

## **TURKEY: AN EMERGING ECONOMY MOVING TOWARDS FULL MEMBERSHIP TO THE EU**

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## ENGINE OF EUROPE'S GLOBAL COMPETITIVENESS<sup>1</sup>

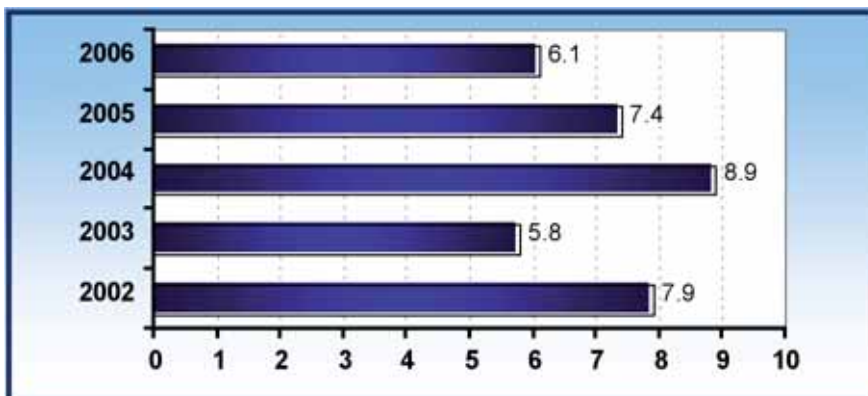
Turkey is at the center of an economic and political area known as Eurasia, where three regions of the world - Europe, the former Soviet Union and the Middle East, intersect. Because it has its unsaturated local market, young and entrepreneurial population, dynamic and growing private sector, an export-oriented industrial economy, rapidly developing information society and bright demographic prospects, if Turkey gains accession to the European Union, the size and competitiveness of the internal European market is likely to increase.

Turkey is the world's 17th and Europe's 6th largest economy. The IMF projects that Turkey's Purchasing Power Parity (PPP) - adjusted GNP will be US\$755 billion in 2008. Turkey's GNP is expected to surpass that of Australia in 2008 and become one of the top 10 economies in the world by 2050.

Turkey has witnessed three major crises since 1994; the last one - in 2001, was one of the worst economic downturns Turkey has ever experienced. Although average historical growth rates have been more than satisfactory, political instability, problems in foreign affairs, populist domestic policies and a major earthquake in an industrial center have all contributed to these crises.

However, since the latest crisis, Turkey has recorded the **highest average growth rate in the OECD (2002-2006)**, reaching an annual growth rate of 7.2% (see Figure 1). What is different from the past is the fact during this period, Turkey has carried out some of the most impressive and long-awaited structural reforms, which were recognized by the international community. Because of them, the EU has agreed to initiate full membership negotiations with Turkey and the IMF has declared Turkey a success story. It would not be an exaggeration to suggest that in the absence of a force majeure, Turkey is set on the right track for economic growth at satisfactory levels. According to its economic program, the Turkish economy is expected to grow at an average of 5% annually for the next two years.

Figure 1 GDP growth, 2002-2006 (%)



Source: WDI Online

Furthermore, long-term perspectives look even more promising. With Turkey's population growth rate having fallen from over 2% to roughly 1.5%, it is on the verge of entering a **demographic window of opportunity** similar to what some East Asian countries experienced in the 1980s, where the productive working population is large relative to children and retirees, providing the potential for even more rapid income growth.

This situation is likely to be a panacea for improving the competitiveness of Europe as well as that of Turkey. The continuation of reforms designed to bring Turkey into full EU membership will not only increase confidence in Turkish potential and investments in Turkey, but is also likely to make Turkey indispensable for the EU. For example, with her renowned hospitality, quality of medical care and pleasant climate, Turkey has the potential of becoming the **Florida of the EU**, in terms of caring for the elderly.

<sup>1</sup> This section is based mainly on [1] and [2] by Dr. Yılmaz Argüden.

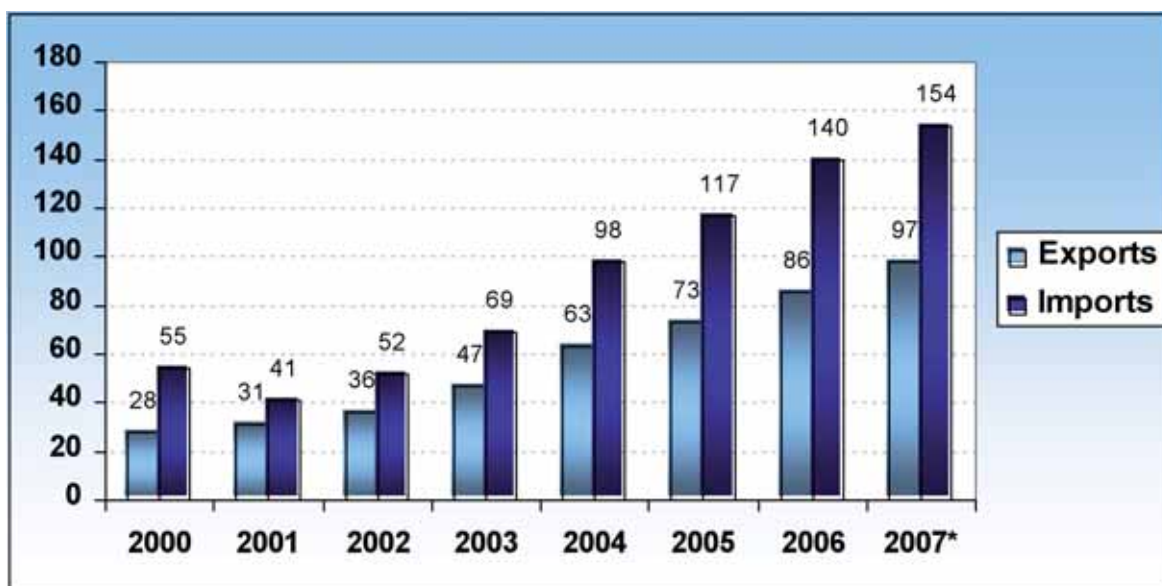
## BOX 1 TURKEY: THE CRADLE OF CIVILIZATIONS

The oldest temple known in the world, dated between 8500 and 9000 B.C., has been excavated near Urfa, which is the possible birthplace of Abraham. St. Peter invented the term "Christian" in Antioch, where he founded one of the earliest cathedrals of Christianity. The seven Churches of the Revelation (of Asia) and the church where St. Nicholas, popularly known as Santa Claus, preached is also located in Turkey. Mevlana Celaleddin-i Rumi, founder of the Whirling Dervishes, preached universal love in Konya in the 13th century. The Ottoman Sultans were the Caliph, representing the leadership and the political unity of Islam, for 400 years. Today, Turkey is the only democratic and secular country where the majority of the population is Muslim. It is the only country in the world that is a member of both the Organization of the Islamic Conference and the Council of Europe since the first year that they were established. Turkish people frequently name their sons Isa (Jesus) or Musa (Moses) and celebrate Christmas by attending church services in major churches such as Saint George's church. Turkey is co-chairing with Spain the Alliance of Civilizations, an initiative of the United Nations intended to reduce the tensions and polarization between societies with different religions and cultural values.

Only a few emerging markets in the world have the potential of attracting investment for both exports and their domestic market. Turkey is in a privileged position whereby it can create a **virtuous investment cycle**: a more competitive domestic business environment functions to strengthen Turkey as a platform for exports, and exports in turn encourage firms to upgrade and better serve the domestic market. This is true not only for products, but also for young managers. Young Turks are being employed by global firms throughout the world because of their professionalism and flexibility in dealing with a wide range of circumstances. Several chairmen of multinational companies located in Turkey suggest that the most important export of their Turkish operation is qualified managers/leaders.

From 1975 to 2005, Turkey recorded one of the highest increases in foreign trade-to-GDP ratio, reaching 61% by the end of the period. This demonstrates that the Turkish economy has become considerably open for a large country. Specifically, Turkish foreign trade has increased tremendously over the past decade, growing almost 20% annually. According to WTO figures, Turkey ranks fifth in the world in terms of exports growth. In fact, **Turkey's exports have more than tripled in the last six years**, recording a historical high of over US\$100 billion for 2007. Its imports have also been growing at an impressive rate. The structure of imports remains concentrated in raw materials and other industrial inputs, suggesting that, however high they may be at this stage; imports are merely supporting the export base.

Figure 2 Foreign Trade, 2000-2007 (\$US billions)



[\*] 2007 January-November

Source: Turkstat, SPO

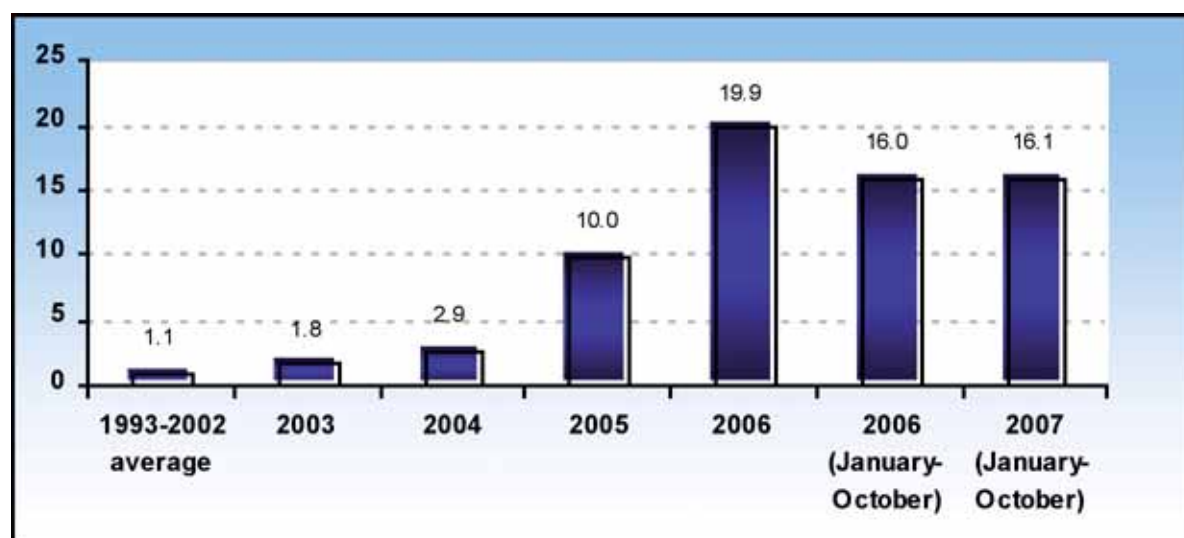
A major driver for success in the EU and global markets has been the quality of the goods and services provided. Recently, Turkey has become one of the top countries to host European Quality Award winners, and Turkish brands are becoming household names in a wide range of countries. With ever increasing dedication to quality Turkey has become a **leader in European Quality initiatives**.

The only serious concern regarding the major economic indicators has to do with the current account deficit, which is high by any standards - having reached a US\$35.7 by November 2007. Historical data suggest that although the current account deficit has been high in recent years, its rate of growth is slowing down - rising from US\$22.6 to US\$32.3 from 2005 to 2006. Moreover, the possibility as well as the quality of financing it is definitely improving.

Any correction to such a high figure carries its risks. The general attitude of the government towards financing the deficit is to keep calm, carry on with the IMF program and the EU integration process and continue to improve the quality of financing over time.

Annual foreign direct investments (FDI) to Turkey remained around US\$1 billion during 1993-2002 period (Figure 3). Subsequent attractiveness of Turkey for foreign investors seems to have increased mainly due to the new FDI law, which came into effect in 2003 and the setting of a start-date for EU accession negotiations on December 17, 2004, followed by the actual commencement of negotiations on October 3, 2005. Since 2003, the only structural change in FDI has not only been in real estate purchases exceeding the total FDI inflow of previous years, but also the change in the distribution of FDI among different sectors. The share of manufacturing, which was 42% of the FDI stock as of the date the new FDI law came into force, fell to 11% in 2006, largely as a result of the increasing interest of foreign investors in financial intermediaries and acquisitions in telecommunications due to privatization. However, the decrease in the share of manufacturing in total FDI does not imply that FDI in this sector has declined in absolute terms: the amount of foreign investment in manufacturing increased from US\$110 million in 2002 to US\$1,868 million in 2006. It grew even more in the January-October 2007 period, reaching US\$3,172 million. Since 2006, Turkey has been among the top ten emerging markets, following the BRIC countries (Brazil, Russia, India and China), attracting 5.5% of the total FDI inflows to developing economies (US\$19.9 billion) and 30% of total FDI inflows to emerging economies in Europe in 2006. The FDI inflow for January-October period of this year is US\$ 16.1 billion (Figure 3).

Figure 3 FDI Inflows, 1993 to 2007 (US\$ billions)



Source: Central Bank of the Republic of Turkey

In short, with its high growth potential, young and dynamic population, and the entrepreneurial spirit, Turkey provides an important potential market for global businesses. Furthermore, regional political stability can only be established on a sustainable basis if economic development spreads throughout the region. The engine for growth in the Balkans, Caucasus, Central Asia, and the Middle East is likely to be Turkey. Perhaps more importantly, Turkey might play a role in revitalizing European competitiveness.

**BOX 2****CAPITAL OF EMPIRES: ISTANBUL**

Istanbul, which spans two continents, is the only city in the world that has been the capital of three great empires (Roman, Byzantium and Ottoman). In one sense, Istanbul is the center of the world, given that the Western and the Eastern countries are defined with respect to Istanbul. With 17 palaces, 63 museums, 49 churches, 16 synagogues, 27 universities and over 12 million inhabitants with median age of 25, Istanbul has become the 2010 European Capital of Culture. Turkish Airlines, the fastest growing and the most punctual airline in 2006, according to the Association of European Airlines, connects Istanbul to 103 cities in the world. The major European, Middle Eastern and Central Asian capitals are just a few short hours flight away from Istanbul.



## **TURKEY'S COMPETITIVENESS IN THE GLOBAL CONTEXT: AN ASSESSMENT BASED ON THE WORLD ECONOMIC FORUM'S GLOBAL COMPETITIVENESS REPORT**

Over the last two years, Turkey has seen an impressive improvement in its competitive performance, rising 18 places in the World Economic Forum's Global Competitiveness Index (GCI) Rankings. This confirms the pace and importance of the progress made, placing the country in the 2007-2008 GCI Rankings well ahead of not only Bulgaria, Romania, which joined the EU in 2007 enlargement, but also Greece, Cyprus and Malta, which joined the EU earlier. With respect to the BRIC countries, the rank of Turkey has surpassed that of Russia and Brazil as well. Therefore, it is possible to deduce that Turkey is beginning to reap the benefits of policy reforms introduced in the aftermath of 2001 crisis. Although the overall ranking of a country provides an idea about its competitiveness, what matters more is the areas deserving particular attention both from political point of view, for the purposes of intervention, and from business point of view, in order to make investment decision. The World Economic Forum considers national competitiveness as the set of factors, policies and institutions that determines the productivity level of a country. Therefore, as many as 123 different factors deemed as critical to driving productivity, hence competitiveness, are taken into account while preparing the GCI rankings.

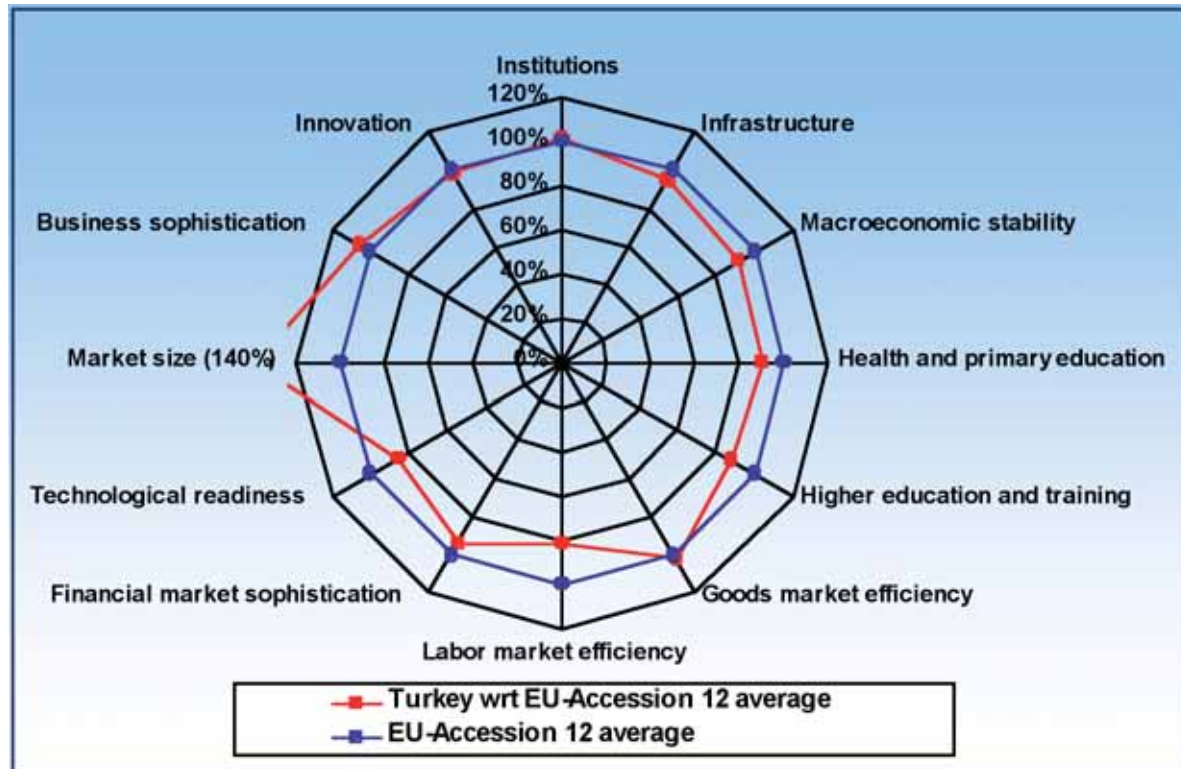
The Global Competitiveness Index is a weighted average of three sub-indices, each of which containing data that are critical to driving productivity and competitiveness in national economies, where weights are determined according to the stage of development of countries. The first sub-index, Basic Requirements, groups data regarding institutions, infrastructure, macroeconomic stability and health and primary education pillars, which are most critical for countries at the factor-driven stage (income of less than US\$2,000). The second sub index, Efficiency Enhancers, on the other hand, includes those pillars critical for countries in the efficiency-driven stage (income between US\$ 3,000 and US\$ 17,000), namely higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness and market size. Finally, the last one, Innovation and Sophistication Factors sub-index comprises business sophistication and innovation pillars, which are especially important for countries at the innovation-driven stage (with income more than US\$ 17,000).

In order to place Turkey's performance within a global context, specific comparisons are made with the average performance of the 12 countries (EU-Accession 12) that joined the EU in May 2004 and January 2007 and the average performance of the BRIC countries, which are rapidly developing and are believed to have the capacity to surpass most of the current richest countries of the world by the year 2050. The comparison with respect to the EU-Accession 12 is of particular importance as 75% of FDI in Turkey was accounted for by EU members during 2002-2006, when Turkey attracted the bulk of its FDI stock. Taking into account that the EU-Accession 12 is the other potential destination for FDI originating in EU countries, assessing Turkey's competitive position within the twelve pillars with respect to the EU-Accession 12 is crucial.

### **Emerging Member of the EU**

Figure 4 provides data on Turkey's performance on each of the twelve pillars of GCI with respect to the EU-Accession 12 average (see Appendix for more detail). The performance of the EU-Accession 12 is designated as 100%, which, in turn is the standard being used to gauge the relative strengths and weaknesses of the Turkish economy.

Figure 4 Turkey's competitiveness on the twelve composite pillars of GCI with respect to the EU-Accession 12 average



Source: WEF (2007-2008), REF Calculations

Figure 4 underlines Turkey's relative prowess with respect to the EU-Accession 12 in market size, business sophistication and, to a certain extent, in goods market efficiency.

**Turkey is one of the world's biggest markets.** It has a population of 74 million, of which 40% is under 22. It also has the world's 13th largest urban population (approximately 50 million). The international image of Turkey in terms of a destination for investment is generally shaped by the diverse market opportunities, both domestic and export-oriented, that Turkey offers. The potential of these markets is over one billion consumers, and includes [2]:

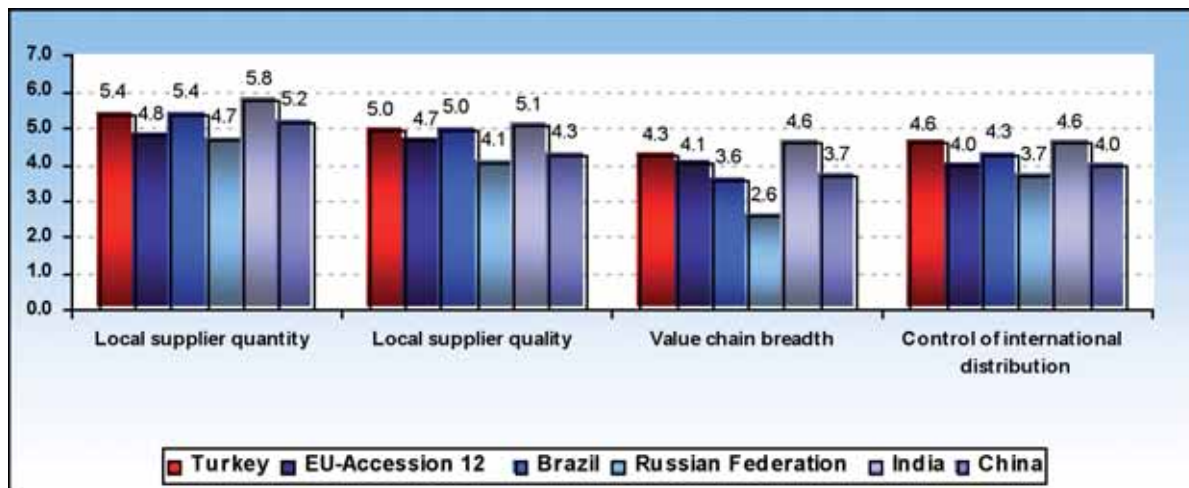
- A huge and growing domestic market (approximately 74 million)
- High-income European markets (approximately 600 million)
- Emerging Russian, Caucasian and Central Asian markets (approximately 250 million)
- Diverse and expanding Middle Eastern and North African markets (approximately 160 million)

The business sophistication pillar concerns the quality of a country's overall business networks, as well as the quality of individual firms' operations and strategies. Turkey presents quite an interesting case given its stage of development since it, in fact, shows a competitive advantage in this pillar [3]. Turkey is assessed as doing well regarding business sophistication compared with its own performance on the other GCI pillars, as well as with the EU-Accession 12 average and the BRIC countries.

Turkey gets particularly good marks for its cluster-related infrastructure, such as local supplier quantity and quality, as well as in variables pertaining to the sophistication of Turkish firms' operations and strategies, including their control of international distribution and the extent to which they are producing goods higher up on the value chain. Figure 5 provides a graphical comparison between aspects of Turkey's business sophistication and the EU-Accession 12 average as well as BRIC countries.



Figure 5 Turkey's Relative Performance on Selected Factors of the Business Sophistication



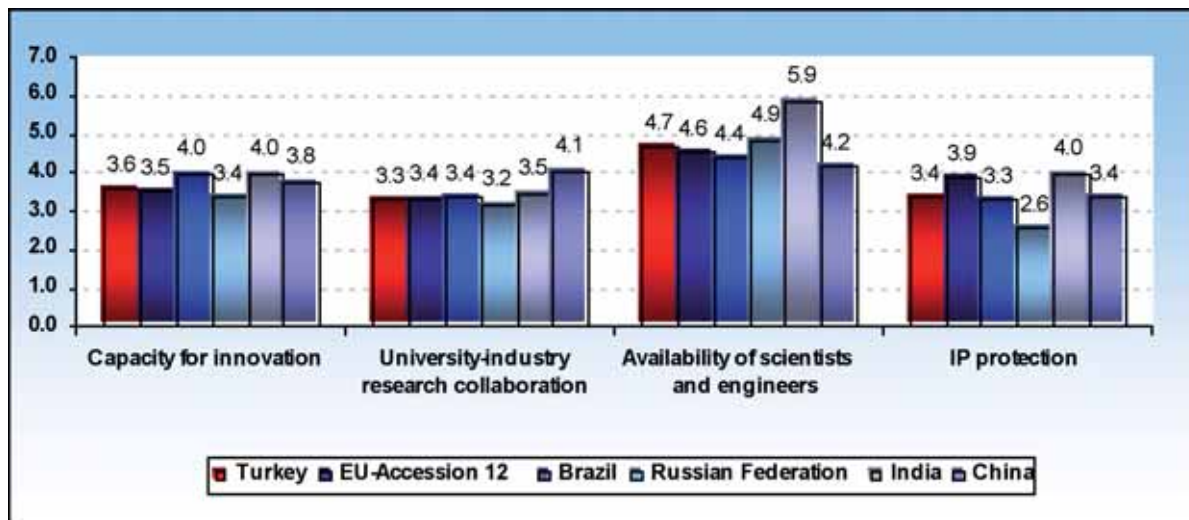
Source: WEF (2007-2008), REF Calculations

Turkey's business sophistication not only bodes well for its prospects to evolve toward more advanced stages of development, but also corroborates the progress achieved in recent years. Indeed, although the rural sector still accounts for around one-third of Turkey's labor force and is characterized by a rather low level of average labor productivity (value added per employed person) - half of the average of the EU-Accession 12 countries, but much higher than each of the BRIC countries - it represented only 13% of GDP in 2006. This is significantly less than the industrial (22%) and the services (65%) sectors, which are characterized by significantly higher productivity levels. With average labor productivity at the same level, the industry and services sectors are perfectly competitive with the EU-Accession 12 countries, demonstrating comparable - if not better - levels of business sophistication and modernization. This "dual economy" connotation can also, to a certain extent, be found within each sector of the national economy, since modern companies adopting advanced technology, efficient production processes and exploiting economies of scale have developed everywhere, alongside traditional companies, which are generally small and medium-size enterprises (SMEs) with lower levels of productivity and less efficient processes.

In current knowledge-based and interconnected economic systems, the other pillar of the Innovation and Sophistication Factors sub-index of the GCI, namely innovation, becomes the only sustainable driver of productivity growth for firms and countries alike. By developing national dynamic competitive advantages (based on technology and high value-added products), as opposed to static ones (based on natural endowments and production factors with diminishing rates of return), countries ensure increasing levels of prosperity and living standards for their citizens. In particular, the capacity to generate endogenous innovation becomes a precondition for countries having reached the technological frontier to generate sustained productivity increases and achieve enduring competitiveness.

In accordance with the new growth theory pioneered by Romer [4], WEF's Global Competitiveness analysis views commercially oriented innovation efforts responding to economic incentives as the major engine of technological progress and long-run growth. In this view, increases in factor inputs and improvements in factor productivity are crucial for the growth of developing countries, which are at lower stages of development. For developed countries at their innovation-driven stage of development, on the other hand, the economy's growth depends almost entirely on efforts towards improving its innovation and sophistication of productive systems and processes.

Figure 6 Turkey's Relative Performance on Selected Factors of the Innovation

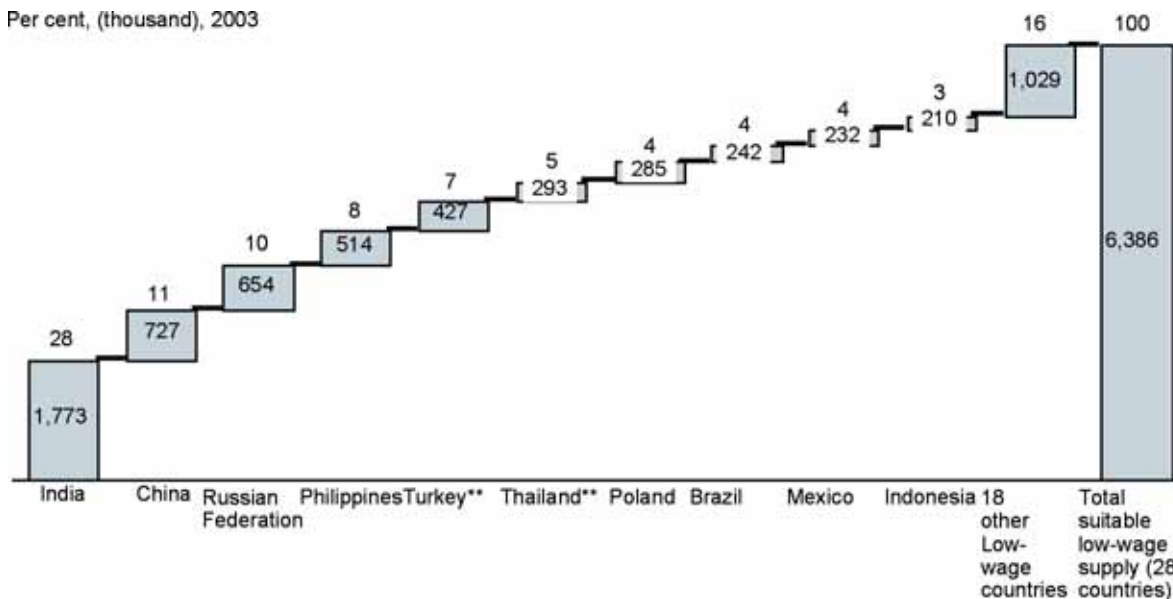


Source: WEF (2007-2008), REF Calculations

Looking at the data related to the innovation pillar (Figure 6), Turkey scores relatively well compared to the EU-Accession 12 and the BRIC countries on the business sector and academia-related variables, such as the extent of research cooperation between the private sector and universities, companies' capacity for innovation, the availability of scientists and engineers and intellectual property protection. Indeed, as shown in Figure 7, Turkey is fifth in the world with respect to suitable supply of university educated young professionals.

Figure 7 Suitable quantity, total university-educated young professionals\*

Per cent, (thousand), 2003



\*Engineers, Finance/Accounting, Analysts, Life science researchers, Generalists; d7 years of work experience.

\*\*Number derived via extrapolation.

Source: HR interviews; country labor & graduation statistics; McKinsey Global Institute analysis [7]

Within the last decade innovation has become one of the high competitive priorities of the manufacturing sector in Turkey. As such, it has evolved into a major subject of discussion. This intense interest in innovation in both the manufacturing and service sectors has already translated into results. In the area of innovation, two weak spots of Turkey are her relative position concerning R&D intensity (Research and Development expenses as a percentage of Gross Domestic Product) and the number of patents granted or filed. While it is true that Turkey has started off at a low level, its high rate of development is an indication of a latent capacity for innovation as well as of a determination to excel in this domain. According to OECD [5], the annual rate of increase

in Turkey's R&D intensity (11%) is the third highest in the world, following only China and Iceland, over the 1995-2005 period. Similarly, in the period 1997-2005, the annual rate of increase of Turkey's patent filings with the European Patent Office (39%) ranks as the third highest, following those of China and India. In another such innovation-related performance indicator, namely the annual rate of increase in scientific publications, Turkey has shown a remarkable sustainable performance. The annual rate of increase in scientific publications has been 16.1% throughout 1994-2003. For example, none of the BRIC countries has a higher rate; the highest rate belongs to China at 14.1% [6].

### BOX 3 REKINDLING THE ANCIENT CANDLE OF LEARNING

Thales, Anaximande, Anaximenes and Herodotus are just a few of the founders of Western science and philosophy who were born in these fertile lands. Parchment was invented in Pergamum, the world's leading center of learning at its time and had a library of 200,000 items, second only to the Alexandria's. The University of Constantinople (Byzantine Empire), re-founded in A.D. 849 (original school founded in A.D. 425), by the regent Bardas of Emperor Michail III, is generally considered the first institution of higher learning having the characteristics we associate today with a university. Today, over 2.4 million students are currently enrolled in 115 universities in Turkey. According to the Institute for Scientific Information, Turkey ranks 19th among countries contributing to scientific literature. With an increasingly well educated population, which has a median age of 25, Turkey is about to enter a period known as the "demographic window of opportunity".

Based on location analyses [8], it has been concluded that the availability of qualified personnel, closeness to universities and customers, and an acceptable level of university-industry collaboration are the leading factors influencing location decisions of an R&D facility. With its performance on business sophistication and innovation, **Turkey deserves to be considered as a destination for R&D investment**, particularly by multinational companies.

The evidence that Turkey performs better on such pillars as business sophistication and innovation, which are more conducive for developed countries in innovation-driven stage, where the private sector's capacity in producing new and different goods using the most sophisticated processes is evaluated. In contrast, it fails on the Basic Requirements sub-index, which comprises data related to macroeconomic stability, health and primary education, and infrastructure, in which mainly governments' performance is measured. This discrepancy is derived from inefficacy of government policies in recent decades. One of many policy shortcomings is in the area of macroeconomic stability, which has been of primary concern. Others are the tight fiscal and monetary policies adopted in the aftermath of the 2001 economic collapse. While inflation has been significantly curbed because of them - being brought down to single digit figures in the 2002-2007 period, it is still high in international standards.

The competitive advantage in business sophistication, together with the similar performance in innovation, also demonstrates Turkey's preparedness to reach more advanced stages of development. However, Figure 4 also highlights some areas of particular concern, such as macroeconomic stability, health and primary education, higher education and training, labor market efficiency and technological readiness, in which Turkey performs, though slightly, worse than the EU-Accession 12 average. At this point, it is worth comparing Turkey's performance with the BRIC countries.

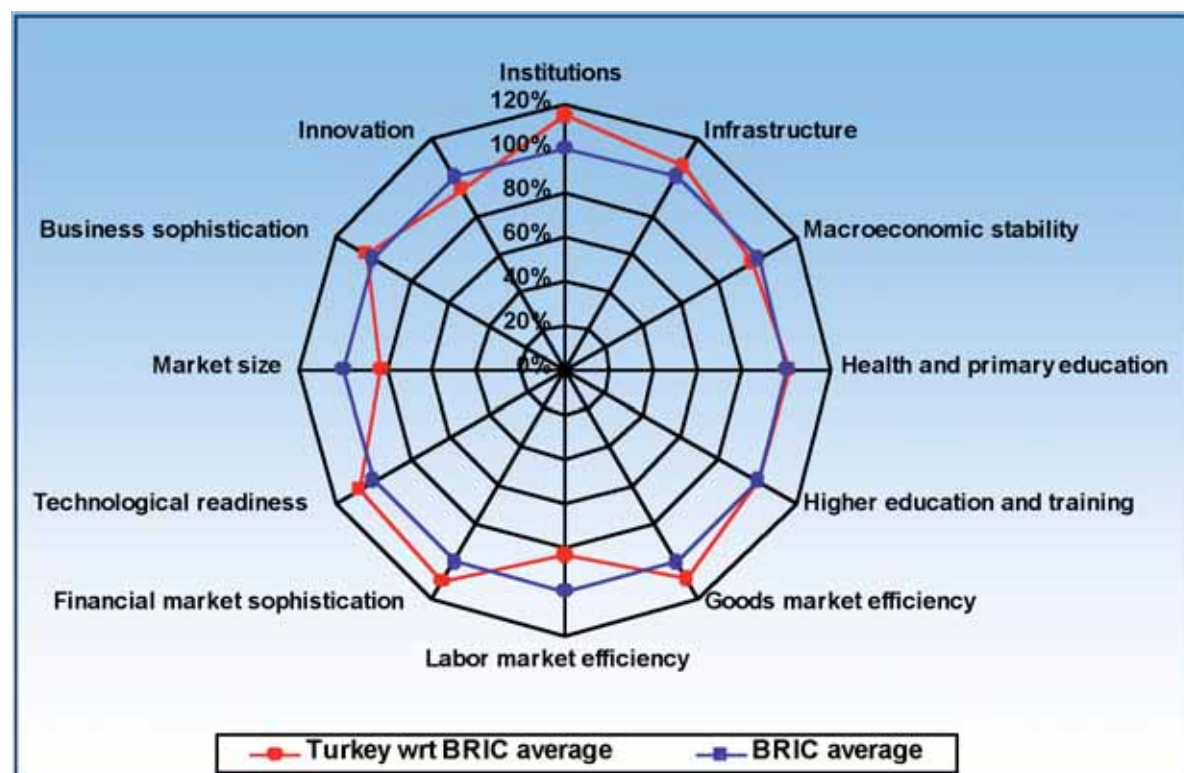


## Turkey's Competitiveness: Better than BRIC?

Figure 8 presents Turkey's performance on each of the twelve composite pillars of GCI with respect to the average of the BRIC countries (see Appendix for more detail). In contrast to the comparison with the EU-Accession 12, Turkey performs as well as, if not better than the BRIC average on all pillars of Basic Requirements and Efficiency Enhancers sub-indices except for labor market efficiency and market size. It is of no surprise that the BRIC countries do better in market size as they are, by definition, the greatest emerging economies, but Turkey should tackle the problems related to labor market efficiency. The Turkish government is aware of these problems and some structural reforms and policies to overcome these deficiencies are included in its agenda, as will be stated later in this report.

There is no significant difference between Turkey and the BRIC average with respect to the GCI pillars of macroeconomic stability, health and primary education as well as higher education and training, but Turkey is well ahead of the average of the BRIC countries on the institutions pillar of the GCI as shown in Figure 8.

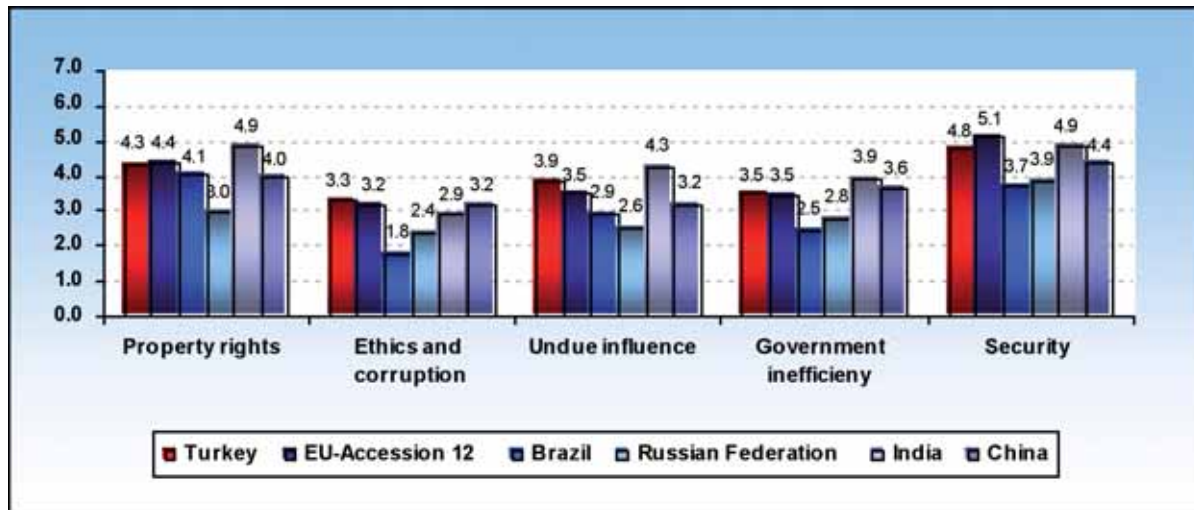
**Figure 8 Turkey's competitiveness on the twelve composite pillars of GCI relative to the BRIC average**



Source: WEF (2007-2008), REF Calculations

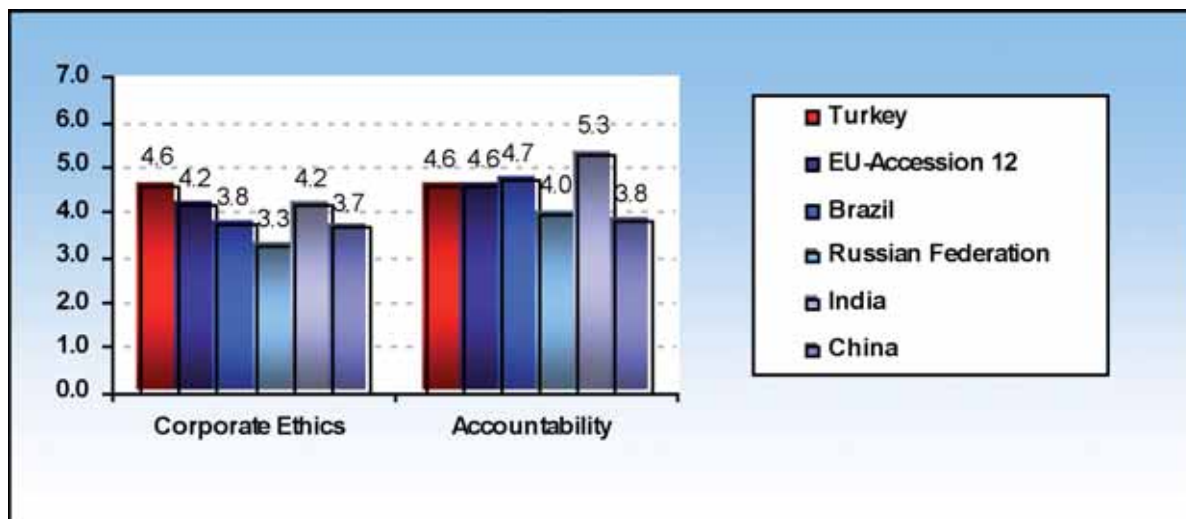
The institutional environment forms the framework within which private firms, individuals, and government interact not only to realize production in the economy, but also distribution of wealth among the economic actors. Moreover, institutional framework of a country covers its legal framework and government attitudes toward markets and freedoms and the efficiency of its operations. Unfavorable practices, such as excessive bureaucracy, overregulation, corruption, lack of transparency, all undermine the effectiveness of the economy by increasing the cost of doing business. Thus, the quality of the institutional framework is critical to the efficient functioning of the economy and to the robustness and sustainability of businesses. In its treatment of the institutions pillar, the WEF takes into consideration input related to both the public and private institutions [9]. Turkey ranks either first or second after India, in all aspects of institutions among the comparison countries as depicted in Figure 9 and Figure 10.

Figure 9 Turkey's Relative Performance on Selected Factors of Public Institutions



Source: WEF (2007-2008), REF Calculations

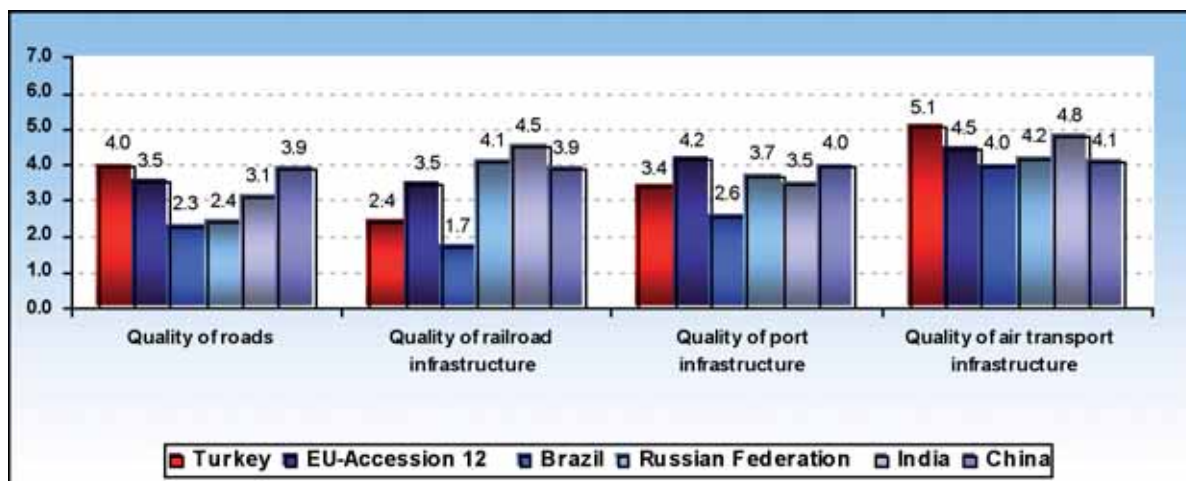
Figure 10 Turkey's Relative Performance On Selected Factors of Private Institutions



Source: WEF (2007-2008), REF Calculations

Although Turkey performs better than the BRIC average in infrastructure, there is still a challenging road ahead. Without quality infrastructure, it is impossible to ensure the efficient functioning of the economy. Efficient modes of transport for goods, people and services, such as good quality roads, railroads, ports and air transport are vitally important, as are an electricity supply free of interruption and a solid telecommunications network.

Figure 11 Turkey's Relative Performance on Selected Factors of Infrastructure



Source: WEF (2007-2008), REF Calculations



In the quality of air transport infrastructure, Turkey has a score well above of each of the BRIC countries as well as the EU-Accession 12 averages in the Global Competitiveness Report 2007-2008. As depicted in Figure 11, the same holds for the quality of roads, i.e., Turkey does better than all of the comparison countries.

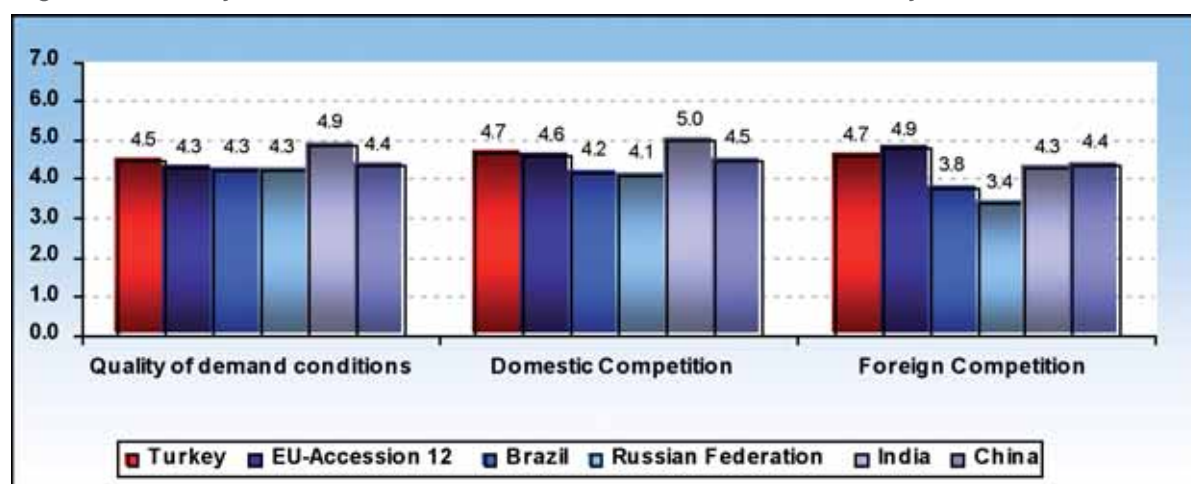
#### BOX 4 PASSAGE TO WEALTH

One of the oldest commercial roads, The Royal Road, built by the Persian King Darius I circa 500 B.C. which ran some 2699 km, used to link Susa to Izmir. The road became part of the well-known Silk Road and poured the agricultural and manufactured commercial wealth of the Eastern world into the Western world. Turkey is geographically located in close proximity to 71.8% of the world's proven gas and 72.7% of oil reserves, in particular, those in the Middle East and the Caspian basin. Around 3.7% of the world's daily oil consumption is shipped through the Turkish Straits. The Baku-Tbilisi-Ceyhan oil pipeline (which has a capacity of 1 million barrel a day, approximately 1.5% of the world's supply) was completed in 2006. With other projects such as Blue Stream Pipeline (completed in 2005), the Baku - Tbilisi- Erzurum Natural Gas (completed in 2007), the Kirkuk-Ceyhan Oil (existing), the Trans-Caspian Turkmen Gas, and the Nabucco and Trans-Arab Natural Gas Pipeline, 6-7% of the world's oil supply is anticipated to be transported through Turkey, with Ceyhan becoming one of the largest energy hubs in the world.

Among the other components of infrastructure, of particular concern is the general lack of quality of Turkish railroads and electricity supply, both of which have been attracting remarkable investment recently. Another point of concern in infrastructure is the quality of the country's ports, once taking into account the fact that Turkey is encircled by sea on three sides. Nevertheless, the privatization of many of the ports recently will likely to lead to improvements in quality and efficiency in the years to come.

It is also evident in Figure 8 that Turkey performs better than the average of the BRIC countries on in the goods market efficiency and financial market sophistication pillars of the GCI. High levels of productivity and sustainable growth can only be achieved in an economy in which human resources are effectively employed and in which national resources - goods, workers or capital - are allocated to their most effective use, which are taken into account by the GCI in goods market efficiency, labor market efficiency and financial market sophistication pillars, respectively.

Figure 12 Turkey's Relative Performance on Goods Market Efficiency

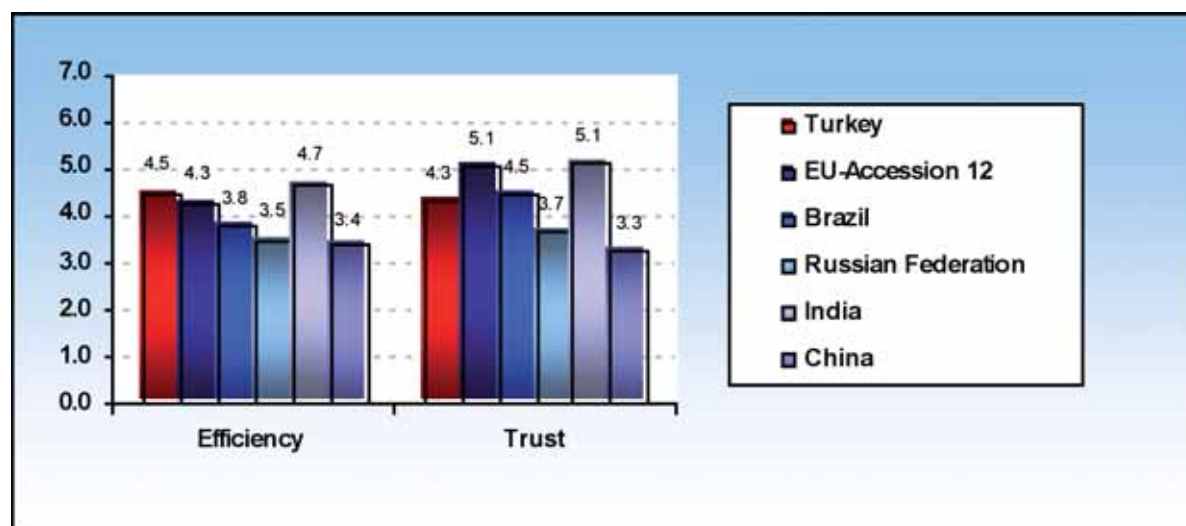


Source: WEF (2007-2008), REF Calculations

The existence of a well-developed and functioning goods market is a necessary precondition for an economy to produce the right combination of goods and services. Market efficiency becomes especially important as economies move from the factor-driven to the more advanced stage of efficiency-driven economy as is the case for Turkey. As shown in Figure 12, Turkey's performance is the second best among the comparison countries with respect to all aspects of goods market efficiency.

Financial market sophistication, which measures mainly how easy it is for firms to have access to the right kind of financing and the extent to which businesses trust their financial institutions, is treated as a separate pillar in The Global Competitiveness Report 2007-2008. An efficient financial sector channels the financial resources to the best entrepreneurs or investment projects rather than to the politically connected. A well-functioning financial sector needs to be trustworthy and transparent and it is also expected to develop products and methods to small innovators with good ideas [10]. Therefore, as economies move from lower to higher stages of development, they require more sophisticated financial markets that can make capital available for private-sector investment from such sources as loans from a sound banking sector, well-regulated securities exchanges, and venture capital.

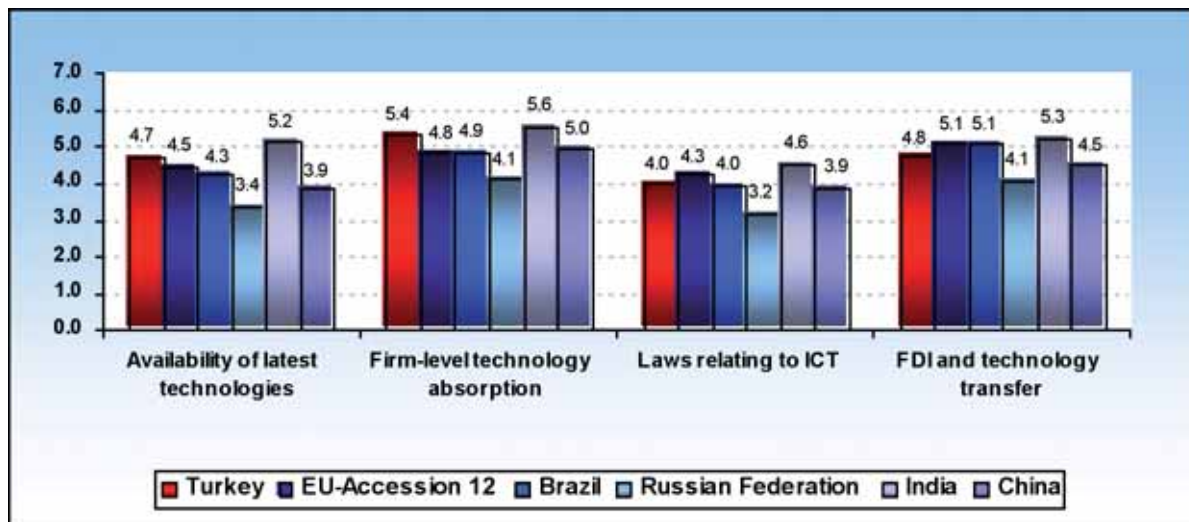
**Figure 13 Turkey's Relative Performance on Financial Market Sophistication**



Source: WEF (2007-2008), REF Calculations

Turkey performs better than the BRIC average on the technological readiness pillar of the GCI as well. The technological readiness pillar measures the ability of an economy to adopt existing technologies to enhance the productivity of its industries. This differs from technological innovation in the sense that it is not necessary to invent the most advanced products and blueprints domestically to make use of them. Rather, it measures how ambitious firms are in integrating existing and new technologies into their production processes in order to increase their productivity. In this sense, the technological readiness pillar incorporates into the GCI the findings of the literature on international technology diffusion, which mainly investigates international technology spillovers and their effects either on growth directly or on total factor productivity [11]. However, technology transfer brought about by diffusion of technology is not straightforward and should be supported by enhancing the recipient countries' absorptive capacity that results from its own R&D efforts, an environment that facilitates technological implementation and stock of and investment in human capital. In accordance with these findings of the literature, the technological readiness pillar measures countries' capacities to absorb technology.

Figure 14 Turkey's Relative Performance on Technological Readiness



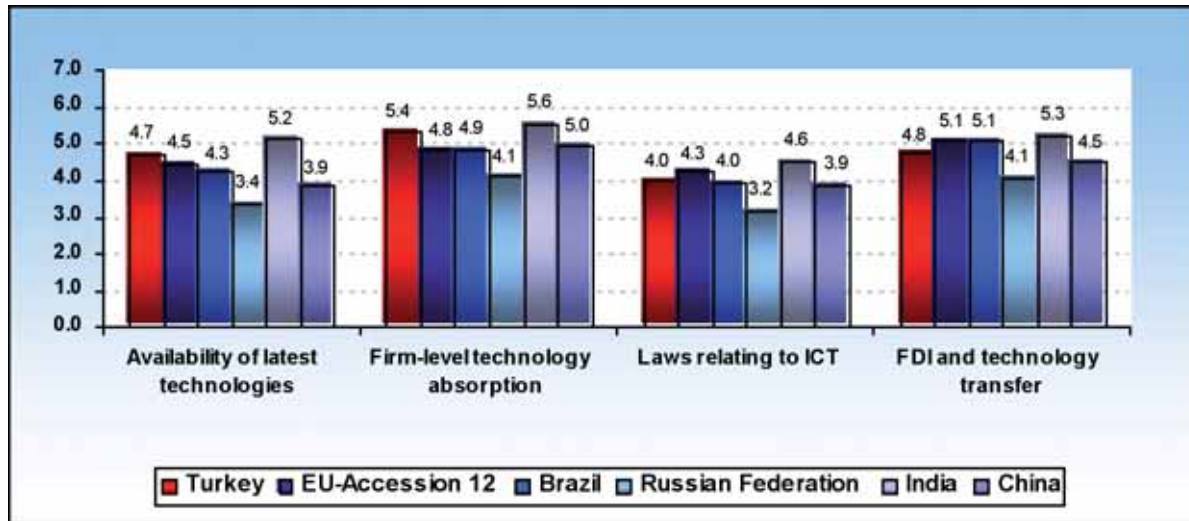
Source: WEF (2007-2008), REF Calculations

Figure 14 shows Turkey's performance on technological readiness compared to the average of the EU-Accession 12 countries as well as to the BRIC countries. With respect to availability of latest technologies and firm level technology absorption, Turkey ranks second after India among the comparison countries; however, in laws relating to ICT and FDI and technology transfer, its position is not as good as the former two. However, Turkey is expected to perform better in the near future considering that the new R&D law is on the reform agenda and Turkey has started to attract a significant amount of FDI just recently to reap the benefits of FDI as a technology transfer mechanism.

Among new technologies, information and communication technologies (ICT) are of particular importance as ICT access and usage have become fundamental elements in determining economies' overall levels of absorptive capacity, given the critical spillover of ICT to the other economic sectors and its role as efficient infrastructure for commercial transactions. Therefore, among the components of technological readiness pillar of the GCI, telecommunications appears as an important component (Figure 15). **Telecommunications is a rapidly developing sector in Turkey [12].**

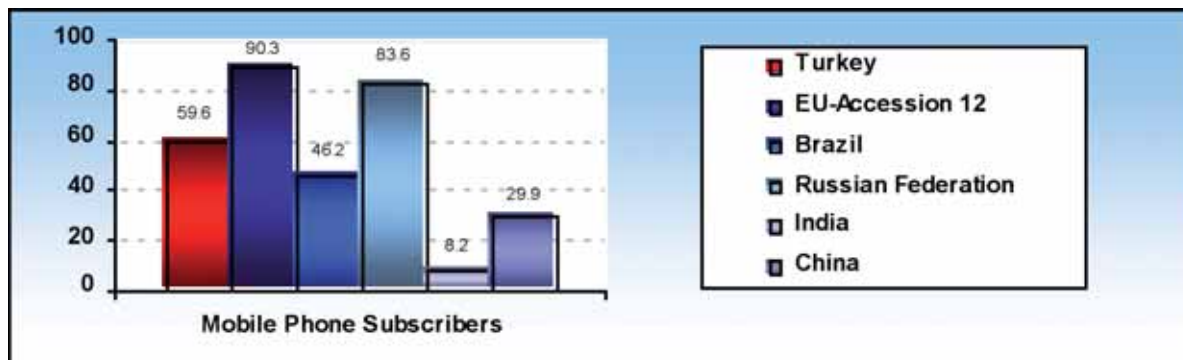
- The privatization of Turk Telekom (Turkish Telecom) and the liberalization of fixed telephony services were realized through the abolition of the monopoly of Turk Telekom in 2004.
- The third GSM license sold during 2000 became operative in 2001. Turk Telekom's GSM operator, too, was launched in 2002. Now, both of the new GSM operators have been merged under one roof.
- Acquisition of the assets of the second GSM operator of Turkey by Vodafone Group was completed in 2006, increasing the level of competition in the sector.
- Between 1994 and 2006, the number of mobile phone subscribers rose from 80,000 to 44,000,000 (see also Figure 16). By the end of 2007, it reached 60 million.
- There are currently 4.5 million ADSL subscribers, a number that grows by 1 million every six months according to Turk Telekom's Internet Supplier. As a result of this rapid increase, the number Internet users per 100 population, which was 15.3 in Figure 15, already reached 26.4 by the end of 2007.
- Constant need for infrastructure investments to satisfy rapidly developing domestic demand is met by world telecommunication giants such as Nokia, Ericsson and Siemens.

Figure 15 Turkey's Relative Performance on Technological Readiness (per 100 population)



Source: WEF (2007-2008)

Figure 16 Mobile Telephone Subscribers (per 100 population) in 2005



Source: WEF (2007-2008)

A study carried out by the McKinsey Global Institute [13] with the executives of multinational companies revealed that the major considerations when investing abroad are the quality of the infrastructure and the labor force, the size and growth of the domestic market, and the accessibility of the location. With respect to all these considerations Turkey emerges as a strong contender. A major factor shaping the competitive environment in Turkey, and hence influencing her competitiveness in the years to come, are the steps taken by the Turkish Government in that direction. A major source of information for the intentions of the Turkish Government is the Pre-Accession Economic Program announced annually on a basis of three years.



## **PRE-ACCESSION ECONOMIC PROGRAM 2007**

A perspective into short-term developments in Turkey can best be summarized by the headings of the to do-list of the Turkish Government covering the period 2008-2010 as stated in the Pre-Accession Economic Program 2007 announced in December 2007.

### **Privatization**

- The completion of the required investments before initiating the privatization of electricity distribution companies.
- The passing of a law for the regulation of the market after privatization before initiating the privatization of the 'game of chance' companies.
- The privatization of Iskenderun, Bandırma and Samsun ports.
- The privatization of Bor, Ereğli, and Ilgın Kayseri Sugar Factories.

### **Competition Law**

- The approval of the proposal for the revision of the Law Number 4054 on the Protection of Competition, which is on the agenda of the Turkish Competition Authority. The revision is made in order to align the law with the EU legislation and enhance its implementation efficiency.
- The completion of the formation of a functionally independent unit, which will monitor and audit the state aids.

### **Improvements on the Investment Environment**

- The approval of the proposal for the Turkish Commercial Law by the Turkish Parliament.
- The approval of the proposal for the Coastal Law by the Turkish Parliament.
- The approval of the proposal for the law concerning work permits for aliens by the Turkish Parliament.

### **Financial Sector**

- The formulation of the privatization strategy for Ziraat Bank.
- The establishment of a stock market for trading capital market instruments issued by SMEs.
- The continuation of the work on the restructuring of settlement and securing systems.
- With the adoption of the BASEL II criteria by the EU, the conformance of the regulations concerning the Turkish financial intermediary's capital adequacy requirements with the EU directives.
- Establishment of Special Expertise Courts on capital markets.
- Domestic Government Debt instruments will be registered by the Central Registry Agency Inc. of Turkey and will be stored and monitored in customer accounts.

### **Agriculture**

- In order to achieve conformance with the corresponding EU legislation, a new law will be passed covering issues related to food, feed grain, food hygiene, and veterinary services.
- Privatization of the sugar factories.
- Preparation of the Rural Development Plans.
- Strengthening of the institutional capacity related to rural development issues.

### **Energy**

- Continuing with the process of privatization of electricity distribution companies.
- Continuing with the efforts of establishing electricity and natural gas supply security.
- Separation of the regulatory and supervisory functions in the field of nuclear energy.
- Completion of the "Matching Project" in 2008 to achieve the integration of the electricity system in Turkey with that in Europe and updating the technical infrastructure of the electricity system to prepare for cross border electricity trade.
- Completion of the "Project on Improving Energy Efficiency in Turkey" by making use of EU experience in this area and to achieve conformance with the related EU legislation.



**Information and Communication Technologies**

- The approval of the proposal for the Electronic Communication Law by the Turkish Parliament.
- The approval of the proposal for the Personal Data Protection Law by the Turkish Parliament.
- To put into effect the by-law on “Processing the Personal Data and Protecting the Privacy in the Telecommunication Sector”.

**Health and Social Security Reform**

- Continuing the work on the transition to full automation of the IT infrastructure of the social security system leading to an effective, accessible, and sustainable structure.

**Regional Development**

- Putting into effect the Regional Development Agencies Law.

## CONCLUDING REMARKS

This report has been prepared to assess Turkey's competitiveness in the global context, based on the findings of the World Economic Forum's Global Competitiveness Report 2007-2008. In order to place Turkey's performance into a global context, specific comparisons have been made with the last 12 members of EU and the BRIC countries, which are known to attract significant amounts of foreign investment. The analysis has shown that while Turkey does quite well in some of the more complex competitiveness dimensions such as business sophistication and technological readiness with respect to the EU-Accession 12 countries, it continues to lag behind in some of the more basic requirements for competitiveness, such as the macroeconomic stability and the primary education. With regard to macroeconomic stability, though it is still below international standards, there is a marked improvement in the Global Competitiveness Report 2007-2008 with respect to the previous years' reports as a result of the efforts, especially towards reducing government budget deficit and consumer price inflation.

Turkey has not reached the innovation-driven stage and can still improve its productivity by getting more of the “basics” right. However, in spite of remaining well behind world leaders in innovation, the economy already performs better in this area than all EU-Accession 12 countries. In this regard, it is notable that the country's competitive strengths are primarily in areas that are normally reserved for countries at higher stages of development, although it lags behind in more basic factors. While this bodes well for Turkey's ability to be competitive at a higher stage of development, it also highlights the need to address some of the more basic issues, which - given sufficient political will - should ostensibly be easier to address, and which are critical for enabling improvements in productivity and growth at the present time.

In contrast to the comparison with the EU-Accession 12, Turkey performs as good as, if not better than the BRIC average on all pillars of Basic Requirements and Efficiency Enhancers sub-indices except for labor market efficiency and market size. Though the latter is an expected result, the former is the main problem that Turkey should tackle and, actually, the Government has started to work on as has been documented earlier.

Turkey should be commended for the great progress it has achieved in recent years, which is reflected in the country's impressive rise in the competitiveness rankings. However, it should be kept in mind that while it is possible to move up in rankings of topics in which reforms take place, it is inevitable to lose ground in topics that are merely not handled, even when no anti-reform is in question, due to the reforms realized in other countries. To sum up, in order to help improve competitiveness, and hence secure sustainability of growth, it is imperative to continue reforms, both at the macro- and micro-levels. Furthermore, it is necessary to ensure consistency as well as continuity of reforms, i.e., reforms should not be considered as a one-time affair, but as a process. Otherwise, it won't be possible to foster competitiveness, even to maintain the current position.

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## APPENDIX. GLOBAL COMPETITIVENESS INDEX SCORES

	<i>Turkey</i>	<i>EU Acc. 12</i>	<i>Brazil</i>	<i>Russia</i>	<i>India</i>	<i>China</i>	<i>BRIC</i>
<b>Global Competitiveness Index</b>	4.25	4.34	3.99	4.19	4.33	4.57	4.27
<b>Basic Requirements</b>	4.44	4.73	3.82	4.36	4.22	4.80	4.30
<b>Efficiency Enhancer</b>	4.16	4.28	4.12	4.19	4.52	4.26	4.27
<b>Innovation Factors</b>	3.90	3.82	3.99	3.50	4.36	3.89	3.94
<b>1. Institutions</b>	4.13	4.08	3.32	3.10	4.32	3.71	3.61
A. Public Institutions	3.97	3.97	3.00	2.92	4.17	3.69	3.45
1. Property rights	4.12	4.38	4.08	2.96	4.85	4.01	3.98
2. Ethics and corruption	3.31	3.21	1.79	2.40	2.92	3.17	2.57
3. Undue Influence	3.87	3.51	2.94	2.55	4.29	3.12	3.23
4. Government Inefficiency	3.52	3.50	2.48	2.79	3.93	3.64	3.21
5. Security	4.78	5.11	3.72	3.90	4.88	4.39	4.22
B. Private Institutions	4.61	4.41	4.25	3.63	4.76	3.76	4.10
1. Corporate ethics	4.64	4.17	3.77	3.26	4.18	3.70	3.73
2. Accountability	4.58	4.64	4.73	4.01	5.33	3.82	4.47
<b>2. Infrastructure</b>	3.68	3.84	3.07	3.48	3.45	3.96	3.49
A. General Infrastructure	3.73	3.96	2.69	3.01	3.10	3.59	3.10
B. Specific Infrastructure	3.63	3.73	3.44	3.94	3.79	4.34	3.88
<b>3. Macroeconomic Stability</b>	4.66	5.09	3.66	5.35	4.21	6.03	4.81
<b>4. Health and Primary Education</b>	5.31	5.91	5.23	5.51	4.92	5.49	5.29
A. Health	6.42	6.71	6.32	4.31	5.66	6.39	5.67
B. Primary Education	4.20	5.10	4.13	4.70	4.17	4.58	4.40
<b>5. Higher Education and Training</b>	4.05	4.64	4.01	4.33	4.13	3.77	4.06
A. Quantity of education	4.00	5.27	4.41	5.42	2.95	3.35	4.03
B. Quality of education	3.96	4.56	3.18	4.04	4.80	3.86	3.97
C. On-the-job training	4.19	4.07	4.43	3.51	4.63	4.09	4.17
<b>6. Goods market efficiency</b>	4.54	4.45	3.80	3.94	4.66	4.26	4.17
A. Competition	4.69	4.73	4.01	3.76	4.65	4.46	4.22
1. Domestic competition	4.71	4.61	4.20	4.12	5.00	4.53	4.46
2. Foreign competition	4.66	4.85	3.82	3.39	4.30	4.38	3.97
B. Quality of demand conditions	4.48	4.31	4.26	4.27	4.89	4.36	4.45

<b>7. Labor market efficiency</b>	3.60	4.42	3.96	4.70	4.07	4.40	4.28
A. Flexibility	3.72	4.34	3.63	4.49	4.26	3.81	4.05
B. Efficient use of talent	3.48	4.49	4.28	4.90	3.87	4.98	4.51
<b>8. Financial market sophistication</b>	4.40	4.69	4.14	3.60	4.93	3.35	4.01
A. Efficiency	4.47	4.32	3.80	3.50	4.71	3.42	3.86
B. Trustworthiness and confidence	4.34	5.06	4.48	3.68	5.13	3.27	4.14
<b>9. Technological readiness</b>	3.39	3.96	3.35	3.03	3.17	3.00	3.14
<b>10. Market Size</b>	4.97	3.56	5.54	5.54	6.16	6.80	6.01
A. Domestic market size	5.00	3.43	5.50	5.50	6.20	6.70	5.98
B. Foreign market size	5.00	3.98	5.20	5.70	6.00	7.00	5.98
<b>11. Business Sophistication</b>	4.45	4.23	4.48	3.70	4.81	4.18	4.29
A. Networks and supporting industries	4.73	4.42	4.77	4.00	4.73	4.59	4.52
B. Sophistication of firms' operations and strategy	4.16	4.05	4.18	3.38	4.16	3.75	3.87
<b>12. Innovation</b>	3.36	3.40	3.50	3.31	3.90	4.60	3.83

Source: The Global Competitiveness Report 2007-2008.



