



# Political institutions of electricity regulation: The case of Turkey

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## ABSTRACT

Turkey has been going through a liberalization process in its electricity market over the last decade. So far, the regulatory content of the market reforms has been in the center of attention in the literature, to the negligence of regulatory governance. However, recent studies, which applied the theoretical insights of new institutional economics to utilities regulation, have demonstrated that political endowments of the country draw the boundaries to which extent such regulatory content can be effectively implemented. In line with these studies, this paper adopts an institutional approach and attempts to identify the political endowments of Turkey in order to further analyze whether the market reforms succeeded in bringing about sufficient checks to cure the institutional problems. In other words, the paper takes a picture of the overall regulatory arena. The results show that the current regulatory structure, especially government–regulator relations, yet fails to meet good regulatory governance criteria. The paper also provides some policy suggestions.

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## 1. Introduction

Energy sector is widely seen as the most promising investment area in Turkish economy. Electricity market in particular is one of the fastest growing in the world ([Turkish Energy Industry Report, 1997](#)). Increasing demand calls for significant investment in the sector, which entails private investment. For the last decade, the sector is going through a liberalization process to develop a competitive market structure. Electricity distribution activities have already been privatized whereas state-owned electricity generation assets are being privatized one after another.

In fact, this is not Turkey's first attempt. The history of introducing private participation in electricity sector goes back to the 1980s. Since then, different governments have enacted many laws to promote and incentivize both new private investment and the privatization of the existing facilities. However, most of these attempts encountered legal challenges and were reversed by the judiciary. Several projects were canceled and deals were broken. Failures of the past have been very costly for Turkey. This is, in fact, the reason why the current attempt is less tolerant to faults.

Certain lessons were learned from the failures; such that the current liberalization process is backed up with Electricity Market Law<sup>1</sup> that was enacted in 2001 and Energy Markets Regulatory Authority (EMRA) was established as the sector-specific regulator on energy markets.

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<sup>1</sup> Law No. 4628 published in the Official Gazette No. 24335, dated 3 March 2001.

However, statistics about developing and transition economies show that introducing a regulator to handle market reforms is not sufficient for good regulation. World Bank Private Participation in Infrastructure Database points out that private investment flows in electricity in these countries (such as countries in Latin America, Central and Eastern Europe and Asia, all of which mainly started private investment in infrastructure in the 1990s) have faced severe falls in the 2000s ([World Bank Private Participation in Infrastructure \(PPI\) Database, 2010](#)). It has been argued that the establishment of new regulatory agencies, mostly in the last 15 years, did not prevent the Asian IPP crisis, nor the collapse of energy regulatory arrangements in Argentina nor similar problems in some other Latin American countries; on the contrary, the weaknesses of such agencies are regarded as a contributory factor to these crises ([Stern and Cubbin, 2005](#)).

Then regulatory problems are not automatically solved with the establishment of a new regulatory agency. In fact, it gives rise to institutional problems, especially regarding the inter-relationships of the new institution with the existing ones. Economic performance is closely related to the regulatory environment and inter-relationships among multiple agencies, and the implementation of efficient policies is only possible if the institutional structure supports cooperation ([Spiller and Tommasi, 2003](#)). The existence of former institutions may facilitate, hamper or sidetrack the desired evolution and the actual consequences of the creation of new institutions ([Glachant and Perez, 2009](#)). This is an institutional change issue and needs to be handled accordingly.

From an institutional perspective, however, the current liberalization process does not seem very bright. The last decade witnessed a “regulatory chaos”. The transition stage from state-dominated structure to a competitive one comprises too many

actors, including but not limited to the government, EMRA, state-owned generation–distribution–transmission companies, Privatization Administration, Turkish Competition Authority and the judiciary, each of whom has a word on regulatory policies. In particular, there is an ongoing tension between the government and EMRA on regulatory policies. Although EMRA is the competent regulator, the government is inclined to intervene through its *de jure* authorities on EMRA and *de facto* power in the regulatory process. In short, the market is suffering serious regulatory governance problems.

This paper takes an institutional approach and tries to make a regulatory governance analysis of the sector by looking at the overall regulatory picture. For this purpose, the political and economic endowments of the country are analyzed and their effects on electricity market regulation are presented in order to further analyze whether or not the market reforms managed to design the correct mechanisms to handle the institutional problems. It is actually surprising that despite the vast number of studies on market reforms, not much attention has been paid to make an institutional analysis that covers all related institutions in the regulatory process.<sup>2</sup> Turkey appears to be no exception to crucial finding of Levy and Spiller (1994) that “regulatory content” has been in the center of analyses, to the negligence of “regulatory governance”.

The rest of the paper is organized as follows: Section 2 provides the theoretical background on institutions and regulatory governance in utilities with a short literature review. Section 3 analyzes the political and economic endowments of the country in general, and in electricity in particular. It also describes the current institutional arena in electricity regulation. Section 4 makes a brief legal analysis EMRA and then develops a regulatory governance analysis, taking into account EMRA–government relations, to see whether EMRA’s regulatory practice fits good regulatory governance criteria and what economic implications it has. Section 5 concludes and provides policy suggestions.

## 2. Institutions, regulatory governance and economic performance

According to North (1992), institutions consist of formal rules and informal constraints (norms of behavior, conventions, etc.), as well as their enforcement characteristics. Coase had already pointed out that markets will work efficiently only in the absence of transaction costs (Coase, 1960). Building on him, North adds that if transaction costs are significant, then institutions matter. They determine the cost of transacting and producing, and they reduce uncertainty by establishing a stable structure to human interaction. Since neoclassical theory focuses on the operation of efficient markets, Western economists usually fail to understand the institutional requirements necessary for the creation of such markets; they take the institutions for granted (North, 1992). For developing countries, on the other hand, analyzing institutions and institutional change may help for economic development.

Transaction cost economics (especially O. Williamson) has also contributed to the analysis of institutions by pointing attention to the role of asset specificity, bounded rationality and opportunism in the emergence of economic institutions. It is particularly applicable to electricity sector, in which asset specificity is a key feature and opportunistic asset appropriation is a major problem (see Rufin, 2003 for details).

Levy and Spiller (1994) followed North’s institutional approach and applied it to regulatory frameworks in order to devise

regulatory mechanisms that fit best to a particular country’s “institutional endowments”. They became the first ones to make a clear distinction between regulatory governance and regulatory incentives, and argued that the structure of regulatory incentives has been the central focus of all theoretical work on regulation, to the neglect of regulatory governance. Even though regulatory incentives affect performance, their full effect occurs only if the proper regulatory governance structure is in place (Levy and Spiller, 1994).

In their line of argument, both regulatory governance and regulatory incentives are choice variables for policy makers, which are subject to constraints. Choices about regulatory governance are constrained by the specific institutional endowment of a nation. In defining “institutional endowments” of a nation, Levy and Spiller build on North, and characterize the institutional endowment of any country in terms of five key elements:

- Country’s legislative and executive institutions;
- Country’s judicial institutions;
- Country’s custom and other informal, but broadly accepted norms that constrain the actions of individuals and institutions;
- The character of contending social interests within the society and the balance between them, including the role of ideology;
- The country’s (and its institutions’) administrative capabilities.

In their analysis, Levy and Spiller put most emphasis on the first two elements, namely the country’s political and judicial institutions (i.e., the roles of separation of powers, different electoral systems, federal vs. unitary states, etc.) In their view, legislative and executive institutions may limit a country’s options for regulatory governance.<sup>3</sup>

Further studies followed and extended the work of Levy and Spiller. Such studies include Warrick (1997), *Principles for Good Regulation* by UK Better Regulation Task Force (1997), Stern (1997), and Stern and Holder (1999).

The main focus of Stern and Holder (1999) is on *informal accountability* issues, which correspond to third and fourth points from North’s list above.<sup>4</sup> In this line of argument, formal regulatory arrangements are necessary but not sufficient; informal regulatory accountability matters as well. Stern’s emphasis is on the *spirit* of the law—namely the practical application of the legal framework and how it is interpreted. In this context, informal accountability refers to the degree, to which the regulatory process encourages debate and open discussion, involves all relevant parties, leads to justification by the regulator of decisions and methodologies, and generally leads to a clear understanding of the “rules of the game” (Stern, 1997).

Based on these arguments, Stern and Holder identified six aspects of regulatory frameworks as main governance elements. These six aspects were:

- *Clarity of Roles and Objectives* especially between Ministers and regulators to avoid confusion as to which functions are carried out by the regulator and which are carried out by the ministry (or other bodies),
- *Autonomy* from political intervention will ensure that the regulators are independent. Secure sources of funding and

<sup>3</sup> In electricity reforms, legislative and executive institutions play an initial role by producing a reform law, which is always “incomplete”; because (i) they have very little knowledge about the technical and economic issues at stake and (ii) they cannot intervene frequently to redefine the rules when necessary, so the law needs to be sufficiently general and flexible. See Dubois (2009) for details.

<sup>4</sup> According to Stern (1997) “...effective utility regulatory institutions are ones that provide transparency and predictability”.

<sup>2</sup> For an exceptional study from a public choice perspective, see Çetin and Oğuz (2007).

protection of senior officers from unfair dismissal by politicians are significant issues.

- *Accountability* requires that the decisions of the regulator can be challenged in an effective way. Appeal mechanisms and accountability to the legislature can be important in this sense.
- *Participation* of all relevant parties contribute effectively to the regulatory process and increases cooperation within the sector as well as support to the regulator,
- *Transparency* enables market participants to have a better understanding of the regulator's decisions and main reasons behind it. It also contributes to predictability and preciseness as well as reducing the likelihood of unfair decisions.
- *Predictability* ensures firms (in a sector with high sunk costs) that “rules of the game” will not suddenly change. This also means that requisite changes will be carried out in a consistent manner.<sup>5</sup>

These aspects are mostly interrelated and support each other. Similar criteria set forth by various authors demonstrate that today there is a consensus among scholars regarding what good governance requires.

There is also an increasing number of empirical studies with respect to the positive effects of good regulatory governance on economic outcome. For telecommunications, *Gutierrez (2003)* finds, by using a regulatory governance index for a sample of 22 Caribbean and Latin American countries, statistically significant positive correlations between his index and teledensity and efficiency. For electricity, *Bergara et al. (1998)* find in their regression analysis for sample of 87 countries that well-defined and credible political institutions are positively and significantly correlated with national electricity generating capacity. Their analysis also shows that judicial independence is particularly important in this regard. *Cubbin and Stern (2006)*, in their analysis for 28 developing economies over 1998–2001, find that both regulatory law and higher quality regulatory governance are positively and significantly associated with higher per capita generation capacity (controlling for privatization and competition and allowing for country-specific fixed effects). This positive impact also increases for more than 10 years, as experience develops and regulatory reputation grows. Moreover, using detailed datasets covering 26 countries and 250 utilities in Caribbean and Latin American region, *Andres et al. (2009)* show that regulation matters for sector performance on three aspects: (i) the existence of a regulatory agency matters, (ii) the experience of the regulatory agency matters, and (iii) its governance matters as well.

Recent theoretical studies try to place regulatory governance in public utilities into stronger theoretical framework. *Spiller and Tommasi (2005)* follow New Institutional Economics approach (the works of Oliver Williamson in particular) by combining transaction costs economics and positive political economy. In a nutshell, they try to explore the implications of looking at regulation as a political transaction for the resulting features of regulatory policy and to analyze the institutional determinants of regulatory policy. A more concrete approach for the present study was set forth by *Jordana and Sancho (2004)*. In their analysis of the regulatory state, they argue that it is the whole institutional arena, not just the regulatory agency, which will make the difference in policy processes and policy outcomes.<sup>6</sup> In order to explain complex regulatory structures, they develop the concept

of “institutional constellations”, meaning “...entire sets of formal institutions and interconnected rules that shape public decision-making in a given regulatory arena...” (*Jordana and Sancho, 2004*). The following table explains the three dimensions of institutional constellations:

Institutional Constellations: key dimensions and their variation			
Key dimensions	Definition	Range of variation	Absence of inst. Constellation
Institutional diversity	Number of institutions involved	Degree of fragmentation (low–high)	Institutional unity
Distribution of responsibility	Allocation of policy decisions to different institutions	Degree of dispersion (low–high)	Concentrated responsibilities
Power structure	Institutional capacity to control final policy decisions	Degree of centralization (low–high)	Hierarchical power

Source: *Jordana and Sancho (2004, p. 300)*.

In short, literature on the analysis of institutions in general, and regulatory governance in particular, shows that for effective regulation of public utilities, regulatory governance matters at least as much as regulatory content. Empirical evidence also supports this result.

### 3. Political endowments and the current institutional arena

This section develops a general framework for political and economic endowments of Turkey. Then it draws the current institutional arena in electricity regulation.

#### 3.1. Political and economic endowments of Turkey

Turkey has a parliamentary system of government for more than 85 years. Separation of powers is constitutionally recognized. Politics, however, has traditionally been practiced on slippery and unstable grounds. Since the establishment of the Republic in 1923, there have been 60 governments in 87 years; namely, the average term of office for a government is less than 1.5 years, which is considerably low. U.K.-style “two strong parties” model is not operative in Turkey. Political preferences and ideologies tend to support fragmented party structure and usually coalitions in return. Political parties usually do not last long and are frequently replaced by new formations. Accordingly, governments frequently change hands. It is an exceptional case that the same political party wins the elections two times in a row (with few exceptions, one being the current government). Military coups in the 1960–1980 period, albeit temporary, have also influenced the political composition. After all, the country can be characterized by unstable politics.<sup>7</sup>

Together with its political institutions, Turkey's economic history demonstrates that the country has a long tradition of state participation in economy. Even though it never experienced a communist system and its economic policies were always based on the free markets mechanism, state has always been an important economic actor. This process initially started as a necessity after the establishment of the Republic of Turkey in 1923 when the young state chose to adopt *statism* as its economic

<sup>5</sup> For the details of each of these elements, see *Stern and Holder (1999)*.

<sup>6</sup> An interesting example demonstrating that an independent regulator is not a *conditio sine qua non* is the German electricity market, which was entirely opened to competition in 1998 with no sector-specific regulator until it has been modified in 2005. For details, see *Glachant et al. (2008)*.

<sup>7</sup> Nevertheless, it should be noted that political structure has been relatively stable with two single-party governments in the last 10 years and political risks are lower than before to a certain extent.

policy since private sector had neither financial nor technical capabilities to undertake big investments. Over time, this mandatory choice became the country's economic policy due to country's financial conditions while private sector failed to raise enough funds to make major investments. At the beginning of 1960s, almost half of the entire economy was held by the state (Özkıvrak and Dileyici, 2001). State was involved in providing almost every kind of public and private goods. In 1980s, the government decided to liberalize the economy including electricity. Privatization of the state-owned enterprises has started in this period.<sup>8</sup>

Electricity in particular has always been an important element in this setting. Domination of the sector by state-owned enterprises and “political good” nature of electricity enabled politicians to use it for political maneuvering.<sup>9</sup> This is due to three general features of utilities, including electricity: (i) specific and sunk investments, (ii) economies of scale, and (iii) massive consumption. These features incentivize the government to behave opportunistically and expropriate the investing company's sunk assets (Spiller and Tommasi, 2005). Spiller and Martorell (1996) point out that political instabilities always trigger government interference with the pricing and investment policies in the sector. Since investments in electricity provide benefits only in the future, current governments tend to delay investments and find it more profitable to subsidize their constituencies directly through pricing. Thus, such a country will have relatively low prices in general and residential prices will be subsidized in particular.

Moreover, governments in Turkey have traditionally tended to use prices to reduce inflationary expectations at the expense of larger future deficits, because future deficits will be taken care of by the future government whereas current inflation rates may help the current government. For instance, Brazil, Argentina and Uruguay, which have been through high inflation rates, have experienced similar manipulations by their governments as well. In Brazil and Argentina, real electricity prices have fallen sharply during hyperinflation periods and have increased back later on. In other words, redistribution and macroeconomic preferences rather than economic efficiency concerns determine the prices and policies in politically unstable countries (Spiller and Martorell, 1996). Turkey is no exception.

Nonetheless, only opportunistic behavior on the side of the government is not sufficient to explain the overall picture, taking into consideration the privatization attempts in the 1990s. During this period, governments put lots of efforts to privatize state-owned enterprises.<sup>10</sup> They passed a number of legislation for privatization, most of which failed to meet the legal and economic criteria set by the judiciary. Atiyas (2009) argues that these laws were designed to undertake privatizations in quite unaccountable and non-transparent ways, and they looked for shortcuts rather than create a solid legal base for a proper privatization policy. A plausible explanation might be that politicians and bureaucrats lacked the requisite capacity to deal with the complexities of privatization and its consequences. Long-term productivity issues and promotion of competition have usually been dominated by fiscal considerations (such as generating high revenues, reducing public debt and create flexibility in current expenditures).

In fact, Turkey suffered substantially from such imperfect and badly-designed privatization attempts not only in the sense that

development of competition has been delayed, but also in the form of monetary damages paid to investors. For instance, in the case of privatization of electricity distribution regions, government failed to design proper legal frameworks and take into account judiciary's potential approach (at least in the form of a risk provision in the contracts). In the end, such failure turned out to be very costly. Danıştay (Council of State or High Administrative Court) annulled the concessions granted to private parties and the government canceled these privatizations. Private parties headed to international arbitration. The last arbitration case was decided in 2010 and, except one, Turkey lost all the cases. The total amount that Turkey has to pay to private investors is estimated approximately \$200 Millions. These high costs will be borne by the society rather than the governments in charge back then. Unstable political structure makes it easier for governments to externalize the costs of their political actions.

A more recent example of opportunistic government behavior is related to natural gas prices. Even though natural gas prices have increased substantially in the recent years, government kept selling electricity (through state-owned companies) at a price that was significantly below the marginal costs.<sup>11</sup> Even though government tries to explain this policy on social grounds, this was not true since 61.7% of the demand was from industrial customers. Such practice pushed state-owned electricity and gas companies, which are also subject to high gas prices, into a debt chain (Sevaioğlu, 2009). Such predatory pricing also negatively affected the competitive market structure since it deterred private investors from investing.<sup>12</sup> Price mechanism is used by politicians as a means to transfer wealth between different social groups.

Similarly, EMRA's efforts to introduce cost-based regional pricing scheme in 2003 was hindered by the government (Çetin and Oğuz, 2007). Under the government's scheme, end-use prices are uniform across the country whereas costs of supply vary significantly across different regions. This scheme has negative impacts on the private investment and privatization processes, since no company would like to invest in regions with high costs. Cost-based regional pricing system would solve this problem; however, it will result in increased prices in low income regions (Southeastern and Eastern Anatolia regions) where level of illegal use is high.<sup>13</sup> Instead of adopting the cost-based regional pricing system, the government preferred to implement a transitional mechanism between 2005 and 2010 in which the prices remained uniform until regional cost differences would be minimized (IEA Report, 2005). During this period, illegal use in these regions has remained to be cross-subsidized by other consumers (Çetin and Oğuz, 2007).

The government eventually agreed to adopt cost-based pricing mechanism in 2008. This decision inevitably led to drastic prices increases. In 2.5 years, increases in prices amounted up to 72%. In fact, the positive climate conditions of 2010 reduced costs of electricity to the government and led to expectations that such cost reductions might be reflected to electricity prices (because most of state-owned generation facilities are hydroelectricity power plants). However, government disappointed the market, because Treasury needed financing for rehabilitation of the

<sup>8</sup> According to the Privatization Administration's statistics, more than 188 enterprises amounting up to \$39.6 Billion have been fully privatized between 1985 and 2010. [www.oib.gov.tr](http://www.oib.gov.tr).

<sup>9</sup> The term “political good” is due to Oğuz (2010).

<sup>10</sup> The fact that different governments made similar attempts at least demonstrates that politicians were not against privatization.

<sup>11</sup> This practice lasted until the government won the elections again in 2007. Electricity prices increased dramatically afterwards.

<sup>12</sup> The president of the Electricity Distribution Services Association reported that foreign investors pulled out due to the possibility of political intervention in prices. Oğuz (2010), on the other hand, argues that difference between the rates charged to industrial and residential customers is in fact lower than the difference in costs; therefore, industrial customers subsidize the residential ones.

<sup>13</sup> Çetin and Oğuz (2007) note that this proposal was opposed by the members of the parliament from these regions.



generation assets to be privatized. Bad fiscal conditions of the poorly-managed state-owned enterprises and need for financing forced the government to take action and ignore price reduction.

In short, political concerns have always forced governments to keep control on electricity variables whereas efficiency issues are usually overlooked. Current government is no exception. However, similar tendencies in other developing countries have already proved failure of this approach. Countries like Brazil, Argentina and Uruguay, who all had public ownership, tariff discrimination for different users and tariffs unrelated to marginal costs, have failed whereas Chilean electric system, which was based on competitive markets and marginal cost pricing, turned out to be a huge success (Spiller and Martorell, 1996).

In addition to the government opportunism, social opposition to privatization is at considerable level. Such opposition may be explained on traditional statist ideology, which underlies the country's economic history. Sevaioğlu (2009) argues that such statist and anti-liberalist social organizations did not exist even in major socialist countries. In an interview, the head of a major energy company counts statism as one of the major obstacles to potential investors and states that the idea to maintain government authority over all sectors is very strong (see Güney, 2005). North (1992) argues that the larger the number of rule changes, the greater the number of losers and opposition. Labor unions strictly object to privatizations in order to protect their positions. Their interests are usually aligned with the position of extremely nationalistic political parties, who are mainly concerned that foreign investment in energy sector may threaten the national security. Nationalistic position is open to manipulation by anti-privatization interest groups and political parties (Çetin and Oğuz, 2007).

From this country-specific institutional analysis, it follows that electricity market restructuring in Turkey means upsetting the balances of many parties, which aim at preserving their current positions, one of them being the government itself. Governments have traditionally enjoyed the liberty of exercising their wide discretion on energy variables for political purposes, to the negligence of efficiency concerns. In the presence of such opportunistic incentives, if the government wants to attract investment in utilities; it will have to send investors the right signals by designing institutional arrangements that will limit its ability to behave opportunistically (Spiller and Tommasi, 2005).

### 3.2. The institutional arena

The electricity regulation in Turkey started with the establishment of Ministry of Energy and Natural Resources (MENR) in 1963 as the competent ministry on the country's energy policy. In 1970, Turkish Electricity Administration (TEK) was established as a state monopoly at almost all levels of the sector. Since then, energy sector has witnessed several state-owned enterprises as well as their restructurings and unbundlings. After private participation was enabled in generation sector in 1982, TEK was restructured as a state-owned enterprise. In 1993, TEK was added into the privatization plan and was restructured into Turkish Electricity Generation & Transmission Co. (TEAŞ) and Turkish Electricity Distribution Co. (TEDAŞ).

With the enactment of Electricity Market Law in 2001, TEAŞ was further unbundled into three state-owned enterprises: TEİAŞ (transmission as well as balancing and settlement issues between private parties), TETAŞ (wholesale activities as well as implementing previous BOO, BOT and TOR contracts) and EÜAŞ (operation of the state-owned power plants which are not transferred to private sector).

Under the current structure, MENR is responsible for the preparation and implementation of energy policies, plans and programmes in coordination with other public and private

entities. Its main tasks include determining and implementing national energy policy objectives, ensuring coordination between related public bodies and private entities and supervising all exploration, development, production and distribution activities for energy and natural resources.

The Electrical Power Resources Survey and Development Administration (EİE), on the other hand, is a private law entity and is related to MENR. It was established in 1935 and its authorities have been redefined in 2007 to be in line with the new market structure. It mainly carries out studies with relation to renewable energy resources and energy efficiency issues, including raising the awareness of the society about energy efficiency and providing consulting services.

State Hydraulic Works (DSİ) is the state water agency responsible for the development of all water resources in the country. DSİ implements surface and ground water projects and plans, designs, constructs and operates dams and hydroelectric power plants for multi-purpose use. In 2007, DSİ was separated from MENR and was related to the Ministry of Environment and Forestry.

The State Planning Organization (DPT) is an advisory body of the Prime Minister. It assists the government in determining economic and social policies. For energy sector, it prepares 5-year development plans in cooperation with the industry and MENR, as well as demand projections. DPT issued the Strategy Paper Concerning Electricity Market Reform and Privatization, a roadmap for market reforms and privatization, in 2004 (see IEA Report, 2005 for details).<sup>14</sup>

Speaking of privatization, it is also important to note that privatization is carried out by a special authority, Privatization Administration, which is directly related to the Prime Ministry. Its competence covers the privatization of all state-owned enterprises, including electricity generation and distribution companies.

And last but not least, with the enactment of Electricity Market Law in 2001, EMRA was placed in the core of this regulatory environment as the main regulator with significant authorities.

In addition to these bodies which directly take part in the regulation of the market, there are others which are also involved in formulating regulatory decisions. Judiciary and the Competition Authority can be considered in this category.

### 3.3. Analysis of the institutional structure and related problems

Economic theory envisages that aim of rational economic policy is the design of policy within a system of consistent policy goals and instruments. One of the pre-conditions of rational economic policy is knowledge about the interrelation of policy goals. Complementary policy goals both enable and support the implementation of separate economic policies whereas conflicting policy goals make it harder to implement. The existence of a "wise dictator" is theoretically assumed as a pre-condition for the proper implementation of economic policy.<sup>15</sup>

The above-mentioned puzzling institutional landscape appears to be in contradiction with what economic theory requires. Appearance of new public institutions on stage, in addition to the existing institutional environment, has made regulatory decision making

<sup>14</sup> According to this Paper, privatization would start in distribution segment in 2005 and would be completed in 2006. After that (certain), generation assets would be privatized. Some hydropower plants, the transmission system and TEİAŞ will remain in state ownership. The process, however, is currently going more slowly than projected.

<sup>15</sup> This paragraph benefits from the LL.M. Course "Advanced Topics of Competition and Economic Regulation" lectured by Prof. Klaus Heine in Erasmus University Rotterdam.

process more complicated. Using the terminology of [Jordana and Sancho \(2004\)](#) terminology, in terms of institutional diversity, more-than-necessary public institutions are involved in policy-making and degree of fragmentation is very high. From a public choice perspective, different institutions involved on this stage might have different and contradicting interests (and expectations) from the market regulation. [Ulusoy \(2005\)](#) illustrates this in electricity distribution privatizations framework. In this setting, the EMRA's main concern may be how to expand its authorities on the market at the post-privatization stage, whereas government (and Treasury) may be interested in maximizing revenues from privatizations. As [Atiyas \(2009\)](#) points out, this is particularly true for the single-party governments of the 2000s since they had strong incentives to do so especially after the 2001 financial crisis. At the same time, the Privatization Administration may be interested in completing the privatization process as soon as possible for the sake of other potential privatizations; and the management and workers of the public enterprises may have unemployment concerns. Even the officials of the related ministries may be worried that they will lose their "power domain" ([Ulusoy, 2005](#)).

Moreover, the structure lacks a clear allocation of responsibilities. Decision making is distributed to several bodies, some of which have overlapping authorities. Limited legal amendments aiming at avoiding such overlaps are apparently insufficient. The degree of dispersion remains high. Such a structure increases the number and complexity of bureaucratic formalities and paperwork. Increase in the number of agencies implies increase in number of licenses, permits and approvals. Therefore, transacting becomes more costly. And finally, in terms of power structure, the existence of several governmental bodies enables the government to have the final say over the decisions in a hierarchical structure.

This can be directly linked to efficiency considerations, namely Kaldor–Hicks and Pareto criteria ([Oğuz, 2010](#)). Market liberalization is Kaldor–Hicks efficient, because taking into account the costs and benefits, there are net social gains from liberalization. However, following Kaldor–Hicks criterion would create political costs since certain groups will suffer losses. This is particularly relevant in the present case since an institutional change as proposed would upset several groups. Instead, politicians would prefer to follow the Pareto criterion, because it requires unanimous consent of all voters/groups and implies less political costs ([Oğuz, 2010](#)). The drawback is that high number of veto players slow down the liberalization process and institutional change becomes impossible. Potential social gains are sacrificed in return for saving political costs.

A closer look at the regulatory governance level of EMRA would be helpful for a better understanding of the current regulatory practice.

## 4. Legal and economic analysis of EMRA

This section will make a legal analysis of EMRA and develop a regulatory governance analysis in order to assess whether the EMRA's current regulatory practice fits good regulatory governance criteria as well as its economic implications.

### 4.1. Brief legal analysis of EMRA

#### 4.1.1. Legal status

The main purpose of Electricity Market Law is to ensure the development of a financially viable, stable and transparent electricity market operating in a competitive environment and to ensure the autonomous regulation and supervision of this market. For this purpose, EMRA was established as the regulatory authority. EMRA lies within the sphere of executive branch and is "affiliated" with the

MENR.<sup>16</sup> However, it has legal personality as well as financial and administrative autonomy. EMRA is governed and represented by Energy Markets Regulatory Board (the "Board").

#### 4.1.2. Main structural characteristics

The Board is composed of nine members. All Board members are appointed by the Council of Ministers. When making the appointment, Council of Ministers also selects the Chairman and the Vice Chairman. The term of office is 6 years and the members can be re-elected. Board members can only be dismissed on grounds of incapacity and misbehavior.

An important aspect of EMRA Board decisions is that they cannot be overruled by any governmental body; they are only subject to judicial review by Danıştay. Such filings against Board decisions qualify as "urgent matters" and have priority.

EMRA's budget is supervised by Supreme Audit Board, which is a governmental body affiliated with the Prime Ministry. The Board also submits an informative annual report to MENR.

#### 4.1.3. Authorities

The Board's authorities in the electricity sector mainly include issuance of licenses, preparation and enforcement of secondary legislation, regulation of distribution, transmission and retail sale tariffs as well as the wholesale tariffs of TETAŞ, taking appropriate measures for the promotion of competition in the sector and application of sanctions, including administrative fines and cancellation of licenses. Moreover, the Board has some special authorities with respect to resolution of disputes in certain cases and expropriation of lands on behalf of private investors, when necessary.

#### 4.1.4. Income and personnel policy

EMRA's income with respect to the electricity sector mainly consists of license fees, 25% of the administrative fines sanctioned by the Board and a surcharge on transmission tariffs (maximum amount of 1%).

Council of Ministers is authorized to decide on EMRA's internal organization, including the duties and authorities of the departments and the number of personnel as well as the salaries to be paid to the Board members. The salaries and other financial rights of the personnel shall be decided by the Board within the limits to be set forth by the Council of Ministers.

### 4.2. Regulatory governance analysis of EMRA

Based on the regulatory governance criteria set forth by [Stern and Holder \(1999\)](#), this section develops a regulatory governance analysis of the current regulatory practice of EMRA, taking into account both formal and informal aspects of regulation, and its economic outcomes on the sector.

*Clarity of Roles and Objectives* has not been sufficiently provided after the market reforms. OECD Report on Turkey's energy sector specifically points out that the role of the involved parties (i.e. the government, regulator and state companies) should be determined clearly ([IEA Report, 2005](#)). This is, indeed, related to two other problems: (i) institutional diversity and (ii) allocation of responsibilities among these institutions. [Atiyas and Dutz \(2005\)](#) count at least eight entities with separate management teams involved in the regulation process and underline the lack of coordination among them. Due to highly dispersed regulatory

<sup>16</sup> Pursuant to Articles 123 and 127 of the Turkish Constitution, "unity of administration" principle applies. Thus, especially in cases of independent regulatory agencies, it is a common practice to "affiliate" the agency with a ministry to satisfy this principle.

structure, allocation of responsibilities is costly and overlapping authorities are inevitable. Also, it is not enough to define only the duties of the ministry and the regulator since government have additional tools to influence the sector. Relevant laws have been amended to redefine each institution's role, but they are not very effective. An interesting example is that Electricity Market Law limited the authorities of the General Directorate of Energy Affairs to the extent that these authorities are not left to other public bodies (such as EMRA). Apparently, the legislature anticipated the possibility of overlapping authorities; however, instead of clearly defining them, they are left vaguely and open to interpretation and political maneuvering.

In fact, authorities of many institutions could have been transferred to EMRA subsequent to its establishment. The establishment of EMRA represents an institutional change and needs to be treated accordingly. Once a regulator is in place, its scope of authority covers mostly those of the many institutions of the former structure; thus, such institutions are no longer needed. For instance, EİE carries out studies on energy efficiency and renewable energy issues. DPT advises the government on economic policies and prepares 5-year development plans in cooperation with EMRA.<sup>17</sup> Instead, the structure proposed here is that sector-specific regulator is better suited for effective regulation and decision making as well as advising the government when necessary at a lower cost. From an efficiency perspective, the first thing to do is to reduce the number of institutions to an efficient level and only then responsibilities can be allocated accordingly and clearly. Such a system could decrease decision making costs and information costs, especially by avoiding duplication of costs. From the investors' perspective, it could strengthen EMRA's authority over the market and enable providing reliable regulatory commitment. Clear allocation of responsibilities would also contribute to accountability and predictability concerns.

It is, however, difficult to dissolve long-established institutions within the state. It is not hard to imagine that abolishing these institutions will face strong reactions, especially from their staff that will face the threat of unemployment. An intermediate solution could be integration of suitable institutions into EMRA. EMRA may benefit from such integration in terms of synergy gains as well as their broad experience in the sector.<sup>18</sup>

*Autonomy* from political intervention is probably the most significant aspect in Turkish case as it has already been mentioned that politicians have an inveterate tradition of using electricity for political purposes. Therefore, it is a correct choice to establish an independent regulator with "financial and administrative" autonomy rather than carry out regulation under the hierarchical structure of the ministry. However, in order to evaluate the degree of autonomy of EMRA, one needs to put positive and negative aspects on the scale.

On the positive side, one could mention the following: EMRA has its own budget and enjoys financial independence. EMRA Board decisions cannot be overturned by the government; these decisions are only subject to judicial review. Also, Board members cannot be removed from office by the government except incapacity or misbehavior.

However, what lies on the negative side of the scale reduce the impacts of the positive ones. Firstly, all EMRA Board members are

appointed by the Council of Ministers.<sup>19</sup> In fact, the Constitutional Court held in a similar case that number of Board members to be appointed by the Council of Ministers may damage the autonomous structure of an authority.<sup>20</sup> In line with this decision, current practice may be annulled by the Constitutional Court on similar grounds.

It is also important to emphasize a time-periodic overlap: EMRA was established in 2001 and the same political party is in charge since 2002. This means that EMRA's regulatory process up until now has almost entirely been overseen by the same political party.<sup>21</sup> Therefore, political preferences and attitude towards electricity market liberalization and privatization have been continuous and consistent during this period. Current composition of EMRA Board is a direct reflection of this problem. The entire Board, including the chairman, has been appointed by this government. This does not necessarily imply that such appointments have been made due to political party affiliations. Policy preferences might have carried some weight as well. However, what necessarily follows from such composition that "agent losses" will most probably be very limited. In principal—agent terminology, the problem of agency losses arise when the agent (regulator) acts contrary to the preferences of the principal (government). Such losses can arise from two sources: either "shirking", because the agent follows its own preferences, which diverge from those of the principal's, or "slippage", because of incentives for the agent to act contrary to the preferences of the principal (Thatcher, 2005). Under the current appointment framework, agent losses will be low, because there is a high possibility that the Board members will have similar preferences with the government. This is to say that "shirking" will be low. In addition, the institutional design incentivizes the Board members to follow the preferences of the government, especially for reappointment concerns (Thatcher, 2005). Namely, "slippage" will be low as well. In either case, current framework minimizes agency losses.

Secondly, even though most of independent regulatory agencies in Turkey are audited by the Court of Accounts, EMRA's budget is supervised by Supreme Audit Board. Court of Accounts audits on behalf of the legislature whereas Supreme Audit Board is a governmental body affiliated with the Prime Ministry. This mechanism provides the government with a political tool to interfere EMRA's internal affairs and weakens EMRA's position against the government. The same Constitutional Court decision (mentioned above) also rules that Supreme Audit Board does not have jurisdiction over this type of agencies. Thus, this practice may be annulled as unconstitutional.

As the third point, Aslan (2007) points out that EMRA is defined as "financial and administrative autonomy" rather than simply "independent". He emphasizes that considering EMRA is related to MENR, it is legally possible that it may take orders from MENR within the administrative hierarchy (Aslan, 2007).

Empirical evidence also provides interesting results. Şanlısoy and Özcan (2006) apply an independence index to regulatory agencies in Turkey and find that EMRA ranks last among its peers.<sup>22</sup>

<sup>19</sup> Aslan (2007) notes that the Board had been designed in a more independent way in the first place, namely the members to be nominated by several entities; however, this structure has not been implemented.

<sup>20</sup> Constitutional Court decision E.2002/100, K. 2004/109, dated 21 September 2004.

<sup>21</sup> The Justice and Development Party (AKP) had two single-party governments since 2002, one being the current government. They have a strong majority in the parliament.

<sup>22</sup> An interesting point is that when in their cross-country analysis, EMRA's independence index ranks higher than electricity regulatory agencies of many developed countries including England, France, Holland and Norway. For similar results, see Ergün (2007). These results can be interpreted on the grounds that informal institutional structures matter more than formal ones in Turkey and carry more weight in practice.

<sup>17</sup> It was DPT who issued the vital *Strategy Paper Concerning Electricity Market Reform and Privatization* (2004).

<sup>18</sup> Transfer of transmission system network operation activities from TEİAŞ to EMRA may also be a complementary step to strengthen the sector-specific regulator position of EMRA. This is of particular importance in the Turkish market where the possibility of political influence is high and the development of a consistent energy policy is necessary. For a detailed analysis on the design of transmission system operators, see Rious et al. (2008).



In short, in addition to the power that the government holds through various institutions in regulatory process, the current framework gives government direct control over EMRA itself. It enables the government to play this game in a traditional principal–agent framework and trivializes “autonomy” feature of the regulator.

*Accountability* of EMRA can only be controlled by judicial review in Turkey since neither the government nor the legislature is entitled to review any challenges against EMRA Board decisions. Danıştay is the competent court to review filings against EMRA. This is a positive feature, because Danıştay has more expertise in the sector than a court of first instance and can handle cases at a lower cost. This system also enables unification of judgments and increases the level of legal certainty (Aslan, 2007). Moreover, Danıştay reviews these filings as an urgent matter, which avoids loss of time.

*Participation* of relevant parties (regulated firms, consumers and other sector participants) in the regulatory process may help to improve cooperation within the sector, and it may legitimize EMRA's decisions in sector participants' eyes. It is a positive point that EMRA is obliged to (and in practice does) consult market participants while preparing regulations. However, the actual effects of participation in this system are ambiguous, because it is unknown whether EMRA actually takes into account any suggestions from these consultations. A more effective solution would be that EMRA's consultation responses can be made publicly available. This system would set the right incentives on both sides: It would incentivize the market participants to express their opinions on proposed regulations since they have a higher chance of making an influence on the regulator. EMRA would also benefit from this active participation since this system would allow EMRA to learn the preferences of particular interest groups and foresee potential political problems that may arise in advance (Spiller and Tommasi, 2005). Then, this setting also minimizes the costs incurred by the legislature to supervise EMRA since the legislature does not need to be actively involved in the regulatory process as it used to be (Spiller and Tommasi, 2005).

A more concrete suggestion to improve participation would be establishment of a private sector consultation committee. This committee would be composed of representatives of sector participants and have an advisory role for EMRA (OECD, 2002). It would close the gap between EMRA and the private sector and serve as an *ex ante* consultation and information exchange forum. It could effectively contribute to reducing the information asymmetries between the parties.

*Transparency* helps market participants to have a better understanding of EMRA's approach to certain issues as well as its decisions and the underlying rationale. EMRA is not legally obliged to publish its decisions, which is a significant obstacle to transparency. In practice, EMRA voluntarily publishes some of its major decisions, and informs market participants on certain issues whenever it deems necessary. However, these decisions are usually brief and do not provide comprehensive information regarding on which legal and economic grounds they were based. Similarly, the electricity market legislation is constantly subject to change and there is no sufficient precedent to rely upon concerning how EMRA interprets and applies the legislation. This increases the costs of transacting between market participants, because information is costly and in this case, held asymmetrically by the parties (North, 1992). In order to avoid this, EMRA should publish all its decisions, including the legal and economic reasoning behind them, and comprehensive memoranda on the interpretation and implementation of the controversial provisions in relevant legislation.<sup>23</sup> Such practice would significantly reduce

uncertainties for market participants along with transaction and information costs.<sup>24</sup> Providing transparency could also address regulatory failures, such as regulatory capture and bias towards certain parties (OECD, 2002).

On the other hand, it is noteworthy that electricity market licenses and EMRA's annual reports are publicly available. Other reports, which EMRA is legally obliged to prepare such as Electricity Security of Supply Report and Electricity Market Development Report, must be made accessible for market participants within a reasonable time as well.

*Predictability* is of utmost importance in a country of unstable politics. Electric companies undertake investments, which need to be recouped over several years, and they need to be assured by reliable commitments that they will not face sudden, unpredictable changes. Uncertainty is costly. EMRA is better positioned to deal with this since it has been clear that governments fail to provide such commitment for political reasons. However, a recent report by the State Audit Board (2010) finds that EMRA Board decisions tend to differ in similar circumstances and lack consistency. To cure this problem, EMRA can start by publishing an annual regulatory plan, which gives an approximate list of issues to be dealt with and a timetable (OECD, 2002). This may reduce the likelihood of regulatory surprises, thereby minimizing the negative consequences of asymmetric information and the costs arising from uncertainty. Also transparency in regulatory process, as mentioned, supports predictability in the sense that market participants will be able to observe EMRA's approach to certain issues and take it into consideration in advance.

#### 4.3. Comments on the results

This overall regulatory governance analysis does not provide very optimistic results. The analysis shows that market reforms failed to bring about a comprehensive and consistent institutional change, especially with respect to the position of the regulator. Good “regulatory content” may have been introduced; however, “regulatory governance” problem is still at the heart of the regulatory process and has negative effects on the implementation of this regulatory content.

It should be kept in mind, however, that EMRA started from scratch and currently has less than a decade of regulatory practice. Albeit young, it has contributed significantly to the development of a competitive market structure and its efforts must be appreciated. Nonetheless, so far, it has been overshadowed by the government under the current structure. Even though the analysis reveals that this is mainly due to government behavior, EMRA can still improve its own regulatory methods as well. Especially there is room for improvement in transparency and predictability issues. In fact, EMRA is currently involved in a permanent institutional development and strategic management project, which signals that EMRA is aware of where it stands.

The critical negative aspect of the current structure is that the political endowments of the country have not been sufficiently taken into account, and no institutional checks have been devised to avoid opportunistic government behavior. The destiny of the sector is still up to the government rather than the regulator. The government seems to be reluctant to fasten the liberalization process, and prefers to obtain more political gains in the meantime. As in the case of electricity prices, failures of the past and bad fiscal conditions of the state-owned enterprises are also burdens on efficient policy-making.

<sup>23</sup> See the Office of the Gas and Electricity Markets' website for a good example of transparent regulatory practice: <http://www.ofgem.gov.uk>.

<sup>24</sup> It is very common among energy lawyers in Turkey to constantly call EMRA officials to learn how they interpret or implement certain provisions, which in return increases information costs.



As a principle, incentives and subsidies to investors only function to the extent that they are credible (Bergara et al., 1998). The very nature of the relationship between private investors and the government involves a simple imbalance that investors are under no obligation to invest in a particular country and can always seek better opportunities whereas the government needs such investment, especially from foreign investors (O'Rourke and Tomiak, 2005). In the absence of substantive constraints on arbitrary government action, it is not possible to attract foreign investment and exploit efficiency gains from competitive markets.

Lack of credibility deters foreign investment and delays the liberalization process. The most recent example concerns the applicants for wind farm licenses. EMRA received a record number of applications for wind farm projects in 2007 and collected performance bonds in the amount of TL 550 Million (approximately €290 Million) from the applicants. However, it took EMRA and TEİAŞ 2.5 years just to conclude the necessary technical studies. During this long period, applicant firms suffered high opportunity costs as well as real costs, such as the costs of holding a performance bond from a bank. Many firms applied for withdrawal of their applications and filed lawsuits. It seems that there will be another rush of lawsuits and legal challenges in the near future, which will result in more costs. Çetin and Oğuz (2007) also note that many companies applied for to get government subsidies; however, they did not start construction since they could not count on government's credibility and commitment. Similarly, the privatization of electricity distribution regions, which were scheduled to be completed in 2006, went more slowly than anticipated and the deadline had to be extended to the end of 2010, because investors were not happy with the government's pricing policies and were reluctant to bid for the tenders.

Political uncertainty also played its part, as usual, in this setting: The Constitutional Court case concerning the possible closure of the Justice and Development Party (the current government) had negative implications on the entire economy.

The problems of opportunism and lack of commitment do not only concern the current government. Past governments did the same and so will do the future governments to maximize their political gains. Thus, Turkey needs to reform its political and regulatory institutions so as to provide reliable commitment to the private sector. Since political institutional change will most probably take a long time, what needs to be done in the short run is to adapt the regulatory institutions to the political realities of the country. Policies should be formulated and backed up by the government and EMRA hand-in-hand. Day-to-day regulation of the market must be left solely to the regulator since it is better suited to provide regulatory commitment. Private participation and competitive market structure will never reach desirable levels unless opportunistic government behavior and regulatory commitment issues are solved.

## 5. Conclusion

New institutional economics offers a more comprehensive understanding of regulation and regulatory environments with significant contributions from law and politics. Especially in a developing country context, institutions and institutional change is of vital importance for better economic performance in Turkey.

In a country of unstable politics, high possibility of variation in the political structure has provided room for opportunistic government behavior in the past. Especially, as in most developing countries, governments have enjoyed the liberty of using electricity for political purposes. Economic efficiency concerns

have usually been overlooked for the sake of macroeconomic and redistribution concerns. Poorly designed privatization attempts failed to meet the high legal and economic standards set by the judiciary, and eventually resulted in very high costs. Moreover, at social level, statist beliefs in economic life are deep-rooted.

The Electricity Market Law of 2001 failed to bring about a comprehensive institutional change to this structure. Sufficient institutional checks have not been designed to curb opportunistic government behavior, and EMRA is left in a position to be politically influenceable. Moreover, old and new public institutions involved in regulatory process with overlapping authorities and conflicting interests have turned the regulatory arena into a "regulatory/institutional chaos". The current structure is highly bureaucratic and high number of players with *de facto/de jure* veto powers poses high transaction costs as well as political and economic risks for investors.

What may then be the policy implications? Here comes what North (1992) calls the "dilemma of institutional change". Rapid change will result in social and political turmoil since informal constraints and underlying ideological perceptions will not simply change all at once. Slow change, on the other hand, will be sabotaged by the existing bureaucracy and interest groups so that the reforms will be distorted, dissipated and dissolved (North, 1992). Then there exists no clear cut policy that can guide the policy-maker in restructuring and institutional change efforts. Nevertheless, some policy suggestions can still be put forward to improve the current regulatory structure. Main policy implications may be summarized as follows:

1. Both the government and EMRA should be aware, as a general regulatory principle, that good regulatory content can be effective only when it is supported by good regulatory governance, and they should take this basic fact into consideration at every step of policy-making.
2. Fragmented institutional structure should be fixed. Public institutions which have lived out their lives need to be abolished. Overlaps in authorities should be prevented and responsibilities should be allocated clearly. Cooperation should be promoted. A "transaction cost reducing" approach should be adopted in general.
3. Institutional checks should be devised to limit opportunistic government behavior in the market. EMRA should be taken out of the direct political influence of the government, and the government's inherent power in the market should be superseded by EMRA, which is better suited to provide reliable commitment to investors.
4. EMRA needs to improve the way it regulates the market. There is room for progress especially with respect to transparency, participation and predictability issues.

It should be acknowledged that market reforms are intrinsically dynamic; and given their complex nature, they are adapted progressively over a long time and efficiencies may arise only as a result of a learning process (Dubois, 2009). Therefore, EMRA's efforts despite the drawbacks of this structure must be encouraged for the sake of long term benefits. And last but not least, policy makers should keep in mind that there is no single template for effective utility regulation. The solutions to regulatory problems in a developing country like Turkey may differ from those of a highly developed country. Therefore regulatory design must always take into account the institutional endowments (constitutional, legal, political, judicial, etc.), and administrative capabilities of the country. Public policies that are intentionally or recklessly contrary to this fundamental motto are doomed to failure.

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