regulatory uncertainty. These developments prompted the government to enact law No. 4673 mentioned above in May 2001. The granting of a single golden share to the state was seen as a compromise that addressed the worries of the establishment about losing control in what was seen as a strategic company.[8]

What explains this very chaotic experience and the underlying lack of a cohesive policy? Part of the answer lies in the prevalence of coalition governments in most of the 1990s up until 2002. Coalition partners often had different views about the role of publicly owned enterprises in the economy, and these differences were especially heightened towards the end of the 1990s. For example, the coalition government that was in power between 1999 and 2002 consisted of three political parties. The MT belonged to the Nationalist Action Party (MHP) that had a statist and nationalistic ideology, which was also paralleled with a tradition of using public resources for partisan purposes. By the end of 1990s TTAŞ had became one of the extreme examples of politization and patronage and the MT clearly displayed a lack of willingness to reduce or relinquish control over TTAŞ. As a result, over-employment was very high and most of the managerial positions came to be filled with members of the MHP.[9]

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[6] "Telekom, caused rift between Ministers", the daily Milliyet, September 4, 2000.

[7] "Bayar [The President of the PA] states that it is unavoidable to grant control rights to the strategic investor in sensitive issues", the daily Milliyet, October 23, 2000.

[8] A critical article in that law, vehemently opposed by the Minister of Transport, transferred the authority to issue authorizations to the Telecommunications Authority. See the discussion below.

[9] It was reported that several family members and locals from the Minister's village found employment in TTAŞ (The daily Radikal, May 3, 2001). A member of the Minister's party who ran as mayor and lost was given appointed as Deputy General Manager. The Minister's statement on the issue was: All parties provide jobs to those who run as

Allegations of excessive partisanship in hiring prompted the President of the country to launch an investigation, but the investigation found no wrongdoing. After the financial crisis, and a new stand-by agreement with the IMF, several managers were replaced (daily Milliyet, July 12, 2001) and eventually the Minister had to resign as well. An important indicator of the extent of over-employment in TTAŞ is perhaps the steep reduction in the number of employees that occurred after 2001: The number of employees was reduced from almost 70,000 in 2001 to below 27,000 by 2008 (TTAŞ Annual Report 2002-2003 and 2008).

During the same period the Minister of State responsible for privatization belonged to the pro-market Motherland Party (ANAP) which upheld privatization throughout the 1990s.[10] The PA was under the authority of this Minister, which explains the relentless pursuit of privatization by the PA. Reflecting the overall pro-privatization sentiment of the 1990s this attitude neglected problems of market power associated with natural monopolies and tried to rush privatization past purposes of raising the government revenues on the one hand, and removing the state ownership in the economy, on the other. As a result, considerations such as development of competition and the consequent long term productivity growth were almost completely disregarded.

One should note, however, lack of cohesiveness in privatization policy was a result of not only political conflicts, but also lack of policy making capacity. Clearly in the 1980s and 1990s governments wanted to pursue privatization, but could not create the legal infrastructure that would survive the constitutional review. This lack of capacity constrained privatization policy independently of the political dynamics and the conflicts among the coalition parties.

Starting in 2002, the privatization of TTAŞ entered a new phase. The elections of July 2002 produced a single party government, which had a stronger preference for market orientation and privatization than the previous government. In November 2003 a Cabinet Decision stipulated that at least 51 percent of the company would be privatized through a block sale and the rest as public offerings. With the passage of Law No. 5189 in June 2004, the upper limit on foreign ownership was removed. Another Council of Ministers Decision issued in October 2004 stipulated the block sale of 55 percent of TTAŞ sales and that the tender process would start by the end of 2004. This time the tender process moved more smoothly, and the tender was held in July 2005. Oger Telecoms Venture Group (a consortium led by Saudi Oger and Telecom Italia) won the tender and the sale was concluded.

2. THE LIBERALIZATION PROCESS

In contrast to efforts of "privatization without liberalization" prevalent in the 1990s, the 2000s witnessed an apparent effort to develop a regulatory framework with a view to liberalize and enhance competition in the telecommunications industry. Nine years after the

candidates for member of parliament or mayor and lose. Should I have left them and chosen other people instead? Is not the brother of a Minister human as well? (quoted in Radikal, May 30, 2001).

[10] The ideological differences should not be overemphasized; ironically, the same Minister displayed a very protectionist attitude when he opposed the reform of tobacco policy pursued by the Minister of State responsible from the economy (who was appointed under the initiative of the third party of the coalition, namely the Democratic Left Party). He considered the reform proposal as harmful for his constituency at the tobacco growing province of Aydin, from where he was elected as a member of the Parliament. After his clash with the Economics Minister on this issue he had to resign.

passage of the landmark law in 2000, the degree of competition in services provided over fixed networks is still quite limited TTAŞ has almost unchallenged dominance in the provision of most voice and data services and prices, especially in broadband services, are higher than in many countries in Europe. This section provides an overview of the evolution of the regulatory framework and the main market outcomes in the fixed segments of the telecommunications industry.

The emergence of a regulatory framework for the telecommunications industry in Turkey started in the year 2000 when Law No 4502 was adopted by the parliament. One can argue that Turkey's commitment to the World Trade Organization guidelines to liberalize basic telecommunications services, as well as her efforts towards accession to the EU played a role in the adoption of the law.

Law No. 4502 was basically an amending law and it introduced changes to Law No. 406 and the Wireless Law (Law No. 2183, originally dated April 1983). First, it envisaged that the monopoly rights of TTAŞ would be terminated on December 31, 2003. As will become clear below, in the Turkish context termination of monopoly rights did not mean full liberalization, as new entry could still be prevented by a restrictive licensing regime. Second, it established the Telecommunications Authority (TA) as an independent administrative agency with power to design and implement secondary legislation. In particular, the TA was authorized to issue regulations for the telecommunications industry, determine operators which are responsible to provide interconnection and roaming services, regulate or set tariffs, monitor compliance and impose fines in case of non-compliance. Initially, the authority to issue licenses remained with the Ministry of Transport. The TA started functioning in August 2000. Later, partly as a result of pressures from the IMF, licensing authority was also transferred to the TA through Law no. 4673 (May 2001).

The timing of the law had an important impact on future developments. The original regulatory framework laid out in Law No. 4502 was inspired by the 1998 regulatory framework in the European Union (EU). It did not contain the .competition law-based logic of the new EU regulatory framework that was launched in 2003. The secondary legislation put out by the TA has been increasingly modeled after the 2003 package. Nevertheless, the framework law, as laid out by Law No. 4502, has put significant constraints on how closely the TA can emulate the 2003 framework and significant divergences existed, especially in the area of authorizations, as discussed below. Many of these discrepancies between the Turkish and the EU framework have been eliminated recently, by the adoption of the Electronic Communications Law in November 2008.[11] The key components of the regulatory regime prior to enactment of the new law are discussed below.

2.1. The Regulatory Framework

The decision making body of the Telecommunications Authority is the Telecommunications Board that consists of 7 members, including a Chairman and a Vice Chairman. The Chairman of the Board is also responsible for the general management and representation of the Authority. Board members are appointed for a period of 5 years and can

[11] As of December 2009, secondary legislation was still in the process of amendment in accordance with the requirements of the new law.

only be dismissed before expiration of a term by the Council of Ministers for inability to work due to serious illness, professional misconduct or criminal offences.

Article 14 of Law 4502 (amending article 5 of Law No. 2813) sates that the TA is an "independent budget entity having public legal personality and administrative and financial autonomy." The TA has independent sources of finance, including frequency fees, pre-determined contributions from operators, any fines it levies on operators and revenues obtained through consultancy and training.

Turkey also has a Law on the Protection of Competition, which was enacted in 1994. The critical articles of the Competition Law are modeled after Articles 81 and 82 of the Treaty Establishing European Community.

The division of responsibilities between the TA and the Competition Authority (CA) is not clear cut. Article 7 of the Wireless Law (No. 2183, as amended by Law No. 4502, Art. 16) provided the TA with the authority to investigate anti-competitive practices in the telecommunications industry. It also stated that the CA should take the TA's opinion into consideration before taking any decisions on the telecommunications industry. Hence effectively Turkey had a system of concurrent powers.

The Authorization Regime Until recently, the authorization regime in Turkey was governed by the Ordinance on the Authorization of Telecommunications Services and Infrastructure (Official Gazette, 26.08.2004, hereafter referred to as the Authorization Ordinance). The ordinance outlined a regime of individual licenses. The main text of the ordinance described the different kinds of authorizations and the conditions through which they are granted. The specific types of authorizations required for different types of services were described in individual annexes. Over the years several changes have been made to the Ordinance, most of which had to do with addition of new annexes to cover the authorization of new services.

The licensing regime was the area which was most divergent from the EU regime. In the EU the Authorization Directive[12] stipulated two types of authorizations: The first is rights of use, limited to cases where operators use a scarce resource such as frequencies, numbers, or rights of way. The second type is general authorizations, which should not require any explicit administrative decision or act, and where any procedural requirements are limited to notification only. In the case of Turkey, individual licenses are limited to narrowly denied services or activities. Because the boundaries of these activities are not always clear, the licensing regime adds to regulatory and legal uncertainty. In fact, the Council of State (the Turkish High Administrative Court) has cancelled two authorizations ("cable platform services" and "fixed telecommunications services") in the past on the grounds that they provided operators with the opportunity to provide more than one service (such as voice and data). Hence in practice the authorization regime has acted as a serious barrier to entry.

Authorization for fixed telecommunications services" deserves special attention. This is the authorization that alternative operators would need to obtain to provide local telephony services. This was authorized three-and-a-half years after the monopoly rights of TTAŞ were removed, in August 2007. It was cancelled by the Council of State in January 2008. The authorization was revised by the TA and finally published in November 2008. Licenses have

[12] Directive (2002/20/EC) on the authorization of electronic communications networks and services.

been issued in May 2009. Hence in fact it has taken more than five years since the removal of monopoly rights of TTAŞ to allow alternative operators to enter the local telephony business.

Access and Interconnection The TA has issued an Ordinance of Access and Interconnection first in May 2003; this was replaced with a new Ordinance in June 2007. The main logic of the regime was similar to that in the EU. The TA carries out market analyses, on the basis of which it identifies markets susceptible to ex-ante regulation as well as operators with significant market power (SMP). On the basis of this analysis it imposes obligations on operators. According to Art. 7 of the Ordinance, the TA could impose access obligations on SMP operators in case the operator does not allow access to other operators or requests unreasonable conditions and when the TA deems that this prevents competition or harms users. Article 8 stated that SMP operators have interconnection obligations. The TA can impose interconnection obligations on any operator if that operator does not allow access to other operators or requests unreasonable conditions and when the TA deems that this prevents competition or harms users. Other obligations that the TA can impose on SMP operators include non-discrimination, transparency (including obligation to prepare sufficiently unbundled Reference Interconnection Offers), cost orientation (if the TA decides that interconnection tariffs are not cost-oriented, then it can directly determine these tariffs), accounting separation and cost accounting and carrier selection and pre-selection.

Operators are free to conclude interconnection agreements. In case an agreement cannot be a reached within 3 months, a party can request dispute resolution by the TA. In case the parties still fail to reach an agreement, the TA may impose the terms of an agreement. In the interim period, the TA can take temporary measures, including the determination of interconnection tariffs.

The TA also issued a Communiqué on Principles and Procedures Regarding Unbundled Access to the Local Loop (UALL) in July 2004. According to the Communiqué Türk Telekom had to meet all reasonable requests for full or shared access to the local loop, except when this would require building infrastructure for new access networks. The communiqué did not address bitstream access but stated that the Authority may issue additional regulations for this. It also requires Türk Telekom to publish a reference unbundling offer. The Communiqué was going to be effective on July 1, 2005. It took until May 2007 before operators actually started to sign UALL agreements with TTAŞ (see below).

Law No. 4502 also gave the TA the authority to publish "standard reference interconnection tariffs which relevant operators may, as appropriate, incorporate in their standard terms and conditions". The TA has actually published standard reference interconnection tariffs (SRIT) regularly. Even though these tariffs are not binding, it is understood in the industry that in case of dispute resolution, these would be the tariffs that the TA would impose. Hence the SRIT actually has been one of the critical means through which the TA implemented its interconnection policy.

2.2. Implementation at a snail's pace and market outcomes

Even though and despite the stated shortcomings, Law No. 4502 provided a useful starting point, its implementation and the resulting market outcomes in the fixed-line industry are generally viewed as disappointing. This section reviews the evolution of two important segments of the industry, namely, voice telephony and the broadband market.

The development of competition in the long distance and international call market has been extremely slow. The licenses were granted 4 months after the termination of monopoly rights of Türk Telekom. However, these licenses could not become operational because it took a long time to conclude interconnection agreements with TTAŞ. Originally, TTAŞ was supposed to have completed technical preparations for Type B and Type A licenses by November 2004 and May 2005 respectively,[13] but this never materialized. Operators holding Type B licenses concluded first interconnection agreements with Türk Telekom in March 2006. Five operators holding Type A licenses (Superonline, Global Iletisim, Borusan Telekom, Koc.net and Dogan Telekom) were able to sign interconnection agreements with TTAŞ in July 2006. Hence, the time lag between the granting of the licenses and their operationalization was almost a remarkable two years.

The interconnection policy was not used to speed up the development of competition either. The initial offers of TTAŞ were very high (about 2.7 and 3.7 Eurocents/min for in-zone and out-zone areas, respectively), and many operators refrained from signing agreements with Türk Telekom and applied for dispute resolution by the TA. Finally, in September 2004 the TA announced the first SRIT.

The rates determined in the SRITs are listed in Table 1. For comparison, the table also lists the EU averages of call termination on the fixed incumbent's network taken from the European Commission's Implementation Reports, as well as more recent SRIT determinations of the TA. Initially there was a large gap between the tariffs determined by the TA and the EU average: the tariff for October-December 2004 was higher than not only the EU average of 2004, but even the Commission's recommended best practice back in 1998 (which was 0.9-1.8 Eurocents for single transit and 1.5-2.6 Eurocents for double transit).[14] This large gap was eliminated only after beginning of 2008.

Table 1. Standard Interconnection Tariffs set by the Telecommunications Authority

	Call origination and call termination on TTAŞ network				EU Average		Exchange rate
	In-zone area (per min)		Out-zone area (per min)				
Effective during	Ykr	Eurocent	Ykr	Eurocent	Single Transit	Double Transit	Eurocent/Ykr
01.10.2004 31.12.2004	4.10	2.21	5.90	3.18	1.01	1.61	1.8577
01.01.2005 30.09.2005	3.40	1.86	5.10	2.78	0.94	1.39	1.8321
01.10.2005 01.03.2007	2.00	1.23	3.70	2.28	0.86	1.25	1.6232
01.03.2007 01.04.2008	1.89	1.01	3.00	1.60	0.87	1.18	1.8736

[13] Type A is for operators which will use carrier pre-selection. Type B is for operators using carrier selection on a call-by-call basis.

[14] See European Commission Implementation Report, 1998

01.04.2008 01.05.2009	1.71	0.82	2.70	1.30	0.86	1.16	2.0743
Since 01.05.2009	1.71	0.81	2.70	1.28	NA	NA	2.1133

Sources: Information and Communications Technologies Authority, European Commission 12th Implementation Report (2006), Annex 2, Figure 22, and 14th Implementation Report (2009), Annex 2, Figure 86.

Cullen International (2008) reports that as of early 2008, the share of TTAŞ in overall fixed telephony services is 91 percent by traffic and 81 percent by revenue. The share (by minutes of traffic) in national calls is 91 percent and in international calls it is 78 percent.

It can be said that TTAŞ has responded to the threat of entry by reducing long distance and international tariffs quite aggressively, prompting allegations of margin squeezes from alternative operators.[15] Table 2 provides data on fixed line call tariffs in comparison to EU averages. The table shows that monthly rental fees are lower than the EU average. Also, international calls seem to be lower than the EU average. By contrast, local calls charges are higher than EU averages when expressed in PPP, possibly reflecting the fact that TTAŞ did not face any competition in this segment.

Table 2. Fixed line call tariffs (€, April 2008)

	Türk Telekom	Türk Telekom PPP(*)	EU 27 Average
Standard Monthly Rental residential users (incl. VAT)	6.75	12.825	15.00
Standard Monthly Rental business users (incl. VAT)	6.75	12.825	18.60
3 minute local call	0.11	0.209	0.14 (**)
10 minute local call	0.36	0.684	0.38 (**)
3 minute residential long distance call	0.13	0.247	0.26
10 minute residential long distance call	0.44	0.836	0.77
10 minute international call to UK residential users	0.57	1.083	2.50
10 minute international call to USA residential users	0.57	1.083	2.00

Source: Cullen International (2008), Figure 38, 40, 41, 42, and 45.
(*) PPP adjustment rate: 1.9.
(**) European Commission, 14th Implementation Report (2009).

In order to appreciate how slow the development of competition in fixed voice services has been, it will be informative to place Turkey in an international comparative perspective. Table 3 provides data on the market share of new entrants in the two most competitive segments of the markets for voice telephony, namely domestic long distance and international calls, after 4 years of liberalization. In the long distance market, with a market share of 9

[15] One important change occurred in the summer of 2004, when TTAS reduced its international call tariffs by 50-70 percent. Another occurred in the beginning of 2007, when TTAS announced that fixed monthly fees and local call tariffs were increased by about 23 percent and 18 percent, respectively, whereas tariffs of domestic long distance and international calls and calls to GSM operators were reduced by another 50-60 percent. The fact that TTAS reduced tariffs in the competitive segments and increased tariffs of calls where it still held effective monopoly position caused an outrage. The TA approved the tariffs. There was no formal analysis to back the decision, but it was argued that TTAS had not increased local call charges for years even though the inflation rate was above 10 percent.

percent of new entrants, Turkey comes last among the OECD countries for which data are available. In the UK, new entrants also had 9 percent market share after 7 years of liberalization, but this is possibly to be expected since the UK was an early liberalizer. In the international calls market, the market share of new entrants is lowest for Turkey, except for the cases of the UK, New Zealand and Spain. Again, low market shares in the UK and New Zealand are to be expected as these are among the first countries to liberalize their markets.

Table 3. Market shares of new entrants 4 years after liberalization (% of call minutes)

	Domestic Long Distance		International	
	(1) year of liberalization	(2) market share	(3) year of liberalization	(4) market share
Australia	1991	12	1991	28
Austria	1998	47	1998	56
Belgium	1998	15	1998	49
Canada	1990	18	1992	33
Czech Republic	2000	25	2000	Na
Denmark	1996	37	1996	56
Finland	1993	60	1993	41
France	1998	36	1998	26
Germany	1998	36	1998	54
Greece	2001	21	2001	29
Hungary	2002	na	2002	Na
Ireland	1998	na	1998	25
Italy	1998	25	1998	50
Japan	1986	22	1987	27
Korea	1996	17	1996	27
Luxembourg	1998	12	1998	28
Mexico	1996	27	1996	29
Netherlands	1997	24	1997	38
New Zealand	1990	21	1990	21
Norway	1998	29	1998	34
Portugal	2000	na	2000	25
Spain	1998	18	1998	17
Sweden	1994	17	1992	25
Switzerland	1998	45	1998	57
Turkey	2004	9	2004	22
United Kingdom	1985	9	1986	14
United States	1984	38	1984	27

Sources: Columns (1) and (3): Boylaud and Nicoletti, Table 1
Columns (2) and (4): OECD Communications Outlook 2005, Tables 2.3 and 2.4
Notes: In cases where data for 4th year after liberalization is not available data for a year earlier is adopted. For UK and the US data is for 1991. Data for Turkey is from Cullen International 2008.

The degree of competition in fixed broadband services is even lower. As of 2008, there were more than 70 internet service providers (ISPs) in the market, and share of TTAŞ in fixed retail broadband connections was about 95 percent (4.3 million out of a total of 4.5 million). Most of the alternative operators were engaged in pure resale and the number of bitstream connections was a mere 8 thousand (Cullen International, 2008, Table A.23 and A.25). The alternative operators share in revenue was a mere 15 percent (Table A.23).

TTAS started to provide ADSL access in 2003, as the sole provider of that service. In February 2004 the TA instituted a resale arrangement for a small portion of the ADSL ports installed by TTAŞ (with a margin allowed to resellers of 18%), but this attracted little enthusiasm from private ISPs. In October 2004, the TA Board decided to launch bitstream access. The TA's approach was to regulate bitstream access through a retail-minus methodology. However, the commercial realization of bitstream access was significantly delayed both by legal challenges by TTAŞ[16] and because it proved that fixing margins did not stop TTAŞ from preventing entry through non-price tactics. In that period, only one ISP applied to the TA for dispute resolution in May 2006, and this was concluded in an agreement in February 2007.

These problems seem to have pushed the TA to take a more structured approach to the issue of wholesale broadband access and in March 2007 the TA requested TTAŞ to prepare reference offers for wholesale broadband products. Availability of bitstream access began only after the TTAŞ came up with reference offers and bitstream became commercially available only in 2008.

In the meantime, TTAŞ' draft reference unbundling offer was put up for consultation on December 2005 and finalized in November 2006. Two ISPs, Netone and Superonline, signed UALL agreements with TTAŞ in May 2007.[17] As of May 2009 monthly rental fees are a bit over €8, which is about €1 cheaper than the EU average.[18] As of the end of 2008, there were no UALL products yet offered by alternative operators.

The initial intent of the TA was somewhat in line with the "ladder of investment" approach (ERG, 2005, Cave, 2006).[19] The TA wanted to take quick action on pure resale and bitstream and have especially bitstream readily available to ISPs even before TTAŞ reference unbundling offer would be ready. However, TTAŞ success in challenging the TA decisions, as well as TA's initial tendency to see bitstream purely as a matter of pricing seems to have delayed bitstream from becoming a commercial reality.

Another issue that is often raised by alternative operators is the possibility of Wholesale Line Rental (WLR). WLR allows alternative suppliers to rent access lines on wholesale terms

[16] It may be informative to describe briefly the nature of the legal challenge initiated by TTA¸S. Control of retail tariffs is governed by the Tariff Ordinance put out by the TA in 2001. This Ordinance outlined the procedures TA was to follow in the approval and auditing of telecom tariffs of operators with significant market power. It did not give the TA the authority to set retail tariffs, reflecting TA's desire not to be too intrusive in retail markets. TTAŞ' challenge against the TA's effort to regulate bitstream access through a retail-minus approach was based on the allegation that TA had authority to approve tariffs offered by TT, but not to dictate tariffs and the decision was struck down by an administrative court on these grounds. Hence the TA was found to be inconsistent with the Tariff Ordinance it adopted back in 2001.

[17] http://turk.internet.com/haber/yazigoster.php3?yaziid=18324.

[18] Data from www.cullen-international.com.

[19] The ladder of investment refers to the idea that there is a migration by new entrants from pure resale to bitstream access, and unbundled access, suggesting that entrants are moving up the investment ladder, from those steps with lowest investment to those with higher investment.

from the incumbent operator, and resell the lines to customers. In combination with Carrier Pre Selection (CPS), WLR enables the alternative operator to end the billing relationship between the incumbent operator and the customer and allows the alternative operator to provide a single bill that covers both line rental and telephone calls. WLR has been imposed as a remedy in all EU 15 (Western European) countries except for Belgium, Germany and Finland. It is imposed as a remedy in many newer member states of the EU as well, including in Cyprus, Lithuania, the Former Yugoslav Republic of Macedonia, Malta, Poland and Slovenia.[20]

While the TA has been intervening in wholesale broadband markets by mandating TTAŞ to provide various forms wholesale products, the TA has refrained from intervening in the retail broadband market. Retail broadband markets have been subject to various inquiries by the CA. As mentioned above, the telecommunications industry is also subject to general competition law enforced by the CA. While Law No. 4502 did not provide a clear demarcation of the division of labor between the TA and the CA, and while initially the two authorities had some disagreements about their respective spheres of authority, it can be said that the CA refrains from adjudicating cases that involve allegations of anticompetitive behavior in areas that are under the ex-ante regulation enforced by the TA and instead concentrates in markets that are not subject to ex-ante regulation, especially the retail broadband internet market. The Competition Authority also has a decision regarding the privatization of TTAŞ whereby it has required that the cable TV network had to be separated from TTAŞ before the sale.

In a recent decision[21] which is representative of CA enforcement of competition law in the fixed line telecommunications industry, the CA has decided that TTAŞ has abused its dominant position by executing a price-squeeze against its competitors in the retail broadband internet market and imposed a fine of 12.4 million TL (about €8 million). In another decision,[22] the CA has informed TTAŞ that it has to provide naked DSL services. Naked DSL services prevent TTAŞ from tying data and voice services and therefore allow consumers to subscribe only to TTAŞ data services.

2.3. The new Electronic Communications Law

A new Electronic Communications Law (ECL) was adopted by the Parliament in November 2008. Overall, the ECL has brought the Turkish regulatory framework closer to the 2003 framework of the EU. For example, it explicitly mentions market analyses and identification of operators with significant market power, reflecting the competition-law based spirit of the EU framework. The law also changes the name of the regulatory authority to Information and Communications Technologies Authority (ICTA). Perhaps the most important innovations of the ECL are in the areas of authorizations and transparency of the regulatory authority. Regarding authorizations, the law does away with the existing individual licenses regime and adopts a regime that consists of general authorizations and rights of use, as in the EU framework. One would expect that this change would imply a reduction in regulatory barriers to entry in the future. The law also states that "making those Board

[20] Data obtained from www.cullen-international.com.
[21] Decision No. 08-65/1055-411, Official Gazette dated 17.6.2009.
[22] Decision No. 09-07/127-38, Official Gazette dated 27.4.2009.

decisions that concern operators and consumers, as well as the reasoning and procedures behind those decisions, open to public opinion" is among the duties and competencies of the ICTA. If implemented, this is potentially a major step towards improving the transparency and accountability of the regulatory authority (see also the discussion below).

Since the publication of the ECL, the ICTA has issued a series of regulations to implement it. Again, the main spirit of the secondary legislation is to bring the Turkish framework closer to the 2003 framework of the EU. The new Ordinance on Authorization in the Electronic Communications Sector was adopted in May 2009, doing away with the over-complicated individual licenses regime and introducing a two-tiered regime consisting of general authorizations and rights of use. In September 2009 the procedures for identifying operators with SMP were renewed and the new rules explicitly introduced something similar to the "three criteria test" that characterizes the EU regime of SMP designations. In March 2009 the ICTA also adopted an ordinance that regulates the protection of trade secrets and publication of market information. In effect, the ordinance authorizes the ICTA to make public information such as number of subscribers, traffic volumes, net sales incomes, market shares, investment volumes, number of subscribers switching operators, and quality indicators, presumably to enhance consumers' information about the market.

3. WHAT EXPLAINS TURKEY'S (LIMITED) PERFORMANCE ?

This section discusses the institutional and political-economic factors that may explain Turkey's less than perfect performance in the liberalization of and promotion of competition in the fixed-line telecommunications industry. Establishing a regulatory framework prior to privatization One important issue emphasized in the literature is the order of two important components of liberalization in telecommunications, namely, establishment of a regulatory framework and privatization.[23] There are two arguments that favor the establishment of a regulatory framework prior to privatization: removal of regulatory uncertainty and promotion of competition.

First, in the absence of a regulatory framework private investors need to be compensated for the risks associated with regulatory uncertainty. This in turn implies lower willingness to pay (on average) for the utility. Another consequence of such uncertainty is that it can also lead to lower investments post-privatization. Second, in the absence of regulation monopolies have little or no incentives to provide access to potential entrants. Therefore, a regulatory framework that ensures access in reasonable terms and on non-discriminatory basis is a precondition of development of competition .in fact, this is true regardless of the ownership structure.

These arguments are also supported by empirical studies. For example, Wallsten (2002) uses telecoms data from 197 countries for the period 1985 to 1999 and finds that establishing a regulatory authority before privatizing the firm enhances investment and sector performance (in terms of telephone penetration, telecom investment and mobile cellular subscriptions). Also, it substantially increases the price investors are willing to pay for the .rm. For the same sample period, with a special focus on (86) developing countries' telecoms markets, Fink et. al. (2003) also find that the sequence of reform matters. They find that liberalizing the sector

[23] See, for example, Wallsten (2002), Fink et. al. (2003), Li and Xu (2004).

after privatization leads to lower performance: in such cases the penetration rate is lower than in the cases where the reforms are introduced at the same time.[24]

In a more recent study, Knyazeva et. al. (2006) analyze preconditions of the success of ownership reforms in the telecoms industry, and show that the quality of institutions (political stability and regulatory environment) has a significant positive effect on the changes in performance, as measured by efficiency growth, after privatization. In fact, quality of institutions has a positive impact on performance regardless of the ownership structure. They find that the efficiency improvements after privatization are more pronounced in the presence of better institutions and accompanying regulatory reforms.

In this context, the failure of the earlier attempts to privatize TTAŞ can be explained not only by the government's determination not to relinquish control but also by absence of regulatory framework, which created uncertainty about what type of regulatory obligations the incumbent would face post-privatization. It is very likely that this uncertainty reduced the potential buyers' willingness to pay for TTAŞ. It could be argued that after the passage of Law No. 4502 and the ensuing secondary legislation the uncertainty was partly removed, which possibly explains the success of privatization in 2005.

This sequencing of events could also lead one to conclude that the authorities finally got the order of reform right: establishment of regulatory framework in 2001 and privatization in 2005.[25] We would argue, however, that this conclusion is only partially correct, as the correct sequencing would lead to better market outcomes only if the regulatory framework is not only legislated but also effectively implemented. Even though Turkey ended up following the correct sequencing and the general evolution of regulatory framework has been in the right direction (that is, towards the EU model), the implementation has been extremely slow and enforcement has been weak. Moreover, in a number of instances, measures that would enhance competition were delayed in an almost deliberate fashion (e.g. competition at the local level). The weakness in implementation was demonstrated by the slow pace in the emergence of competition as documented in the previous section. Effective implementation (for example, well designed and coherent secondary regulations and their effective enforcement) ultimately hinges on a number of factors that are generally labeled under "quality of regulatory institutions."

Quality of regulatory institutions There are various attempts to define and measure quality of regulatory institutions.[26] One of few ones that includes Turkey (albeit only recently) is the Annual Regulatory Scorecard published by the European Competitive Telecommunications Association. The scorecard provides an overall score for the relative effectiveness of the regulatory environment for 20 European countries, since 2002.[27]

[24] See also Li and Xu (2004). Their data is not restricted to the developing countries (177 countries during the period 1990 to 2000) and yet they find a similar result: countries that implemented more aggressive programs of reforms perform significantly better than those with less aggressive reform policies.

[25] See for example, Bagdadioglu and Cetinkaya (2007): they argue that the sequencing of restructuring, regulation and privatization is properly implemented in Turkish telecommunications sector and that enough time is not passed for the realization of the benefits of privatization.

[26] See for example, Gutierrez (2003a,b), who constructs a regulatory framework index, which includes an equally weighted sum of six elements; independence from the incumbent, independence from the government, accountability, clarity of its roles and objectives and transparency and participation in regulatory process.

[27] The scores are computed through a comparative quantitative analysis, whereby the data is based on responses to a comprehensive questionnaire by the National Regulatory Authorities, ECTA members, and other stakeholders.

The assessment is based on selected key criteria, including: (1) overall institutional environment (legislative framework, National Regulatory Authority's (NRA) powers, independence, dispute settlement and appeal systems), (2) key enablers for market entry and network roll out (numbering, rights of way, etc.), (3) the NRA's regulatory processes, (4) application of regulation by the NRA, and (5) regulatory and market outcomes (degree of service-based and infrastructure-based competition, market shares, prices). It turns out that Turkey performs poorly in all of these dimensions and has the lowest overall score in the sample.

Table 4 shows the ECTA scores for 2008 as well as the year of establishment of the NRAs of various countries. Table 5 presents the detailed breakdown for each component and the scores obtained by Turkey.

Table 4. ECTA Scores (countries ranked according to the overall score)

Country	Overall Score	Components of the overall score					NRA's est. year (*)
		Institutional Framework	Entry Enablers	Efficiency of NRA	Application of Regulation	Market Conditions	
UK	374	73	76	62	62	101	1984
Netherlands	361	66	80	52	58	105	1997
Norway	361	66	76	62	43	114	1987
Denmark	344	78	73	40	50	103	1991
France	323	76	57	50	56	84	1996
Italy	302	78	57	43	41	83	1996
Ireland	301	73	54	62	59	53	1997
Finland	301	62	71	59	31	78	1988
Portugal	287	62	40	50	33	102	1981
Hungary	281	71	52	54	33	71	NA
Austria	282	62	43	47	33	97	1997
Germany	280	43	66	57	21	93	1996
Spain	266	73	40	40	44	69	1996
Sweden	265	57	59	47	12	90	1992
Belgium	253	33	54	33	53	80	1993
Slovenia	250	62	47	47	28	66	2001
Greece	246	78	35	40	28	65	1995
Czech Rep.	192	71	31	24	17	49	2000
Poland	179	47	26	35	13	58	2000
Turkey	139	57	9	21	12	40	2000

Minimum	139	33	9	21	12	40	
Average	279.35	64.40	52.30	46.25	36.35	80.05	
Median	281.50	66.00	54.00	47.00	33.00	81.50	
Std. dev.	60.84776	12.32	18.76	11.94	16.47	20.80	

Source: ECTA Scorecard 2008.
(*) Obtained from various sources.

The scores for 2008 (6th scorecard) range from 374 (UK) to 140 (Turkey), with an average score of 279 (median: 282). Turkey scores particularly bad for the "regulatory" results.[28] Turkey scores the minimum in all criteria, except for the institutional framework.

One can note a positive correlation between the overall regulatory score and the age of the NRA, possibly reflecting learning due to experience. Although the quality of the NRA[29] is not the sole determinant of the qualities of the regulatory environment,[30] for criteria (2), (3) and (4) it seems to matter a lot. It is possible that NRA age has an important impact on its quality. Hence, the table shows that the correlations between the categories "entry enablers" and "efficiency of NRA" on the one hand and NRA age on the other are particularly strong. The worst performers in the category of "entry enablers", namely Turkey, Poland, and the Czech Republic (that also have the lowest overall score) have established their NRAs relatively recently (in 2000). The correlation between NRA age and "the overall score" is also strong. Note that the best performer overall, namely the UK, has one of the oldest NRAs.

Table 5. Breakdown of ECTA 2008 scores for Turkey
(W: weak, N: Neutral, S: Strong)

1. Institutional Framework		2. Entry Enablers		3. Efficiency of NRA		4. Application of regulation by NRA		5. Economic Market Conditions	
NRA enforcement powers	W	Rights of way	W	Efficiency of dispute settlement	W	Technology neutrality	W	Voice Services	W
NRA independence	W	Numbering	W	Enforcement record	W	Operational conditions	W	Broadband Services	W
NRA scope and scale of resources	S	Frequencies	W	Transparency of regulatory process	W	Non pricing condition / prevention of leveraging	W	Mobile Services	W
Dispute settlements	S			Market Analysis process	N	Accounting separation	N	Business Services	W
Effectiveness of appeals procedure	S								

[28] The 2008 report distinguishes between institutional and regulatory results, whereby the former mostly represents the criteria (1) listed above, and the latter represents the rest.
[29] By the term .quality. we mean both the quality of the rules designed by the NRA as well the quality and effectiveness of their implementation and enforcement.
[30] As noted by ECTA, other institutional players are Governments, legislators and judiciary bodies.

Transposition of framework	S							

Source: ECTA Scorecard 2008.

The relative weakness of Turkey particularly stands out in regulatory transparency. Turkey stands as the only country that performs weakly under this category. Except for four countries that are ranked as "neutral" (Greece, Slovenia, Czech Republic and Belgium), all countries perform well (strong) in this criteria. This is not surprising: until very recently, the regulatory authority in Turkey was not obliged to publish its decisions (and in practice many Board decisions were not made public). Furthermore, it was also not obliged to provide any reasoning or justification for its decisions. Even though it did engage in public consultations prior to adopting secondary legislation and market analyses, it has not made these consultations public. It has also not disclosed how it responded to the concerns raised in these consultations.

A similar point applies to "NRA independence"; Turkey is one of the few countries that perform weakly (the other two are Germany and Poland). It is generally believed that NRA independence is an important determinant of regulatory quality. As Edwards and Waverman (2006) show, regulatory independence is particularly important when the government retains ownership, as governments may face a commitment problem in creating a regulatory environment which does not favor the publicly owned incumbent. Using time series data for EU15 countries, they show that public ownership of the incumbent telecom operators has a positive effect on the interconnection rates (which entrants pay to incumbents to terminate calls);[31] however, the presence of institutions which promote the independence of NRAs mitigates this effect.[32]

For the purpose of comparison, we have computed the Edwards-Waverman European Union Regulatory Institutions Independence (EURI-I) index[33] for the case of Turkey. Turkey's score turned out to be 6.3,[34] which is close the EU15 average (computed for 2003). Interestingly, according to this index, Turkey scores better than the UK (5.75), which has the highest overall score and which has been reported as "strong" for regulatory independence in the ECTA scorecard (ever since the scorecard has been published). Hence in terms of regulatory independence, it would seem that there is a divergence between the ECTA score and the EURI-I index. This is because, as previously noted, the ECTA score is calculated on the basis of responses to a questionnaire by various stakeholders, whereas the EURI-I index is calculated on the basis of objective criteria such as funding, terms of appointment of board members, and whether the authority is multisectoral or not. We think the latter reflects a de-jure assessment of independence whereas the former captures a de-facto assessment of

[31] See Bauer (2005), who also shows that the interconnection rates are higher in countries where the incumbent operators are under full or partial state ownership.

[32] They also find that the regulatory independence has no effect on interconnect rates when the incumbent is operation fully privatized.

[33] The EURI-I index is an equally weighted sum of 12 institutional elements, each measured as a dummy or categorical variable (e.g., funding, terms of appointment, experience) on a 0.1 scale. Hence it was relatively straightforward to calculate this index for the case of Turkey.

[34] To be able to compare the Turkish score with the EU15 index, we have computed Turkey's score for 2003. If the score were to be computed for a more recent date, the only significant change in the elements that determine the index would be the "NRA experience": updating would imply that the score would increase by one point to 7.3.

independence. The contrasting scores for Turkey and the UK, for example, reflect the fact that de-facto independence can seriously diverge from de-jure independence. This also underscores the fact that procedural and legal measures may be neither necessary nor sufficient for actual independence.

Indeed, in the case of Turkey, it has often been asserted in the media that the regulatory authority has not been able to act in complete independence from the Ministry and that appointments to the Board have been not fully based on merit.[35] In fact, the fact that the Ministry has not shown political ownership of the liberalization process is probably one of the important factors that explains the slow pace of competition. Further but perhaps even more revealing evidence of the regulator's lack of independence is its contrasting attitude in its interconnection policy in fixed versus mobile industry. In the mobile industry both the Ministry and the regulatory authority seemed keen to support the entry and growth of new operators, one of which was a subsidiary of TTAŞ. As discussed in Atiyas and Dogan (2007) the TA was much more aggressive in its interconnection policy in the mobile segment and the termination charges imposed on Turkcell, the dominant player in the mobile segment, was among the lowest in the EU.

It is very likely that privatization of TTAŞ itself also played a role in the slow pace of emergence of competition. The government was concerned about raising as high revenues as possible from the privatization transaction. This has slowed down the introduction of measures that would result in the erosion of monopoly rents, as reflected in the relatively high interconnection tariffs in the earlier phase of the liberalization process, delays in the commercial operationalization of licenses for long distance and international voice services and the delay in the authorization of entry into the local call business.

Finally, professional capacity is an important dimension of regulatory quality although it may be hard to measure it in any objective manner. The fact that a number of authorization attempts were cancelled by the Administrative Court can be construed as evidence of weakness in the capacity to design credible secondary legislation. A stronger legal capacity would have formulated the licenses in such a way that the higher court would not overrule them and there would be no resulting damages to the credibility of the authority. The fact that TTAŞ was able to frustrate TA's initial attempts to launch bitstream access may also be taken as an indicator of lack of capacity. One could also argue that the lack of transparency alluded to above partly results from a deficiency of technical and professional capacity. The reluctance of the authority to publish any reasoning or justification for its decisions reflects its concern that justifications may be technically not well grounded and that they could be vulnerable to legal challenges through appeals.

4. THE PRIVATIZATION QUESTION REDUX

Given the problems associated with the implementation of the regulatory framework, one may ask the question whether privatization of Türk Telekom was a good idea to begin with. In fact, TTAŞ privatization was criticized by many on the grounds that it amounted to a transformation of public monopoly to a private monopoly.

[35] See for example Serdar Güçlü, "Telekomda 'To Be or Regulatory Captured'", published at http://www.turk.internet.com/haber/yazigoster.php3?yaziid=10765, 26 August 2004.

In contrast with earlier studies that support the benefits of privatization,[36] some studies have been arguing that retaining public ownership in the fixed line telecommunications may achieve more desirable market outcomes. For example, with a special focus on developing countries, Auriol (2005) argues that privatization of telecoms leads to a substantial reduction in employment and real output (by and large, the decrease in the latter effect is dominated by the former, which leads to an increase in labor productivity), as well as a price increase. She argues that in increasing returns to scale industries, like fixed line and long distance telecommunication markets, public ownership may be preferable due to allocative inefficiency combined with the critical budgetary conditions.[37]

Knyazeva et al (2006) use cross-country data to study the effects of institutional development and ownership reforms on efficiency growth in the telecommunications industry. They show that when one accounts for the sample selection bias, which is due to the endogeneity of the privatization decisions,[38] privatized sectors exhibit weaker performance improvements than sectors remaining public over their sample period of 1999-2000. This result is in contrast with most of the earlier cross-country studies on privatization. Knyazeva et al (2006) argue that the transfer of ownership to the private investors does not necessarily eliminate the incentive problems within the firm and that privatization can be associated with additional costs. Furthermore, presence of a rent-seeking government may also be an additional burden on the recently privatized enterprise.

While there may be arguments in favor of retaining public ownership in a "perfect" second-best environment, where policy makers are not only social welfare maximizers but also fully capable in designing and implementing regulatory policies to achieve that end, the regulatory environment in Turkey was far from perfect prior to the privatization of TTAŞ. There are a number of reasons why one might believe that privatization was the right thing to do in Turkey even though the regulatory framework was less than perfect. These are discussed below.

Economic theory would suggest that one of the main implications of privatization is profit orientation, which in turn means stronger incentives for cost reduction. The case of TTAŞ seems to confirm this expectation. Anecdotal evidence suggests that there have been significant efficiency gains after privatization. This is especially true in the context of restructuring of the labor force, both in terms of reduction in the total number of workers and in terms of improving overall skill mix through new hires (Türk Telekom, 2008). It is also likely that TTAŞ may be experiencing more flexibility in procurement because it is less subject to government monitoring and bureaucratic rules and this may create additional capacity to reduce costs. Even though actual development of competition has been lacking, especially in international comparison, the threat of potential competition seems to have made an important impact on domestic long distance and international retail prices. As discussed in section 3.2, there have been several rounds of steep reductions in these prices.

A discussion of whether privatization has been beneficial or not also requires some conjectures about what would have happened if TTAŞ remained under public ownership. One

[36] See, for example, Bortoletti et. al. (2002). Based on a sample of 31 firms from 25 countries, they find that privatization of telecoms firms is associated with higher profitability, output and efficiency.

[37] Auriol points to China and Vietnam as countries that followed the winning strategy, which is to keep the fixed line operator public and monopolistic while fostering (regulated) competition in the mobile segment.

[38] There is a self-selection problem as factors like past performance, initial institutional conditions, and macroeconomic conditions can affect both (future) efficiency improvements and the privatization decision.

could in principle envision, for example, a situation where TTAŞ would be politically instructed to act as a social welfare maximizing incumbent operator[39] that oversees and promotes the development of competition in the industry. However, the discussion above suggests that the political and institutional dynamics behind the public ownership of TTAŞ was not conducive to this kind of behavior. First, TTAŞ was used as a vehicle for partisan patronage over the years and as a result suffered from significant over-employment. Second, TTAŞ' attitude towards liberalization and competition was outright hostile. Even while under public ownership, TTAŞ used every available instrument, most importantly legal challenges against regulatory interventions, to block the development of competition.

The telecommunications industry has been experiencing rapid change in terms of technology. The speed of innovation in products and services is very high, and the introduction of these new products and services into the Turkish market is likely to have an important positive welfare effect. It has been argued that the presence of a strong potential of innovation is an important argument for private ownership (Shleifer, 1998).

Finally, and on a positive note, the prospect of competition in the telecommunications industry is stronger now than a few years ago. With the complete liberalization of fixed line services and implementation of unbundled access to the local loop, it is likely that alternative fixed line operators will be able to better compete with TTAŞ. Moreover, with fixed-mobile convergence TTAŞ is experiencing increased competition from mobile industry.

5. CONCLUSION

Earlier attempts to privatize TTAŞ failed due to a lack of cohesiveness at the policy making level, typically with different coalition partners pursuing different agendas. It seems there was also a lack of capacity to create the necessary legal infrastructure for the privatization policy to survive constitutional review. Perhaps not differently from many developing countries, privatization was driven by revenue maximization motives, which ignored long term productivity growth and competition, as reflected by the complete absence of a proper regulatory framework. Ironically, this absence of a regulatory framework and the ensuing regulatory uncertainty probably further hindered the privatization prospects of TTAŞ in that era.

Partly thanks to the failure of earlier privatization attempts and partly as a response to external pressures, such as her commitment to the WTO guidelines, Turkey appeared to have the necessary preconditions for a successful liberalization in the early 2000s, i.e., once Law No. 4502 was adopted. The legal framework, while not completely in conformity with that in the EU, had most of the necessary basic components: in particular, an independent regulatory authority that had significant amount of discretionary power in crucial areas such as access and interconnection and retail tariff control. Moreover, through the same series of events Turkey ended up with the right sequencing approach, that is, establishing regulatory framework prior to privatization.

From a formal point of view, there were some important safeguards that would insulate the regulatory authority from political interference: the authority had independent sources of finance, the members of the governing body were appointed for fixed terms and could not be removed, its decisions could not be overturned by the Ministry and could only be appealed at

[39] For theoretical analyses, see, for example, Sertel (1988) and Fjell and Heywood (2002).

the high administrative court. Indeed, progress has taken place: some prices have come down and there has been some limited entry by new players in the market. However, this chapter has argued that both the evolution of the regulations and market outcomes in fixed segments reflect that the development of competition has been extremely slow. In hindsight, the Turkish experience confirms that quality of effectiveness of the regulatory framework requires more than de-jure forms of independence. It also underscores the importance of transparency as well as of professional and technical capacity.

In hindsight, it seems that the lack of ownership of the liberalization agenda by the Ministry seems an important factor that has delayed the development of competition. In that sense the Turkish experience suggests that delegation of regulatory authority is not a panacea in the absence of political intent and ownership. The Turkish experience also suggests that problems in implementation may prevent the full exploitation of benefits that may result from correct sequencing of reforms.

There are a number of reasons to be more hopeful for the future. The implementation of the legal infrastructure has reached a level of maturity especially in terms of unbundled access and full liberalization of voice services; hence barriers to competitive growth in broadband as well as voice services have been significantly reduced in the last few years. The new Electronic Communications Law has introduced a number of important changes and has moved the Turkish regime closer to the EU framework. It has also introduced some institutional changes (such as requiring the regulatory authority to publish its decisions with justifications) which will likely increase the degree of transparency and accountability of regulatory interventions.

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