

Turkey & The Construction Services Cluster



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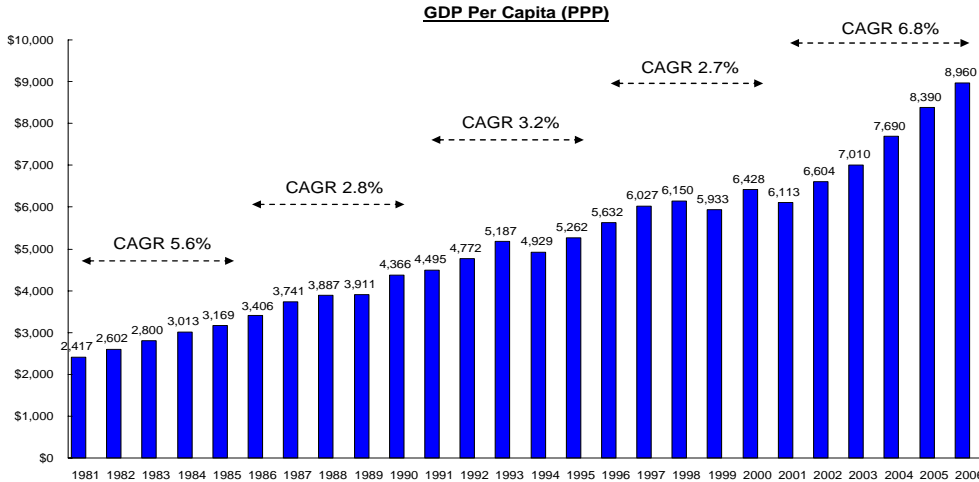
Turkey stretches across the Anatolian peninsula in southwest Asia and Southeastern Europe; the country has a total population of 72 million, the majority of which is Muslim, and covers an area of 814,000 km².

Turkey has shown signs of increased competitiveness in the last five years as a result of macroeconomic stability. Successful implementation of IMF recommended policies following the 2001 economic crisis, stability stemming from the election of a one party government, increased foreign trade as a result of the customs union with the EU in 1996 have contributed to Turkey's good performance. Furthermore, EU accession talks have provided momentum for reforms and the attraction of FDI.

However, key risks remain and may undermine Turkey's competitiveness going forward. There is lack of political consensus, and reforms are required to address corruption, bureaucracy and gaps in regulation. Productivity still remains low, and Turkey's clusters lack coordination and innovation capabilities.

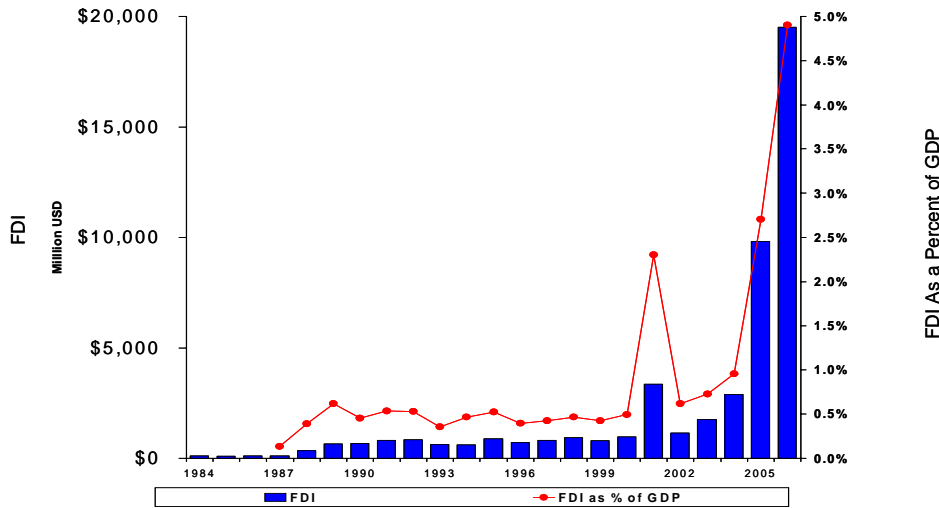
Breaking the cycle

In our view, 2001 was a turning point in Turkey's history of macroeconomic instability. Historically, the country's economic performance has been marked by various attempts at positioning the economy to grow using macroeconomic policies without addressing the structural weaknesses of the economy. In addition, most of these efforts at economic reforms have tended to be short-lived or abandoned before completion (Krueger, 2005). In a period of 15 years, Turkey experienced three different economic crises in 1994, 1999 and 2001, which led to GDP contractions as shown in the graph below. Since 2001, Turkey has been growing at approximately 7%, higher than in any other 5-year period.

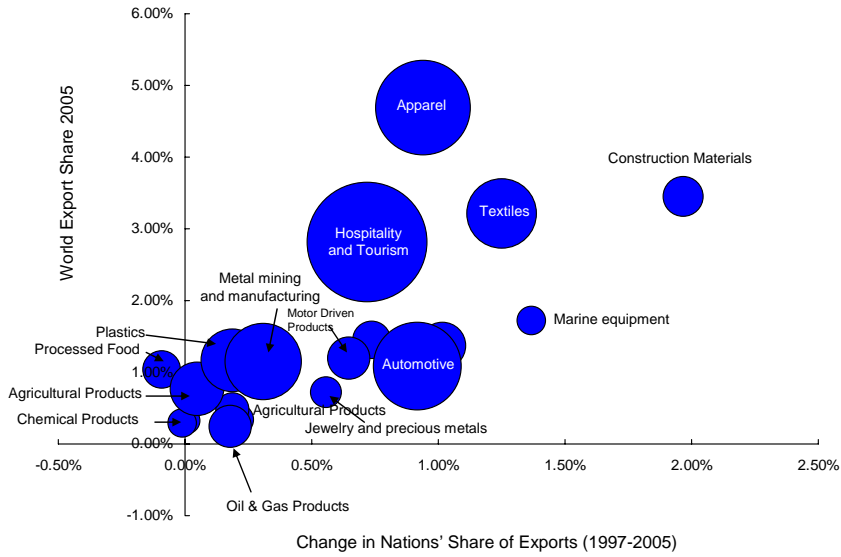


Note: GDP per capita data is adjusted for PPP at 1996 prices
 Source: EIU

Due to Turkey’s recent achievements and security provided under the prospects of EU membership, FDI has increased substantially since 2005 reaching \$19 billion in 2006 alone from an average of \$1 billion between 1990 and 2003.

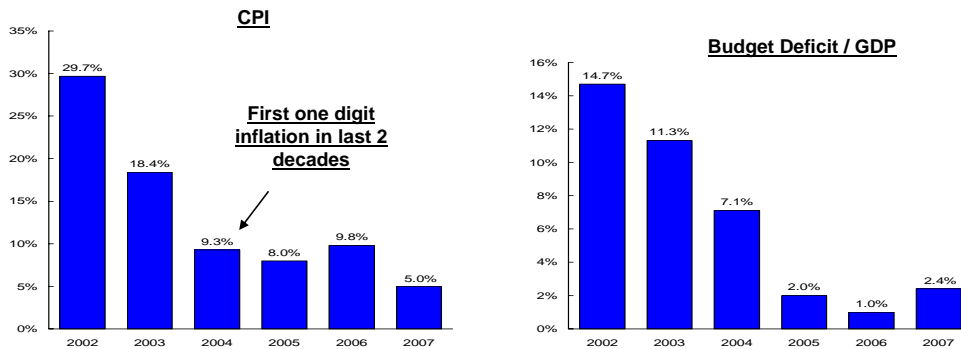


Turkey’s recent economic success story is also supported by good performance across clusters within the economy. Due to the increased trade mainly with the EU since the signing of the 1996 customs union, Turkey began to gain export market share across many clusters. The majority of Turkey’s export clusters are gaining world market share. Textiles, construction materials, apparel, marine equipment and automotive are growing the fastest as shown the graph below.



Factors Leading to Current Progress

In November 2002, a **one-party government** came to power in the country, enabling effectiveness in implementing changes. A new stabilization program was recommended by the IMF and was closely enforced driven by a desire to meet EU Accession criteria. The macroeconomic stability program focused on fiscal discipline and the **reduction of the budget deficit** designed to bring down inflation and interest rates. Turkey's inflation rate was reduced by over 30% between 2002 and 2006. The budget deficit was also reduced to 1% of GDP in 2006 from 15% in 2002 as shown in the graphs below.



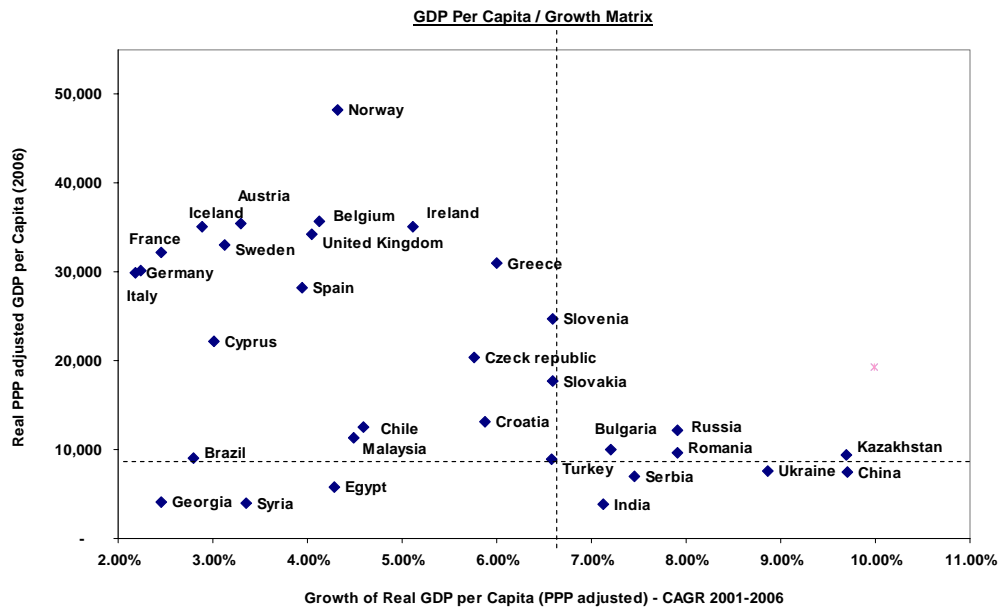
Source: Treasury Department (2007: Expected)

There were also a number of instituted microeconomic **reforms**. The most important ones are: 1) the **restructuring of the banking** sector consisting mainly through the privatization of state banks and the increase of reserve requirements, 2) the **privatization of state-owned enterprises** mainly in the areas of energy and telecom, and 3) the continuation of **agriculture sector reform** in order to liberalize the sector and increase rural income. The following table outlines the major reforms Turkey instituted since the 2001 crisis.

Reforms After 2001 Crisis
<p>Fiscal Policy</p> <ul style="list-style-type: none"> - New public financial Management and Control Law putting an emphasis on balancing the budget
<p>Monetary Policy</p> <ul style="list-style-type: none"> - Central Bank Independence mandated. The main purpose of the central bank is price stability. - Explicit inflation targeting introduced in 2006
<p>Tax Policy</p> <ul style="list-style-type: none"> - Corporate and personal income taxes were reduced
<p>Labor Policy</p> <ul style="list-style-type: none"> - 2003 Labor code increased the threshold for employment protection from companies with 10 to 30 workers. Other aspects of labor law became more rigid than before
<p>Banking Regulations</p> <ul style="list-style-type: none"> - Public banks to operate on an arms-length basis from government with mandatory budgeting - Public banks re-capitalized according to Basel rules - Intra-group lending is capped
<p>Financial Markets</p> <ul style="list-style-type: none"> - Regulatory framework strengthened; new governance principles were issued
<p>Foreign Direct Investment</p> <ul style="list-style-type: none"> - New FDI law in 2003 granted national treatment to foreign firms
<p>Infrastructure</p> <ul style="list-style-type: none"> - New electricity, natural gas, telecommunications laws in-line with competition policy at EU level - Authorization to new air carriers to enter domestic and international routes
<p>Agricultural Policy</p> <ul style="list-style-type: none"> - Market distortive price subsidies were significantly reduced and replaced with direct income support for farmers - State funding of agricultural co-operatives was reduced - New Agricultural Law in 2006 outlining institutions and policies
<p>EU Harmonization</p> <ul style="list-style-type: none"> - Customs Union: Law on simplification and convergence of customs regime - Law for the creation of the Public Procurement Agency - Regulation for the enforcement of IP Rights in industrial designs - Unification of Social Security institutions; improving sustainability of pension system and offering universal healthcare
<p>Source: OECD Economic Survey Turkey 2006</p>

Competitiveness relative to peers

Turkey's economic performance relative to its peers tracks that of many of Eastern European countries. Although the country's GDP per capita remains low, its overall GDP growth tracks that of new entrants into the EU.



Source: EIU

Stages of development leading to today's competitiveness

Prior to 1980 – Protectionism

Prior to 1980, Turkey's policies were characterized by import substitution, price and capital controls as well prevalence of state-owned enterprises in many clusters across the economy. In addition, the government shielded private enterprises in industries such as the automotive and home appliances from global competition through trade protection mechanisms. This took a toll on the productivity and global competitiveness of Turkish enterprises that were lagging behind their foreign counterparts. Protectionism failed as local industry was unable to produce high value products due to the artificial protection from competition. The absence of high levels of foreign trade further limited growth.

From 1980 to 1989 – Infrastructure Investment and export promotion

In 1980, Turkey abandoned import substitution for an export led growth policy and embarked on a comprehensive liberalization program. On a macroeconomic level, this involved deregulation by eliminating price and capital controls and trade liberalization. In addition, the government focused on tax rebates and duty free imports.

The government embarked on an early privatization program, instituted credit subsidies and invested in infrastructure (dams, highways) and housing projects in lower income region. To support this liberalization program, international organizations such as the World Bank and the IMF extended credits to the Turkish government to invest in infrastructure and regional development programs. This investment had a positive impact on local construction companies. While the infrastructure program had significant benefits, structural problems relating to laws, regulations, and institutional issues were not resolved and limited the country's competitiveness.

From 1989-2001 – The lost decade with limited structural reforms

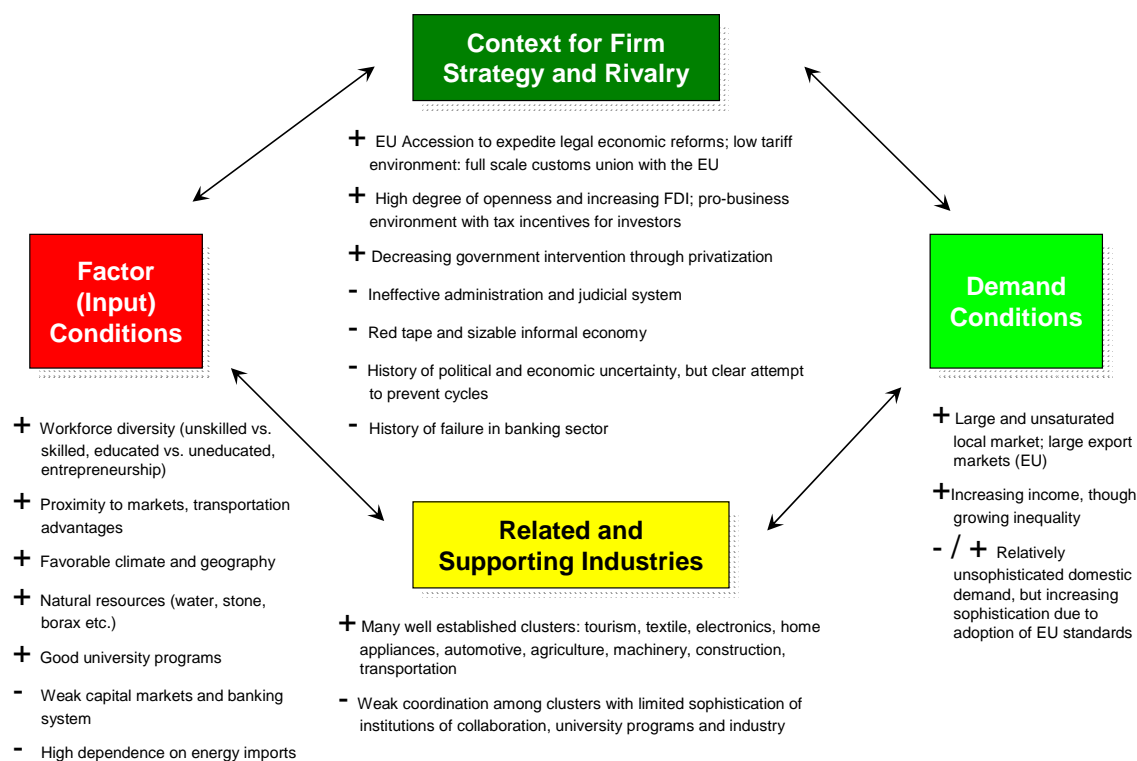
In the 1990s, Turkey focused on lowering tariffs, eliminating control on capital flows and forming a customs union with the EU. To support its policies to promote export competitiveness, the government adopted tax rebates, removed duties on imports on intermediate goods and subsidized export credits. In 1995, Turkey joined the WTO and signed the following year a **customs union with the European Union**. In this way, Turkey was able to make inroads and increase its exports market share with exports mainly driven by the textiles, apparel, and automotive clusters.

On a microeconomic level however, the country did not further restructure the foundations of its economy such as reforming weak institutions and pushing for the privatization of state owned enterprises. The government implemented a social program and invested in

education through **the founding of new universities** and established a **compulsory 8-year education** program. However, higher rates of enrollment in schools as opposed to higher quality schooling did not necessarily lead to prosperity and growth. Turkey continued market-focused reforms, but on the national macro-level and at an insufficient pace. Microeconomic reforms in the main clusters of the economy were not implemented either.

Turkey's National Diamond since 2001

Up to 2001, Turkey's development model was driven by policy decisions rather than a **bottoms-up process** in which institutions, companies and individuals were taking initiatives. The government's efforts were directed in the passing of universal laws and **policy at the national level**. A list outlining the main attributes of the national diamond follows.



Turkey's national diamond has many positive elements, but still does not resemble that of an advanced economy. In terms of factor conditions, Turkey's **infrastructure** and the **quality of**

its education system remain very weak. In education, primary and secondary level enrollment is high, especially for men, reaching over 90% of the population, but substantially lower in tertiary education. In 2003, **the gross enrollment rate in tertiary education was at a low-level,** 33.8% for males and 25.36% for females. However, there have been dramatic increases in the rates of both male and female enrollment (above 80 percent) from the 1970s. **Large disparities in education among regions** exist, however. The lowest gross enrollment rates in secondary education were recorded in the South-East Anatolia region, only 43.7% of males and 20.7% of females. The highest level of secondary education enrollment is found in East-Marmara for men, 80.34%, and West-Marmara for women, 68.51%. (Hosgor S., 2005) As a result, while in the cities of the Western part of the country, there exists a strong base of high wage professionals, there is **workforce mix** as lower-wage labor is abundant in the poorest regions.

In terms of context for firm strategy and rivalry, Turkey suffers from **weak institutions lacking independence as well as ineffectual bureaucracy.** The presence of a **large informal economy** is a consequence of **rigid labor laws, expensive social security contributions** and a high, complex, and **intransparent structure of taxation.** Furthermore, **corruption,** even at high levels in the government, including within the judicial system, increases transaction costs and undermines fair dealing. For example, Turkey was listed among the top 12 delinquent US trading partners **lacking protection of intellectual property rights.** (Turkish Daily News, 2007)

There remain key challenges ahead of Turkey in maintaining a stable business environment; these include the formation of **political consensus** as demonstrated by the recent crisis with the presidential election, which can **undermine the confidence** that investors have in the national business environment. Finally, structural reforms need to continue; for example, to date, about 30% of banks are still owned by the state.

In terms of demand conditions, the **lack of sophistication in domestic demand** stemming from the low national purchasing power leads to low quality in products. **Large GDP per capital disparities exist among regions** making demand conditions extremely poor in some regions, such as Eastern and Southeastern Region in which GDP per capital is close to the poverty level. The data graph below highlight regional differences in GDP per capita.

Region	GDP per capita (USD million)	Share in GDP %	Population (millions)	Urbanization rate (%)
Marmara	1,892	37.0	17.4	79.1
Aegean	1,516	15.3	8.9	61.5
Mediterranean	1,229	12.1	8.7	59.8
Central	1,296	17.0	11.6	69.3
Black Sea	994	9.5	8.4	49.0
Eastern	599	4.1	6.1	53.1
Southeastern	679	5.1	6.6	62.7
All	1,308	100.0	67.8	64.9

Source: State Planning Organization (2003)

Health, Safety and Environmental regulations are also lagging. **Government procurement practices lack transparency** despite the passing of a new law harmonizing procurement practices in 2003 and following EU standards. Because of integration with the EU, Turkey has adopted various EU standards, which have led to an increase in the sophistication of demand for its products and raised the bar for local companies to achieve higher quality.

In the area of related and supporting industries, despite the large number of firms, associations, universities and institutions of collaboration, there are **few channels for coordination**. The absence of **grass-root initiatives** to upgrade clusters and common programs to coordinate activities among cluster participants hampers the development of unique strengths and the creation of competitive advantage. The lack of grass-root efforts for coordination and

cluster activation exacerbates the regional imbalances with the poorer regions not being able to capture local economic opportunities.

In the area of innovation, Turkey's **growth in US patents** has increased at a 10% CAGR from 2001-2006 surpassing the growth rate of other comparable countries. This increase in patents is an indication that innovation is becoming stronger producing and exporting higher value added products.

Overall, Turkey seems to be passing the chance of **capitalizing on its geographical location** and neglecting opportunities in developing clusters on a systematic basis such as transportation and logistics. Due to its crossroad location, Turkish clusters can offer products and services that require **speed to market** and **low transportation costs**.

Turkish Construction Services Cluster

The Turkish construction services cluster is the **13th largest in the world in terms of exports** (International Cluster Competitiveness Project) and has demonstrated very high growth of 63% (2002-2006 CAGR) in international undertakings with \$65 billion worth of projects undertaken internationally so far (Turkish Construction Association (TCA), 2007). While the construction services cluster represents only 6% of Turkey's GDP by itself, together with all complementary and related industries, it still accounts for 30 percent of GDP (TCA, 2007).

The cluster is **divided into two parts**: the lower-quality domestic-only set of firms and the higher quality international firms. These two parts share some but not all cluster participants. On the lower-quality side, there are more than 30,000 active local firms (Oz O., 2001), and on the international firms side, there are 130 firms, **15 of which are among the 250 world largest construction companies in terms of overseas activities** (Engineering News records, 2005).

The success of the high-end part of the cluster has its origins in a) the early state-led sophisticated demand for infrastructure and industrial plants, b) learning through cooperation with international construction firms, c) early internationalization of activities, and d) participation in the development of the world-class tourism cluster of the country. The lower-end part has been active in **the building of smaller housing projects and has not evolved significantly**.

Historical Development of (High-End) Turkish Construction Cluster

In the 1950s and 1960s, the Turkish State pursued industrialization and import-substitution policies financed by Marshall Aid program. These policies led to heavy investments in basic infrastructure like power plants, pipelines, refineries, dams, highways as well as plants producing steel and machinery. These types of projects required high skills and expertise early on, and the Turkish State engaged leading international construction companies to complete these projects and also created opportunity for local construction firms to **learn through subcontracting**. The construction activities benefited from the abundance of natural resources to produce cement, glass, ceramic, steel etc. and led to the establishment of important related clusters. To support industrialization efforts, the Turkish state also put emphasis on creation of strong engineering and architect programs.

In the 1970s, due to political and economic instability in Turkey, the Turkish construction firms started to pursue **opportunities abroad**, especially in the Middle Eastern countries, which found a windfall in high oil prices and had similar infrastructural needs as Turkey had in 1950s-1970s. In this period, the Turkish construction firms continued to cooperate with their international counterparts and **upgrade skills levels**, but were able to do so **on equal footing through joint ventures** indicating the progress they made in skill development.

In the 1980s and early 1990s, new demand conditions such as **urbanization, state-led housing projects and tourism** started to shape the cluster and encouraged the Turkish construction companies to enter civil engineering construction. Specifically, within the context of export promotion policy in this period, the tourism cluster was of high priority and a leading value-added export industry, and Turkish construction firms again had to meet high standards to attract foreign tourists. Internationally, in this period, the Turkish construction firms continued their strong presence in the Middle East and started **penetrating the USSR market**, which would later become an attractive opportunity and give them first-mover advantage in that market. In terms of innovation and learning, the Turkish construction firms continued in this period their cooperation with international counterparts locally and abroad through joint ventures, especially in large-scale projects.

It should be noted that construction firms in Turkey were **formed as divisions of conglomerates**, serving as internal needs for construction and support to other businesses. This way, construction firms were able to be financed appropriately and **be first movers**.

Current State of Turkish Construction Cluster

Currently, in Turkey there are 91,400 construction firms authorized by the Ministry of Building and Public Works (Yapi-Endustri Merkezi, 2003), but no more than 30,000 of them are active construction companies (Oz O., 2001). An additional 70,000 companies are not registered, but are part of the **large informal construction industry** (Yapi-Endustri Merkezi, 2003). Clearly, the majority of these companies form the lower-end part of the cluster and are firms participating in small and irregular projects.

On the higher-value part of the cluster, there are 130 large companies, which form the Turkish Construction Association (TCA). The business volume of its members encompasses

nearly 70% of all domestic and 90% of all international contracting work done so far by Turkish construction companies and, in our view, they represent the most advanced companies of the cluster. Fifteen of these firms are among the top 250 largest international construction companies². **The activities of these construction services companies involve the pulling of specialized technical professionals to offer large-scale project management services.** Turkish construction companies are offering almost **all types of construction services** just like their international counterparts. They are able to compete with leading international firms and continue to cooperate with them when necessary. Expertise is developed by capitalizing on experience gained through participation in similar projects. Currently, Turkish firms have a very strong presence in the Middle East, North Africa, FSU and Eastern Europe. Recently, they started penetrating Western European markets. Some of them **became publicly traded** to obtain financing and fuel growth further (e.g. Enka) or announced plans to do so (e.g. Gama) in the near future. The large number of successful Turkish construction companies has led to intense local and international competition among them and further strengthen their competitiveness.

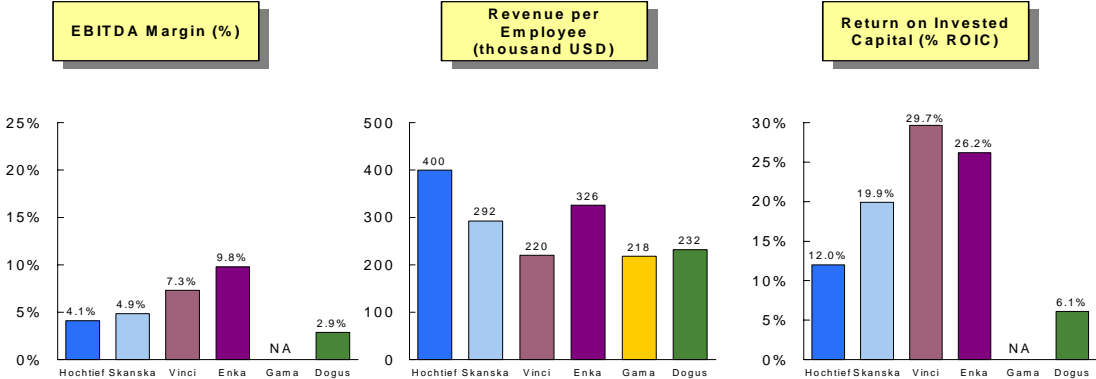
Historically, government projects have made most of spending in this cluster. At present, **government orders do not play a significant role in shaping demand** for construction. Demand since 2000 has been driven primarily by private investments or by parent companies of Turkish construction firms investing in other industries and now accounts for 65% of all investments (Yapi-Endustri Merkezi, 2006).

One important factor that makes Turkish construction companies successful has been their ability to operate in volatile environments of developing countries (major international success so far), because it is shielded from external shocks due the “closed nature” of the

² They include Enka, Gama, Tekfen, Alarko, Gebze-Izmit, Nurol, STFA, Yapi, Summa, Dogus, Hazinedaroglu, Soyak, Baytur, Limak, TML.

organization. Typically, Turkish construction companies conduct overseas operations by **relocating the entire staff** (both skilled and unskilled) from Turkey to project sites. This provides for **consistency of quality, speed and better cost management**. Turkish firms set up autonomous residence site near the construction site to meet all the needs of the staff. When necessary, they also source construction materials from Turkey. Such organization gives Turkish construction companies the following advantages which enable them to quickly expand geographically. Maintaining the same core of skilled and unskilled employees for multiple projects, Turkish firms are able to achieve speed to market. Such organization **ensures smooth coordination and communication**: no language issues, cohesive established teams, ability to train people, promote and lock in key personal.

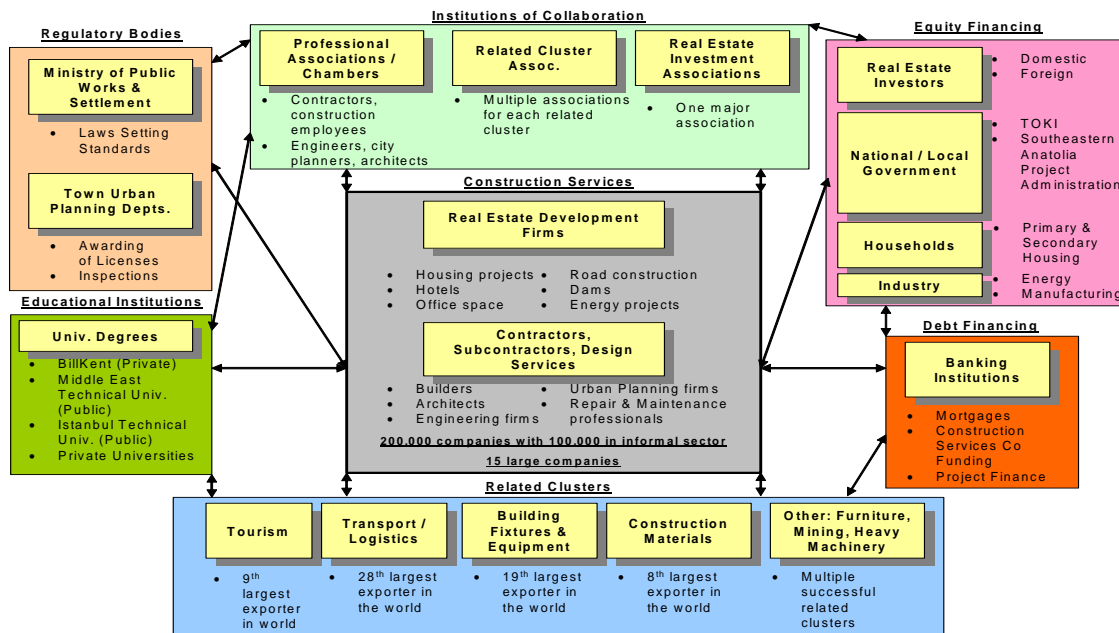
However, this internal organization has its limits and might be one of the reasons why Turkish construction companies were not able to significantly penetrate, for example, developed markets, where strong competition from local players, visa regulations, entrenched labor unions, long distance from Turkey (e.g. USA) invalidate “body shopping” and therefore cost advantage. In fact, there is a lot of room for productivity improvement even for the leading Turkish companies like Enka, Gama and Dogus (see Figure below) comparing to leading international firms. Moreover, this is one of the major challenges for Turkish construction firms.



Source: Amadeus for Hochtief, Skanska and Vinci; Enka and Dogus 2005 annual reports, Gama website.

In general, EBITDA margin for Turkish construction companies is in line with that of their international counterparts, but revenue per employee and return on invested capital is lower, which shows lower productivity compensated by cheaper labor costs allowing them to achieve the same margins.

Turkish construction companies operate within relatively well developed cluster as shown in the figure below.



Other Participants of Construction Services Cluster

There are 200 major **engineering consultancy** companies. They are providing 65% of the technical consultancy services realized in Turkey and 90% of the consultancy services realized by the Turkish firms abroad. Their annual turnover is approximately \$200 million, and they employ approximately 5,000 people (Association of Turkish Consulting Engineers and Architects, 2007). There are 64 major suppliers of construction materials forming Construction Materials Industrialists' Association (Construction Materials Industrialists' Association, 2007). There are also more than 100 major real estate development companies (The Association of Real

Estate Investment Companies, 2007).

Related and Supporting Industries

The Construction Services cluster is supported by many successful related industries.

Cement

Turkey benefits from an abundance of raw materials for cement production. Turkey is the **3rd largest cement producer** in Europe and 11th in the world (Yapi-Endustri Merkezi, 2006). It is also the 3rd largest cement exporter. With privatization of cement factories after 1980, there was an inflow of FDI in the industry, significantly upgrading the quality of produced cement to world standards.

Ceramics

Turkey ranks **3rd in Europe** after Italy and Spain and 5th in the world in ceramic production (Yapi-Endustri Merkezi, 2006). Raw materials used in ceramics production are clay, feldspar and borax which are also abundant in Turkey. Turkey possesses about two-thirds of the global reserves of borax material and is the second larger producer of borax after the US.

Glass

Turkey ranks **6th in Europe** and 10th in the world in glass production (Yapi-Endustri Merkezi, 2006). Turkey sources 95% of raw materials for glass production locally. The weakness of this cluster is that there is low local demand for high value added glass such as coated glass and safety glass, weakening its competitiveness.

Hospitality and Tourism

This is the **largest cluster** in Turkey and one of the most successful ones. It ranks 9th in the world in terms of exports and plays a crucial role in improving the competitiveness of construction services (International Cluster Competitiveness Project, 2007).

Iron and steel

Turkey ranks 13th in steel production in the world and **5th in Europe** ((Yapi-Endustri Merkezi, 2006). There were significant privatization efforts in the sector, resulting in significant upgrade of quality.

Other Clusters

Turkey is also competitive in a number of other related clusters and ranks high in terms of exports: clay and vitreous products (10th), fabricated materials (11th), heating products (6th), building stone (5th), plumbing fixtures (5th), tile and brick (6th) (International Cluster Competitiveness Project, 2007).

Regulatory bodies

There are a number of regulatory bodies overseeing the construction services cluster. The main regulator is the Ministry of Public Works and Settlement. It serves two main functions. First, it oversees the construction activities financed by public funds (planning, tendering, controlling, and technical acceptance). Second, it sets standards, issues licenses, and prepares and publishes regulation for the whole construction services cluster. Historically, the **Ministry has not been transparent in granting public tenders** and has not been effective in setting and enforcing stringent standards for construction. However, with the EU integration process in recent years, it took a few important steps to adopt EU standards. It adopted **new “Regulations Governing the Application of Construction Work”** which should bring about important changes in the arrangement of state construction contracts: stricter timeline for government payments, better due diligence of potential contractors, assessment of environmental impact, strict sanctions against non-compliance, transparency and tenders and “arm’s length” principle, simplification of tender process (Yapi-Endustri Merkezi, 2003). **This regulation will ensure**

fair competition for public works and upgrade the quality standards of public construction.

The Ministry also made changes to the **Building Inspection Law** after the earthquake of 1999 enforcing stricter standards for all construction activities in Turkey: longer “**Professional Responsibility Insurance**” by contractors, detailed and clear inspection procedures, strict responsibility for delay, employment of unqualified or inexperienced workers, failure to carry out due inspection to meet accepted standards (Yapi-Endustri Merkezi, 2003).

Another important government body is the **Mass Housing Administration of Turkey** (TOKI), responsible for increasing the housing supply for the low-to-medium income population. Its main function is to provide financing, develop projects both in Turkey and abroad and achieve an orderly process of urban development. Finally, the State Planning Organization develops medium-to-long term plans for the public construction projects.

Institutions of Collaboration

There are two general and seven major cluster-specific institutions of collaboration shaping the construction services industry in Turkey. **Except for TCA, whose members belong to the higher-value part of the cluster, all other institutions of collaboration are mixed.** Their main activity is promoting and lobbying economic interest of their constituencies. However, it is clear that they are numerous and **lack cooperation and coordination among one other.** In fact, cluster specific associations are more focused on closer cooperation with their direct counterparts in Europe and elsewhere (**vertical cooperation**) by becoming members of larger European or world associations, rather than cooperation with associations in related industries, universities and government (**horizontal cooperation**). In other words, there is lack of **cluster awareness** among institutions of cooperation.

General institutions of collaboration include Foreign Economic Relations Board, a

private non-profit organization established by Turkey's Union of Chambers of Commerce and Industry and other investors, banks and trade associations/unions, promoting international activities of Turkish construction firms; and Foreign Investors Association of Turkey, promoting joint ventures between local construction firms and their foreign counterparts.

All categories of professionals maintain distinct institutions of collaboration. The Turkish Chamber of Civil Engineers has about 50,000 members. It conducts research, publishes technical catalogues and magazines, follows construction tenders and assists its members in participating in these tenders. The Chamber of Architects of Turkey organizes all architects in Turkey. Turkish Contractors Association represents 130 largest Turkish contraction companies. This is the most important association in the cluster. The business volume of its members encompasses nearly 70% of all domestic and 90% of all international contracting work done so far by. Construction Materials Industrialists' Association represents largest 64 major suppliers of construction materials. It assists its members with research and development in their industry and monitors the activities in the sector. Association of Turkish Consulting Engineers and Architects represents 200 major engineering consultancy companies. It promotes the services offered by technical consultancy professionals and increases business opportunities for its members by developing their professional capabilities. Construction Equipment Distributors and Manufacturers Association represents construction equipment cluster in every forum and organizes activities to increase the use of construction equipment throughout Turkey. The Association of Real Estate Investment Companies represents 100 major real estate developers.

Educational Institutions

There are a few universities with strong engineering and design programs in Turkey. In our view, **engineering programs in Turkey's universities are particularly strong.** These universities

include Bilkent, Istanbul Technical University, Middle East Technical Universities, Bogazici, Koc and Sabanci Universities. Bilkent, Bogazici, Koc, Middle East Technical Universities and Sabanci teach their **programs in English**, making their graduates more adaptive to work in international environments. Despite efforts to establish specialized programs related to aspects of construction services, the progress has been slow.

Financing

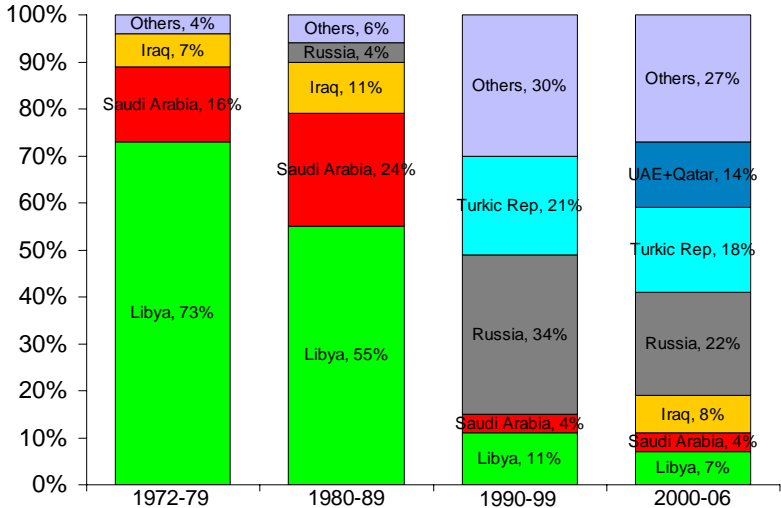
Historically, the role of public finance to promote demand for construction has been significant. However, this situation has changed since the mid-90s with **private investments accounting now for 65% of all investments**, which are expected to continue to increase. Therefore, the development of efficient and stable capital market in Turkey has become critical for future demand for construction. The recently adopted **Mortgage Law** will make mortgages more accessible. It will secure long mortgage maturities to house buyers, who until now have had to rely on family borrowings or expensive short-term bank loans. It also allows foreigners to secure mortgages to buy property in Turkey. The law also enables the securitization of mortgages, which will help to increase the liquidity and banks will be more willing to offer mortgage products (Turkish Embassy London, 2007). The Association of Real Estate Investment Companies forecasts that house mortgages may amount to \$88 billion by 2015, if the mortgage system works effectively (ISI Emerging Markets, 2007). In addition, there are nine listed Real Estate Investment Companies (REICs) at the Istanbul Stock Exchange, which have similar characteristics to their counterparts in developed countries with capitalization of \$952.6 million in 2005 (TREIC, 2007). Overall, prudent macroeconomic policy will be the deciding factor whether private investments in construction will realize as they are predicted to do so.

In public construction finance, the Ministry of Public Works and Settlement, TOKI and

Southeastern Anatolia Project Regional Development Administration will continue to play a major role and may contribute to further improvement of quality of construction works if they enforce fair and transparent tender process envisioned by new “Public Contracts” law.

Internationalization Process of (Higher-End) Turkish Construction Services Cluster

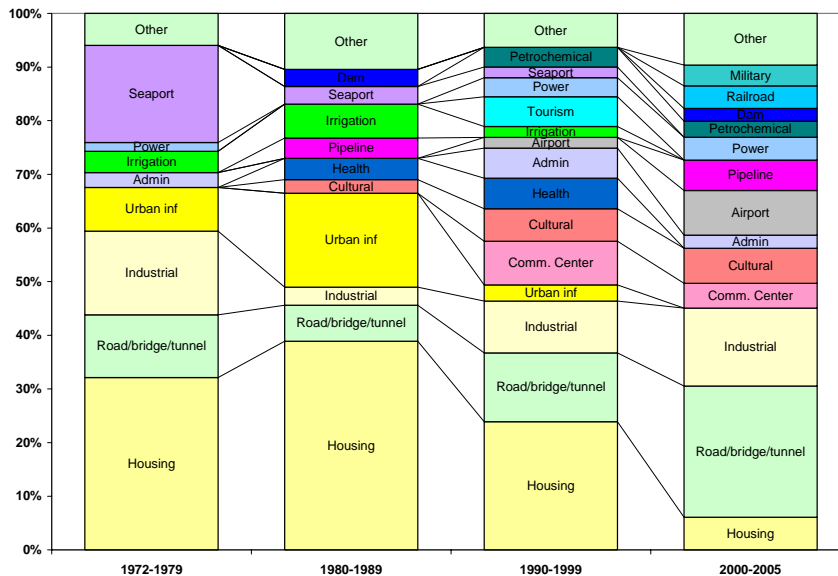
From the beginning of the 1970s up to the present, 130 largest Turkish companies have completed over 3,000 projects in 63 countries, and at present, they very often undertake the primary contractor role, especially in their traditional foreign markets. 130 largest firms undertook 90% of all international contracting work done so far by Turkish construction companies and 70% of all domestic jobs. Their business volume abroad has reached approximately \$65 billion so far. Since 1990s the Turkish contractors managed to diversify into many other countries beyond traditional markets, but do not have major presence in developed countries as shown in the graph below.



Source: Turkish Construction Association

Historically, the Turkish construction companies started internationalization with

building housing, roads, bridges, tunnels, industrial plants and urban infrastructure, where they had significant experience doing projects in Turkey (See Figure below). Since the beginning of the 1990s, they started undertaking wider range of projects, including **pipeline, petrochemical facilities and airports**, which require high level of expertise, project management skills and high technology. This shows the progress the Turkish construction firms made in improving their sophistication. However, there is **still a lot of room for improvement in terms of undertaking high valued added projects like skyscrapers, offshore facilities, suspension bridges** and other valued added projects. The breakdown by type of projects is shown below.

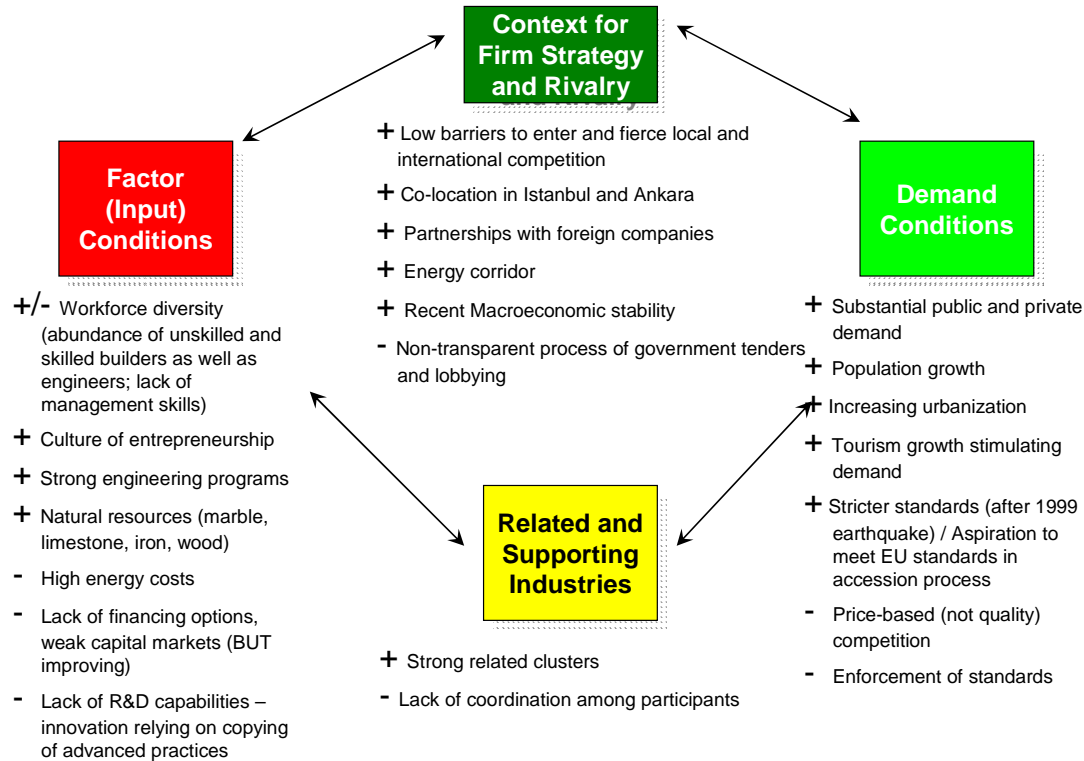


Source: Turkish Construction Association

Turkish Construction Cluster Services Diamond Analysis

In our view, the construction services diamond possesses multiple strengths. The **diversity of the workforce** – i.e. the existence of a mix in skill level in the economy, the **culture of entrepreneurship** (leading to an abundance of SMEs), the existence of related clusters with high

export shares, as well as the continuing infrastructure spending by the government, demand due to urbanization, and tourism-related construction contribute to the strength of the construction services cluster. The following figure lists some of the strengths and weaknesses of the cluster.



The cluster diamond points to some strong structural weaknesses. According to survey data of executives in the cluster, 55% of survey respondents point to the **absence of research and development capabilities** as the most important weakness of the cluster (Dikmen I. et al, 2003). **Managerial capabilities** (45% of respondents) and **organizational structures** (57% of respondents) are not seen as strengths either. This data points to the quality of product that companies offer and their ability to innovate. The absence of close collaboration among associations, universities, and construction companies limits the cluster’s ability to upgrade itself and innovate. **Government contribution is has been lacking so far:** the absence of strict laws and enforcement mechanisms on product quality and environmental / safety standards does not push cluster participants to creating high value products or innovating to achieve higher

standards. Relying on government projects also presents a challenge. The **cyclical** of the **availability of state-procured projects** does not allow for stable returns to construction companies making them **reluctant to invest further in R&D**. In attempting to diversify away from government projects, construction companies have historically found **limited financial options** for the undertaking of private projects.

The description above refers to the part of the cluster with the higher-value activities. For the lower-end of the cluster, demand conditions differ. Demand depends on the prosperity of the population and **the growth of its income** as well as the **ability of households to finance new housing construction**. The **new mortgage law** is expected to boost activity in housing construction.

Policy choices are driven by government decisions in the domestic market, but do not affect the top 15 firms adversely. The competitiveness of the entire cluster is upgraded due to such policies with large firms benefiting as well. However, specific policy decisions towards the top 15 firms seem to be non-existent.

Challenges and Recommendations for Turkey's Competitiveness

Challenge 1: Weak Political Consensus

The absence of political consensus in the country presents the greatest challenge for Turkey. The lack of agreement leads to 1) **uncertainty in the implementation of microeconomic and other reforms** necessary to achieve higher competitiveness and, 2) uncertainty with regards to the Turkey's ability to **move away from its cycles of macroeconomic crises** as well as its ability to attract capital inflows and FDI in a sustainable fashion. The political challenges relate to the country's commitment to being a member of the

European Union, the debate about the influence of religious principles in the country's secular foundations, and Turkey's presence in a relatively unstable region.

Reforms on the way to EU membership would enable for **law and regulation to be catalysts for growth** as it has for other new entrants of the European Union. The recent increase in FDI in Turkey reflects the fact that foreign investors trust that European Union "supervision" and harmonized laws ensure "**fair dealing**" and equal treatment of foreign investors. In our minds, EU Accession presents a unique opportunity for reform being created due to the presence of a **common national goal**, that of EU membership. Lack of consensus also exists with regards to the secular foundations of the Turkish State and the presence of regional conflicts and they have the same effect: political uncertainty and uncertainty in reform implementation and, therefore, sustainable FDI.

Recommendation 1: Create Consensus Regardless of EU Accession Outcome

The political establishment should **recognize and communicate to all constituents** that reforms have led to growth and increased competitiveness. Early results are proof of such claims and can help create consensus around the **urgency of reform**. Reform towards competitiveness should become a national goal itself independent of EU Accession, but should be implemented based on the plan offered by the EU, especially in the area of harmonization of laws and policies, which has proven beneficial for other countries who adopted them.

If consensus exists in a sub-section of policy, reforms can start from that sub-section to bring **further results** and the building of **incremental consensus**. For example, it is our view that the **continuation of prudent macroeconomic policies** should be an achievable goal as Turkish citizens have understood the effects associated with macroeconomic crises and the loss of purchasing power. Increased trade is another one. Similarly, Turkey should recognize the

benefits of the 1996 Free Trade agreement with the EU and should foster **more closely-knit economic relations with neighbors**, countries of the European Union, Russia and the Middle East. This would mean fostering activity beyond trade leading to cross-border mergers & acquisition activity, higher FDI from companies of neighbor countries, and the **creation of regional companies benefiting from economies of scale in a larger area of activity**.

The goal of microeconomic reform is very complex, but it is the only way to maintain the momentum in the absence of consensus for EU Accession and the direction the country should take. The think tank Eurasia Group places Turkey as #4 in the list of countries with political risk and claims that “it should be increasingly obvious to all observers that Turkey isn’t going to join the European Union.” It is our view that **Turkey should remain persistent and become a pioneer** in reform, even if the outlook is negative. In microeconomic reform, **Turkish Associations should become pioneers** in cluster upgrading by developing collaborative programs, lobbying the government for specific laws and policies affecting different parts of the cluster. The danger that Associations will lobby for protectionist measures remains and for this reason the strength of independent institutions (e.g. competition agency) is important. After all, even if EU Accession does not realize, greater competitiveness will have realized and domestic and geopolitical problems could be dealt with **more clarity** if constituents feel that reforms bear fruit and that Turkey is becoming sustainably richer.

Challenge 2: Bureaucracy, Corruption & Weak Institutions

EU Accession is not panacea, as certain problems are not resolved in the process to membership. Such challenges are 1) ineffectual bureaucracy, 2) corruption at all levels, including in the judicial system, 3) weak (non-independent) institutions.

Ineffectual bureaucracy does not enable entrepreneurship and discourages FDI. A foreign company interested in establishing operations in Turkey has to deal with cumbersome procedures to establish legal entity, obtain licenses, etc. Cumberse bureaucracy favors incumbents and is used to **keep new markets entrants out, leading to less competition**. Bureaucracy also fosters corruption between the private sector and government officials, as officials expedite requests and figure out shortcuts in procedures. Corruption translates to **additional transaction costs** effectively. Its presence in the judicial system makes “fair dealing” extremely difficult.

Fair dealing is also not enforced due to the presence of weak institutions in Turkey, especially regulatory bodies, such as the anti-trust authorities. Such institutions lack **de facto independence** and are often guided by the political parties in power. For example, the enforcement of antitrust policies is heavily influenced by the desires of the executive arm of the government and its desire to enforce strict competition rules.

Recommendation 2: Simplify Bureaucratic Procedures & Create Transparency

The review of bureaucratic procedures and their simplification, e.g. the number of documents required for the creation of a company, is the first step towards fewer hurdles for competition. Simplified bureaucratic procedures need to be transparent to lead to lower incidents of corruption. Transparency enables parties to follow steps and procedures and, therefore, **detect any wrongdoings**. Simplified bureaucratic processes diminish the value of a corrupt official as they reduce its ability to maneuver. The **internet** presents an opportunity in creating simpler and transparent processes, especially in the dealings of the private sector with the State.

Challenge 3: Regional Imbalances in Wealth and GDP Growth

There are very high regional imbalances in GDP per capita among the regions of the country. To date, broad economic reforms have not strengthened the economies of the

disadvantaged regions. Outside of the main urban centers, the economies remain **rural** and undeveloped.

Recommendation 3: Enable Cluster-based Development in Disadvantaged Regions & Foster Education

Disadvantaged regions should develop grass-root projects in specific clusters in which **seeds already exist**. Local or national government should take a lead on coordinating the development of programs. In the longer term, the **strengthening of the education system** is required to enable inhabitants of disadvantaged regions to acquire higher value skills. Ensuring that primary and secondary education in such regions maintains the same standards as in urban areas is the first step. The establishment of government scholarship programs for these populations for university study in Turkey or abroad should also be instituted.

Challenges and Recommendations for Construction Services Competitiveness

Challenge 1: Further Internationalization in Western Europe for the Top 15

Internationalization for the top 15 firms in construction services has been successful, but these firms have not been able to penetrate successfully higher value-added markets, such as European markets. These markets have already established players with sophisticated capabilities serving Europe for a long time. Presence in such markets is not only important for capturing economic rents, but also for **innovating** through **funding research projects** and **locating near the highest caliber engineering and other technical research programs in universities**.

Recommendation 1: Grow Through Acquisition; Spin-off from Conglomerate Structure

The top 15 firms should grow through **acquisition** to establish a presence in Western Europe. Joint ventures should also be established whenever possible. By acquiring existing construction services or related firms and focusing on **one segment**, firms can avoid the “reputation” hurdle of establishing a new venture. The example of Gama demonstrates that this strategy may be successful: Gama has traditionally had expertise in energy projects. It first invested in a related industry: it made investments energy projects in Ireland and constructed energy plants in Ireland for itself. Today, the company has expanded in other European countries and its European revenues have reached 15% of total revenues.

In some cases, it is our view that the construction services firms should **spin off** from their parent companies with conglomerate structures. The activities of the conglomerates have helped them develop expertise in some verticals (e.g. energy for Gama), but, once a high level of expertise is achieved, **conglomerates may not allow for focus and can allocate capital in a non-efficient way**, limiting the ability of the construction services activities to innovate and expand.

Challenge 2: Weak Coordination Among Cluster Participants

The coordination challenge among cluster participants can hinder the ability of construction services firms to develop further. The coordination challenge affects the bulk of firms operating domestically as the top 15 firms are not in dire need of support services or structure. On the other hand, **smaller firms are in such need as their scale does not enable them to develop support.**

Recommendation 2: Associations to Take a Coordination Role in Cluster

In our view, the upgrading of this cluster needs to be a similar effort as the one we studied in the case on the State of Connecticut under Governor Rowland, but we believe that the **Associations can own the mandate to upgrade** this cluster and coordinate other constituents as they have a better understanding of cluster specifics. The government, through the Ministry of Public Works should demonstrate its commitment by actively responding to the requests of the Association. Some of their actions should be: 1) the Associations and Universities should coordinate in creating **specialized Masters Programs** addressing specific needs in expertise for new professionals and fitting the characteristics of demand in the country; 2) the Government in partnership with the Associations should fund and develop **vocational programs** for professionals interested in entering the building profession; 3) the Association should work with banks to develop **project finance structures** and the government should legislate to support such structures; 4) the Associations and the Government should work on adopting **sophisticated quality and safety standards** with the government's role to enforce such standards; 5) and finally, encourage construction services firms to use international accreditation to **accredit processes and products** to make their quality standards transparent.

Overall, we remain confident that the construction services cluster is well positioned to develop a long-standing competitive advantage and to continue to contribute to the underlying growth of the Turkish economy.

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